Online Appendix

Table A1

Correlations table

This table shows the correlations among the explanatory variables used to estimate the target capital ratio [Eq. (3)]. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Log(Total Assets)* is the natural logarithm of the bank's total assets. *Return on Assets* is net income divided by total assets. *Loan Loss Provisions* is loan loss provisions divided by net loans. *Loans Total Assets* is net loans divided by total assets. *Market Discipline* is total long-term market funding divided by total funding. *d(Listed Bank)* is a dummy equal to one if the bank is publicly listed and zero otherwise. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
d(Excess Control Rights) (1)	1							
Log(Total Assets) (2)	0.11	1.00						
Return on Assets (3)	-0.13	-0.17	1.00					
Loan Loss Provisions (4)	0.03	-0.08	-0.28	1.00				
Loans Total Assets (5)	0.07	-0.22	0.03	0.07	1.00			
Market Discipline (6)	-0.04	-0.13	0.02	-0.09	0.14	1.00		
d(Listed Bank) (7)	-0.26	0.22	0.11	0.05	0	-0.15	1	
GDP Growth Rate (8)	-0.01	-0.01	0.20	-0.23	-0.03	-0.01	0.04	1.00

Table A2

Estimating the target capital ratio

This table shows the Blundell and Bond (1998) estimation results of the target capital ratio based on a partial adjustment model [Eq. (3)] over the 2002–2010 period. The sample consists of 341 European commercial banks corresponding to 2,204 observations. *Tier 1 Total Assets* is Tier 1 capital divided by total assets. *Tier 1 RWA* is Tier 1 capital divided by risk-weighted assets. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Log(Total Assets)* is the natural logarithm of the bank's total assets. *Return on Assets* is net income divided by total assets. *Loan Loss Provisions* is loan loss provisions divided by net loans. *Loans Total Assets* is net loans divided by total assets. *Market Discipline* is total long-term market funding divided by total funding. *d(Listed Bank)* is a dummy equal to one if the bank is publicly listed and zero otherwise. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. In the last three rows, we report the summary statistics (mean, maximum and minimum) of the estimated target capital ratio. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent variable	*Tier 1 Total Assets*	*Tier 1 RWA*
Lagged dependent variable	0.60***	0.66***
	(0.00)	(0.00)
d(Excess Control Rights)	-0.33**	-0.73***
	(0.04)	(0.00)
Log(Total Assets)	-0.51***	-0.57***
	(0.00)	(0.00)
Return on Assets	0.47***	0.54***
	(0.00)	(0.00)
Loan Loss Provisions	0.19***	0.16**
	(0.00)	(0.04)
Loans Total Assets	-0.02***	-0.03***
	(0.00)	(0.00)
Market Discipline	0.00**	0.01**
	(0.02)	(0.02)
d(Listed Bank)	-0.67***	-1.41***
	(0.00)	(0.00)
GDP Growth Rate	-0.00	-0.01
	(0.61)	(0.28)
Constant	5.14***	7.84***
	(0.00)	(0.00)
Hansen test (p-value)	0.11	0.10
AR2 test (p-value)	0.35	0.32
Fitted target (%): Mean	7.02	11.53
Maximum	14.92	24.87
Minimum	1.70	4.08

Table A3

Correlations table

This table shows the correlations among the explanatory variables used to test the effect of excess control rights on capital ratio adjustment [Eq. (6)]. *Tier 1 Total Assets Surplus* and *Tier 1 RWA Surplus* are, respectively, the absolute value of the difference between the fitted and the lagged values of the ratio of Tier 1 capital to total assets and the ratio of Tier 1 capital to risk-weighted assets (RWA) when the bank is above the target and zero otherwise. *Tier 1 Total Assets Shortfall* and *Tier 1 RWA Shortfall* are, respectively, the absolute value of the difference between the fitted and the lagged values of the ratio of Tier 1 capital to total assets and the ratio of Tier 1 capital to risk-weighted assets (RWA) when the bank is below the target and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period, and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Tier 1 Total Assets Surplus (1)	1.00												
Tier 1 RWA Surplus (2)	0.63	1.00											
Tier 1 Total Assets Shortfall (3)	0.44	0.29	1.00										
Tier 1 RWA Shortfall (4)	0.36	0.44	0.60	1.00									
d(Excess Control Rights) (5)	0.04	-0.01	0.06	0.07	1								
Deposits Total Assets (6)	0.05	0.07	0.13	0.14	-0.14	1.00							
Log(Age) (7)	0.04	0.15	-0.02	0.12	-0.16	0.17	1.00						
d(Rescued Bank) (8)	0.06	0.08	-0.12	-0.06	-0.01	-0.08	0.08	1					
Cross-Listed Index (9)	0.04	0.05	-0.05	-0.05	-0.09	-0.10	0.04	0.16	1.00				
d(Merger Acquisition) (10)	0.07	0.12	-0.15	-0.11	-0.20	-0.14	0.03	0.27	0.35	1.00			
Three-month Interbank Rate (11)	-0.14	-0.12	-0.23	-0.31	0.00	0.00	0.02	0.01	0.02	0.00	1.00		
GDP Growth Rate (12)	-0.01	-0.11	-0.17	-0.30	0.02	0.03	0.01	0.07	0.02	0.07	0.48	1.00	
Stock Traded (13)	-0.08	-0.09	-0.12	-0.16	-0.12	0.07	-0.07	-0.11	0.00	0.02	0.45	0.19	1.00

Table A4

Ownership type and the effect of excess control rights on capital ratio adjustment

This table shows the Blundell and Bond (1998) estimation results on the effect of ownership type on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. We exclude banks for which the control chain is a cross-holding (for simplicity) and we use a sample of 336 European commercial banks corresponding to 2,171 observations. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Family)* is a dummy equal to one if the bank is family-controlled and zero otherwise. *d(State)* is a dummy equal to one if the bank is state-controlled and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.11**	-0.06**	-0.07**	-0.05**	0.75**	0.82*	0.31*	0.46**	0.41**	0.61**
	(0.02)	(0.05)	(0.02)	(0.03)	(0.03)	(0.05)	(0.05)	(0.02)	(0.04)	(0.03)
d(Family) × *Capital Ratio Surplus* (α_2)	0.07	0.01	0.02	0.02	0.14	0.15	0.18	0.12	0.16	0.14
	(0.27)	(0.85)	(0.21)	(0.18)	(0.37)	(0.16)	(0.26)	(0.36)	(0.34)	(0.32)
d(State) × Capital Ratio Surplus (α_3)	0.07	-0.01	-0.01	0.01	0.04	0.20	0.06	0.08	0.08	0.16
	(0.33)	(0.89)	(0.36)	(0.24)	(0.73)	(0.21)	(0.30)	(0.66)	(0.44)	(0.58)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.04	-0.00	-0.01	-0.01	-0.40	-0.39	-0.11	-0.15	-0.20	-0.29
	(0.67)	(0.95)	(0.12)	(0.75)	(0.27)	(0.51)	(0.88)	(0.70)	(0.35)	(0.26)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.06*	-0.07*	0.04*	0.01	-0.07	-0.17	-0.06	-0.16	-0.15	-0.11
	(0.08)	(0.07)	(0.05)	(0.20)	(0.52)	(0.20)	(0.72)	(0.79)	(0.92)	(0.40)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_3)	-0.02	-0.02	-0.12	-0.01	0.06	-0.15	0.03	-0.08	-0.09	-0.13
	(0.33)	(0.65)	(0.31)	(0.14)	(0.50)	(0.17)	(0.66)	(0.28)	(0.45)	(0.19)
Capital Ratio Shortfall (α'_1)	0.16**	0.08***	0.03	0.05*	-0.37	0.08	-0.42	-0.39	-0.31	-0.53**
	(0.01)	(0.00)	(0.33)	(0.08)	(0.12)	(0.78)	(0.19)	(0.18)	(0.16)	(0.01)
d(Family) × *Capital Ratio Shortfall* (α'_2)	0.11	0.07	0.01	0.01	0.06	0.07	0.06	-0.07	0.14	-0.03
	(0.15)	(0.10)	(0.84)	(0.47)	(0.38)	(0.49)	(0.26)	(0.81)	(0.48)	(0.41)
d(State) × *Capital Ratio Shortfall* (α'_3)	0.02	-0.03	-0.04	-0.00	0.03	0.04	0.06	-0.06	0.03	-0.08
	(0.89)	(0.36)	(0.42)	(0.99)	(0.78)	(0.61)	(0.25)	(0.82)	(0.70)	(0.40)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.08	-0.02	0.04	0.00	-0.12	-0.50	-0.06	-0.10	-0.05	-0.05
	(0.24)	(0.26)	(0.35)	(0.91)	(0.20)	(0.29)	(0.70)	(0.16)	(0.48)	(0.21)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.17**	-0.10**	-0.00	0.02*	-0.52**	-0.67**	-0.29**	-0.39**	-0.45*	-0.11
	(0.04)	(0.03)	(0.93)	(0.09)	(0.02)	(0.01)	(0.05)	(0.03)	(0.07)	(0.10)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_3)	-0.02	0.08**	-0.05	-0.03	-0.13	-0.17	-0.12	0.11**	-0.09	0.10
	(0.77)	(0.03)	(0.50)	(0.90)	(0.15)	(0.22)	(0.31)	(0.03)	(0.41)	(0.11)
Lagged dependent variable	0.03	0.03	0.43***	0.42***	0.10***	0.13***	0.16***	0.17***	0.15***	0.16***
	(0.45)	(0.42)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.55***	-0.63**	-0.15	-0.16*	-2.96	-0.15	-0.42	-0.22	-0.02	-2.54
	(0.00)	(0.01)	(0.14)	(0.08)	(0.19)	(0.95)	(0.77)	(0.88)	(0.99)	(0.16)
d(Family)	0.19	0.29	0.03	-0.25*	3.42	-0.69	1.16	-0.44	2.04	1.71
	(0.40)	(0.27)	(0.85)	(0.07)	(0.29)	(0.84)	(0.60)	(0.85)	(0.48)	(0.57)
d(State)	0.22	0.29*	0.10	0.09	2.98	1.59	3.60*	3.61*	2.91	-3.17*
	(0.31)	(0.10)	(0.52)	(0.54)	(0.30)	(0.58)	(0.07)	(0.06)	(0.20)	(0.08)

Table A4 (continued)

Deposits Total Assets	-0.00**	-0.00*	0.00	0.00	0.00	-0.01	0.02	0.02*	0.00	0.01
	(0.04)	(0.06)	(0.16)	(0.13)	(0.87)	(0.60)	(0.23)	(0.09)	(0.98)	(0.75)
Log(Age)	-0.02	-0.03**	0.00	-0.00	-0.37*	-0.31*	-0.31**	-0.29**	-0.24	-0.22
	(0.31)	(0.04)	(0.90)	(0.72)	(0.05)	(0.08)	(0.01)	(0.03)	(0.12)	(0.20)
d(Rescued Bank)	0.02	0.03	0.00	0.04	1.39	1.05	0.58	0.41	0.66	0.41
	(0.87)	(0.71)	(1.00)	(0.64)	(0.22)	(0.42)	(0.50)	(0.60)	(0.61)	(0.78)
Cross-Listed Index	0.02**	0.03***	0.01	0.01	0.21*	0.15	0.08	0.14	0.33***	0.40***
	(0.01)	(0.00)	(0.49)	(0.47)	(0.10)	(0.28)	(0.36)	(0.11)	(0.00)	(0.00)
d(Merger Acquisition)	0.09	0.06	0.00	0.01	0.49	0.52	1.44*	1.36*	0.06	0.26
	(0.20)	(0.42)	(0.94)	(0.85)	(0.66)	(0.65)	(0.07)	(0.06)	(0.95)	(0.80)
Three-month Interbank Rate	0.04	0.05	-0.11**	-0.11***	-2.10***	-2.02***	-1.96***	-2.04***	-1.92***	-1.98***
	(0.49)	(0.39)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.01*	0.01	0.00	0.00	0.23**	0.31***	0.18***	0.18***	0.14*	0.15**
	(0.06)	(0.16)	(0.47)	(0.63)	(0.04)	(0.01)	(0.01)	(0.01)	(0.10)	(0.05)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.02*	0.02**	0.00	0.00
	(0.46)	(0.59)	(0.18)	(0.42)	(0.71)	(0.31)	(0.06)	(0.04)	(0.88)	(0.87)
Constant	0.13	0.12	0.56**	0.57***	12.14***	13.76***	9.54***	10.85***	9.91***	11.79***
	(0.61)	(0.64)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.13	0.14	0.12	0.12	0.17	0.15	0.16	0.14	0.12	0.20
AR2 test (p-value)	0.85	0.92	0.69	0.95	0.31	0.29	0.66	0.60	0.34	0.22
Wald tests: $\alpha_1+\alpha_2$	-0.04**	-0.05**	-0.05**	-0.03*	0.89***	0.97***	0.49**	0.58**	0.57**	0.75***
$\alpha_1+\alpha_3$	-0.04*	-0.07**	-0.08**	-0.04**	0.79**	1.02***	0.37**	0.54**	0.49**	0.77***
$\alpha_1+\beta_1$	-0.15**	-0.06**	-0.08**	-0.06*	0.35	0.43	0.20	0.31	0.21	0.32
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.14**	-0.12**	-0.02	-0.03	0.42	0.41	0.32	0.27	0.22	0.35
$\alpha_1+\alpha_3+\beta_1+\beta_3$	-0.10**	-0.09**	-0.19**	-0.06**	0.45	0.48	0.29	0.31	0.20	0.35
$\alpha'_1+\alpha'_2$	0.27***	0.15***	0.04	0.06*	-0.31	0.15	-0.36	-0.46	-0.17	-0.56**
$\alpha'_1+\alpha'_3$	0.18***	0.05**	-0.01	0.05*	-0.34	0.12	-0.36	-0.45	-0.28	-0.61***
$\alpha'_1+\beta'_1$	0.08**	0.06**	0.07*	0.05*	-0.49	-0.42	-0.48	-0.49*	-0.36	-0.58**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.02	0.03	0.08**	0.08**	-0.95**	-1.02**	-0.71**	-0.95**	-0.67**	-0.72**
$\alpha'_1+\alpha'_3+\beta'_1+\beta'_3$	0.08**	0.11***	-0.02	0.02	-0.59*	-0.55*	-0.54	-0.44	-0.42	-0.56

Table A5

Shareholder protection and the effect of excess control rights on capital ratio adjustment

This table shows the Blundell and Bond (1998) estimation results on the effect of shareholder protection rights on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively and zero otherwise. *d(Owner Rights)* is a dummy equal to one if the shareholder protection index as defined in Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008) is greater than the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.07*	-0.06**	-0.06***	0.72**	0.89**	0.33*	0.43**	0.39**	0.62**
	(0.02)	(0.09)	(0.02)	(0.01)	(0.01)	(0.01)	(0.07)	(0.05)	(0.02)	(0.04)
d(Owner Rights) × *Capital Ratio Surplus* (α_2)	0.02	0.03	-0.02	0.01	0.15	0.08	0.15	0.14	0.16	0.18
	(0.10)	(0.22)	(0.29)	(0.24)	(0.59)	(0.19)	(0.56)	(0.73)	(0.89)	(0.28)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.08	-0.02	0.05	0.04	-0.36	-0.48	-0.04	-0.17	-0.18	-0.29
	(0.65)	(0.90)	(0.15)	(0.17)	(0.39)	(0.69)	(0.50)	(0.74)	(0.70)	(0.19)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.06	0.02	-0.03	-0.06*	-0.07	-0.02	-0.18	0.07	-0.17	-0.16
	(0.72)	(0.53)	(0.14)	(0.10)	(0.78)	(0.78)	(0.19)	(0.97)	(0.10)	(0.11)
Capital Ratio Shortfall (α'_1)	0.16**	0.07**	0.04	0.04*	-0.35	-0.09	-0.37	-0.29	-0.19	-0.59**
	(0.04)	(0.04)	(0.45)	(0.08)	(0.17)	(0.64)	(0.17)	(0.11)	(0.51)	(0.01)
d(Owner Rights) × *Capital Ratio Shortfall* (α'_2)	0.06	0.08	0.01	-0.00	-0.10	0.17	-0.05	-0.27	-0.08	-0.03
	(0.41)	(0.11)	(0.79)	(0.98)	(0.92)	(0.17)	(0.93)	(0.34)	(0.21)	(0.43)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.14**	-0.06**	0.04*	0.02*	-0.49**	-0.85**	-0.48*	-0.61**	-0.47*	-0.08
	(0.02)	(0.03)	(0.05)	(0.06)	(0.03)	(0.01)	(0.07)	(0.02)	(0.06)	(0.36)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.00	-0.00	-0.04	-0.03	0.34	0.27	0.47*	0.58*	0.43	0.13
	(0.95)	(1.00)	(0.60)	(0.54)	(0.51)	(0.38)	(0.07)	(0.07)	(0.46)	(0.48)
Lagged dependent variable	0.03	0.03	0.40***	0.35***	0.11***	0.12***	0.12***	0.13***	0.15***	0.16***
	(0.39)	(0.51)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.55***	-0.54***	-0.14	-0.02	-0.98	-1.47	-1.64	-0.22	-1.85	-2.19
	(0.00)	(0.01)	(0.16)	(0.80)	(0.62)	(0.50)	(0.26)	(0.89)	(0.31)	(0.55)
Deposits Total Assets	-0.00**	-0.00*	0.00*	0.00	0.00	-0.00	0.01	0.02	0.01	0.00
	(0.02)	(0.07)	(0.07)	(0.11)	(0.94)	(0.85)	(0.31)	(0.14)	(0.75)	(0.78)
Log(Age)	-0.02	-0.02	0.00	-0.01	-0.37**	-0.28*	-0.30**	-0.27**	-0.26*	-0.27
	(0.20)	(0.16)	(0.92)	(0.61)	(0.04)	(0.10)	(0.01)	(0.04)	(0.09)	(0.11)
d(Rescued Bank)	0.01	0.02	0.00	0.01	1.16	1.47	0.78	0.11	0.28	0.25
	(0.89)	(0.77)	(0.98)	(0.87)	(0.35)	(0.27)	(0.31)	(0.89)	(0.84)	(0.84)
Cross-Listed Index	0.03**	0.03***	0.00	0.00	0.18	0.22	0.10	0.07	0.28***	0.40***
	(0.01)	(0.00)	(0.79)	(0.76)	(0.20)	(0.12)	(0.23)	(0.44)	(0.01)	(0.00)
d(Merger Acquisition)	0.07	0.06	0.03	0.05	0.34	0.24	1.72**	1.53*	0.32	0.71
	(0.39)	(0.41)	(0.52)	(0.35)	(0.78)	(0.83)	(0.03)	(0.06)	(0.75)	(0.49)
Three-month Interbank Rate	0.02	0.04	-0.13***	-0.12***	-1.97***	-2.04***	-2.14***	-2.25***	-1.78**	-1.91***
	(0.68)	(0.50)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.02**	0.01	0.01	0.00	0.24**	0.26**	0.20***	0.20***	0.18**	0.18**
	(0.01)	(0.30)	(0.25)	(0.48)	(0.03)	(0.02)	(0.00)	(0.00)	(0.03)	(0.04)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01*	0.01	0.00	0.00
	(0.34)	(0.38)	(0.17)	(0.19)	(0.67)	(0.46)	(0.08)	(0.12)	(0.87)	(0.76)
Constant	0.39*	0.30	0.70***	0.72***	13.43***	13.06***	10.91***	10.74***	9.18***	10.97***
	(0.08)	(0.27)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.31	0.18	0.15	0.24	0.33	0.52	0.24	0.20	0.33	0.43
AR2 test (p-value)	0.90	0.98	0.88	0.95	0.25	0.21	0.49	0.57	0.15	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.06**	-0.04*	-0.08**	-0.05**	0.87***	0.97***	0.48**	0.57**	0.55**	0.80**
$\alpha_1+\beta_1$	-0.16**	-0.09**	-0.01	-0.02	0.36	0.41	0.29	0.26	0.21	0.33
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.08**	-0.04**	-0.06**	-0.07**	0.44*	0.47*	0.26	0.33	0.20	0.35
$\alpha'_1+\alpha'_2$	0.22***	0.15***	0.05	0.04	-0.45	0.08	-0.42	-0.56	-0.27	-0.62**
$\alpha'_1+\beta'_1$	0.02	0.01	0.08**	0.06**	-0.84**	-0.94**	-0.90**	-0.90**	-0.66**	-0.67**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.08**	0.09***	0.05*	0.03	-0.60*	-0.50*	-0.43	-0.59	-0.31	-0.57*

Table A6

2008 financial crisis and the effect of excess control rights on capital ratio adjustment

This table shows the Blundell and Bond (1998) estimation results on the effect of the 2008 financial crisis on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are respectively the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively and zero otherwise. *d(Crisis)* is a dummy equal to one if the observation is from 2008 or 2009 and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.09***	-0.06**	-0.04**	-0.05**	1.08**	1.15***	0.53**	0.63**	0.61**	0.91**
	(0.01)	(0.02)	(0.03)	(0.03)	(0.02)	(0.00)	(0.03)	(0.02)	(0.02)	(0.01)
d(Crisis) × *Capital Ratio Surplus* (α_2)	0.05*	0.03	-0.02	-0.01	-0.62	-0.45	-0.20	-0.28	-0.30	-0.40
	(0.07)	(0.49)	(0.13)	(0.12)	(0.75)	(0.67)	(0.71)	(0.59)	(0.12)	(0.27)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.04	-0.03	0.01	0.03	-0.62	-0.65	-0.17	-0.29	-0.32	-0.54
	(0.51)	(0.50)	(0.61)	(0.16)	(0.77)	(0.47)	(0.50)	(0.80)	(0.42)	(0.45)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.04	0.03	-0.02	-0.03	0.50	0.35	0.06	0.16	0.22	0.37
	(0.63)	(0.25)	(0.92)	(0.65)	(0.23)	(0.41)	(0.88)	(0.70)	(0.80)	(0.28)
Capital Ratio Shortfall (α'_1)	0.16**	0.12**	0.04	0.06	-0.43	0.07	-0.24	-0.32	-0.25	-0.65**
	(0.04)	(0.01)	(0.17)	(0.10)	(0.28)	(0.85)	(0.73)	(0.35)	(0.12)	(0.02)
d(Crisis) × *Capital Ratio Shortfall* (α'_2)	-0.06	-0.06	-0.01	-0.02	-0.06	0.18	-0.21	-0.14	-0.18	0.18
	(0.39)	(0.85)	(0.21)	(0.19)	(0.51)	(0.66)	(0.75)	(0.59)	(0.22)	(0.80)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12*	-0.10*	0.06	0.06*	-0.50*	-0.96**	-0.42*	-0.51*	-0.48**	-0.15
	(0.07)	(0.08)	(0.16)	(0.06)	(0.08)	(0.01)	(0.05)	(0.06)	(0.04)	(0.82)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	0.10	0.10	-0.04	-0.05	0.47	0.20	0.43	0.51	0.62	0.33
	(0.24)	(0.17)	(0.43)	(0.73)	(0.15)	(0.44)	(0.24)	(0.38)	(0.12)	(0.29)
Lagged dependent variable	0.03	0.02	0.41***	0.39***	0.12***	0.12***	0.23***	0.20***	0.21***	0.18***
	(0.42)	(0.56)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.48***	-0.40***	-0.08	-0.09	-0.08	-0.32	-0.51	-0.32	-1.30	-2.24
	(0.00)	(0.00)	(0.39)	(0.37)	(0.97)	(0.88)	(0.70)	(0.83)	(0.35)	(0.12)
Deposits Total Assets	-0.00*	-0.00**	0.00**	0.00**	0.00	-0.00	0.03**	0.02	0.00	0.01
	(0.05)	(0.02)	(0.01)	(0.01)	(0.90)	(0.84)	(0.03)	(0.21)	(0.97)	(0.36)
Log(Age)	-0.01	-0.02	-0.00	-0.00	-0.34*	-0.36**	-0.25**	-0.23*	-0.19	-0.20
	(0.34)	(0.14)	(0.75)	(0.71)	(0.05)	(0.03)	(0.02)	(0.08)	(0.17)	(0.17)
d(Rescued Bank)	0.02	0.02	0.01	0.02	1.83	1.31	1.24	0.60	0.36	0.13
	(0.83)	(0.80)	(0.85)	(0.82)	(0.13)	(0.36)	(0.11)	(0.46)	(0.73)	(0.91)
Cross-Listed Index	0.03**	0.03***	0.00	0.00	0.20*	0.15	0.08	0.13	0.28**	0.32***
	(0.01)	(0.00)	(0.86)	(0.82)	(0.09)	(0.25)	(0.37)	(0.19)	(0.01)	(0.00)
d(Merger Acquisition)	0.01	0.03	0.01	0.03	0.71	0.82	1.48*	1.48*	0.18	0.80
	(0.90)	(0.70)	(0.83)	(0.55)	(0.50)	(0.50)	(0.07)	(0.07)	(0.85)	(0.39)
Three-month Interbank Rate	0.03	0.03	-0.11***	-0.09**	-2.20***	-2.32***	-1.95**	-2.12***	-1.36**	-1.39**
	(0.54)	(0.63)	(0.01)	(0.03)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)
GDP Growth Rate	0.01	0.01	0.01	0.00	0.26**	0.26**	0.17**	0.19***	0.16**	0.20**
	(0.22)	(0.24)	(0.11)	(0.50)	(0.02)	(0.02)	(0.01)	(0.00)	(0.04)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00
	(0.43)	(0.35)	(0.27)	(0.36)	(0.35)	(0.15)	(0.72)	(0.12)	(0.97)	(0.97)
Constant	0.26	0.30	0.50***	0.48***	13.05***	13.94***	8.53***	10.83***	6.91***	8.27***
	(0.27)	(0.21)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.17	0.14	0.09	0.13	0.26	0.22	0.17	0.11	0.16	0.18
AR2 test (p-value)	0.90	0.89	0.90	0.80	0.21	0.22	0.47	0.61	0.34	0.35
Wald tests: $\alpha_1+\alpha_2$	-0.04*	-0.03	-0.06**	-0.06**	0.46*	0.70**	0.33	0.35	0.31	0.51**
$\alpha_1+\beta_1$	-0.13**	-0.09**	-0.03	-0.02	0.46	0.50	0.36	0.34	0.29	0.37
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.04	-0.03*	-0.07**	-0.06**	0.34	0.40	0.22	0.22	0.21	0.34
$\alpha'_1+\alpha'_2$	0.10**	0.06**	0.03	0.04	-0.49	0.25	-0.45	-0.46	-0.43	-0.47*
$\alpha'_1+\beta'_1$	0.04	0.02	0.10***	0.12**	-0.93**	-0.89**	-0.66**	-0.83**	-0.73**	-0.80**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.08**	0.06**	0.05	0.05	-0.52	-0.51	-0.44	-0.46	-0.29	-0.29

Table A7

Bank capitalization and the effect of excess control rights on capital ratio adjustment

This table shows the Blundell and Bond (1998) estimation results on the effect of bank capitalization on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively and zero otherwise. *d(Undercapitalized)* is a dummy equal to one if the Tier 1 RWA (Tier 1 Total Assets) ratio is less than 6% (4%) and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06**	-0.06*	-0.05**	-0.04*	0.72**	0.83**	0.47*	0.52**	0.45**	0.65***
	(0.03)	(0.08)	(0.04)	(0.06)	(0.01)	(0.03)	(0.05)	(0.01)	(0.02)	(0.00)
d(Undercapitalized) × *Capital Ratio Surplus* (α_2)	0.02	0.04**	0.01	0.02*	-0.08	-0.41*	-0.03	-0.19*	-0.02	-0.23*
	(0.82)	(0.04)	(0.92)	(0.10)	(0.40)	(0.06)	(0.37)	(0.09)	(0.86)	(0.09)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.10	-0.04	0.02	0.00	-0.42*	-0.40*	-0.18*	-0.10*	-0.14	-0.16
	(0.18)	(0.36)	(0.70)	(0.90)	(0.10)	(0.08)	(0.08)	(0.09)	(0.11)	(0.12)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.07	0.04*	0.00	0.03*	0.07	0.19	0.19	-0.09	0.11	-0.03
	(0.68)	(0.07)	(0.19)	(0.09)	(0.55)	(0.30)	(0.47)	(0.63)	(0.70)	(0.61)
Capital Ratio Shortfall (α'_1)	0.10**	0.08**	0.02	0.03	-0.36	-0.04	-0.26	-0.38	-0.36	-0.48**
	(0.04)	(0.03)	(0.46)	(0.12)	(0.19)	(0.40)	(0.45)	(0.15)	(0.12)	(0.05)
d(Undercapitalized) × *Capital Ratio Shortfall* (α'_2)	0.05	0.07*	0.03	0.00	-0.12	0.29	-0.12	-0.12	-0.18	-0.18
	(0.25)	(0.06)	(0.61)	(0.94)	(0.15)	(0.62)	(0.18)	(0.64)	(0.16)	(0.29)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.08**	-0.06**	0.07*	0.03*	-0.27*	-0.44**	-0.40*	-0.22*	-0.43**	-0.12
	(0.02)	(0.02)	(0.06)	(0.07)	(0.06)	(0.03)	(0.06)	(0.06)	(0.01)	(0.12)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.04	-0.05	-0.05	-0.00	-0.17	-0.43**	-0.12	-0.27*	0.09	-0.14*
	(0.19)	(0.17)	(0.26)	(0.50)	(0.42)	(0.03)	(0.87)	(0.05)	(0.65)	(0.10)
Lagged dependent variable	0.03	0.03	0.39***	0.37***	0.11***	0.11***	0.12***	0.15***	0.15***	0.17***
	(0.28)	(0.48)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.49***	-0.39**	-0.19*	-0.01	-0.41	-0.35	-1.18	-0.24	-1.47	-2.97**
	(0.00)	(0.01)	(0.05)	(0.89)	(0.85)	(0.87)	(0.43)	(0.86)	(0.33)	(0.04)
d(Undercapitalized)	0.17	0.67***	-0.23*	-0.17*	-2.85	-1.62	-1.43	0.14	-3.37*	-3.25*
	(0.37)	(0.00)	(0.06)	(0.09)	(0.15)	(0.50)	(0.36)	(0.93)	(0.06)	(0.10)
Deposits Total Assets	-0.00**	-0.00**	0.00*	0.00**	0.01	-0.00	0.02*	0.02	-0.00	0.00
	(0.02)	(0.03)	(0.05)	(0.04)	(0.64)	(0.85)	(0.07)	(0.12)	(0.78)	(0.79)
Log(Age)	-0.02	-0.02	-0.01	-0.00	-0.41**	-0.29*	-0.33**	-0.29**	-0.33**	-0.20
	(0.33)	(0.14)	(0.54)	(0.89)	(0.02)	(0.10)	(0.01)	(0.02)	(0.03)	(0.21)
d(Rescued Bank)	0.01	0.06	0.00	0.02	1.37	1.16	0.75	0.59	0.98	0.14
	(0.95)	(0.55)	(0.97)	(0.76)	(0.35)	(0.41)	(0.36)	(0.46)	(0.47)	(0.92)
Cross-Listed Index	0.03**	0.03***	0.00	0.00	0.20	0.19	0.09	-0.12	0.33***	0.38***
	(0.01)	(0.00)	(0.95)	(0.97)	(0.16)	(0.17)	(0.29)	(0.19)	(0.00)	(0.00)
d(Merger Acquisition)	0.02	0.03	0.06	0.02	0.65	0.49	1.63**	1.53**	0.21	0.35
	(0.82)	(0.67)	(0.20)	(0.64)	(0.59)	(0.71)	(0.03)	(0.04)	(0.84)	(0.73)
Three-month Interbank Rate	0.02	0.04	-0.13***	-0.11***	-2.13***	-2.47***	-2.14**	-2.20***	-1.52**	-1.48***
	(0.62)	(0.50)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)
GDP Growth Rate	0.02**	0.01	0.01	0.00	0.25**	0.29**	0.19***	0.24***	0.19**	0.20**
	(0.03)	(0.12)	(0.20)	(0.64)	(0.03)	(0.01)	(0.00)	(0.00)	(0.03)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00*	0.01	0.01	0.01	0.01*	0.01	0.00
	(0.20)	(0.16)	(0.14)	(0.10)	(0.36)	(0.37)	(0.19)	(0.10)	(0.63)	(0.96)
Constant	0.26	0.11	0.75***	0.69***	15.22***	15.58***	10.17*	11.05***	10.30*	9.30***
	(0.30)	(0.68)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.00)	(0.05)	(0.00)
Hansen test (p-value)	0.53	0.65	0.60	0.66	0.86	0.71	0.78	0.64	0.84	0.77
AR2 test (p-value)	0.93	0.96	0.79	0.93	0.28	0.28	0.55	0.58	0.15	0.17
Wald tests: $\alpha_1+\alpha_2$	-0.04**	-0.02	-0.04*	-0.02	0.64**	0.42	0.44**	0.33	0.43**	0.42
$\alpha_1+\beta_1$	-0.16**	-0.10**	-0.03	-0.04	0.30	0.43	0.29	0.42	0.31	0.49
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.07**	-0.02	-0.02	0.01	0.29	0.21	0.45	0.14	0.40	0.23
$\alpha'_1+\alpha'_2$	0.15**	0.15**	0.05	0.03	-0.48	0.25	-0.38	-0.50	-0.54	-0.66**
$\alpha'_1+\beta'_1$	0.02	0.02	0.09**	0.06**	-0.63**	-0.48**	-0.66**	-0.60**	-0.79**	-0.60**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.03	0.04	0.07**	0.06**	-0.92**	-0.62**	-0.90**	-0.99**	-0.88***	-0.92**

Table A8

Asset structure and the effect of excess control rights on capital ratio adjustment

This table shows the Blundell and Bond (1998) estimation results on the effect of asset structure on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively and zero otherwise. *d(Lending Oriented)* is a dummy equal to one if the ratio of net loans (excluding interbank loans) to total assets is greater than the median value and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.07*	-0.06**	-0.06***	0.74**	0.85**	0.40**	0.45**	0.43**	0.64**
	(0.01)	(0.05)	(0.01)	(0.00)	(0.01)	(0.01)	(0.04)	(0.03)	(0.02)	(0.02)
d(Lending Oriented) × *Capital Ratio Surplus* (α_2)	-0.01	-0.02	-0.01	-0.01	0.14	0.10	-0.02	-0.01	0.10	0.08
	(0.15)	(0.20)	(0.30)	(0.22)	(0.37)	(0.21)	(0.35)	(0.53)	(0.29)	(0.28)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.06	-0.02	0.03	0.04	-0.39*	-0.50*	-0.12*	-0.15*	-0.12*	-0.30**
	(0.25)	(0.40)	(0.19)	(0.21)	(0.09)	(0.06)	(0.10)	(0.07)	(0.07)	(0.05)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.04	0.02	-0.00	-0.01	-0.12	-0.10	-0.02	-0.02	-0.10	-0.06
	(0.22)	(0.23)	(0.34)	(0.20)	(0.28)	(0.18)	(0.19)	(0.27)	(0.12)	(0.21)
Capital Ratio Shortfall (α'_1)	0.11**	0.07**	0.03	0.03	-0.48*	-0.49*	-0.30	-0.29	-0.39	-0.56**
	(0.03)	(0.02)	(0.24)	(0.18)	(0.07)	(0.06)	(0.21)	(0.15)	(0.15)	(0.01)
d(Lending Oriented) × *Capital Ratio Shortfall* (α'_2)	0.06	0.06	0.02	0.01	0.15*	0.17*	-0.08	-0.07	0.06	-0.03
	(0.13)	(0.15)	(0.52)	(0.45)	(0.09)	(0.07)	(0.23)	(0.34)	(0.21)	(0.40)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.08**	-0.04**	0.05*	0.04*	-0.45**	-0.43**	-0.25*	-0.26*	-0.40*	-0.10
	(0.02)	(0.02)	(0.05)	(0.06)	(0.01)	(0.01)	(0.08)	(0.06)	(0.06)	(0.36)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.04	-0.05	-0.01	-0.00	-0.04	-0.10	-0.28*	-0.30**	-0.07	-0.03
	(0.25)	(0.20)	(0.26)	(0.45)	(0.33)	(0.38)	(0.07)	(0.04)	(0.26)	(0.45)
Lagged dependent variable	0.04	0.03	0.42***	0.37***	0.10***	0.12***	0.12***	0.13***	0.16***	0.16***
	(0.24)	(0.44)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.53***	-0.55***	-0.15	-0.04	-0.55	-0.00	-0.15	-0.05	-1.03	-3.20**
	(0.00)	(0.00)	(0.14)	(0.69)	(0.80)	(1.00)	(0.92)	(0.97)	(0.55)	(0.04)
d(Lending Oriented)	-0.14	0.04	0.15	0.16*	-0.46	1.55	0.17	2.88***	-1.19	3.21**
	(0.24)	(0.70)	(0.11)	(0.06)	(0.79)	(0.30)	(0.87)	(0.01)	(0.39)	(0.03)
Deposits Total Assets	-0.00**	-0.00**	0.00*	0.00**	0.01	-0.01	0.03**	0.02*	-0.00	0.01
	(0.04)	(0.04)	(0.08)	(0.01)	(0.64)	(0.60)	(0.02)	(0.09)	(0.98)	(0.50)
Log(Age)	-0.02	-0.03	-0.00	-0.00	-0.42**	-0.24	-0.33**	-0.21*	-0.24	-0.27*
	(0.35)	(0.13)	(0.88)	(0.71)	(0.02)	(0.15)	(0.01)	(0.08)	(0.10)	(0.09)
d(Rescued Bank)	0.02	0.02	0.03	0.05	1.79	1.79	0.76	0.49	0.18	0.41
	(0.82)	(0.87)	(0.71)	(0.54)	(0.15)	(0.20)	(0.39)	(0.51)	(0.88)	(0.73)
Cross-Listed Index	0.03***	0.03***	0.00	0.01	0.19	0.17	0.03	0.05	0.30***	0.27***
	(0.00)	(0.00)	(0.72)	(0.35)	(0.15)	(0.27)	(0.70)	(0.61)	(0.00)	(0.01)
d(Merger Acquisition)	0.08	0.07	0.01	0.02	0.55	0.42	1.89**	1.46**	0.13	0.00
	(0.31)	(0.41)	(0.89)	(0.63)	(0.63)	(0.71)	(0.02)	(0.04)	(0.90)	(1.00)
Three-month Interbank Rate	0.02	0.02	-0.12***	-0.12***	-1.80***	-2.14***	-2.13**	-2.22***	-1.80**	-2.00***
	(0.75)	(0.70)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01*	0.01	0.00	0.00	0.26**	0.24**	0.21***	0.22***	0.14*	0.21***
	(0.07)	(0.14)	(0.39)	(0.57)	(0.01)	(0.02)	(0.00)	(0.00)	(0.09)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.02*	0.01	0.00	0.01
	(0.25)	(0.20)	(0.17)	(0.27)	(0.48)	(0.32)	(0.06)	(0.14)	(0.91)	(0.65)
Constant	0.16	0.29	0.74***	0.73***	12.32***	14.77***	10.33*	11.61***	9.52***	12.73***
	(0.52)	(0.27)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.15	0.19	0.18	0.17	0.38	0.57	0.25	0.24	0.27	0.29
AR2 test (p-value)	0.86	0.90	0.91	0.87	0.27	0.27	0.58	0.59	0.13	0.16
Wald tests: $\alpha_1+\alpha_2$	-0.09**	-0.09**	-0.07**	-0.07**	0.88**	0.95**	0.38**	0.44**	0.53**	0.72**
$\alpha_1+\beta_1$	-0.14**	-0.09**	-0.03	-0.02	0.35	0.35	0.28	0.30	0.31	0.34
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.11**	-0.09**	-0.04	-0.04	0.37	0.35	0.24	0.27	0.31	0.36
$\alpha'_1+\alpha'_2$	0.17**	0.13**	0.05	0.04	-0.33	-0.32	-0.38	-0.36	-0.33	-0.59**
$\alpha'_1+\beta'_1$	0.03	0.03	0.08**	0.07**	-0.93**	-0.92**	-0.55**	-0.55**	-0.79**	-0.66**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.05	0.04	0.09**	0.08**	-0.82**	-0.85**	-0.91***	-0.92***	-0.80**	-0.72**

Table A9

Bank size and the effect of excess control rights on capital ratio adjustment

This table shows the Blundell and Bond (1998) estimation results on the effect of bank size on the relationship between excess control rights and capital ratio adjustment (Eq. (7)) for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Large Bank)* is a dummy equal to one if the bank's total assets is above the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06**	-0.05*	-0.08**	-0.05**	0.86**	0.92***	0.41*	0.45**	0.48**	0.64**
	(0.03)	(0.07)	(0.02)	(0.05)	(0.02)	(0.00)	(0.09)	(0.03)	(0.04)	(0.05)
d(Large Bank) × *Capital Ratio Surplus* (α_2)	-0.03	-0.03	0.02	-0.02	0.07	0.02	0.02	-0.00	0.19	0.16
	(0.44)	(0.59)	(0.17)	(0.52)	(0.79)	(0.75)	(0.75)	(0.99)	(0.42)	(0.28)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.02	-0.01	0.05	0.01	-0.40**	-0.49*	-0.14*	-0.22**	-0.19*	-0.33*
	(0.80)	(0.79)	(0.28)	(0.90)	(0.02)	(0.08)	(0.09)	(0.05)	(0.09)	(0.10)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.08	-0.02	-0.03	0.03	-0.07	-0.05	-0.03	-0.03	-0.05	-0.05
	(0.48)	(0.80)	(0.42)	(0.44)	(0.41)	(0.56)	(0.78)	(0.69)	(0.27)	(0.20)
Capital Ratio Shortfall (α'_1)	0.14***	0.12***	0.04	0.05	-0.34	-0.09	-0.35	-0.38	-0.37	-1.02***
	(0.00)	(0.00)	(0.39)	(0.12)	(0.17)	(0.78)	(0.31)	(0.12)	(0.19)	(0.00)
d(Large Bank) × *Capital Ratio Shortfall* (α'_2)	0.04	0.04	0.00	-0.01	-0.13	-0.09	-0.08	-0.10	-0.14	-0.08
	(0.53)	(0.21)	(0.93)	(0.70)	(0.61)	(0.87)	(0.23)	(0.68)	(0.20)	(0.33)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.06**	-0.05**	0.03*	0.03*	-0.34*	-0.61**	-0.33**	-0.27*	-0.33*	-0.07
	(0.02)	(0.02)	(0.10)	(0.08)	(0.05)	(0.03)	(0.05)	(0.07)	(0.06)	(0.19)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.05**	-0.08***	-0.04*	-0.03*	-0.41**	-0.31*	-0.46**	-0.36**	-0.36**	-0.05
	(0.02)	(0.00)	(0.07)	(0.05)	(0.05)	(0.06)	(0.04)	(0.03)	(0.03)	(0.28)
Lagged dependent variable	0.03	0.03	0.40***	0.38***	0.11***	0.13***	0.12***	0.12***	0.15***	0.16***
	(0.39)	(0.50)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.39***	-0.60***	-0.13	-0.03	-0.56	-0.84	-0.94	-0.65	-1.84	-3.17**
	(0.00)	(0.00)	(0.20)	(0.72)	(0.75)	(0.68)	(0.43)	(0.63)	(0.15)	(0.04)
d(Large Bank)	-0.18	-0.15	-0.20**	0.01	-3.24	-2.18	-2.10	-1.95	-6.04***	-5.01***
	(0.33)	(0.36)	(0.04)	(0.92)	(0.10)	(0.19)	(0.10)	(0.15)	(0.00)	(0.01)
Deposits Total Assets	-0.00**	-0.00**	0.00*	0.00**	-0.00	-0.02	0.01	0.01	-0.02	-0.00
	(0.01)	(0.03)	(0.06)	(0.04)	(0.92)	(0.45)	(0.61)	(0.44)	(0.29)	(0.82)
Log(Age)	-0.02	-0.02	0.00	-0.00	-0.26	-0.17	-0.21*	-0.18	-0.10	-0.09
	(0.24)	(0.15)	(0.95)	(0.93)	(0.12)	(0.32)	(0.06)	(0.17)	(0.46)	(0.57)
d(Rescued Bank)	0.05	0.00	0.01	0.02	1.80	1.17	1.14	0.65	0.84	1.07
	(0.48)	(0.96)	(0.94)	(0.73)	(0.11)	(0.37)	(0.15)	(0.39)	(0.46)	(0.41)
Cross-Listed Index	0.02*	0.03***	0.01	0.00	0.10	0.04	0.03	0.07	0.20**	0.23**
	(0.06)	(0.01)	(0.46)	(0.91)	(0.50)	(0.78)	(0.73)	(0.47)	(0.05)	(0.04)
d(Merger Acquisition)	0.03	0.05	0.05	0.02	0.61	0.20	1.63**	1.32*	0.20	0.05
	(0.72)	(0.53)	(0.32)	(0.63)	(0.58)	(0.88)	(0.05)	(0.10)	(0.84)	(0.96)
Three-month Interbank Rate	0.01	0.03	-0.12***	-0.11***	-2.01***	-1.93***	-2.08***	-2.34***	-1.77***	-1.84***
	(0.76)	(0.60)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.02**	0.01*	0.00	0.00	0.22**	0.25**	0.19**	0.21***	0.14*	0.17**
	(0.05)	(0.10)	(0.38)	(0.78)	(0.04)	(0.03)	(0.01)	(0.00)	(0.09)	(0.04)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
	(0.46)	(0.31)	(0.26)	(0.36)	(0.47)	(0.56)	(0.20)	(0.12)	(0.69)	(0.34)
Constant	0.41*	0.33	0.75***	0.64***	15.95***	14.05***	11.33***	12.18***	13.54***	12.52***
	(0.10)	(0.25)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.23	0.10	0.23	0.19	0.42	0.35	0.21	0.29	0.28	0.26
AR2 test (p-value)	0.89	0.87	0.86	0.87	0.27	0.20	0.58	0.56	0.15	0.17
Wald tests: $\alpha_1+\alpha_2$	-0.09**	-0.08**	-0.06**	-0.07**	0.93**	0.94***	0.43*	0.45**	0.67**	0.80**
$\alpha_1+\beta_1$	-0.08**	-0.06**	-0.03	-0.04	0.46	0.43	0.27	0.23	0.29	0.31
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.19***	-0.11***	-0.04	-0.03	0.46	0.40	0.26	0.20	0.43	0.42
$\alpha'_1+\alpha'_2$	0.18***	0.16***	0.04	0.04	-0.47	-0.18	-0.43	-0.48	-0.51	-1.10***
$\alpha'_1+\beta'_1$	0.08*	0.07*	0.07**	0.08**	-0.68**	-0.70**	-0.68**	-0.65**	-0.70**	-1.09***
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.07	0.03	0.03	0.04	-1.22**	-1.10**	-1.22**	-1.11**	-1.20**	-1.22***

Table A10

Estimating the target capital ratio: regressions on subsamples

This table shows the Blundell and Bond (1998) estimation results of the target capital ratio based on a partial adjustment model [Eq. (3)] over the 2002–2010 period for subsamples of banks without and with excess control rights. Based on a control threshold of 10%, we classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash flow rights, it is widely held, or its control chain is a cross-holding. We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash flow rights. *Tier 1 Total Assets* is Tier 1 capital divided by total assets. *Tier 1 RWA* is Tier 1 capital divided by risk-weighted assets. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Log(Total Assets)* is the natural logarithm of the bank's total assets. *Return on Assets* is net income divided by total assets. *Loan Loss Provisions* is loan loss provisions divided by net loans. *Loans Total Assets* is net loans divided by total assets. *Market Discipline* is total long-term market funding divided by total funding. *d(Listed Bank)* is a dummy equal to one if the bank is publicly listed and zero otherwise. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. In the last three rows, we report the summary statistics (mean, maximum and minimum) of the estimated target capital ratio. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Absence of Excess Control Rights		*Presence of Excess Control Rights*	
Dependent variable	*Tier 1 Total Assets*	*Tier 1 RWA*	*Tier 1 Total Assets*	*Tier 1 RWA*
Lagged dependent variable	0.57***	0.67***	0.56***	0.35***
	(0.00)	(0.00)	(0.00)	(0.00)
Log(Total Assets)	-0.04	-0.04	-0.42***	-0.41***
	(0.33)	(0.58)	(0.00)	(0.00)
Return on Assets	0.59***	0.69***	0.27***	0.45***
	(0.00)	(0.00)	(0.00)	(0.00)
Loan Loss Provisions	0.27***	0.28***	0.18***	-0.07
	(0.00)	(0.00)	(0.00)	(0.25)
Loans Total Assets	-0.01***	-0.02***	-0.00	-0.03***
	(0.00)	(0.00)	(0.20)	(0.00)
Market Discipline	0.01***	0.01***	0.01***	0.00
	(0.00)	(0.00)	(0.00)	(0.27)
d(Listed Bank)	-0.22*	-0.09	-0.44***	-0.51***
	(0.06)	(0.61)	(0.00)	(0.00)
GDP Growth Rate	-0.03**	-0.05**	0.03***	0.02**
	(0.05)	(0.01)	(0.00)	(0.04)
Constant	5.93**	6.95***	5.94***	10.20***
	(0.03)	(0.00)	(0.00)	(0.00)
Number of observations	1,416	1,416	788	788
Number of banks	236	236	154	154
Hansen test (p-value)	0.11	0.12	0.13	0.16
AR2 test (p-value)	0.73	0.46	0.30	0.53
Fitted target (%): Mean	7.04	11.70	6.49	10.14
Maximum	15.73	24.46	12.67	19.76
Minimum	1.61	4.89	2.31	5.98

Table A11

Excess control rights and capital ratio adjustment: regressions on subsamples

This table shows the Blundell and Bond (1998) estimation results on the effect of excess control rights on capital ratio adjustment over the 2002–2010 period. For robustness, we run regressions on subsamples of banks without and with excess control rights (Panels A and B) instead of using interaction terms as in Eq. (6). Based on a control threshold of 10%, we classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash flow rights, it is widely held, or its control chain is a cross-holding. We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash flow rights. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model using the Blundell and Bond (1998) estimation method for subsamples of banks without and with excess control rights. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time t + total assets at time t-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Absence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.06**	-0.03*	-0.04**	-0.03**	0.75**	0.90**	0.46**	0.50**	0.42**	0.66**
	(0.04)	(0.08)	(0.01)	(0.02)	(0.04)	(0.04)	(0.01)	(0.05)	(0.05)	(0.03)
Capital Ratio Shortfall (α'_1)	0.15***	0.12***	0.03	0.04*	-0.43	0.17	-0.35	-0.31	-0.19	-0.47**
	(0.00)	(0.00)	(0.36)	(0.08)	(0.24)	(0.59)	(0.31)	(0.15)	(0.59)	(0.03)
Lagged dependent variable	0.03	0.04	0.38***	0.39***	0.11***	0.11***	0.16***	0.16***	0.23***	0.24***
	(0.46)	(0.40)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Deposits Total Assets	-0.00	-0.00**	0.00	0.00	0.00	-0.02	0.02	0.01	0.01	0.02
	(0.27)	(0.03)	(0.11)	(0.28)	(0.96)	(0.53)	(0.28)	(0.46)	(0.52)	(0.35)
Log(Age)	-0.01	-0.03	-0.01	-0.00	-0.16	-0.17	-0.23*	-0.10	-0.12	-0.05
	(0.51)	(0.13)	(0.53)	(0.94)	(0.43)	(0.36)	(0.07)	(0.52)	(0.44)	(0.78)
d(Rescued Bank)	0.12	0.14	0.02	0.08	2.11	1.70	0.32	0.23	0.20	0.18
	(0.39)	(0.34)	(0.84)	(0.34)	(0.30)	(0.45)	(0.76)	(0.86)	(0.89)	(0.91)
Cross-Listed Index	0.02*	0.03**	0.00	0.00	0.15	0.09	0.11	0.09	0.35***	0.29**
	(0.09)	(0.03)	(0.79)	(0.71)	(0.24)	(0.58)	(0.24)	(0.40)	(0.00)	(0.01)
d(Merger Acquisition)	0.01	0.05	0.04	0.02	0.28	1.09	1.37	1.08	0.90	1.02
	(0.87)	(0.56)	(0.46)	(0.77)	(0.83)	(0.47)	(0.11)	(0.27)	(0.46)	(0.38)
Three-month Interbank Rate	0.05	0.06	-0.12**	-0.09*	-1.96***	-1.88**	-1.86***	-2.21***	-1.15*	-1.23*
	(0.41)	(0.39)	(0.02)	(0.06)	(0.01)	(0.02)	(0.00)	(0.00)	(0.09)	(0.06)
GDP Growth Rate	0.02*	0.01	0.00	0.00	0.19	0.21	0.16*	0.20**	0.11	0.09
	(0.08)	(0.11)	(0.40)	(0.66)	(0.17)	(0.14)	(0.08)	(0.01)	(0.34)	(0.38)
Stock Traded	0.00	0.00	0.00	0.00	0.03**	0.04**	0.01	0.02	0.01	0.00
	(0.71)	(0.98)	(0.63)	(0.79)	(0.05)	(0.02)	(0.23)	(0.12)	(0.69)	(0.94)
Constant	0.08	0.17	0.62***	0.53***	10.25***	11.43***	9.04***	10.12***	5.48**	4.89*
	(0.79)	(0.56)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	(0.08)
Number of observations	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416
Number of banks	236	236	236	236	236	236	236	236	236	236
Hansen test (p-value)	0.14	0.16	0.15	0.18	0.12	0.19	0.15	0.14	0.15	0.15
AR2 test (p-value)	0.86	0.89	0.86	0.80	0.62	0.59	0.90	0.95	0.28	0.23
Panel B: Presence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.14**	-0.07**	-0.04	-0.03	0.40	0.39	0.27	0.26	0.23	0.38
	(0.01)	(0.04)	(0.28)	(0.14)	(0.39)	(0.86)	(0.35)	(0.65)	(0.39)	(0.17)
Capital Ratio Shortfall (α'_1)	0.05	0.02	0.07**	0.04**	-0.74**	-0.74**	-0.60**	-0.75**	-0.50*	-0.65**
	(0.25)	(0.36)	(0.03)	(0.03)	(0.03)	(0.03)	(0.05)	(0.02)	(0.09)	(0.02)

Table A11 (continued)

Lagged dependent variable	0.02	0.02	0.42***	0.40***	0.14**	0.15**	0.15***	0.14**	0.10	0.06
	(0.66)	(0.79)	(0.00)	(0.00)	(0.05)	(0.04)	(0.01)	(0.03)	(0.27)	(0.49)
Deposits Total Assets	-0.00	-0.00	-0.00	0.00	0.02	-0.01	0.03*	0.02	-0.02	0.01
	(0.12)	(0.40)	(0.62)	(0.95)	(0.53)	(0.78)	(0.09)	(0.35)	(0.46)	(0.65)
Log(Age)	0.01	-0.00	-0.01	-0.01	-0.35	-0.25	-0.33	-0.27	-0.05	-0.20
	(0.74)	(0.87)	(0.62)	(0.56)	(0.31)	(0.48)	(0.13)	(0.28)	(0.88)	(0.59)
d(Rescued Bank)	0.08	0.06	0.12	0.05	0.17	0.37	0.81	1.38	0.59	0.43
	(0.54)	(0.52)	(0.26)	(0.59)	(0.94)	(0.89)	(0.61)	(0.46)	(0.77)	(0.88)
Cross-Listed Index	0.01	0.02*	0.02	0.01	0.35	0.15	0.18	0.23	0.16	0.13
	(0.32)	(0.05)	(0.13)	(0.43)	(0.40)	(0.68)	(0.40)	(0.36)	(0.30)	(0.54)
d(Merger Acquisition)	0.01	0.04	0.12	0.13	1.06	0.26	2.54	3.13	2.66	2.53
	(0.93)	(0.76)	(0.30)	(0.37)	(0.67)	(0.92)	(0.19)	(0.11)	(0.11)	(0.17)
Three-month Interbank Rate	-0.09	-0.06	-0.05	-0.05	-3.17	-3.72	-2.92**	-2.92**	-2.47*	-2.17*
	(0.26)	(0.47)	(0.47)	(0.49)	(0.10)	(0.13)	(0.02)	(0.04)	(0.07)	(0.10)
GDP Growth Rate	0.02*	0.01	0.02***	0.01	0.22	0.32	0.24**	0.23*	0.30**	0.29**
	(0.07)	(0.49)	(0.01)	(0.27)	(0.29)	(0.15)	(0.05)	(0.06)	(0.02)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.04	0.03	0.01	0.01	0.01	0.02
	(0.71)	(0.22)	(0.34)	(0.86)	(0.23)	(0.26)	(0.51)	(0.72)	(0.63)	(0.56)
Constant	0.52	0.53*	0.85**	0.66**	27.40***	31.15***	18.31***	22.21***	18.42**	13.71
	(0.14)	(0.09)	(0.02)	(0.03)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	(0.44)
Number of observations	788	788	788	788	788	788	788	788	788	788
Number of banks	154	154	154	154	154	154	154	154	154	154
Hansen test (p-value)	0.14	0.23	0.25	0.45	0.16	0.15	0.33	0.12	0.22	0.22
AR2 test (p-value)	0.24	0.26	0.74	0.81	0.23	0.18	0.24	0.24	0.18	0.11

Table A12

Ownership type and the effect of excess control rights on capital ratio adjustment: regressions on subsamples

This table shows the Blundell and Bond (1998) estimation results on the effect of ownership type on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period. For robustness, we run regressions on subsamples of banks without and with excess control rights (Panels A and B) instead of using interaction terms as in Eq. (7). Banks for which the control chain is a cross-holding are excluded from the initial sample (for simplicity). Based on a control threshold of 10%, we classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash flow rights or if it is widely held. We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash flow rights. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model using the Blundell and Bond (1998) estimation method for subsamples of banks without and with excess control rights. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time t + total assets at time t-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Family)* is a dummy equal to one if the bank is family-controlled and zero otherwise. *d(State)* is a dummy equal to one if the bank is state-controlled and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Absence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.10**	-0.06**	-0.07**	-0.05**	0.76**	0.83**	0.33**	0.45**	0.43**	0.63**
	(0.02)	(0.04)	(0.01)	(0.02)	(0.02)	(0.04)	(0.04)	(0.02)	(0.03)	(0.01)
d(Family) × *Capital Ratio Surplus* (α_2)	0.05	0.01	0.01	0.01	0.13	0.17	0.15	0.14	0.12	0.12
	(0.33)	(0.80)	(0.30)	(0.24)	(0.39)	(0.14)	(0.32)	(0.32)	(0.38)	(0.40)
d(State) × *Capital Ratio Surplus* (α_3)	0.06	-0.00	-0.01	0.00	0.06	0.16	0.09	0.10	0.11	0.14
	(0.29)	(0.92)	(0.34)	(0.32)	(0.70)	(0.31)	(0.30)	(0.53)	(0.34)	(0.60)
Capital Ratio Shortfall (α'_1)	0.15**	0.07**	0.04	0.05*	-0.38	0.10	-0.40	-0.40	-0.34	-0.55**
	(0.01)	(0.01)	(0.29)	(0.10)	(0.11)	(0.67)	(0.21)	(0.17)	(0.14)	(0.01)
d(Family) × *Capital Ratio Shortfall* (α'_2)	0.09	0.07	0.00	0.00	0.04	0.06	0.05	-0.06	0.10	-0.04
	(0.20)	(0.12)	(0.90)	(0.53)	(0.43)	(0.44)	(0.30)	(0.78)	(0.56)	(0.33)
d(State) × *Capital Ratio Shortfall* (α'_3)	0.01	-0.01	-0.03	-0.00	0.02	0.06	0.04	-0.04	0.02	-0.10
	(0.90)	(0.49)	(0.54)	(0.97)	(0.80)	(0.57)	(0.36)	(0.87)	(0.77)	(0.31)
Lagged dependent variable	0.03	0.04	0.39***	0.41***	0.12***	0.13***	0.17***	0.17***	0.27***	0.23***
	(0.45)	(0.32)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Family)	0.14	0.65*	0.19	0.10	5.05	-1.65	3.42	2.33	5.44	4.32
	(0.66)	(0.09)	(0.36)	(0.59)	(0.18)	(0.72)	(0.16)	(0.43)	(0.13)	(0.27)
d(State)	-0.13	0.15	-0.02	-0.05	-5.58	-2.22	-1.15	-1.42	1.42	1.13
	(0.74)	(0.61)	(0.93)	(0.86)	(0.30)	(0.58)	(0.68)	(0.57)	(0.67)	(0.72)
Deposits Total Assets	-0.00	-0.00*	0.00	0.00	0.01	-0.01	0.01	0.02	0.00	0.01
	(0.21)	(0.07)	(0.22)	(0.48)	(0.54)	(0.69)	(0.43)	(0.20)	(0.98)	(0.53)
Log(Age)	-0.01	-0.03**	-0.00	-0.01	-0.31*	-0.28	-0.28**	-0.19	-0.22	-0.14
	(0.40)	(0.05)	(0.74)	(0.40)	(0.10)	(0.12)	(0.04)	(0.17)	(0.19)	(0.42)
d(Rescued Bank)	0.14	0.07	0.08	0.09	2.04	2.47	0.92	0.50	0.15	0.19
	(0.45)	(0.72)	(0.41)	(0.30)	(0.29)	(0.22)	(0.45)	(0.67)	(0.93)	(0.92)
Cross-Listed Index	0.01	0.02	0.00	0.01	0.09	0.15	0.08	0.09	0.32***	0.33**
	(0.24)	(0.14)	(0.84)	(0.43)	(0.52)	(0.32)	(0.37)	(0.37)	(0.00)	(0.01)
d(Merger Acquisition)	0.01	0.01	0.07	0.06	0.11	0.90	1.22	0.57	0.85	1.10
	(0.93)	(0.91)	(0.19)	(0.20)	(0.93)	(0.50)	(0.18)	(0.54)	(0.48)	(0.38)
Three-month Interbank Rate	0.08	0.09	-0.13***	-0.09*	-1.91***	-2.07***	-1.98***	-1.88***	-1.43**	-1.78***
	(0.20)	(0.28)	(0.01)	(0.08)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.00)
GDP Growth Rate	0.01	0.01	0.00	0.00	0.17	0.19	0.23***	0.22**	0.13	0.14
	(0.20)	(0.25)	(0.66)	(0.75)	(0.28)	(0.23)	(0.01)	(0.02)	(0.27)	(0.18)
Stock Traded	0.00	0.00	0.00	0.00	0.03*	0.04**	0.01	0.01	0.00	0.00
	(0.52)	(0.98)	(0.43)	(0.42)	(0.06)	(0.02)	(0.28)	(0.29)	(0.92)	(0.93)
Constant	0.13	0.03	0.64***	0.50**	9.90***	11.26***	9.31***	8.10***	6.45**	7.57**
	(0.67)	(0.93)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)

Table A12 (continued)

Number of observations	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383
Number of banks	231	231	231	231	231	231	231	231	231	231
Hansen test (p-value)	0.15	0.20	0.15	0.21	0.26	0.20	0.21	0.17	0.16	0.22
AR2 test (p-value)	0.91	0.96	0.81	0.93	0.57	0.56	0.98	0.97	0.19	0.22
Wald tests: $\alpha_1+\alpha_2$	-0.05**	-0.04**	-0.06**	-0.03*	0.89**	1.00**	0.48**	0.59**	0.55**	0.75**
$\alpha_1+\alpha_3$	-0.04*	-0.06**	-0.08**	-0.05**	0.82**	0.99**	0.42**	0.55**	0.54**	0.77**
$\alpha'_1+\alpha'_2$	0.24**	0.14**	0.04	0.05*	-0.34	0.16	-0.35	-0.46	-0.24	-0.59**
$\alpha'_1+\alpha'_3$	0.16**	0.06**	0.01	0.05	-0.36	0.16	-0.36	-0.44	-0.32	-0.65**
Panel B: Presence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.15**	-0.06**	-0.07**	-0.06*	0.34	0.42	0.22	0.33	0.23	0.32
	(0.01)	(0.02)	(0.04)	(0.10)	(0.57)	(0.26)	(0.62)	(0.52)	(0.15)	(0.17)
d(Family) × *Capital Ratio Surplus* (α_2)	0.02	-0.06	0.04	0.03	0.06	-0.03	0.10	-0.03	0.02	0.02
	(0.23)	(0.38)	(0.32)	(0.21)	(0.33)	(0.41)	(0.32)	(0.30)	(0.33)	(0.34)
d(State) × *Capital Ratio Surplus* (α_3)	0.05	-0.03	-0.10	0.01	0.10	0.05	0.10	0.01	-0.02	0.03
	(0.25)	(0.42)	(0.34)	(0.30)	(0.27)	(0.31)	(0.29)	(0.35)	(0.30)	(0.36)
Capital Ratio Shortfall (α'_1)	0.08**	0.06**	0.07**	0.05**	-0.50	-0.41	-0.48	-0.50*	-0.37	-0.58**
	(0.02)	(0.02)	(0.04)	(0.04)	(0.19)	(0.16)	(0.23)	(0.08)	(0.42)	(0.02)
d(Family) × *Capital Ratio Shortfall* (α'_2)	-0.06**	-0.03**	0.01	0.03	-0.46**	-0.59**	-0.23*	-0.46*	-0.32*	-0.14
	(0.04)	(0.05)	(0.39)	(0.35)	(0.04)	(0.04)	(0.06)	(0.07)	(0.06)	(0.13)
d(State) × *Capital Ratio Shortfall* (α'_3)	0.00	0.04	-0.09	-0.02	-0.09	-0.13	-0.07	0.04	-0.06	0.01
	(0.90)	(0.45)	(0.34)	(0.29)	(0.28)	(0.25)	(0.36)	(0.37)	(0.47)	(0.31)
Lagged dependent variable	0.01	0.03	0.48***	0.40***	0.08	0.12	0.11*	0.13*	0.09	0.07
	(0.77)	(0.60)	(0.00)	(0.00)	(0.28)	(0.12)	(0.06)	(0.06)	(0.28)	(0.40)
d(Family)	-0.15	-0.18	-0.10	-0.27*	2.74	-2.03	-1.23	-0.11	0.94	-0.91
	(0.66)	(0.60)	(0.58)	(0.10)	(0.62)	(0.67)	(0.78)	(0.97)	(0.83)	(0.81)
d(State)	0.22	0.23	0.05	0.10	5.18	-1.17	6.53*	2.10	3.77	-3.47
	(0.31)	(0.32)	(0.80)	(0.68)	(0.36)	(0.82)	(0.06)	(0.60)	(0.39)	(0.30)
Deposits Total Assets	-0.00	-0.00	-0.00	0.00	0.01	-0.01	0.02	0.02	0.01	0.02
	(0.16)	(0.78)	(0.67)	(0.92)	(0.88)	(0.82)	(0.35)	(0.29)	(0.82)	(0.52)
Log(Age)	-0.00	-0.02	-0.01	-0.01	-0.44	-0.26	-0.27	-0.34	-0.13	-0.36
	(0.97)	(0.35)	(0.53)	(0.57)	(0.31)	(0.48)	(0.33)	(0.19)	(0.75)	(0.37)
d(Rescued Bank)	0.13	0.08	0.02	0.11	1.03	1.60	0.02	0.96	1.07	1.07
	(0.34)	(0.67)	(0.89)	(0.49)	(0.71)	(0.68)	(0.99)	(0.61)	(0.65)	(0.69)
Cross-Listed Index	0.01	0.02**	0.02	0.01	0.37	0.28	0.32	0.07	0.22	0.20
	(0.53)	(0.03)	(0.31)	(0.46)	(0.36)	(0.51)	(0.18)	(0.79)	(0.24)	(0.42)
d(Merger Acquisition)	0.06	0.02	0.07	0.14	0.24	1.06	1.73	3.44*	3.12	2.24
	(0.69)	(0.89)	(0.51)	(0.25)	(0.92)	(0.66)	(0.32)	(0.07)	(0.14)	(0.25)
Three-month Interbank Rate	-0.06	-0.07	0.01	-0.05	-3.21*	-4.03	-2.86*	-3.38**	-2.20*	-2.05
	(0.50)	(0.43)	(0.93)	(0.50)	(0.05)	(0.12)	(0.06)	(0.05)	(0.08)	(0.13)
GDP Growth Rate	0.01	0.01	0.01*	0.01*	0.20	0.40*	0.17	0.24**	0.28**	0.31**
	(0.20)	(0.49)	(0.06)	(0.10)	(0.43)	(0.08)	(0.16)	(0.04)	(0.03)	(0.04)
Stock Traded	0.00	0.00	0.00	0.00	0.03	0.04	-0.00	0.01	0.02	0.02
	(0.81)	(0.88)	(0.18)	(0.84)	(0.48)	(0.35)	(0.93)	(0.80)	(0.66)	(0.64)
Constant	0.79	0.56	0.63	1.29**	15.06	40.94***	24.01**	26.03**	25.89**	15.22
	(0.12)	(0.20)	(0.25)	(0.02)	(0.44)	(0.01)	(0.04)	(0.02)	(0.02)	(0.14)
Number of observations	788	788	788	788	788	788	788	788	788	788
Number of banks	154	154	154	154	154	154	154	154	154	154
Hansen test (p-value)	0.16	0.20	0.30	0.35	0.20	0.19	0.23	0.20	0.20	0.20
AR2 test (p-value)	0.25	0.28	0.89	0.90	0.41	0.30	0.12	0.06	0.09	0.10
Wald tests: $\alpha_1+\alpha_2$	-0.13**	-0.12**	-0.03	-0.03	0.40	0.39	0.32	0.30	0.25	0.34
$\alpha_1+\alpha_3$	-0.10**	-0.09**	-0.17**	-0.05*	0.44	0.47	0.32	0.34	0.21	0.35
$\alpha'_1+\alpha'_2$	0.02	0.03	0.08**	0.08**	-0.96**	-1.00**	-0.71**	-0.96**	-0.69**	-0.72**
$\alpha'_1+\alpha'_3$	0.08**	0.10**	-0.02	0.03	-0.59*	-0.54*	-0.55	-0.46	-0.43	-0.57*

Table A13

Shareholder protection and the effect of excess control rights on capital ratio adjustment: regressions on subsamples

This table shows the Blundell and Bond (1998) estimation results on the effect of shareholder protection rights on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period. For robustness, we run regressions on subsamples of banks without and with excess control rights (Panels A and B) instead of using interaction terms as in Eq. (7). Based on a control threshold of 10%, we classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash flow rights, it is widely held, or its control chain is a cross-holding. We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash flow rights. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model using the Blundell and Bond (1998) estimation method for subsamples of banks without and with excess control rights. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are respectively the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Owner Rights)* is a dummy equal to one if the shareholder protection index as defined in Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008) is greater than the median value and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Absence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.08**	-0.06*	-0.06**	-0.05***	0.71**	0.90**	0.33*	0.42**	0.40**	0.62**
	(0.01)	(0.10)	(0.03)	(0.00)	(0.01)	(0.01)	(0.08)	(0.05)	(0.02)	(0.03)
d(Owner Rights) × *Capital Ratio Surplus* (α_2)	0.02	0.02	-0.02	0.00	0.13	0.08	0.15	0.15	0.18	0.18
	(0.10)	(0.22)	(0.29)	(0.44)	(0.60)	(0.20)	(0.55)	(0.71)	(0.80)	(0.28)
Capital Ratio Shortfall (α'_1)	0.14**	0.08**	0.04	0.04*	-0.36	-0.10	-0.37	-0.30	-0.20	-0.60**
	(0.04)	(0.03)	(0.45)	(0.07)	(0.16)	(0.60)	(0.18)	(0.11)	(0.50)	(0.01)
d(Owner Rights) × *Capital Ratio Shortfall* (α'_2)	0.06	0.06	0.02	-0.00	-0.09	0.17	-0.05	-0.27	-0.08	-0.04
	(0.22)	(0.20)	(0.70)	(0.99)	(0.91)	(0.18)	(0.92)	(0.33)	(0.20)	(0.42)
Lagged dependent variable	0.02	0.03	0.38***	0.39***	0.13***	0.11***	0.16***	0.15***	0.24***	0.25***
	(0.56)	(0.46)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Deposits Total Assets	-0.00	-0.00*	0.00	0.00	0.00	-0.02	0.02	0.01	0.01	0.01
	(0.31)	(0.05)	(0.11)	(0.14)	(0.95)	(0.58)	(0.35)	(0.59)	(0.62)	(0.49)
Log(Age)	-0.01	-0.03*	-0.00	-0.00	-0.12	-0.19	-0.22*	-0.16	-0.09	-0.07
	(0.46)	(0.07)	(0.75)	(0.91)	(0.56)	(0.32)	(0.10)	(0.27)	(0.57)	(0.69)
d(Rescued Bank)	0.10	0.07	0.02	0.08	1.83	1.47	0.39	0.18	0.34	0.70
	(0.48)	(0.63)	(0.84)	(0.37)	(0.32)	(0.49)	(0.71)	(0.88)	(0.81)	(0.62)
Cross-Listed Index	0.02*	0.02**	0.00	0.00	0.10	0.04	0.10	0.12	0.32***	0.26**
	(0.06)	(0.03)	(0.92)	(0.60)	(0.45)	(0.81)	(0.27)	(0.23)	(0.00)	(0.01)
d(Merger Acquisition)	0.03	0.05	0.04	0.03	0.42	1.15	1.34	1.08	0.98	1.18
	(0.73)	(0.53)	(0.46)	(0.59)	(0.75)	(0.46)	(0.12)	(0.28)	(0.42)	(0.36)
Three-month Interbank Rate	0.04	0.05	-0.11**	-0.09*	-2.21***	-2.06**	-1.83**	-2.14***	-1.10*	-1.38**
	(0.50)	(0.47)	(0.03)	(0.06)	(0.00)	(0.01)	(0.01)	(0.00)	(0.08)	(0.04)
GDP Growth Rate	0.02*	0.01	0.00	0.00	0.22	0.23	0.16*	0.18**	0.10	0.07
	(0.10)	(0.11)	(0.59)	(0.49)	(0.10)	(0.11)	(0.06)	(0.03)	(0.36)	(0.55)
Stock Traded	0.00	0.00	0.00	0.00	0.03*	0.03*	0.01	0.02	0.01	0.00
	(0.68)	(0.99)	(0.54)	(0.62)	(0.05)	(0.07)	(0.24)	(0.10)	(0.68)	(0.93)
Constant	0.07	0.23	0.54***	0.49**	10.27***	11.43***	8.87***	10.49***	4.91**	5.12*
	(0.82)	(0.43)	(0.01)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.06)
Number of observations	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416
Number of banks	236	236	236	236	236	236	236	236	236	236
Hansen test (p-value)	0.27	0.29	0.17	0.12	0.44	0.22	0.15	0.10	0.13	0.47
AR2 test (p-value)	0.96	0.96	0.87	0.93	0.63	0.55	0.92	0.89	0.25	0.22

Table A13 (continued)

Wald tests: $\alpha_1+\alpha_2$	-0.06**	-0.04*	-0.08**	-0.05**	0.84**	0.98**	0.48**	0.57**	0.58**	0.80**
$\alpha'_1+\alpha'_2$	0.20**	0.14**	0.06	0.04	-0.45	0.07	-0.42	-0.57	-0.28	-0.64**
Panel B: Presence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.15**	-0.08**	-0.02	-0.03	0.37	0.42	0.30	0.28	0.22	0.34
	(0.05)	(0.05)	(0.81)	(0.23)	(0.41)	(0.41)	(0.43)	(0.54)	(0.39)	(0.12)
d(Owner Rights) × *Capital Ratio Surplus* (α_2)	0.08	0.05	-0.05	-0.05	0.08	0.06	-0.03	0.22	-0.01	0.03
	(0.28)	(0.12)	(0.26)	(0.37)	(0.67)	(0.31)	(0.40)	(0.20)	(0.30)	(0.26)
Capital Ratio Shortfall (α'_1)	0.03	0.02	0.07**	0.06**	-0.83**	-0.94**	-0.91**	-0.91**	-0.65**	-0.67**
	(0.64)	(0.73)	(0.01)	(0.01)	(0.02)	(0.02)	(0.04)	(0.02)	(0.01)	(0.01)
d(Owner Rights) × *Capital Ratio Shortfall* (α'_2)	0.06*	0.07*	-0.02	-0.03	0.25	0.44	0.42	0.31	0.35	0.10
	(0.08)	(0.10)	(0.45)	(0.20)	(0.18)	(0.44)	(0.19)	(0.49)	(0.41)	(0.37)
Lagged dependent variable	0.01	-0.02	0.43***	0.40***	0.14*	0.14**	0.15**	0.14**	0.10	0.07
	(0.89)	(0.79)	(0.00)	(0.00)	(0.06)	(0.05)	(0.01)	(0.02)	(0.22)	(0.46)
Deposits Total Assets	-0.00	-0.00	-0.00	0.00	-0.01	0.00	0.02	0.03	-0.02	0.01
	(0.18)	(0.46)	(0.73)	(0.79)	(0.85)	(0.93)	(0.24)	(0.13)	(0.45)	(0.67)
Log(Age)	-0.00	-0.00	-0.01	-0.00	-0.14	-0.22	-0.26	-0.40	-0.19	-0.04
	(0.83)	(0.99)	(0.65)	(0.79)	(0.73)	(0.49)	(0.30)	(0.14)	(0.61)	(0.93)
d(Rescued Bank)	0.06	0.01	0.09	0.06	0.41	1.08	0.94	0.07	0.25	0.14
	(0.56)	(0.94)	(0.48)	(0.63)	(0.85)	(0.70)	(0.56)	(0.96)	(0.92)	(0.96)
Cross-Listed Index	0.01	0.02	0.02	0.01	0.18	0.15	0.15	0.21	0.01	0.15
	(0.64)	(0.19)	(0.10)	(0.51)	(0.65)	(0.64)	(0.44)	(0.36)	(0.96)	(0.47)
d(Merger Acquisition)	0.02	0.08	0.15	0.18	3.00	1.23	2.88*	2.81	2.53	2.60
	(0.86)	(0.51)	(0.23)	(0.20)	(0.25)	(0.63)	(0.08)	(0.12)	(0.13)	(0.15)
Three-month Interbank Rate	-0.13	-0.05	-0.09	-0.04	-3.16	-4.05	-2.94**	-3.30**	-2.78**	-2.55*
	(0.11)	(0.51)	(0.26)	(0.54)	(0.27)	(0.15)	(0.01)	(0.03)	(0.03)	(0.06)
GDP Growth Rate	0.01	0.00	0.02***	0.01*	0.32	0.35*	0.19*	0.24**	0.35***	0.31**
	(0.13)	(0.69)	(0.01)	(0.06)	(0.19)	(0.07)	(0.09)	(0.04)	(0.01)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.04	0.04	0.02	0.01	0.03	0.02
	(0.75)	(0.83)	(0.15)	(0.84)	(0.23)	(0.18)	(0.36)	(0.75)	(0.43)	(0.63)
Constant	0.71	0.51	1.07**	0.90**	21.70	36.20***	18.57*	21.33***	27.83**	13.75
	(0.13)	(0.15)	(0.01)	(0.03)	(0.30)	(0.00)	(0.06)	(0.00)	(0.04)	(0.24)
Number of observations	788	788	788	788	788	788	788	788	788	788
Number of banks	154	154	154	154	154	154	154	154	154	154
Hansen test (p-value)	0.81	0.83	0.83	0.98	0.78	0.90	0.96	0.84	0.98	0.95
AR2 test (p-value)	0.26	0.27	0.79	0.95	0.26	0.26	0.14	0.13	0.18	0.18
Wald tests: $\alpha_1+\alpha_2$	-0.07**	-0.04**	-0.07**	-0.08**	0.45	0.48*	0.27	0.50	0.21	0.37
$\alpha'_1+\alpha'_2$	0.09**	0.09**	0.05*	0.03	-0.58*	-0.50*	-0.49	-060	-0.30	-0.57*

Table A14

2008 financial crisis and the relationship between excess control rights and capital ratio adjustment: regressions on subsamples

This table shows the Blundell and Bond (1998) estimation results on the effect of the 2008 financial crisis on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period for banks without and with excess control rights (Panels A and B). Based on a control threshold of 10%, we classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash flow rights, it is widely held, or its control chain is a cross-holding. We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash flow rights. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model using the Blundell and Bond (1998) estimation method for subsamples of banks without and with excess control rights. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time t + total assets at time t-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Crisis)* is a dummy equal to one if the observation is from 2008 or 2009 and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis, and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Absence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.09**	-0.06**	-0.04**	-0.05**	1.04**	1.12**	0.52**	0.62**	0.62**	0.91**
	(0.01)	(0.04)	(0.02)	(0.03)	(0.04)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)
d(Crisis) × *Capital Ratio Surplus* (α_2)	0.04*	0.03	-0.01	-0.01	-0.61	-0.43	-0.19	-0.29	-0.30	-0.39
	(0.06)	(0.51)	(0.13)	(0.19)	(0.72)	(0.68)	(0.77)	(0.42)	(0.14)	(0.17)
Capital Ratio Shortfall (α'_1)	0.15***	0.11***	0.04	0.05	-0.43	0.07	-0.24	-0.31	-0.24	-0.64**
	(0.00)	(0.00)	(0.15)	(0.10)	(0.29)	(0.83)	(0.80)	(0.35)	(0.18)	(0.03)
d(Crisis) × *Capital Ratio Shortfall* (α'_2)	-0.06	-0.05	-0.02	-0.02	-0.06	0.18	-0.20	-0.13	-0.17	0.18
	(0.35)	(0.69)	(0.24)	(0.18)	(0.53)	(0.65)	(0.74)	(0.56)	(0.19)	(0.75)
Lagged dependent variable	0.02	0.03	0.38***	0.39***	0.13***	0.11***	0.16***	0.15***	0.24***	0.25***
	(0.56)	(0.46)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Deposits Total Assets	-0.00	-0.00*	0.00	0.00	0.00	-0.02	0.02	0.01	0.01	0.01
	(0.31)	(0.05)	(0.11)	(0.14)	(0.95)	(0.58)	(0.35)	(0.59)	(0.62)	(0.49)
Log(Age)	-0.01	-0.03*	-0.00	-0.00	-0.12	-0.19	-0.22*	-0.16	-0.09	-0.07
	(0.46)	(0.07)	(0.75)	(0.91)	(0.56)	(0.32)	(0.10)	(0.27)	(0.57)	(0.69)
d(Rescued Bank)	0.10	0.07	0.02	0.08	1.83	1.47	0.39	0.18	0.34	0.70
	(0.48)	(0.63)	(0.84)	(0.37)	(0.32)	(0.49)	(0.71)	(0.88)	(0.81)	(0.62)
Cross-Listed Index	0.02*	0.02**	0.00	0.00	0.10	0.04	0.10	0.12	0.32***	0.26**
	(0.06)	(0.03)	(0.92)	(0.60)	(0.45)	(0.81)	(0.27)	(0.23)	(0.00)	(0.01)
d(Merger Acquisition)	0.03	0.05	0.04	0.03	0.42	1.15	1.34	1.08	0.98	1.18
	(0.73)	(0.53)	(0.46)	(0.59)	(0.75)	(0.46)	(0.12)	(0.28)	(0.42)	(0.36)
Three-month Interbank Rate	0.04	0.05	-0.11**	-0.09*	-2.21***	-2.06**	-1.83**	-2.14***	-1.10*	-1.38**
	(0.50)	(0.47)	(0.03)	(0.06)	(0.00)	(0.01)	(0.01)	(0.00)	(0.08)	(0.04)
GDP Growth Rate	0.02*	0.01	0.00	0.00	0.22	0.23	0.16*	0.18**	0.10	0.07
	(0.10)	(0.11)	(0.59)	(0.49)	(0.10)	(0.11)	(0.06)	(0.03)	(0.36)	(0.55)
Stock Traded	0.00	0.00	0.00	0.00	0.03*	0.03*	0.01	0.02	0.01	0.00
	(0.68)	(0.99)	(0.54)	(0.62)	(0.05)	(0.07)	(0.24)	(0.10)	(0.68)	(0.93)
Constant	0.07	0.23	0.54***	0.49**	10.27***	11.43***	8.87***	10.49***	4.91**	5.12*
	(0.82)	(0.43)	(0.01)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.06)
Number of observations	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416
Number of banks	236	236	236	236	236	236	236	236	236	236
Hansen test (p-value)	0.16	0.17	0.12	0.15	0.30	0.25	0.20	0.12	0.16	0.18
AR2 test (p-value)	0.90	0.89	0.95	0.89	0.55	0.61	0.95	0.91	0.28	0.22

Table A14 (continued)

Wald tests: $\alpha_1+\alpha_2$	-0.05*	-0.03	-0.05**	-0.06**	0.43*	0.69**	0.33	0.33	0.32	0.52**
$\alpha'_1+\alpha'_2$	0.09**	0.07**	0.02	0.03	-0.49	0.25	-0.44	-0.44	-0.41	-0.46*
Panel B: Presence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.14**	-0.09**	-0.03	-0.02	0.46	0.49	0.35	0.32	0.30	035
	(0.01)	(0.02)	(0.59)	(0.13)	(0.14)	(0.42)	(0.48)	(0.66)	(0.52)	(0.32)
d(Crisis) × *Capital Ratio Surplus* (α_2)	0.09*	0.06*	-0.04	-0.04	-0.12	-0.10	-0.13	-0.12	-0.09	-0.04
	(0.09)	(0.07)	(0.21)	(0.18)	(0.44)	(0.35)	(0.15)	(0.38)	(0.18)	(0.30)
Capital Ratio Shortfall (α'_1)	0.05	0.02	0.09**	0.12**	-0.92**	-0.88**	-0.66**	-0.82**	-0.72**	-0.81**
	(0.22)	(0.32)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)	(0.01)
d(Crisis) × *Capital Ratio Shortfall* (α'_2)	0.03*	0.04*	-0.05*	-0.07*	0.41	0.38	0.22	0.37	0.43	0.48
	(0.07)	(0.08)	(0.03)	(0.09)	(0.18)	(0.13)	(0.13)	(0.12)	(0.18)	(0.17)
Lagged dependent variable	0.03	0.01	0.42***	0.39***	0.15**	0.15**	0.16***	0.14**	0.12	0.08
	(0.55)	(0.86)	(0.00)	(0.00)	(0.02)	(0.05)	(0.00)	(0.01)	(0.20)	(0.36)
Deposits Total Assets	-0.00*	-0.00	-0.00	0.00	0.01	-0.02	0.03*	0.02	-0.02	0.01
	(0.05)	(0.32)	(0.69)	(0.77)	(0.70)	(0.61)	(0.06)	(0.29)	(0.52)	(0.75)
Log(Age)	0.01	-0.01	-0.01	-0.01	-0.38	-0.28	-0.33	-0.30	-0.12	-0.22
	(0.65)	(0.77)	(0.48)	(0.67)	(0.30)	(0.42)	(0.11)	(0.18)	(0.70)	(0.51)
d(Rescued Bank)	0.12	0.11	0.07	0.11	0.51	0.15	1.31	0.45	0.74	0.40
	(0.28)	(0.30)	(0.44)	(0.26)	(0.81)	(0.95)	(0.33)	(0.75)	(0.72)	(0.87)
Cross-Listed Index	0.01	0.02	0.02	0.00	0.38	0.19	0.15	0.14	0.13	0.20
	(0.30)	(0.11)	(0.15)	(0.73)	(0.33)	(0.59)	(0.46)	(0.53)	(0.39)	(0.30)
d(Merger Acquisition)	0.00	0.02	0.11	0.09	0.85	0.63	2.86	3.18*	2.40	2.55
	(0.98)	(0.86)	(0.29)	(0.49)	(0.73)	(0.80)	(0.11)	(0.10)	(0.13)	(0.17)
Three-month Interbank Rate	-0.07	-0.04	-0.07	0.01	-3.46	-3.36	-2.97**	-2.52*	-2.46*	-1.61
	(0.29)	(0.62)	(0.36)	(0.91)	(0.10)	(0.15)	(0.01)	(0.06)	(0.08)	(0.20)
GDP Growth Rate	0.02**	0.00	0.02**	0.01	0.23	0.32	0.23*	0.22*	0.26**	0.29**
	(0.04)	(0.78)	(0.01)	(0.18)	(0.28)	(0.14)	(0.05)	(0.06)	(0.02)	(0.03)
Stock Traded	0.00	0.00	0.00	0.00	0.04	0.03	0.00	0.00	0.02	0.02
	(0.52)	(0.32)	(0.21)	(0.68)	(0.21)	(0.34)	(0.89)	(0.84)	(0.57)	(0.37)
Constant	0.49	0.58	0.76**	0.67**	28.67***	31.29***	17.24*	20.47***	14.68	12.31
	(0.10)	(0.19)	(0.02)	(0.04)	(0.00)	(0.00)	(0.05)	(0.00)	(0.20)	(0.35)
Number of observations	788	788	788	788	788	788	788	788	788	788
Number of banks	154	154	154	154	154	154	154	154	154	154
Hansen test (p-value)	0.17	0.20	0.10	0.10	0.20	0.23	0.23	0.17	0.18	0.20
AR2 test (p-value)	0.89	0.89	0.92	0.87	0.56	0.62	0.92	0.93	0.26	0.27
Wald tests: $\alpha_1+\alpha_2$	-0.05	-0.03*	-0.07**	-0.06**	0.34	0.39	0.22	0.20	0.21	0.31
$\alpha'_1+\alpha'_2$	0.08**	0.06**	0.04	0.05	-0.51	-0.50	-0.44	-0.45	-0.29	-0.33

Table A15

Bank capitalization and the effect of excess control rights on capital ratio adjustment: regressions on subsamples

This table shows the Blundell and Bond (1998) estimation results on the effect of bank capitalization on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period for banks without and with excess control rights (Panels A and B). Based on a control threshold of 10%, we classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash flow rights, it is widely held, or its control chain is a cross-holding. We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash flow rights. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model using the Blundell and Bond (1998) estimation method for subsamples of banks without and with excess control rights. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans) and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Undercapitalized)* is a dummy equal to one if the Tier 1 RWA (Tier 1 Total Assets) ratio is less than 6% (4%) and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Absence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.06**	-0.06**	-0.05**	-0.05*	0.74**	0.82**	0.49**	0.52**	0.47**	0.65***
	(0.02)	(0.05)	(0.03)	(0.06)	(0.01)	(0.04)	(0.04)	(0.01)	(0.01)	(0.00)
d(Undercapitalized) × *Capital Ratio Surplus* (α_2)	0.01	0.04**	0.00	0.03*	-0.09	-0.44**	-0.04	-0.21*	-0.03	-0.25*
	(0.82)	(0.02)	(0.95)	(0.08)	(0.32)	(0.05)	(0.34)	(0.07)	(0.84)	(0.07)
Capital Ratio Shortfall (α'_1)	0.09**	0.08**	0.03	0.03	-0.35	-0.05	-0.27	-0.38	-0.37	-0.49**
	(0.05)	(0.02)	(0.40)	(0.11)	(0.20)	(0.38)	(0.41)	(0.16)	(0.11)	(0.03)
d(Undercapitalized) × *Capital Ratio Shortfall* (α'_2)	0.05	0.07**	0.01	0.00	-0.10	0.31	-0.10	-0.09	-0.14	-0.18
	(0.22)	(0.05)	(0.67)	(0.92)	(0.23)	(0.55)	(0.20)	(0.66)	(0.21)	(0.27)
Lagged dependent variable	0.08	0.10	0.43***	0.46***	0.09**	0.11**	0.14***	0.15***	0.28***	0.27***
	(0.16)	(0.11)	(0.00)	(0.00)	(0.05)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)
d(Undercapitalized)	0.02	0.27	-0.09	-0.14	-4.97	-1.37	-4.07**	-3.55	-4.15*	-3.20
	(0.92)	(0.44)	(0.44)	(0.41)	(0.11)	(0.74)	(0.03)	(0.30)	(0.08)	(0.36)
Deposits Total Assets	-0.01***	-0.00	0.01**	0.00*	-0.01	-0.02	0.00	0.00	-0.01	-0.02
	(0.01)	(0.14)	(0.03)	(0.07)	(0.75)	(0.68)	(0.93)	(0.98)	(0.62)	(0.50)
Log(Age)	0.07**	-0.01	0.00	-0.01	0.49	0.43	0.44*	0.70**	0.71**	0.81**
	(0.01)	(0.73)	(0.99)	(0.46)	(0.37)	(0.45)	(0.05)	(0.04)	(0.02)	(0.02)
d(Rescued Bank)	0.08	0.17	0.07	0.26*	2.19	2.34	0.32	0.52	1.73	3.50
	(0.64)	(0.46)	(0.55)	(0.10)	(0.28)	(0.38)	(0.81)	(0.84)	(0.55)	(0.44)
Cross-Listed Index	0.03**	0.02	0.00	0.00	0.30	0.17	0.12	0.10	0.40***	0.33**
	(0.04)	(0.19)	(0.67)	(0.75)	(0.12)	(0.36)	(0.17)	(0.43)	(0.00)	(0.03)
d(Merger Acquisition)	0.11	0.13	0.02	0.03	1.06	0.71	0.16	0.16	0.52	0.50
	(0.13)	(0.12)	(0.64)	(0.59)	(0.49)	(0.69)	(0.87)	(0.89)	(0.71)	(0.70)
Three-month Interbank Rate	0.17	0.22*	-0.08	-0.06	-1.88*	-0.82	-2.52**	-2.30**	-2.18*	-2.17**
	(0.13)	(0.07)	(0.35)	(0.41)	(0.07)	(0.60)	(0.01)	(0.01)	(0.08)	(0.05)
GDP Growth Rate	0.01	0.01	0.01	0.01	0.23	0.18	0.22**	0.23**	0.28*	0.26**
	(0.30)	(0.54)	(0.18)	(0.19)	(0.23)	(0.34)	(0.03)	(0.02)	(0.05)	(0.03)
Stock Traded	0.00	0.00	0.00	0.00**	0.02	0.02	0.01	0.02	0.02	0.01
	(0.40)	(0.56)	(0.21)	(0.04)	(0.34)	(0.38)	(0.79)	(0.24)	(0.57)	(0.59)
Constant	-0.48	-0.61	0.28	0.42	10.31*	5.13	10.32**	6.24	7.75	9.48*
	(0.41)	(0.36)	(0.45)	(0.22)	(0.07)	(0.48)	(0.04)	(0.18)	(0.16)	(0.10)
Number of observations	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416
Number of banks	236	236	236	236	236	236	236	236	236	236

Table A15 (continued)

Hansen test (p-value)	0.50	0.56	0.54	0.62	0.78	0.73	0.75	0.49	0.73	0.75
AR2 test (p-value)	0.83	0.94	0.89	0.96	0.68	0.52	0.12	0.15	0.84	0.86
Wald tests: $\alpha_1+\alpha_2$	-0.05**	-0.02	-0.05**	-0.02	0.65**	0.38	0.45**	0.31	0.44**	0.40
$\alpha'_1+\alpha'_2$	0.14**	0.15**	0.04	0.03	-0.45	0.26	-0.37	-0.47	-0.51	-0.67**
Panel B: Presence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.14**	-0.09**	-0.04	-0.04	0.31	0.41	0.32	0.42	0.33	0.45
	(0.03)	(0.01)	(0.15)	(0.20)	(0.22)	(0.32)	(0.15)	(0.20)	(0.17)	(0.25)
d(Undercapitalized) × *Capital Ratio Surplus* (α_2)	0.08	0.07	0.00	0.02	-0.01	-0.20	0.17	-0.24	0.10	-0.24
	(0.28)	(0.02)	(0.95)	(0.18)	(0.30)	(0.25)	(0.34)	(0.27)	(0.28)	(0.17)
Capital Ratio Shortfall (α'_1)	0.03	0.02	0.08**	0.05**	-0.65**	-0.48**	-0.66**	-0.61**	-0.77**	-0.60**
	(0.33)	(0.45)	(0.01)	(0.05)	(0.01)	(0.03)	(0.01)	(0.03)	(0.02)	(0.02)
d(Undercapitalized) × *Capital Ratio Shortfall* (α'_2)	0.01	0.01	-0.03	0.00	-0.28	-0.16**	-0.23	-0.37**	-0.09	-0.32*
	(0.22)	(0.30)	(0.27)	(0.90)	(0.16)	(0.05)	(0.10)	(0.04)	(0.21)	(0.07)
Lagged dependent variable	0.04	0.05	0.36***	0.36***	0.11	0.05	0.20***	0.17**	0.01	0.01
	(0.52)	(0.49)	(0.01)	(0.00)	(0.22)	(0.62)	(0.01)	(0.03)	(0.92)	(0.95)
d(Undercapitalized)	0.21	0.15	0.55	-0.17	2.31	-9.35*	-0.68	-2.78	0.28	1.16
	(0.63)	(0.66)	(0.22)	(0.49)	(0.77)	(0.10)	(0.89)	(0.69)	(0.94)	(0.84)
Deposits Total Assets	-0.00	-0.00	0.00	0.00	0.06	-0.01	0.02	-0.00	-0.02	0.01
	(0.21)	(0.61)	(0.33)	(0.41)	(0.28)	(0.93)	(0.67)	(0.95)	(0.66)	(0.91)
Log(Age)	-0.01	-0.03	-0.03	0.00	-0.79	-2.69	-0.14	0.66	0.66	0.21
	(0.88)	(0.61)	(0.35)	(0.96)	(0.41)	(0.19)	(0.85)	(0.56)	(0.40)	(0.83)
d(Rescued Bank)	0.17	0.13	0.15	0.05	1.35	7.77	0.72	1.32	0.46	0.65
	(0.28)	(0.59)	(0.23)	(0.82)	(0.64)	(0.56)	(0.76)	(0.77)	(0.87)	(0.85)
Cross-Listed Index	0.01	0.03	0.01	0.01	0.69	0.35	0.13	0.42	0.14	0.16
	(0.45)	(0.27)	(0.33)	(0.64)	(0.22)	(0.72)	(0.75)	(0.42)	(0.64)	(0.53)
d(Merger Acquisition)	0.07	0.09	0.13	0.03	0.50	0.46	1.19	2.30	2.34	3.01*
	(0.63)	(0.52)	(0.36)	(0.85)	(0.80)	(0.89)	(0.53)	(0.41)	(0.11)	(0.05)
Three-month Interbank Rate	-0.18	0.13	-0.04	0.02	1.19	-0.45	-1.21	1.51	-1.37	-0.18
	(0.26)	(0.46)	(0.63)	(0.91)	(0.75)	(0.89)	(0.61)	(0.72)	(0.37)	(0.94)
GDP Growth Rate	0.01	0.01	0.02***	0.01	0.02	0.22	0.03	0.04	0.11	0.07
	(0.51)	(0.65)	(0.00)	(0.35)	(0.95)	(0.40)	(0.89)	(0.85)	(0.34)	(0.71)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.05	0.01	0.02
	(0.93)	(0.73)	(0.89)	(0.40)	(0.80)	(0.87)	(0.93)	(0.39)	(0.80)	(0.58)
Constant	1.18	0.17	0.29	1.11*	1.77	13.58	7.97	6.62	23.34*	8.51
	(0.15)	(0.77)	(0.57)	(0.08)	(0.95)	(0.42)	(0.67)	(0.78)	(0.08)	(0.47)
Number of observations	788	788	788	788	788	788	788	788	788	788
Number of banks	154	154	154	154	154	154	154	154	154	154
Hansen test (p-value)	0.20	0.21	0.22	0.34	0.23	0.21	0.30	0.22	0.24	0.20
AR2 test (p-value)	0.86	0.61	0.20	0.91	0.92	0.74	0.23	0.22	0.82	0.58
Wald tests: $\alpha_1+\alpha_2$	-0.06**	-0.02	-0.04	-0.02	0.30	0.21	0.49	0.18	0.43	0.21
$\alpha'_1+\alpha'_2$	0.04	0.03	0.05**	0.05**	-0.93**	-0.64**	-0.89**	-0.98**	-0.86**	-0.92**

Table A16

Asset structure and the effect of excess control rights on capital ratio adjustment: regressions on subsamples

This table shows the Blundell and Bond (1998) estimation results on the effect of asset structure on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period for banks without and with excess control rights (Panels A and B). Based on a control threshold of 10%, we classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash flow rights, it is widely held, or its control chain is a cross-holding. We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash flow rights. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model using the Blundell and Bond (1998) estimation method for subsamples of banks without and with excess control rights. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively and zero otherwise. *d(Lending Oriented)* is a dummy equal to one if the ratio of net loans (excluding interbank loans) to total assets is greater than the median value and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Absence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.09**	-0.07**	-0.06**	-0.06***	0.75**	0.85**	0.41**	0.45**	0.43**	0.64**
	(0.01)	(0.04)	(0.01)	(0.00)	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)	(0.01)
d(Lending Oriented) × *Capital Ratio Surplus* (α_2)	-0.01	-0.02	-0.01	-0.01	0.14	0.10	-0.02	-0.02	0.11	0.09
	(0.19)	(0.19)	(0.30)	(0.27)	(0.33)	(0.23)	(0.38)	(0.46)	(0.27)	(0.25)
Capital Ratio Shortfall (α'_1)	0.11**	0.08***	0.04	0.04	-0.48*	-0.45*	-0.30	-0.31	-0.38	-0.59**
	(0.01)	(0.00)	(0.20)	(0.17)	(0.06)	(0.06)	(0.18)	(0.14)	(0.13)	(0.01)
d(Lending Oriented) × *Capital Ratio Shortfall* (α'_2)	0.04	0.04	0.00	0.01	0.18*	0.15*	-0.03	-0.03	0.08	-0.02
	(0.15)	(0.20)	(0.54)	(0.40)	(0.06)	(0.06)	(0.34)	(0.33)	(0.20)	(0.44)
Lagged dependent variable	0.03	0.04	0.40***	0.37***	0.11***	0.13***	0.17***	0.17***	0.26***	0.26***
	(0.49)	(0.36)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Lending Oriented)	0.03	0.09	0.11	0.21**	0.13	3.20	1.95*	3.59***	-0.32	1.59
	(0.84)	(0.49)	(0.31)	(0.03)	(0.95)	(0.10)	(0.10)	(0.01)	(0.81)	(0.31)
Deposits Total Assets	-0.00*	-0.00**	0.00	0.00	0.01	-0.00	0.02	0.02	0.01	0.01
	(0.10)	(0.02)	(0.17)	(0.12)	(0.82)	(0.85)	(0.20)	(0.14)	(0.69)	(0.44)
Log(Age)	-0.01	-0.02	-0.00	-0.00	-0.34	-0.16	-0.23*	-0.11	-0.22	-0.22
	(0.73)	(0.33)	(0.78)	(0.91)	(0.11)	(0.42)	(0.10)	(0.43)	(0.15)	(0.18)
d(Rescued Bank)	0.02	0.09	0.08	0.05	1.38	2.05	0.12	0.02	0.35	1.16
	(0.88)	(0.60)	(0.43)	(0.69)	(0.50)	(0.35)	(0.92)	(0.99)	(0.83)	(0.54)
Cross-Listed Index	0.03**	0.03**	0.00	0.01	0.06	0.05	0.04	0.10	0.32***	0.25**
	(0.03)	(0.03)	(0.99)	(0.43)	(0.68)	(0.79)	(0.69)	(0.39)	(0.01)	(0.03)
d(Merger Acquisition)	0.02	0.01	0.06	0.04	0.85	0.03	1.20	1.06	0.39	0.63
	(0.80)	(0.93)	(0.19)	(0.43)	(0.54)	(0.98)	(0.20)	(0.23)	(0.76)	(0.55)
Three-month Interbank Rate	0.06	0.06	-0.10**	-0.10**	-1.47**	-1.51**	-1.59**	-1.98***	-1.36**	-1.78***
	(0.32)	(0.33)	(0.02)	(0.01)	(0.03)	(0.04)	(0.01)	(0.00)	(0.02)	(0.00)
GDP Growth Rate	0.02*	0.01	0.00	0.00	0.26*	0.13	0.22**	0.22***	0.15	0.14
	(0.09)	(0.28)	(0.72)	(0.75)	(0.07)	(0.32)	(0.01)	(0.00)	(0.19)	(0.19)
Stock Traded	0.00	0.00	0.00	0.00	0.03**	0.03**	0.02**	0.01	0.01	0.01
	(0.36)	(1.00)	(0.14)	(0.31)	(0.04)	(0.02)	(0.05)	(0.17)	(0.72)	(0.37)
Constant	0.10	0.15	0.59***	0.62***	10.41***	12.03***	9.01***	10.94***	6.54***	8.31***
	(0.72)	(0.60)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Number of observations	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416
Number of banks	236	236	236	236	236	236	236	236	236	236

Table A16 (continued)

Hansen test (p-value)	0.22	0.17	0.16	0.14	0.17	0.22	0.17	0.14	0.13	0.12
AR2 test (p-value)	0.93	0.96	0.96	0.82	0.60	0.65	0.74	0.89	0.23	0.21
Wald tests: $\alpha_1+\alpha_2$	-0.10**	-0.09**	-0.07**	-0.07**	0.89**	0.95**	0.39**	0.43**	0.54**	0.73**
$\alpha'_1+\alpha'_2$	0.15**	0.12**	0.04	0.05	-0.30	-0.30	-0.33	-0.34	-0.30	-0.61**
Panel B: Presence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.14***	-0.08**	-0.03	-0.04	0.35	0.36	0.30	0.26	0.29	0.30
	(0.00)	(0.02)	(0.23)	(0.19)	(0.23)	(0.32)	(0.32)	(0.30)	(0.33)	(0.21)
d(Lending Oriented) × *Capital Ratio Surplus* (α_2)	0.02	0.00	-0.01	-0.02	0.06	0.01	-0.04	-0.04	0.01	0.01
	(0.20)	(0.22)	(0.30)	(0.26)	(0.40)	(0.26)	(0.17)	(0.20)	(0.17)	(0.20)
Capital Ratio Shortfall (α'_1)	0.03	0.04	0.08**	0.10***	-0.92***	-0.90**	-0.60**	-0.63**	-0.72**	-0.69***
	(0.30)	(0.33)	(0.02	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)
d(Lending Oriented) × *Capital Ratio Shortfall* (α'_2)	0.04	0.04	-0.01	-0.02	0.09	0.16	-0.39*	-0.35*	-0.18	-0.14
	(0.29)	(0.20)	(0.30)	(0.34)	(0.31)	(0.14)	(0.05)	(0.05)	(0.16)	(0.23)
Lagged dependent variable	0.01	0.01	0.43***	0.37***	0.10	0.15**	0.14**	0.16**	0.10	0.12
	(0.84)	(0.75)	(0.00)	(0.00)	(0.16)	(0.02)	(0.01)	(0.01)	(0.21)	(0.18)
d(Lending Oriented)	-0.27*	-0.01	0.11	0.13	-0.47	-2.10	-0.94	1.33	-1.84	4.23
	(0.09)	(0.98)	(0.36)	(0.27)	(0.87)	(0.36)	(0.63)	(0.40)	(0.52)	(0.10)
Deposits Total Assets	-0.00*	-0.00	-0.00	0.00	0.02	-0.01	0.02	0.02	-0.02	0.02
	(0.09)	(0.20)	(0.76)	(0.65)	(0.54)	(0.68)	(0.24)	(0.25)	(0.64)	(0.62)
Log(Age)	-0.01	-0.00	-0.00	-0.00	-0.48	-0.19	-0.27	-0.25	-0.10	-0.21
	(0.80)	(0.84)	(0.92)	(0.82)	(0.22)	(0.55)	(0.23)	(0.31)	(0.80)	(0.60)
d(Rescued Bank)	0.08	0.01	0.08	0.04	0.24	0.48	0.26	0.90	0.17	0.95
	(0.48)	(0.95)	(0.51)	(0.76)	(0.91)	(0.84)	(0.86)	(0.58)	(0.95)	(0.63)
Cross-Listed Index	0.02	0.02	0.02*	0.01	0.42	0.21	0.07	0.02	0.08	0.04
	(0.25)	(0.15)	(0.09)	(0.29)	(0.33)	(0.49)	(0.73)	(0.91)	(0.72)	(0.85)
d(Merger Acquisition)	0.00	0.00	0.15	0.11	1.56	1.88	2.89*	3.95**	2.38	2.12
	(0.99)	(0.99)	(0.17)	(0.36)	(0.53)	(0.40)	(0.05)	(0.04)	(0.22)	(0.26)
Three-month Interbank Rate	-0.08	-0.15*	-0.05	-0.04	-3.48*	-4.86**	-2.86**	-4.04**	-2.60**	-2.37*
	(0.36)	(0.10)	(0.46)	(0.52)	(0.10)	(0.04)	(0.05)	(0.01)	(0.03)	(0.09)
GDP Growth Rate	0.01	0.01	0.02**	0.01	0.30	0.42**	0.20	0.22*	0.31**	0.34***
	(0.18)	(0.59)	(0.02)	(0.20)	(0.14)	(0.04)	(0.17)	(0.06)	(0.02)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00	0.03	0.02	0.01	0.01	0.02	0.04
	(0.67)	(0.85)	(0.39)	(0.42)	(0.48)	(0.44)	(0.70)	(0.59)	(0.50)	(0.26)
Constant	0.46	0.72	0.74*	1.28***	28.48**	34.54**	20.52**	25.36**	25.52**	19.33
	(0.33)	(0.13)	(0.09)	(0.01)	(0.04)	(0.03)	(0.03)	(0.01)	(0.01)	(0.17)
Number of observations	788	788	788	788	788	788	788	788	788	788
Number of banks	154	154	154	154	154	154	154	154	154	154
Hansen test (p-value)	0.87	0.94	0.94	0.95	0.83	0.93	0.92	0.91	0.96	0.91
AR2 test (p-value)	0.26	0.26	0.71	0.73	0.30	0.19	0.12	0.12	0.14	0.10
Wald tests: $\alpha_1+\alpha_2$	-0.12**	-0.08**	-0.04	-0.06	0.41	0.37	0.26	0.22	0.30	0.31
$\alpha'_1+\alpha'_2$	0.07	0.08	0.07**	0.08**	-0.83**	-0.74**	-0.99***	-0.98***	-0.90**	-0.83**

Table A17

Bank size and the effect of excess control rights on capital ratio adjustment: regressions on subsamples

This table shows the Blundell and Bond (1998) estimation results on the effect of bank size on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period for banks without and with excess control rights (Panels A and B). Based on a control threshold of 10%, we classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash flow rights, it is widely held, or its control chain is a cross-holding. We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash flow rights. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model using the Blundell and Bond (1998) estimation method for subsamples of banks without and with excess control rights. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Large Bank)* is a dummy equal to one if the bank's total assets is above the median value and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Panel A: Absence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.06**	-0.05**	-0.08**	-0.05**	0.85**	0.91***	0.42*	0.45**	0.47**	0.63**
	(0.02)	(0.05)	(0.01)	(0.04)	(0.02)	(0.00)	(0.08)	(0.02)	(0.03)	(0.04)
d(Large Bank) × *Capital Ratio Surplus* (α_2)	-0.03	-0.02	0.02	-0.03	0.08	0.02	0.03	-0.00	0.16	0.16
	(0.41)	(0.61)	(0.19)	(0.48)	(0.72)	(0.73)	(0.75)	(0.95)	(0.45)	(0.25)
Capital Ratio Shortfall (α'_1)	0.13***	0.12***	0.04	0.05	-0.35	-0.10	-0.36	-0.38	-0.36	-1.00***
	(0.00)	(0.00)	(0.40)	(0.11)	(0.16)	(0.74)	(0.29)	(0.11)	(0.20)	(0.00)
d(Large Bank) × *Capital Ratio Shortfall* (α'_2)	0.03	0.04	0.00	-0.01	-0.12	-0.10	-0.09	-0.10	-0.12	-0.09
	(0.56)	(0.23)	(0.95)	(0.69)	(0.60)	(0.83)	(0.23)	(0.65)	(0.20)	(0.31)
Lagged dependent variable	0.04	0.04	0.37***	0.39***	0.11***	0.12***	0.24***	0.25***	0.24***	0.24***
	(0.41)	(0.33)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Large Bank)	-0.21	-0.12	-0.26**	-0.04	-6.11**	-2.98	-3.63**	-2.48	-4.10**	-5.46***
	(0.35)	(0.46)	(0.02)	(0.68)	(0.01)	(0.16)	(0.03)	(0.16)	(0.03)	(0.00)
Deposits Total Assets	-0.00*	-0.00**	0.00	0.00	-0.02	-0.01	0.01	0.00	-0.01	-0.01
	(0.06)	(0.03)	(0.15)	(0.16)	(0.51)	(0.65)	(0.75)	(0.92)	(0.67)	(0.66)
Log(Age)	-0.01	-0.03	-0.01	-0.01	-0.20	-0.12	-0.10	-0.09	-0.10	-0.05
	(0.44)	(0.17)	(0.63)	(0.62)	(0.32)	(0.49)	(0.42)	(0.49)	(0.51)	(0.78)
d(Rescued Bank)	0.03	0.13	0.10	0.04	2.14	1.96	0.90	0.76	0.14	0.11
	(0.85)	(0.37)	(0.34)	(0.67)	(0.25)	(0.34)	(0.45)	(0.55)	(0.92)	(0.94)
Cross-Listed Index	0.02	0.02*	0.00	0.00	0.06	0.09	0.03	0.03	0.25**	0.12
	(0.16)	(0.10)	(0.77)	(0.80)	(0.71)	(0.59)	(0.76)	(0.76)	(0.03)	(0.27)
d(Merger Acquisition)	0.02	0.01	0.01	0.01	1.14	0.06	1.01	1.20	1.06	0.37
	(0.80)	(0.91)	(0.89)	(0.89)	(0.43)	(0.97)	(0.28)	(0.21)	(0.36)	(0.76)
Three-month Interbank Rate	0.06	0.08	-0.12***	-0.11**	-1.70**	-1.62*	-1.82***	-2.08***	-1.42**	-1.36*
	(0.30)	(0.22)	(0.00)	(0.02)	(0.04)	(0.05)	(0.00)	(0.00)	(0.02)	(0.06)
GDP Growth Rate	0.01	0.01	-0.00	-0.00	0.14	0.14	0.17**	0.20***	0.07	0.13
	(0.27)	(0.16)	(0.75)	(0.83)	(0.31)	(0.35)	(0.04)	(0.00)	(0.52)	(0.21)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.03*	0.01	0.01	0.00	0.00
	(0.69)	(0.75)	(0.54)	(0.44)	(0.27)	(0.09)	(0.13)	(0.18)	(0.81)	(0.81)
Constant	0.18	0.17	0.77***	0.62***	14.66***	12.01***	10.62***	11.04***	9.24***	9.35***
	(0.52)	(0.58)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Number of observations	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416	1,416
Number of banks	236	236	236	236	236	236	236	236	236	236

Table A17 (continued)

Hansen test (p-value)	0.32	0.29	0.15	0.17	0.17	0.17	0.14	0.18	0.13	0.28
AR2 test (p-value)	0.95	0.96	0.91	0.96	0.62	0.57	0.92	0.91	0.26	0.24
Wald tests: $\alpha_1+\alpha_2$	-0.09**	-0.07**	-0.06**	-0.08**	0.93**	0.93**	0.45**	0.45**	0.63**	0.79**
$\alpha'_1+\alpha'_2$	0.16**	0.16**	0.04	0.04	-0.47	-0.20	-0.45	-0.48	-0.48	-1.09**
Panel B: Presence of Excess Control Rights										
Capital Ratio Surplus (α_1)	-0.09**	-0.06**	-0.04	-0.05	0.44	0.43	0.29	0.24	0.30	0.31
	(0.02)	(0.03)	(0.34)	(0.12)	(0.40)	(0.29)	(0.18)	(0.23)	(0.33)	(0.17)
d(Large Bank) × *Capital Ratio Surplus* (α_2)	-0.09	-0.06	-0.01	0.00	0.00	-0.02	-0.01	-0.03	0.12	0.11
	(0.24)	(0.52)	(0.77)	(0.84)	(0.80)	(0.92)	(0.60)	(0.97)	(0.43)	(0.17)
Capital Ratio Shortfall (α'_1)	0.08*	0.07*	0.07**	0.08**	-0.68**	-0.71**	-0.68**	-0.65**	-0.69**	-1.09***
	(0.06)	(0.06)	(0.03)	(0.05)	(0.05)	(0.01)	(0.02)	(0.02)	(0.04)	(0.00)
d(Large Bank) × *Capital Ratio Shortfall* (α'_2)	-0.03**	-0.04**	-0.04*	-0.04**	-0.54**	-0.41**	-0.55**	-0.45**	-0.51**	-0.11
	(0.04)	(0.02)	(0.08)	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)	(0.03)	(0.45)
Lagged dependent variable	0.01	-0.02	0.40***	0.39***	0.11	0.14*	0.13**	0.15**	0.12	0.06
	(0.88)	(0.72)	(0.00)	(0.00)	(0.12)	(0.06)	(0.02)	(0.02)	(0.15)	(0.48)
d(Large Bank)	0.10	-0.04	-0.03	0.09	0.81	1.59	0.01	-0.10	-4.40	-0.73
	(0.65)	(0.84)	(0.85)	(0.47)	(0.85)	(0.64)	(1.00)	(0.96)	(0.15)	(0.82)
Deposits Total Assets	-0.00	-0.00	-0.00	0.00	0.02	-0.00	0.02	0.02	-0.01	0.01
	(0.32)	(0.28)	(0.87)	(0.62)	(0.50)	(0.89)	(0.26)	(0.29)	(0.67)	(0.74)
Log(Age)	0.00	-0.01	-0.00	-0.01	-0.32	-0.31	-0.33	-0.28	-0.06	0.19
	(0.83)	(0.54)	(0.99)	(0.60)	(0.42)	(0.38)	(0.13)	(0.23)	(0.86)	(0.58)
d(Rescued Bank)	0.07	0.04	0.15	0.11	0.25	0.33	0.18	0.22	1.10	1.69
	(0.51)	(0.70)	(0.22)	(0.29)	(0.90)	(0.90)	(0.89)	(0.91)	(0.60)	(0.43)
Cross-Listed Index	0.00	0.01	0.02	0.01	0.39	0.15	0.11	0.20	0.04	0.02
	(0.78)	(0.44)	(0.24)	(0.64)	(0.34)	(0.66)	(0.59)	(0.35)	(0.83)	(0.92)
d(Merger Acquisition)	0.03	0.02	0.15	0.14	2.09	0.15	3.66**	2.98*	2.24	2.01
	(0.84)	(0.86)	(0.28)	(0.30)	(0.37)	(0.95)	(0.05)	(0.07)	(0.16)	(0.31)
Three-month Interbank Rate	-0.11	-0.07	-0.09	-0.06	-3.76**	-4.19*	-3.10**	-3.64***	-2.12	-2.58*
	(0.18)	(0.29)	(0.26)	(0.37)	(0.05)	(0.06)	(0.02)	(0.00)	(0.14)	(0.06)
GDP Growth Rate	0.01	0.01	0.02***	0.02**	0.28	0.37	0.19	0.25**	0.29**	0.27**
	(0.19)	(0.27)	(0.00)	(0.03)	(0.20)	(0.11)	(0.12)	(0.02)	(0.02)	(0.04)
Stock Traded	0.00	0.00	0.00	0.00	0.05	0.03	0.00	0.00	0.03	0.03
	(0.85)	(0.81)	(0.30)	(0.38)	(0.17)	(0.36)	(0.95)	(0.95)	(0.45)	(0.45)
Constant	0.76	0.51	1.02**	0.99**	28.28**	34.48***	21.43***	21.93**	26.26***	15.20
	(0.12)	(0.11)	(0.02)	(0.02)	(0.02)	(0.00)	(0.00)	(0.02)	(0.01)	(0.27)
Number of observations	788	788	788	788	788	788	788	788	788	788
Number of banks	154	154	154	154	154	154	154	154	154	154
Hansen test (p-value)	0.89	0.79	0.88	0.96	0.96	0.90	0.78	0.91	0.89	0.89
AR2 test (p-value)	0.29	0.27	0.73	0.86	0.29	0.20	0.15	0.13	0.16	0.11
Wald tests: $\alpha_1+\alpha_2$	-0.18***	-0.12***	-0.05	-0.05	0.44	0.41	0.28	0.21	0.42	0.42
$\alpha'_1+\alpha'_2$	0.05	0.03	0.03	0.04	-1.22**	-1.12**	-1.23**	-1.10**	-1.20**	-1.20***

Table A18

Estimating the target capital ratio: a baseline specification

This table shows the Blundell and Bond (1998) estimation results of the target capital ratio based on a partial adjustment model [Eq. (3)] over the 2002–2010 period. The sample consists of 341 European commercial banks corresponding to 2,204 observations. For robustness, we estimate a baseline specification without including the dummy variable for the presence of excess control rights in Eq. (3) to differentiate banks without and with excess control rights. *Tier 1 RWA* is Tier 1 capital divided by risk-weighted assets. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Log(Total Assets)* is the natural logarithm of the bank's total assets. *Return on Assets* is net income divided by total assets. *Loan Loss Provisions* is loan loss provisions divided by net loans. *Loans Total Assets* is net loans divided by total assets. *Market Discipline* is total long-term market funding divided by total funding. *d(Listed Bank)* is a dummy equal to one if the bank is publicly listed and zero otherwise. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. In the last three rows, we report the summary statistics (mean, maximum and minimum) of the estimated target capital ratio. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent variable	*Tier 1 Total Assets*	*Tier 1 RWA*
Lagged dependent variable	0.59***	0.66***
	(0.00)	(0.00)
Log(Total Assets)	-0.51***	-0.56***
	(0.00)	(0.00)
Return on Assets	0.48***	0.54***
	(0.00)	(0.00)
Loan Loss Provisions	0.19***	0.16**
	(0.00)	(0.04)
Loans Total Assets	-0.02***	-0.03***
	(0.00)	(0.00)
Market Discipline	0.00**	0.01**
	(0.02)	(0.01)
d(Listed Bank)	-0.70***	-1.45***
	(0.00)	(0.00)
GDP Growth Rate	-0.00	-0.01
	(0.64)	(0.29)
Constant	5.12***	7.77***
	(0.00)	(0.00)
Hansen test (p-value)	0.11	0.10
AR2 test (p-value)	0.35	0.31
Fitted target (%): Mean	7.02	11.53
Maximum	14.80	24.95
Minimum	1.79	4.11

Table A19

Excess control rights and capital ratio adjustment: a baseline target

This table shows the Blundell and Bond (1998) estimation results on the effect of excess control rights on capital ratio adjustment [Eq. (6)] for a sample of 341 European commercial banks (corresponding to 2,204 observations) over the 2002–2010 period. For robustness, we estimate the target capital ratio based on a baseline specification -without including the dummy variable for the presence of excess control rights in Eq. (3) to differentiate banks without and with excess control rights- using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time t + total assets at time t-1) / 2. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.05*	-0.04**	-0.05**	0.81**	0.94**	0.44**	0.51**	0.47**	0.72**
	(0.03)	(0.06)	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.02)	(0.04)	(0.01)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.07	-0.01	0.02	0.02	-0.40**	-0.49**	-0.19**	-0.24**	-0.26*	-0.39*
	(0.35)	(0.60)	(0.60)	(0.60)	(0.04)	(0.02)	(0.04)	(0.03)	(0.07)	(0.06)
Capital Ratio Shortfall (α'_1)	0.14**	0.09***	0.03	0.05*	-0.40	0.15	-0.36	-0.37	-0.23	-0.59**
	(0.01)	(0.00)	(0.36)	(0.10)	(0.17)	(0.60)	(0.30)	(0.11)	(0.51)	(0.01)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.11**	-0.06**	0.04*	0.03*	-0.31**	-0.85**	-0.24**	-0.30**	-0.29*	-0.05
	(0.01)	(0.04)	(0.06)	(0.07)	(0.02)	(0.01)	(0.02)	(0.03)	(0.07)	(0.20)
Lagged dependent variable	0.03	0.02	0.39***	0.37***	0.11***	0.12***	0.13***	0.15***	0.15***	0.17***
	(0.34)	(0.59)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.55***	-0.44***	-0.13	-0.07	-0.42	-0.18	-0.62	-0.00	-0.65	-2.89*
	(0.00)	(0.00)	(0.15)	(0.43)	(0.86)	(0.93)	(0.70)	(1.00)	(0.70)	(0.05)
Deposits Total Assets	-0.00**	-0.00**	0.00**	0.00**	0.00	-0.01	0.03**	0.02	0.00	0.02
	(0.03)	(0.02)	(0.04)	(0.02)	(0.83)	(0.78)	(0.02)	(0.12)	(0.97)	(0.17)
Log(Age)	-0.01	-0.02	-0.00	-0.01	-0.35**	-0.29*	-0.28**	-0.21	-0.25*	-0.18
	(0.46)	(0.20)	(0.70)	(0.62)	(0.04)	(0.08)	(0.01)	(0.12)	(0.09)	(0.23)
d(Rescued Bank)	0.04	0.01	0.01	0.04	1.90	1.08	1.10	0.18	0.77	0.11
	(0.67)	(0.89)	(0.87)	(0.56)	(0.16)	(0.47)	(0.17)	(0.83)	(0.51)	(0.92)
Cross-Listed Index	0.03**	0.03***	-0.00	0.00	0.22*	0.17	0.09	0.09	0.32***	0.33***
	(0.01)	(0.00)	(0.90)	(0.97)	(0.06)	(0.22)	(0.35)	(0.42)	(0.00)	(0.00)
d(Merger Acquisition)	0.03	0.03	0.01	0.01	0.46	0.54	1.44*	1.43*	0.06	0.98
	(0.65)	(0.60)	(0.89)	(0.80)	(0.68)	(0.65)	(0.08)	(0.09)	(0.95)	(0.28)
Three-month Interbank Rate	0.02	0.03	-0.11***	-0.11**	-2.13***	-2.29***	-1.90***	-2.13***	-1.45***	-1.59***
	(0.67)	(0.60)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01**	0.01*	0.01**	0.00	0.26**	0.24**	0.19***	0.20***	0.15*	0.17**
	(0.05)	(0.09)	(0.05)	(0.55)	(0.02)	(0.03)	(0.00)	(0.00)	(0.06)	(0.03)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00
	(0.52)	(0.26)	(0.26)	(0.25)	(0.27)	(0.12)	(0.73)	(0.11)	(0.95)	(0.71)
Constant	0.29	0.27	0.57***	0.60***	14.13***	13.81***	8.52***	9.75***	8.36***	9.15***
	(0.21)	(0.28)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.19	0.10	0.14	0.19	0.27	0.24	0.15	0.13	0.14	0.37
AR2 test (p-value)	0.95	0.99	0.90	0.96	0.25	0.22	0.46	0.54	0.15	0.16
Wald tests: $\alpha_1+\beta_1$	-0.14**	-0.06**	-0.02	-0.03*	0.41	0.45	0.25	0.27	0.21	0.33
$\alpha'_1+\beta'_1$	0.03	0.03	0.07**	0.08**	-0.71**	-0.70**	-0.60*	-0.67**	-0.52*	-0.64**

Table A20

Ownership type and the effect of excess control rights on capital ratio adjustment: a baseline target

This table shows the Blundell and Bond (1998) estimation results on the effect of ownership type on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. The sample excludes banks for which the control chain is a cross-holding (for simplicity) and consists of 336 European commercial banks corresponding to 2,171 observations. For robustness, we estimate the target capital ratio based on a baseline specification -without including the dummy variable for the presence of excess control rights in Eq. (3) to differentiate banks without and with excess control rights- using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Family)* is a dummy equal to one if the bank is family-controlled and zero otherwise. *d(State)* is a dummy equal to one if the bank is state-controlled and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights, and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.11**	-0.07**	-0.07**	-0.05**	0.75**	0.82**	0.32**	0.47**	0.42**	0.62**
	(0.01)	(0.04)	(0.03)	(0.04)	(0.02)	(0.04)	(0.04)	(0.02)	(0.03)	(0.03)
d(Family) × *Capital Ratio Surplus* (α_2)	0.06	0.01	0.02	0.02	0.12	0.15	0.18	0.11	0.15	0.14
	(0.29)	(0.83)	(0.20)	(0.19)	(0.39)	(0.17)	(0.25)	(0.35)	(0.31)	(0.30)
d(State) × *Capital Ratio Surplus* (α_3)	0.07	-0.01	-0.00	0.01	0.05	0.19	0.08	0.08	0.08	0.15
	(0.31)	(0.85)	(0.40)	(0.25)	(0.70)	(0.21)	(0.28)	(0.65)	(0.43)	(0.60)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.04	-0.00	-0.01	-0.01	-0.41	-0.40	-0.10	-0.15	-0.20	-0.29
	(0.66)	(0.92)	(0.14)	(0.72)	(0.25)	(0.49)	(0.89)	(0.68)	(0.34)	(0.24)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.07*	-0.07*	0.05*	0.02	-0.08	-0.18	-0.06	-0.15	-0.15	-0.12
	(0.07)	(0.05)	(0.05)	(0.18)	(0.50)	(0.19)	(0.70)	(0.79)	(0.89)	(0.38)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_3)	-0.01	-0.02	-0.11	-0.01	0.07	-0.16	0.03	-0.09	-0.09	-0.14
	(0.37)	(0.62)	(0.30)	(0.16)	(0.49)	(0.15)	(0.65)	(0.28)	(0.42)	(0.19)
Capital Ratio Shortfall (α'_1)	0.15**	0.08**	0.03	0.06*	-0.38	0.10	-0.42	-0.40	-0.32	-0.54**
	(0.01)	(0.01)	(0.31)	(0.07)	(0.12)	(0.75)	(0.20)	(0.17)	(0.15)	(0.01)
d(Family) × *Capital Ratio Shortfall* (α'_2)	0.11	0.07	0.02	0.00	0.05	0.07	0.07	-0.08	0.14	-0.03
	(0.16)	(0.12)	(0.80)	(0.50)	(0.38)	(0.47)	(0.24)	(0.79)	(0.46)	(0.40)
d(State) × *Capital Ratio Shortfall* (α'_3)	0.02	-0.02	-0.04	-0.00	0.02	0.03	0.07	-0.07	0.04	-0.09
	(0.87)	(0.37)	(0.40)	(0.95)	(0.80)	(0.61)	(0.23)	(0.78)	(0.70)	(0.38)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07	-0.02	0.04	0.00	-0.13	-0.51	-0.07	-0.11	-0.06	-0.06
	(0.26)	(0.24)	(0.33)	(0.95)	(0.20)	(0.27)	(0.70)	(0.15)	(0.45)	(0.21)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.17**	-0.11**	-0.00	0.03*	-0.53**	-0.69**	-0.31**	-0.40**	-0.44*	-0.13
	(0.03)	(0.02)	(0.90)	(0.08)	(0.02)	(0.01)	(0.04)	(0.02)	(0.08)	(0.10)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_3)	-0.01	0.08*	-0.05	-0.02	-0.13	-0.18	-0.12	0.11*	-0.10	0.11
	(0.79)	(0.05)	(0.48)	(0.92)	(0.16)	(0.21)	(0.31)	(0.05)	(0.39)	(0.11)
Lagged dependent variable	0.03	0.03	0.43***	0.42***	0.10***	0.12***	0.20***	0.19***	0.20***	0.16***
	(0.44)	(0.43)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.62***	-0.68***	-0.16	-0.13	-2.79	-0.34	-0.15	-0.40	-0.72	-2.53
	(0.00)	(0.00)	(0.11)	(0.12)	(0.23)	(0.87)	(0.92)	(0.78)	(0.70)	(0.17)
d(Family)	0.19	0.27	0.02	-0.24*	3.62	-0.12	1.56	-0.30	2.69	2.37
	(0.42)	(0.26)	(0.89)	(0.07)	(0.26)	(0.97)	(0.52)	(0.90)	(0.39)	(0.41)
d(State)	0.28	0.25	0.09	0.11	2.88	1.34	3.46*	2.44	2.63	-2.71
	(0.19)	(0.15)	(0.54)	(0.46)	(0.33)	(0.63)	(0.09)	(0.21)	(0.24)	(0.20)

Table A20 (continued)

Deposits Total Assets	-0.00**	-0.00**	0.00	0.00	0.00	-0.01	0.02	0.02	0.00	0.01
	(0.03)	(0.04)	(0.20)	(0.10)	(0.99)	(0.56)	(0.21)	(0.12)	(0.93)	(0.70)
Log(Age)	-0.02	-0.03**	0.00	-0.01	-0.36**	-0.33*	-0.29**	-0.26**	-0.24	-0.24
	(0.33)	(0.03)	(0.98)	(0.57)	(0.04)	(0.07)	(0.02)	(0.05)	(0.14)	(0.15)
d(Rescued Bank)	0.01	0.00	0.02	0.05	1.49	1.33	0.62	0.54	0.66	0.43
	(0.92)	(0.96)	(0.82)	(0.51)	(0.21)	(0.32)	(0.44)	(0.50)	(0.61)	(0.74)
Cross-Listed Index	0.03***	0.03***	0.00	0.01	0.21*	0.15	0.09	0.16*	0.35***	0.39***
	(0.01)	(0.00)	(0.52)	(0.43)	(0.07)	(0.28)	(0.30)	(0.09)	(0.00)	(0.00)
d(Merger Acquisition)	0.09	0.06	0.01	0.01	0.41	0.39	1.50*	1.38*	0.10	0.07
	(0.21)	(0.46)	(0.80)	(0.84)	(0.71)	(0.71)	(0.06)	(0.07)	(0.93)	(0.94)
Three-month Interbank Rate	0.04	0.04	-0.11***	-0.10**	-1.93***	-2.05***	-2.03***	-2.09***	-1.77***	-1.89***
	(0.50)	(0.48)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.01**	0.01	0.00	0.00	0.24**	0.31***	0.19***	0.18***	0.13	0.16**
	(0.05)	(0.20)	(0.41)	(0.51)	(0.04)	(0.01)	(0.01)	(0.01)	(0.14)	(0.04)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.01*	0.02**	0.00	0.00
	(0.56)	(0.44)	(0.21)	(0.50)	(0.68)	(0.18)	(0.09)	(0.05)	(0.90)	(0.85)
Constant	0.14	0.21	0.58**	0.49***	11.73***	13.33***	9.68***	11.02***	9.00***	11.02***
	(0.56)	(0.43)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.15	0.20	0.18	0.17	0.19	0.17	0.20	0.17	0.15	0.22
AR2 test (p-value)	0.90	0.89	0.89	0.87	0.33	0.22	0.66	0.68	0.15	0.16
Wald tests: $\alpha_1+\alpha_2$	-0.05**	-0.06**	-0.05**	-0.03*	0.87**	0.97**	0.50**	0.58**	0.57**	0.76**
$\alpha_1+\alpha_3$	-0.04*	-0.08**	-0.07**	-0.04**	0.80**	1.01**	0.40**	0.55**	0.50**	0.77**
$\alpha_1+\beta_1$	-0.15**	-0.07**	-0.08**	-0.06*	0.34	0.42	0.22	0.32	0.22	0.33
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.16**	-0.13**	-0.01	-0.02	0.38	0.39	0.34	0.28	0.22	0.35
$\alpha_1+\alpha_3+\beta_1+\beta_3$	-0.09**	-0.10**	-0.19**	-0.06**	0.46	0.45	0.33	0.31	0.21	0.34
$\alpha'_1+\alpha'_2$	0.26**	0.15**	0.05	0.06*	-0.33	0.17	-0.35	-0.48	-0.18	-0.57**
$\alpha'_1+\alpha'_3$	0.17**	0.06**	-0.01	0.06*	-0.36	0.13	-0.35	-0.47	-0.28	-0.63**
$\alpha'_1+\beta'_1$	0.08**	0.06**	0.07*	0.06**	-0.51	-0.41	-0.49	-0.51*	-0.38	-0.60**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.02	0.02	0.09**	0.09**	-0.99**	-1.03**	-0.73**	-0.99**	-0.68**	-0.76**
$\alpha'_1+\alpha'_3+\beta'_1+\beta'_3$	0.09**	0.12***	-0.02	0.04	-0.62	-0.56*	-0.54	-0.47	-0.44	-0.58

Table A21

Shareholder protection and the effect of excess control rights on capital ratio adjustment: a baseline target

This table shows the Blundell and Bond (1998) estimation results on the effect of shareholder protection rights on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, we estimate the target capital ratio based on a baseline specification -without including the dummy variable for the presence of excess control rights in Eq. (3) to differentiate banks without and with excess control rights- using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Owner Rights)* is a dummy equal to one if the shareholder protection index as defined in Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008) is greater than the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.07*	-0.05**	-0.06***	0.73**	0.90***	0.34**	0.43**	0.39**	0.64**
	(0.01)	(0.07)	(0.03)	(0.00)	(0.01)	(0.00)	(0.05)	(0.04)	(0.03)	(0.02)
d(Owner Rights) × *Capital Ratio Surplus* (α_2)	0.02	0.03	-0.01	0.00	0.12	0.06	0.14	0.13	0.15	0.16
	(0.12)	(0.20)	(0.32)	(0.30)	(0.59)	(0.24)	(0.53)	(0.71)	(0.87)	(0.28)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.06	-0.02	0.03	0.03	-0.37	-0.50	-0.05	-0.18	-0.18	-0.30
	(0.67)	(0.89)	(0.19)	(0.20)	(0.35)	(0.60)	(0.50)	(0.71)	(0.67)	(0.17)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.05	0.03	-0.02	-0.05	-0.06	-0.04	-0.16	0.06	-0.17	-0.17
	(0.72)	(0.53)	(0.17)	(0.11)	(0.78)	(0.75)	(0.17)	(0.91)	(0.12)	(0.11)
Capital Ratio Shortfall (α'_1)	0.15**	0.07**	0.04	0.04*	-0.34	-0.10	-0.35	-0.30	-0.18	-0.60**
	(0.05)	(0.03)	(0.43)	(0.09)	(0.19)	(0.62)	(0.20)	(0.11)	(0.51)	(0.01)
d(Owner Rights) × *Capital Ratio Shortfall* (α'_2)	0.05	0.06	0.02	-0.00	-0.09	0.19	-0.03	-0.24	-0.10	-0.03
	(0.43)	(0.13)	(0.75)	(0.95)	(0.92)	(0.15)	(0.94)	(0.37)	(0.20)	(0.41)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12**	-0.04**	0.04**	0.02*	-0.50**	-0.82**	-0.50**	-0.62**	-0.48*	-0.09
	(0.03)	(0.04)	(0.04)	(0.05)	(0.01)	(0.02)	(0.05)	(0.03)	(0.05)	(0.35)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.00	-0.00	-0.04	-0.02	0.30	0.25	0.45*	0.55*	0.44	0.13
	(0.94)	(0.95)	(0.56)	(0.55)	(0.45)	(0.38)	(0.10)	(0.08)	(0.43)	(0.45)
Lagged dependent variable	0.03	0.03	0.40***	0.36***	0.11***	0.12***	0.12***	0.13***	0.15***	0.16***
	(0.39)	(0.49)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.60***	-0.62***	-0.16	-0.01	-0.48	-1.09	-1.72	-0.11	-1.50	-3.12*
	(0.00)	(0.00)	(0.10)	(0.90)	(0.81)	(0.62)	(0.23)	(0.94)	(0.40)	(0.06)
Deposits Total Assets	-0.00**	-0.00*	0.00*	0.00*	0.00	-0.00	0.01	0.02	-0.01	0.00
	(0.02)	(0.06)	(0.07)	(0.08)	(0.98)	(0.85)	(0.29)	(0.17)	(0.69)	(0.93)
Log(Age)	-0.02	-0.03	0.00	-0.01	-0.36**	-0.29*	-0.30**	-0.27*	-0.27*	-0.23
	(0.18)	(0.11)	(0.99)	(0.57)	(0.05)	(0.08)	(0.01)	(0.05)	(0.08)	(0.17)
d(Rescued Bank)	0.02	0.02	0.00	0.02	1.17	1.36	0.75	0.18	0.32	0.15
	(0.85)	(0.82)	(0.95)	(0.78)	(0.35)	(0.30)	(0.33)	(0.81)	(0.82)	(0.90)
Cross-Listed Index	0.03***	0.04***	0.00	0.00	0.16	0.21	0.11	0.08	0.28***	0.41***
	(0.01)	(0.00)	(0.82)	(0.81)	(0.26)	(0.12)	(0.21)	(0.41)	(0.00)	(0.00)
d(Merger Acquisition)	0.06	0.07	0.03	0.04	0.39	0.21	1.67**	1.49*	0.26	0.62
	(0.41)	(0.40)	(0.54)	(0.38)	(0.75)	(0.84)	(0.03)	(0.06)	(0.80)	(0.54)
Three-month Interbank Rate	0.02	0.04	-0.12***	-0.11***	-1.98***	-2.10***	-2.14**	-2.26***	-1.80**	-1.90***
	(0.69)	(0.41)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01**	0.01	0.01	0.00	0.25**	0.25**	0.19***	0.20***	0.18**	0.18**
	(0.02)	(0.30)	(0.26)	(0.45)	(0.02)	(0.02)	(0.00)	(0.00)	(0.02)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01*	0.01*	0.00	0.00
	(0.32)	(0.36)	(0.18)	(0.22)	(0.61)	(0.45)	(0.08)	(0.09)	(0.87)	(0.70)
Constant	0.41*	0.30	0.71***	0.69***	13.23***	12.88***	11.00***	10.80***	9.33***	10.90***
	(0.08)	(0.26)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.33	0.19	0.17	0.24	0.31	0.50	0.26	0.20	0.35	0.53
AR2 test (p-value)	0.90	0.97	0.88	0.96	0.25	0.21	0.50	0.57	0.15	0.14
Wald tests: $\alpha_1+\alpha_2$	-0.06**	-0.04*	-0.06**	-0.06**	0.85**	0.96***	0.48**	0.56**	0.54**	0.80**
$\alpha_1+\beta_1$	-0.14**	-0.09**	-0.02	-0.03	0.36	0.40	0.29	0.25	0.21	0.34
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.07**	-0.04**	-0.05**	-0.08**	0.42*	0.42*	0.27	0.44	0.19	0.33
$\alpha'_1+\alpha'_2$	0.20**	0.13**	0.06	0.04	-0.43	0.09	-0.38	-0.54	-0.28	-0.63**
$\alpha'_1+\beta'_1$	0.03	0.03	0.08**	0.06**	-0.84**	-0.92**	-0.85**	-0.92**	-0.66**	-0.69**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.08**	0.09**	0.06*	0.04	-0.63*	-0.48	-0.43	-0.61	-0.32	-0.59*

Table A22

2008 financial crisis and the effect of excess control rights on capital ratio adjustment: a baseline target

This table shows the Blundell and Bond (1998) estimation results on the effect of the 2008 financial crisis on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, we estimate the target capital ratio based on a baseline specification -without including the dummy variable for the presence of excess control rights in Eq. (3) to differentiate banks without and with excess control rights- using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as: (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Crisis)* is a dummy equal to one if the observation is from 2008 or 2009 and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.09**	-0.06**	-0.05**	-0.05**	1.10**	1.14***	0.53**	0.63**	0.62**	0.90**
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)	(0.00)	(0.02)	(0.01)	(0.02)	(0.01)
d(Crisis) × *Capital Ratio Surplus* (α_2)	0.05*	0.03	-0.01	-0.01	-0.64	-0.45	-0.22	-0.29	-0.31	-0.40
	(0.08)	(0.45)	(0.17)	(0.15)	(0.72)	(0.65)	(0.66)	(0.57)	(0.12)	(0.26)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.04	-0.03	0.02	0.02	-0.63	-0.67	-0.20	-0.31	-0.32	-0.55
	(0.47)	(0.48)	(0.56)	(0.19)	(0.74)	(0.42)	(0.41)	(0.66)	(0.43)	(0.47)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.05	0.03	-0.03	-0.03	0.50	0.36	0.08	0.16	0.20	0.37
	(0.57)	(0.22)	(0.90)	(0.62)	(0.25)	(0.40)	(0.86)	(0.65)	(0.71)	(0.23)
Capital Ratio Shortfall (α'_1)	0.15**	0.11**	0.04	0.05	-0.41	0.09	-0.26	-0.31	-0.26	-0.64**
	(0.04)	(0.01)	(0.19)	(0.10)	(0.27)	(0.80)	(0.62)	(0.35)	(0.13)	(0.02)
d(Crisis) × *Capital Ratio Shortfall* (α'_2)	-0.07	-0.06	-0.00	-0.02	-0.05	0.20	-0.22	-0.14	-0.17	0.20
	(0.35)	(0.81)	(0.33)	(0.20)	(0.55)	(0.60)	(0.74)	(0.53)	(0.22)	(0.66)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12*	-0.09*	0.06	0.07*	-0.52*	-0.99***	-0.43*	-0.52*	-0.47**	-0.14
	(0.06)	(0.06)	(0.18)	(0.05)	(0.06)	(0.00)	(0.05)	(0.05)	(0.05)	(0.84)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	0.09	0.10	-0.03	-0.05	0.45	0. 21	0.43	0.52	0.61	0.33
	(0.26)	(0.18)	(0.45)	(0.70)	(0.21)	(0.48)	(0.22)	(0.38)	(0.15)	(0.30)
Lagged dependent variable	0.03	0.02	0.41***	0.39***	0.12***	0.12***	0.24***	0.20***	0.21***	0.19***
	(0.42)	(0.59)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.55***	-0.48***	-0.08	-0.06	-0.29	-0.11	-0.59	-0.25	-1.27	-2.22
	(0.00)	(0.00)	(0.40)	(0.52)	(0.90)	(0.96)	(0.67)	(0.87)	(0.36)	(0.13)
Deposits Total Assets	-0.00*	-0.00**	0.00**	0.00**	0.00	-0.00	0.03**	0.02	0.00	0.01
	(0.05)	(0.03)	(0.02)	(0.01)	(0.87)	(0.90)	(0.03)	(0.21)	(0.96)	(0.39)
Log(Age)	-0.02	-0.02	-0.00	-0.00	-0.33*	-0.36**	-0.25**	-0.24*	-0.18	-0.21
	(0.31)	(0.12)	(0.75)	(0.70)	(0.06)	(0.03)	(0.02)	(0.06)	(0.18)	(0.16)
d(Rescued Bank)	0.01	0.01	0.02	0.01	1.89	1.35	1.23	0.66	0.39	0.18
	(0.88)	(0.87)	(0.80)	(0.87)	(0.13)	(0.35)	(0.11)	(0.40)	(0.71)	(0.87)
Cross-Listed Index	0.03***	0.03***	0.00	0.00	0.19	0.15	0.08	0.14	0.28***	0.32***
	(0.01)	(0.00)	(0.85)	(0.85)	(0.11)	(0.23)	(0.35)	(0.16)	(0.00)	(0.00)
d(Merger Acquisition)	0.01	0.03	0.01	0.03	0.76	0.83	1.45*	1.52*	0.23	0.75
	(0.88)	(0.66)	(0.87)	(0.54)	(0.48)	(0.49)	(0.07)	(0.07)	(0.82)	(0.42)
Three-month Interbank Rate	0.02	0.03	-0.10***	-0.09**	-2.22***	-2.25***	-1.94***	-2.14***	-1.38**	-1.41**
	(0.65)	(0.65)	(0.01)	(0.04)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
GDP Growth Rate	0.01	0.01	0.01	0.00	0.27**	0.27**	0.17**	0.19***	0.16**	0.20**
	(0.21)	(0.22)	(0.12)	(0.56)	(0.02)	(0.02)	(0.01)	(0.00)	(0.04)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.02*	0.00	0.00
	(0.40)	(0.33)	(0.27)	(0.35)	(0.35)	(0.19)	(0.76)	(0.09)	(0.91)	(1.00)
Constant	0.30	0.33	0.49***	0.48**	13.13***	13.73***	8.61***	10.92***	6.75***	8.32***
	(0.19)	(0.17)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.18	0.13	0.10	0.13	0.24	0.23	0.16	0.11	0.13	0.24
AR2 test (p-value)	0.97	0.89	0.90	0.89	0.20	0.22	0.47	0.62	0.14	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.04*	-0.03	-0.06**	-0.06**	0.46*	0.69**	0.31	0.34	0.31	0.50**
$\alpha_1+\beta_1$	-0.13**	-0.09**	-0.03	-0.03	0.47	0.47	0.33	0.32	0.30	0.35
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.03	-0.03*	-0.07**	-0.07**	0.33	0.38	0.19	0.19	0.19	0.32
$\alpha'_1+\alpha'_2$	0.08**	0.05**	0.04	0.03	-0.46	0.29	-0.48	-0.45	-0.43	-0.44*
$\alpha'_1+\beta'_1$	0.03	0.02	0.10**	0.12**	-0.93**	-0.90**	-0.69**	-0.83**	-0.73**	-0.78**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.05**	0.06**	0.07	0.05	-0.53	-0.49	-0.48	-0.45	-0.29	-0.25

Table A23

Bank capitalization and the effect of excess control rights on capital ratio adjustment: a baseline target

This table shows the Blundell and Bond (1998) estimation results on the effect of bank capitalization on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, we estimate the target capital ratio based on a baseline specification -without including the dummy variable for the presence of excess control rights in Eq. (3) to differentiate banks without and with excess control rights- using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time t + total assets at time t-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Undercapitalized)* is a dummy equal to one if the Tier 1 RWA (Tier 1 Total Assets) ratio is less than 6% (4%) and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06**	-0.06*	-0.06**	-0.05*	0.73**	0.82**	0.48**	0.53**	0.44**	0.66***
	(0.02)	(0.06)	(0.03)	(0.06)	(0.01)	(0.03)	(0.04)	(0.01)	(0.02)	(0.00)
d(Undercapitalized) × *Capital Ratio Surplus* (α_2)	0.02	0.04**	0.02	0.02*	-0.09	-0.43**	-0.04	-0.21*	-0.03	-0.25*
	(0.81)	(0.02)	(0.87)	(0.09)	(0.37)	(0.05)	(0.35)	(0.07)	(0.85)	(0.07)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.09	-0.04	0.03	0.01	-0.44*	-0.43**	-0.20*	-0.11*	-0.16	-0.17
	(0.15)	(0.34)	(0.63)	(0.78)	(0.09)	(0.05)	(0.07)	(0.09)	(0.11)	(0.11)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.06	0.04**	0.00	0.03*	0.06	0.20	0.18	-0.10	0.12	-0.05
	(0.72)	(0.05)	(0.21)	(0.07)	(0.56)	(0.30)	(0.49)	(0.61)	(0.70)	(0.57)
Capital Ratio Shortfall (α'_1)	0.09**	0.08**	0.03	0.03	-0.35	-0.05	-0.28	-0.38	-0.36	-0.49**
	(0.05)	(0.02)	(0.41)	(0.14)	(0.21)	(0.38)	(0.36)	(0.17)	(0.14)	(0.04)
d(Undercapitalized) × *Capital Ratio Shortfall* (α'_2)	0.05	0.07*	0.03	0.01	-0.11	0.30	-0.10	-0.09	-0.13	-0.17
	(0.23)	(0.05)	(0.64)	(0.84)	(0.15)	(0.58)	(0.21)	(0.67)	(0.25)	(0.29)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07**	-0.06**	0.06*	0.04*	-0.28*	-0.46**	-0.41*	-0.21*	-0.44**	-0.13
	(0.02)	(0.01)	(0.07)	(0.06)	(0.06)	(0.02)	(0.05)	(0.06)	(0.01)	(0.12)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.03	-0.05	-0.07	-0.00	-0.18	-0.40**	-0.10	-0.26*	0.11	-0.15*
	(0.21)	(0.18)	(0.20)	(0.52)	(0.42)	(0.04)	(0.90)	(0.05)	(0.62)	(0.09)
Lagged dependent variable	0.04	0.03	0.39***	0.36***	0.10***	0.11***	0.12***	0.13***	0.20***	0.17***
	(0.27)	(0.49)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.53***	-0.48***	-0.22**	-0.02	-0.15	-0.24	-1.14	-0.27	-1.00	-2.98**
	(0.00)	(0.00)	(0.02)	(0.85)	(0.95)	(0.91)	(0.43)	(0.85)	(0.52)	(0.05)
d(Undercapitalized)	0.14	0.63***	-0.11	-0.13	-2.94	-1.68	0.09	0.61	-2.44	-2.85
	(0.43)	(0.00)	(0.39)	(0.20)	(0.10)	(0.46)	(0.95)	(0.72)	(0.17)	(0.12)
Deposits Total Assets	-0.00**	-0.00**	0.00*	0.00**	0.01	-0.01	0.02*	0.02	-0.00	0.00
	(0.02)	(0.02)	(0.08)	(0.02)	(0.74)	(0.77)	(0.09)	(0.15)	(0.77)	(0.83)
Log(Age)	-0.02	-0.03	-0.01	-0.00	-0.41**	-0.27	-0.31**	-0.30**	-0.33**	-0.19
	(0.28)	(0.10)	(0.51)	(0.76)	(0.02)	(0.12)	(0.01)	(0.02)	(0.03)	(0.24)
d(Rescued Bank)	0.01	0.04	0.03	0.00	1.09	1.48	0.62	0.67	0.99	0.36
	(0.89)	(0.62)	(0.67)	(1.00)	(0.44)	(0.31)	(0.44)	(0.40)	(0.47)	(0.79)
Cross-Listed Index	0.03***	0.03***	0.00	-0.00	0.18	0.19	0.11	0.14	0.34***	0.38***
	(0.01)	(0.00)	(0.77)	(0.91)	(0.19)	(0.13)	(0.19)	(0.13)	(0.00)	(0.00)
d(Merger Acquisition)	0.02	0.05	0.10*	0.02	0.57	0.44	2.04**	1.44*	0.67	0.31
	(0.86)	(0.53)	(0.07)	(0.69)	(0.64)	(0.73)	(0.03)	(0.06)	(0.54)	(0.75)
Three-month Interbank Rate	0.01	0.02	-0.12***	-0.10**	-2.17***	-2.44***	-2.07**	-2.30***	-1.45**	-1.49***
	(0.83)	(0.70)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)
GDP Growth Rate	0.01*	0.01**	0.01	0.00	0.28**	0.33***	0.19***	0.23***	0.15*	0.21**
	(0.06)	(0.05)	(0.14)	(0.59)	(0.02)	(0.01)	(0.00)	(0.00)	(0.08)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00
	(0.26)	(0.41)	(0.15)	(0.12)	(0.40)	(0.41)	(0.11)	(0.14)	(0.75)	(0.83)
Constant	0.31	0.20	0.72***	0.66***	15.47***	15.52***	9.89***	11.34***	10.17*	9.34***
	(0.19)	(0.45)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Hansen test (p-value)	0.39	0.63	0.50	0.67	0.79	0.74	0.78	0.62	0.74	0.77
AR2 test (p-value)	0.92	0.97	0.77	0.94	0.29	0.28	0.59	0.60	0.15	0.17
Wald tests: $\alpha_1+\alpha_2$	-0.04**	-0.02	-0.04*	-0.03	0.64**	0.39	0.44**	0.32	0.41**	0.41
$\alpha_1+\beta_1$	-0.15**	-0.10**	-0.03	-0.04	0.29	0.39	0.28	0.42	0.28	0.49
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.07**	-0.02	-0.01	0.01	0.26	0.16	0.42	0.11	0.37	0.19
$\alpha'_1+\alpha'_2$	0.14**	0.15**	0.06	0.04	-0.46	0.25	-0.38	-0.47	-0.49	-0.66**
$\alpha'_1+\beta'_1$	0.02	0.02	0.09**	0.07**	-0.63**	-0.51**	-0.69**	-0.59**	-0.80**	-0.62**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.04	0.04	0.05**	0.08**	-0.92***	-0.61**	-0.89**	-0.94**	-0.82**	-0.94**

Table A24

Asset structure and the effect of excess control rights on capital ratio adjustment: a baseline target

This table shows the Blundell and Bond (1998) estimation results on the effect of asset structure on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, we estimate the target capital ratio based on a baseline specification -without including the dummy variable for the presence of excess control rights in Eq. (3) to differentiate banks without and with excess control rights- using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Lending Oriented)* is a dummy equal to one if the ratio of net loans (excluding interbank loans) to total assets is greater than the median value and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.07**	-0.06**	-0.06**	0.73**	0.84**	0.40**	0.44**	0.43**	0.63**
	(0.01)	(0.04)	(0.02)	(0.01)	(0.01)	(0.01)	(0.03)	(0.04)	(0.01)	(0.02)
d(Lending Oriented) × *Capital Ratio Surplus* (α_2)	-0.01	-0.01	-0.01	-0.01	0.16	0.11	-0.01	-0.02	0.12	0.07
	(0.16)	(0.22)	(0.28)	(0.21)	(0.35)	(0.19)	(0.39)	(0.50)	(0.25)	(0.30)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.06	-0.01	0.03	0.03	-0.40*	-0.49*	-0.13*	-0.14*	-0.14*	-0.32**
	(0.23)	(0.43)	(0.21)	(0.21)	(0.08)	(0.07)	(0.09)	(0.08)	(0.06)	(0.04)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.03	0.01	-0.00	-0.01	-0.10	-0.10	-0.03	-0.02	-0.11	-0.07
	(0.25)	(0.26)	(0.37)	(0.22)	(0.32)	(0.16)	(0.17)	(0.25)	(0.12)	(0.20)
Capital Ratio Shortfall (α'_1)	0.12**	0.07**	0.04	0.04	-0.47*	-0.49*	-0.29	-0.29	-0.38	-0.57**
	(0.02)	(0.01)	(0.20)	(0.16)	(0.07)	(0.05)	(0.22)	(0.17)	(0.15)	(0.01)
d(Lending Oriented) × *Capital Ratio Shortfall* (α'_2)	0.05	0.06	0.01	0.01	0.16*	0.17*	-0.09	-0.08	0.07	-0.02
	(0.17)	(0.18)	(0.55)	(0.42)	(0.08)	(0.06)	(0.21)	(0.29)	(0.19)	(0.42)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.09**	-0.04**	0.04*	0.04*	-0.46**	-0.44**	-0.26*	-0.25*	-0.41*	-0.09
	(0.01)	(0.01)	(0.05)	(0.06)	(0.01)	(0.01)	(0.08)	(0.07)	(0.05)	(0.40)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.04	-0.04	-0.01	-0.01	-0.05	-0.09	-0.29*	-0.29**	-0.06	-0.04
	(0.22)	(0.24)	(0.24)	(0.38)	(0.30)	(0.40)	(0.05)	(0.05)	(0.26)	(0.42)
Lagged dependent variable	0.04	0.03	0.42***	0.37***	0.10***	0.12***	0.12***	0.13***	0.15***	0.16***
	(0.24)	(0.43)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.60***	-0.63***	-0.17*	-0.00	-0.12	-0.70	-0.40	-0.40	-0.98	-2.99**
	(0.00)	(0.00)	(0.10)	(0.98)	(0.96)	(0.73)	(0.79)	(0.78)	(0.57)	(0.05)
d(Lending Oriented)	-0.15	0.05	0.14	0.17*	-0.49	1.79	-0.00	2.98***	-1.24	3.24**
	(0.20)	(0.67)	(0.14)	(0.06)	(0.77)	(0.22)	(1.00)	(0.00)	(0.36)	(0.03)
Deposits Total Assets	-0.00**	-0.00**	0.00*	0.00**	0.01	-0.01	0.03**	0.02*	-0.00	0.01
	(0.04)	(0.04)	(0.09)	(0.01)	(0.69)	(0.54)	(0.01)	(0.07)	(0.92)	(0.55)
Log(Age)	-0.02	-0.03*	-0.00	-0.00	-0.40**	-0.26	-0.33**	-0.21*	-0.24	-0.26
	(0.30)	(0.09)	(0.87)	(0.74)	(0.02)	(0.11)	(0.01)	(0.08)	(0.10)	(0.10)
d(Rescued Bank)	0.03	0.02	0.02	0.05	1.66	2.06	0.78	0.40	0.10	0.48
	(0.76)	(0.87)	(0.76)	(0.54)	(0.19)	(0.14)	(0.39)	(0.58)	(0.93)	(0.66)
Cross-Listed Index	0.04***	0.04***	0.00	0.01	0.18	0.17	0.03	0.06	0.30***	0.26**
	(0.00)	(0.00)	(0.76)	(0.38)	(0.18)	(0.27)	(0.75)	(0.53)	(0.01)	(0.01)
d(Merger Acquisition)	0.09	0.07	0.01	0.02	0.53	0.20	1.87**	1.41**	0.07	0.03
	(0.27)	(0.38)	(0.81)	(0.67)	(0.64)	(0.86)	(0.02)	(0.05)	(0.95)	(0.97)
Three-month Interbank Rate	0.02	0.02	-0.12***	-0.12***	-1.79**	-2.13***	-2.11**	-2.19***	-1.83**	-1.96***
	(0.77)	(0.65)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01*	0.01	0.00	0.00	0.25**	0.23**	0.22***	0.22***	0.14*	0.20**
	(0.07)	(0.15)	(0.40)	(0.59)	(0.02)	(0.02)	(0.00)	(0.00)	(0.09)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.02*	0.01*	0.00	0.01
	(0.27)	(0.23)	(0.18)	(0.27)	(0.47)	(0.29)	(0.08)	(0.10)	(0.92)	(0.60)
Constant	0.18	0.31	0.76***	0.74***	12.20***	15.09***	9.83***	11.36***	9.54***	12.50***
	(0.47)	(0.22)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.14	0.21	0.18	0.17	0.36	0.57	0.25	0.24	0.24	0.32
AR2 test (p-value)	0.85	0.89	0.91	0.86	0.27	0.28	0.59	0.59	0.13	0.16
Wald tests: $\alpha_1+\alpha_2$	-0.09**	-0.08**	-0.07**	-0.07**	0.89**	0.95**	0.39**	0.42**	0.55**	0.70**
$\alpha_1+\beta_1$	-0.14**	-0.08**	-0.03	-0.03	0.33	0.35	0.27	0.30	0.29	0.31
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.12**	-0.08**	-0.04	-0.05	0.39	0.36	0.23	0.26	0.30	0.31
$\alpha'_1+\alpha'_2$	0.17**	0.13**	0.05	0.05	-0.31	-0.32	-0.38	-0.37	-0.31	-0.59**
$\alpha'_1+\beta'_1$	0.03	0.03	0.08**	0.08**	-0.93**	-0.93**	-0.55**	-0.54**	-0.79**	-0.66**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.04	0.05	0.08**	0.08**	-0.82**	-0.85**	-0.93***	-0.91***	-0.78**	-0.72**

Table A25

Bank size and the effect of excess control rights on capital ratio adjustment: a baseline target

This table shows the Blundell and Bond (1998) estimation results on the effect of bank size on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, we estimate the target capital ratio based on a baseline specification -without including the dummy variable for the presence of excess control rights in Eq. (3) to differentiate banks without and with excess control rights- using the Blundell and Bond (1998) method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are respectively the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Large Bank)* is a dummy equal to one if the bank's total assets is above the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.06*	-0.07**	-0.05**	0.84**	0.90***	0.44**	0.46**	0.48**	0.62**
	(0.02)	(0.06)	(0.02)	(0.04)	(0.03)	(0.01)	(0.05)	(0.02)	(0.03)	(0.02)
d(Large Bank) × *Capital Ratio Surplus* (α_2)	-0.02	-0.03	0.01	-0.02	0.06	0.03	0.03	-0.01	0.17	0.14
	(0.37)	(0.46)	(0.20)	(0.44)	(0.72)	(0.66)	(0.71)	(0.79)	(0.34)	(0.30)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.03	-0.02	0.05	0.01	-0.38**	-0.50*	-0.16*	-0.24**	-0.20*	-0.31*
	(0.65)	(0.51)	(0.30)	(0.85)	(0.02)	(0.06)	(0.07)	(0.04)	(0.07)	(0.08)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.07	-0.01	-0.02	0.03	-0.05	-0.05	-0.04	-0.04	-0.05	-0.07
	(0.45)	(0.83)	(0.40)	(0.41)	(0.33)	(0.43)	(0.73)	(0.60)	(0.30)	(0.15)
Capital Ratio Shortfall (α'_1)	0.13***	0.12***	0.05	0.04	-0.36	-0.11	-0.36	-0.38	-0.36	-0.99***
	(0.00)	(0.00)	(0.33)	(0.17)	(0.22)	(0.66)	(0.28)	(0.14)	(0.20)	(0.01)
d(Large Bank) × *Capital Ratio Shortfall* (α'_2)	0.03	0.04	0.00	-0.00	-0.11	-0.08	-0.09	-0.08	-0.12	-0.05
	(0.46)	(0.23)	(0.95)	(0.76)	(0.72)	(0.88)	(0.21)	(0.65)	(0.18)	(0.40)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.05**	-0.05**	0.04*	0.04*	-0.32*	-0.58**	-0.34**	-0.26*	-0.30*	-0.10
	(0.02)	(0.01)	(0.08)	(0.08)	(0.06)	(0.04)	(0.04)	(0.09)	(0.09)	(0.13)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.06**	-0.07***	-0.04*	-0.04**	-0.42**	-0.33**	-0.47**	-0.38**	-0.35**	-0.07
	(0.01)	(0.01)	(0.06)	(0.04)	(0.04)	(0.04)	(0.04)	(0.02)	(0.03)	(0.23)
Lagged dependent variable	0.03	0.03	0.40***	0.37***	0.11***	0.13***	0.12***	0.12***	0.17***	0.16***
	(0.39)	(0.51)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.42***	-0.66***	-0.13	0.00	-0.13	-0.52	-1.04	-0.38	-1.73	-2.99*
	(0.00)	(0.00)	(0.16)	(0.99)	(0.94)	(0.80)	(0.38)	(0.78)	(0.17)	(0.05)
d(Large Bank)	-0.22	-0.16	-0.19**	0.03	-3.13	-2.12	-2.26*	-1.98	-5.73***	-4.89***
	(0.24)	(0.34)	(0.04)	(0.76)	(0.12)	(0.21)	(0.09)	(0.16)	(0.00)	(0.01)
Deposits Total Assets	-0.00**	-0.00**	0.00*	0.00**	-0.00	-0.01	0.01	0.01	-0.02	-0.00
	(0.02)	(0.03)	(0.06)	(0.05)	(0.89)	(0.54)	(0.62)	(0.38)	(0.29)	(0.85)
Log(Age)	-0.02	-0.02	0.00	-0.00	-0.25	-0.18	-0.21*	-0.18	-0.11	-0.12
	(0.26)	(0.18)	(0.93)	(0.99)	(0.15)	(0.29)	(0.07)	(0.17)	(0.44)	(0.47)
d(Rescued Bank)	0.06	0.01	0.01	0.01	1.93*	1.47	1.21	0.64	0.94	1.04
	(0.45)	(0.92)	(0.94)	(0.87)	(0.09)	(0.23)	(0.13)	(0.36)	(0.42)	(0.42)
Cross-Listed Index	0.02*	0.03***	0.01	0.00	0.09	0.02	-0.02	0.07	0.20*	0.23**
	(0.05)	(0.00)	(0.49)	(0.97)	(0.55)	(0.89)	(0.85)	(0.48)	(0.05)	(0.04)
d(Merger Acquisition)	0.03	0.06	0.06	0.03	0.77	0.61	1.65**	1.25	0.16	0.03
	(0.66)	(0.43)	(0.28)	(0.56)	(0.48)	(0.61)	(0.04)	(0.11)	(0.87)	(0.97)
Three-month Interbank Rate	0.02	0.03	-0.12***	-0.10***	-2.01***	-1.92***	-2.07***	-2.34***	-1.75***	-1.84***
	(0.72)	(0.53)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.02*	0.01	0.00	0.00	0.22**	0.25**	0.19***	0.21***	0.14*	0.17**
	(0.06)	(0.11)	(0.40)	(0.81)	(0.05)	(0.03)	(0.01)	(0.00)	(0.09)	(0.04)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.01
	(0.49)	(0.32)	(0.24)	(0.42)	(0.44)	(0.64)	(0.18)	(0.15)	(0.74)	(0.35)
Constant	0.44*	0.35	0.74***	0.62***	15.80***	13.94***	11.47***	12.17***	12.99***	12.68***
	(0.07)	(0.24)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.22	0.10	0.26	0.22	0.45	0.33	0.17	0.35	0.22	0.29
AR2 test (p-value)	0.90	0.89	0.86	0.87	0.27	0.21	0.58	0.56	0.15	0.17
Wald tests: $\alpha_1+\alpha_2$	-0.09**	-0.09**	-0.06**	-0.07**	0.90**	0.93**	0.47**	0.45**	0.65**	0.76**
$\alpha_1+\beta_1$	-0.10**	-0.08**	-0.02	-0.04	0.46	0.40	0.28	0.22	0.28	0.31
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.19***	-0.12**	-0.03	-0.03	0.47	0.38	0.27	0.17	0.40	0.38
$\alpha'_1+\alpha'_2$	0.16***	0.16**	0.05	0.04	-0.47	-0.19	-0.45	-0.46	-0.48	-1.04**
$\alpha'_1+\beta'_1$	0.08*	0.07*	0.09**	0.08**	-0.68**	-0.69**	-0.70**	-0.64**	-0.66**	-1.09**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.05	0.04	0.05	0.04	-1.21**	-1.10**	-1.26**	-1.10**	-1.13**	-1.21***

Table A26

Estimating the target capital ratio: an alternative method

This table shows the generalized least squares estimation (GLS) results of the target capital ratio based on a perfect adjustment model [Eq. (1)] over the 2002–2010 period. The sample consists of 341 European commercial banks corresponding to 2,204 observations. *Tier 1 Total Assets* is Tier 1 capital divided by total assets. *Tier 1 RWA* is Tier 1 capital divided by risk-weighted assets. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Log(Total Assets)* is the natural logarithm of the bank's total assets. *Return on Assets* is net income divided by total assets. *Loan Loss Provisions* is loan loss provisions divided by net loans. *Loans Total Assets* is net loans divided by total assets. *Market Discipline* is total long-term market funding divided by total funding. *d(Listed Bank)* is a dummy equal to one if the bank is publicly listed and zero otherwise. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. In the last three rows, we report the summary statistics (mean, maximum and minimum) of the estimated target capital ratio. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent variable	*Tier 1 Total Assets*	*Tier 1 RWA*
d(Excess Control Rights)	-0.35**	-0.79***
	(0.02)	(0.00)
Log(Total Assets)	-1.34***	-1.11***
	(0.00)	(0.00)
Return on Assets	0.55***	0.75***
	(0.00)	(0.00)
Loan Loss Provisions	0.11*	0.10*
	(0.09)	(0.10)
Loans Total Assets	-0.01**	-0.07***
	(0.04)	(0.00)
Market Discipline	0.89	1.47***
	(0.09)	(0.00)
d(Listed Bank)	-0.70*	-0.99*
	(0.09)	(0.07)
GDP Growth Rate	0.01	0.01
	(0.35)	(0.81)
Constant	7.45***	10.70***
	(0.00)	(0.00)
R-squared	0.50	0.36
Fitted target (%): Mean	6.97	10.88
Maximum	15.10	21.49
Minimum	1.15	4.36

Table A27

Excess control rights and capital ratio adjustment: an alternative method to estimate the target capital ratio

This table shows the Blundell and Bond (1998) estimation results on the effect of excess control rights on capital ratio adjustment [Eq. (6)] for a sample of 341 European commercial banks (corresponding to 2,204 observations) over the 2002–2010 period. For robustness, the fitted target capital ratio in all the regressions is obtained by estimating a perfect adjustment model [Eq. (1)] using the Generalized Least Square estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06*	-0.04*	-0.05**	-0.04**	0.77**	0.90**	0.45**	0.54**	0.48**	0.70**
	(0.07)	(0.08)	(0.02)	(0.03)	(0.04)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.08	-0.02	0.03	0.01	-0.36**	-0.45**	-0.19*	-0.30**	-0.28*	-0.37*
	(0.43)	(0.70)	(0.47)	(0.79)	(0.04)	(0.03)	(0.06)	(0.04)	(0.07)	(0.07)
Capital Ratio Shortfall (α'_1)	0.16**	0.12***	0.03	0.03	-0.36	0.06	-0.35	-0.38	-0.22	-0.60***
	(0.01)	(0.01)	(0.41)	(0.19)	(0.20)	(0.89)	(0.29)	(0.13)	(0.51)	(0.01)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.11*	-0.09**	0.04	0.04**	-0.40**	-0.76**	-0.26**	-0.25**	-0.32*	-0.04
	(0.08)	(0.04)	(0.37)	(0.07)	(0.03)	(0.03)	(0.03)	(0.02)	(0.06)	(0.49)
Lagged dependent variable	0.03	0.02	0.42***	0.38***	0.11***	0.11***	0.13***	0.12***	0.14***	0.17***
	(0.32)	(0.61)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.71***	-0.43**	-0.07	-0.11	-0.45	-1.55	-1.11	-0.40	-1.43	-0.21
	(0.00)	(0.02)	(0.57)	(0.30)	(0.89)	(0.55)	(0.60)	(0.81)	(0.52)	(0.60)
Deposits Total Assets	-0.01***	-0.00*	0.00*	0.00***	0.02	-0.00	0.05***	0.02	0.02	0.02
	(0.01)	(0.06)	(0.10)	(0.01)	(0.38)	(0.81)	(0.00)	(0.13)	(0.35)	(0.18)
Log(Age)	-0.00	-0.01	-0.00	-0.01	-0.45**	-0.35*	-0.31**	-0.29**	-0.39**	-0.19
	(0.80)	(0.48)	(0.97)	(0.62)	(0.03)	(0.06)	(0.02)	(0.05)	(0.01)	(0.25)
d(Rescued Bank)	0.01	0.04	0.00	0.00	1.01	0.99	0.88	0.03	0.62	0.56
	(0.95)	(0.65)	(0.94)	(0.99)	(0.52)	(0.51)	(0.31)	(0.97)	(0.52)	(0.60)
Cross-Listed Index	0.02*	0.02*	-0.00	0.01	0.23*	0.12	0.13	0.15	0.32***	0.39***
	(0.06)	(0.07)	(0.84)	(0.48)	(0.08)	(0.44)	(0.21)	(0.15)	(0.00)	(0.00)
d(Merger Acquisition)	0.05	0.04	0.01	0.02	0.11	0.40	1.03	1.67**	0.16	0.28
	(0.45)	(0.53)	(0.82)	(0.63)	(0.92)	(0.75)	(0.21)	(0.05)	(0.86)	(0.75)
Three-month Interbank Rate	0.02	0.03	-0.11***	-0.11**	-2.01***	-2.21***	-2.09***	-2.30***	-1.59***	-1.71***
	(0.78)	(0.52)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01	0.01**	0.01*	0.01*	0.26**	0.22*	0.21***	0.23***	0.20**	0.19**
	(0.16)	(0.03)	(0.06)	(0.08)	(0.01)	(0.06)	(0.00)	(0.00)	(0.02)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.00	0.00
	(0.79)	(0.28)	(0.43)	(0.20)	(0.18)	(0.13)	(0.52)	(0.23)	(0.96)	(0.74)
Constant	0.35	0.17	0.56***	0.53***	13.51***	13.28***	7.75***	10.68***	9.97***	9.80***
	(0.19)	(0.44)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.10	0.20	0.16	0.16	0.19	0.16	0.11	0.10	0.50	0.15
AR2 test (p-value)	0.94	0.95	0.89	0.96	0.24	0.25	0.38	0.49	0.14	0.15
Wald tests: $\alpha_1+\beta_1$	-0.14**	-0.06**	-0.02	-0.03*	0.41	0.45	0.26	0.24	0.20	0.33
$\alpha'_1+\beta'_1$	0.05	0.03	0.07**	0.07**	-0.76**	-0.70**	-0.61**	-0.63**	-0.54*	-0.64**

Table A28

Ownership type and the effect of excess control rights on capital ratio adjustment: an alternative method to estimate the target

This table shows the Blundell and Bond (1998) estimation results on the effect of ownership type on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. The sample excludes banks for which the control chain is a cross-holding (for simplicity) and consists of 336 European commercial banks corresponding to 2,171 observations. For robustness, the fitted target capital ratio in all the regressions is obtained by estimating a perfect adjustment model [Eq. (1)] using the Generalized Least Square estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are respectively the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Family)* is a dummy equal to one if the bank is family-controlled and zero otherwise. *d(State)* is a dummy equal to one if the bank is state-controlled and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.12**	-0.05**	-0.06**	-0.05**	0.74**	0.81**	0.29*	0.45**	0.41**	0.63**
	(0.01)	(0.05)	(0.04)	(0.03)	(0.02)	(0.04)	(0.08)	(0.04)	(0.03)	(0.03)
d(Family) × *Capital Ratio Surplus* (α_2)	0.04	0.00	0.01	0.01	0.14	0.14	0.21	0.13	0.15	0.16
	(0.26)	(0.92)	(0.36)	(0.20)	(0.42)	(0.26)	(0.37)	(0.33)	(0.42)	(0.27)
d(State) × *Capital Ratio Surplus* (α_3)	0.06	-0.01	-0.02	0.01	0.02	0.20	0.07	0.06	0.08	0.14
	(0.35)	(0.83)	(0.20)	(0.31)	(0.96)	(0.29)	(0.22)	(0.76)	(0.39)	(0.42)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.04	-0.01	-0.01	-0.01	-0.38	-0.37	-0.12	-0.14	-0.19	-0.27
	(0.61)	(0.80)	(0.14)	(0.56)	(0.29)	(0.64)	(0.67)	(0.93)	(0.16)	(0.45)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.06*	-0.06*	0.03*	0.02	-0.09	-0.16	-0.04	-0.14	-0.14	-0.12
	(0.05)	(0.06)	(0.09)	(0.20)	(0.51)	(0.24)	(0.89)	(0.98)	(0.83)	(0.28)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_3)	-0.01	-0.02	-0.13	-0.01	0.05	-0.17	0.02	-0.07	-0.10	-0.14
	(0.45)	(0.34)	(0.30)	(0.13)	(0.61)	(0.21)	(0.43)	(0.21)	(0.38)	(0.18)
Capital Ratio Shortfall (α'_1)	0.18**	0.08***	0.03	0.04	-0.38	0.09	-0.42	-0.38	-0.32	-0.52**
	(0.02)	(0.00)	(0.50)	(0.14)	(0.15)	(0.77)	(0.32)	(0.12)	(0.29)	(0.04)
d(Family) × *Capital Ratio Shortfall* (α'_2)	0.11	0.08	0.02	0.02	0.05	0.08	0.04	-0.06	0.12	-0.04
	(0.31)	(0.37)	(0.66)	(0.27)	(0.39)	(0.43)	(0.38)	(0.84)	(0.39)	(0.63)
d(State) × *Capital Ratio Shortfall* (α'_3)	0.01	-0.05	-0.04	-0.01	0.03	0.03	0.05	-0.09	0.02	-0.09
	(0.94)	(0.73)	(0.34)	(0.66)	(0.99)	(0.86)	(0.28)	(0.91)	(0.40)	(0.37)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.06	-0.03	0.03	-0.00	-0.12	-0.48	-0.07	-0.09	-0.06	-0.06
	(0.26)	(0.52)	(0.26)	(0.55)	(0.60)	(0.25)	(0.41)	(0.39)	(0.55)	(0.34)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.19**	-0.11**	-0.01	0.02*	-0.47**	-0.72**	-0.31**	-0.41**	-0.48*	-0.12
	(0.01)	(0.04)	(0.67)	(0.08)	(0.03)	(0.01)	(0.04)	(0.04)	(0.05)	(0.13)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_3)	-0.03	0.09*	-0.06	-0.02	-0.11	-0.16	-0.11	0.09	-0.06	0.08
	(0.74)	(0.05)	(0.29)	(0.45)	(0.32)	(0.24)	(0.37)	(0.12)	(0.63)	(0.17)
Lagged dependent variable	0.03	0.04	0.43***	0.43***	0.11***	0.12***	0.12***	0.12***	0.19***	0.18***
	(0.39)	(0.32)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.66***	-0.46**	-0.18	-0.10	-0.94	-2.10	-0.34	-0.04	-0.68	-2.93
	(0.00)	(0.01)	(0.14)	(0.26)	(0.76)	(0.33)	(0.86)	(0.98)	(0.74)	(0.13)
d(Family)	-0.04	0.00	-0.01	-0.17	0.34	-1.00	0.56	-0.61	3.52	0.44
	(0.87)	(0.99)	(0.95)	(0.22)	(0.93)	(0.76)	(0.87)	(0.80)	(0.30)	(0.89)
d(State)	0.34	0.08	0.11	0.01	2.01	-1.94	3.28	0.25	4.05	-0.54
	(0.17)	(0.71)	(0.64)	(0.95)	(0.62)	(0.54)	(0.23)	(0.91)	(0.19)	(0.81)

Table A28 (continued)

Deposits Total Assets	-0.00***	-0.00	0.00	0.00*	0.02	-0.00	0.03*	0.02*	0.00	0.01
	(0.00)	(0.16)	(0.34)	(0.06)	(0.47)	(0.81)	(0.08)	(0.07)	(0.83)	(0.74)
Log(Age)	-0.01	-0.02	-0.00	-0.00	-0.42*	-0.26	-0.33**	-0.26*	-0.26	-0.25
	(0.46)	(0.13)	(0.92)	(0.83)	(0.05)	(0.15)	(0.01)	(0.06)	(0.12)	(0.15)
d(Rescued Bank)	0.01	0.05	0.03	0.00	0.68	1.80	0.74	0.54	0.67	0.24
	(0.94)	(0.59)	(0.68)	(0.96)	(0.64)	(0.15)	(0.43)	(0.52)	(0.63)	(0.85)
Cross-Listed Index	0.02	0.02	0.01	0.01	0.29**	0.14	0.12	0.23**	0.39***	0.50***
	(0.12)	(0.13)	(0.44)	(0.29)	(0.03)	(0.33)	(0.20)	(0.01)	(0.00)	(0.00)
d(Merger Acquisition)	0.09	0.07	0.00	0.00	0.01	0.05	1.64**	1.17	0.29	0.30
	(0.23)	(0.38)	(0.98)	(0.94)	(0.99)	(0.96)	(0.05)	(0.11)	(0.77)	(0.76)
Three-month Interbank Rate	0.03	0.04	-0.11***	-0.11**	-1.97***	-2.11***	-2.18***	-2.11***	-1.90***	-2.15***
	(0.52)	(0.43)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.01**	0.01*	0.01	0.00	0.23*	0.28***	0.19***	0.20***	0.14	0.16*
	(0.03)	(0.09)	(0.23)	(0.55)	(0.05)	(0.01)	(0.00)	(0.00)	(0.12)	(0.06)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00
	(0.53)	(0.31)	(0.19)	(0.31)	(0.41)	(0.95)	(0.12)	(0.13)	(0.94)	(0.80)
Constant	0.15	0.02	0.60***	0.60***	12.91***	12.57***	10.21***	10.44***	10.26***	11.85***
	(0.53)	(0.92)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.14	0.15	0.13	0.10	0.12	0.12	0.15	0.12	0.10	0.18
AR2 test (p-value)	0.82	0.96	0.69	0.95	0.27	0.23	0.57	0.57	0.34	0.34
Wald tests: $\alpha_1+\alpha_2$	-0.08**	-0.05**	-0.05**	-0.04*	0.88***	0.95***	0.50**	0.58**	0.56**	0.79**
$\alpha_1+\alpha_3$	-0.06**	-0.06**	-0.08**	-0.04**	0.76**	1.01***	0.36**	0.51***	0.49**	0.77**
$\alpha_1+\beta_1$	-0.16**	-0.06**	-0.07**	-0.06*	0.36	0.44	0.17	0.31	0.22	0.36
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.18**	-0.12**	-0.03	-0.03	0.41	0.42	0.34	0.30	0.23	0.40
$\alpha_1+\alpha_3+\beta_1+\beta_3$	-0.11**	-0.09**	-0.22**	-0.06**	0.43	0.47	0.26	0.30	0.20	0.36
$\alpha'_1+\alpha'_2$	0.29**	0.16**	0.05	0.06*	-0.33	0.17	-0.38	-0.44	-0.20	-0.56**
$\alpha'_1+\alpha'_3$	0.19***	0.04**	-0.01	0.03	-0.35	0.12	-0.37	-0.47	-0.30	-0.61**
$\alpha'_1+\beta'_1$	0.12**	0.05**	0.06*	0.04**	-0.50	-0.39	-0.49	-0.47*	-0.38	-0.58**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.04	0.02	0.07**	0.08**	-0.92**	-1.03**	-0.76**	-0.94**	-0.74*	-0.74**
$\alpha'_1+\alpha'_3+\beta'_1+\beta'_3$	0.10**	0.09***	-0.04	0.01	-0.58	-0.52*	-0.55	-0.47	-0.42	-0.59

Table A29

Shareholder protection and the effect of excess control rights on capital ratio adjustment: an alternative method to estimate the target

This table shows the Blundell and Bond (1998) estimation results on the effect of shareholder protection rights on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, the fitted target capital ratio in all the regressions is obtained by estimating a perfect adjustment model [Eq. (1)] using the Generalized Least Square estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Owner Rights)* is a dummy equal to one if the shareholder protection index as defined in Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008) is greater than the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.06*	-0.07**	-0.05**	0.71**	0.92**	0.35*	0.43**	0.39**	0.64**
	(0.03)	(0.09)	(0.04)	(0.04)	(0.01)	(0.03)	(0.05)	(0.04)	(0.04)	(0.02)
d(Owner Rights) × *Capital Ratio Surplus* (α_2)	0.01	0.02	-0.02	0.02	0.14	0.09	0.17	0.15	0.15	0.17
	(0.18)	(0.21)	(0.24)	(0.27)	(0.37)	(0.29)	(0.54)	(0.69)	(0.84)	(0.22)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.07	-0.03	0.04	0.03	-0.36	-0.50	-0.03	-0.18	-0.17	-0.27
	(0.75)	(0.61)	(0.15)	(0.20)	(0.39)	(0.61)	(0.79)	(0.69)	(0.73)	(0.24)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.06	0.02	-0.03	-0.06*	-0.05	-0.03	-0.16	0.08	-0.16	-0.16
	(0.65)	(0.54)	(0.22)	(0.09)	(0.82)	(0.73)	(0.24)	(0.95)	(0.20)	(0.14)
Capital Ratio Shortfall (α'_1)	0.15**	0.09**	0.04	0.03	-0.37	-0.07	-0.36	-0.28	-0.20	-0.60**
	(0.02)	(0.01)	(0.50)	(0.31)	(0.21)	(0.65)	(0.43)	(0.42)	(0.57)	(0.01)
d(Owner Rights) × *Capital Ratio Shortfall* (α'_2)	0.05	0.07	0.02	-0.00	-0.11	0.19	-0.04	-0.27	-0.07	-0.03
	(0.49)	(0.24)	(0.48)	(0.94)	(0.91)	(0.11)	(0.50)	(0.36)	(0.19)	(0.55)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.16**	-0.07**	0.04*	0.01*	-0.50**	-0.88**	-0.50**	-0.63**	-0.48**	-0.07
	(0.01)	(0.02)	(0.09)	(0.08)	(0.02)	(0.02)	(0.03)	(0.03)	(0.04)	(0.44)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.00	-0.01	-0.03	-0.03	0.37	0.30	0.49	0.57*	0.39	0.16
	(0.94)	(0.76)	(0.80)	(0.59)	(0.62)	(0.27)	(0.24)	(0.09)	(0.48)	(0.40)
Lagged dependent variable	0.04	0.03	0.42***	0.38***	0.12***	0.11***	0.12***	0.14***	0.14***	0.15***
	(0.32)	(0.37)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.65***	-0.64***	-0.24*	-0.01	-0.57	-0.64	-0.68	-0.32	-3.18	-2.09
	(0.00)	(0.00)	(0.07)	(0.91)	(0.83)	(0.77)	(0.67)	(0.84)	(0.20)	(0.22)
Deposits Total Assets	-0.00***	-0.00	0.00	0.00**	0.02	-0.01	0.03*	0.02	0.00	0.00
	(0.01)	(0.13)	(0.13)	(0.03)	(0.35)	(0.58)	(0.07)	(0.24)	(0.98)	(0.97)
Log(Age)	-0.01	-0.02	0.00	-0.00	-0.43**	-0.26	-0.35**	-0.37**	-0.32*	-0.22
	(0.45)	(0.14)	(0.99)	(0.65)	(0.04)	(0.16)	(0.01)	(0.01)	(0.05)	(0.17)
d(Rescued Bank)	0.01	0.01	0.02	0.01	0.86	2.08	0.63	0.09	0.31	0.74
	(0.89)	(0.95)	(0.73)	(0.92)	(0.51)	(0.11)	(0.45)	(0.91)	(0.82)	(0.60)
Cross-Listed Index	0.02**	0.02**	0.00	0.01	0.27**	0.27*	0.14	0.21**	0.29**	0.43***
	(0.05)	(0.03)	(0.75)	(0.53)	(0.05)	(0.06)	(0.17)	(0.04)	(0.01)	(0.00)
d(Merger Acquisition)	0.06	0.08	0.04	0.04	0.37	0.05	1.60**	1.24	0.02	0.11
	(0.42)	(0.33)	(0.48)	(0.47)	(0.76)	(0.97)	(0.03)	(0.12)	(0.99)	(0.91)
Three-month Interbank Rate	0.03	0.01	-0.12***	-0.12***	-2.31***	-1.97***	-2.15**	-2.35***	-1.92***	-1.91***
	(0.59)	(0.80)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.02**	0.01*	0.01	0.00	0.30***	0.28**	0.20***	0.25***	0.18**	0.20**
	(0.01)	(0.05)	(0.23)	(0.58)	(0.00)	(0.01)	(0.00)	(0.00)	(0.03)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00
	(0.68)	(0.51)	(0.17)	(0.20)	(0.33)	(0.62)	(0.12)	(0.16)	(0.63)	(0.84)
Constant	0.31	0.34	0.71***	0.64***	14.58***	11.74***	9.78***	11.36***	9.96***	10.00***
	(0.23)	(0.19)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.31	0.18	0.26	0.21	0.57	0.47	0.26	0.18	0.26	0.51
AR2 test (p-value)	0.92	0.91	0.89	0.94	0.24	0.21	0.39	0.48	0.14	0.14
Wald tests: $\alpha_1+\alpha_2$	-0.06**	-0.04*	-0.09**	-0.04**	0.85***	1.01***	0.52**	0.58**	0.54**	0.81**
$\alpha_1+\beta_1$	-0.14**	-0.09**	-0.03	-0.02	0.35	0.42	0.32	0.25	0.22	0.37
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.07**	-0.05**	-0.08**	-0.06**	0.44*	0.48*	0.33	0.48	0.21	0.38
$\alpha'_1+\alpha'_2$	0.20***	0.16**	0.06	0.03	-0.48	0.12	-0.40	-0.55	-0.27	-0.63**
$\alpha'_1+\beta'_1$	-0.01	0.02	0.08**	0.04**	-0.87**	-0.95**	-0.86**	-0.91**	-0.68**	-0.67***
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.04**	0.08**	0.07*	0.01	-0.61*	-0.46	-0.41	-0.61	-0.36	-0.54*

Table A30

2008 financial crisis and the effect of excess control rights on capital ratio adjustment: an alternative method to estimate the target

This table shows the Blundell and Bond (1998) estimation results on the effect of the 2008 financial crisis on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, the fitted target capital ratio in all the regressions is obtained by estimating a perfect adjustment model [Eq. (1)] using the generalized least squares estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Crisis)* is a dummy equal to one if the observation is from 2008 or 2009, and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.06**	-0.04**	-0.05**	1.07**	1.09**	0.54**	0.63**	0.62**	0.92***
	(0.01)	(0.01)	(0.04)	(0.03)	(0.01)	(0.03)	(0.03)	(0.03)	(0.03)	(0.00)
d(Crisis) × *Capital Ratio Surplus* (α_2)	0.04	0.03	-0.02	-0.01	-0.61	-0.45	-0.21	-0.27	-0.31	-0.41
	(0.16)	(0.36)	(0.33)	(0.19)	(0.79)	(0.51)	(0.64)	(0.87)	(0.13)	(0.11)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.03	-0.02	0.01	0.02	-0.62	-0.63	-0.18	-0.27	-0.25	-0.52
	(0.57)	(0.72)	(0.40)	(0.20)	(0.82)	(0.76)	(0.76)	(0.94)	(0.26)	(0.24)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.03	0.03	-0.02	-0.03	0.49	0.33	0.05	0.17	0.23	0.38
	(0.61)	(0.64)	(0.90)	(0.67)	(0.38)	(0.13)	(0.61)	(0.59)	(0.26)	(0.47)
Capital Ratio Shortfall (α'_1)	0.15***	0.11**	0.04	0.05	-0.42	0.09	-0.25	-0.32	-0.23	-0.63**
	(0.00)	(0.05)	(0.32)	(0.12)	(0.52)	(0.67)	(0.26)	(0.24)	(0.43)	(0.05)
d(Crisis) × *Capital Ratio Shortfall* (α'_2)	-0.07	-0.05	-0.01	-0.01	-0.05	0.17	-0.21	-0.14	-0.19	0.17
	(0.38)	(0.81)	(0.35)	(0.16)	(0.60)	(0.69)	(0.71)	(0.62)	(0.20)	(0.75)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.11*	-0.09*	0.05	0.05**	-0.49*	-0.96**	-0.41*	-0.51*	-0.49**	-0.16
	(0.06)	(0.06)	(0.17)	(0.05)	(0.05)	(0.02)	(0.08)	(0.08)	(0.02)	(0.69)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	0.09	0.09	-0.04	-0.05	0.45	0.24	0.44	0.52	0.60	0.32
	(0.26)	(0.16)	(0.48)	(0.65)	(0.19)	(0.39)	(0.17)	(0.35)	(0.17)	(0.34)
Lagged dependent variable	0.02	0.02	0.43***	0.38***	0.11***	0.12***	0.12***	0.15***	0.16***	0.18***
	(0.54)	(0.50)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.65***	-0.42***	-0.09	-0.02	-0.38	-1.03	-0.65	-0.37	-1.67	-2.22
	(0.00)	(0.00)	(0.44)	(0.88)	(0.90)	(0.65)	(0.74)	(0.83)	(0.40)	(0.19)
Deposits Total Assets	-0.00**	-0.00*	0.00**	0.00***	0.00	-0.00	0.03**	0.02	0.00	0.01
	(0.04)	(0.09)	(0.02)	(0.00)	(0.89)	(0.88)	(0.02)	(0.18)	(0.99)	(0.37)
Log(Age)	-0.02	-0.01	-0.00	-0.00	-0.40**	-0.39**	-0.26**	-0.29**	-0.24*	-0.16
	(0.30)	(0.41)	(0.95)	(0.79)	(0.03)	(0.03)	(0.03)	(0.02)	(0.08)	(0.27)
d(Rescued Bank)	0.03	0.01	0.02	0.02	1.37	0.76	1.49*	0.88	0.50	0.10
	(0.73)	(0.90)	(0.79)	(0.79)	(0.32)	(0.59)	(0.06)	(0.22)	(0.58)	(0.92)
Cross-Listed Index	0.03**	0.02**	0.00	0.01	0.23*	0.07	0.13	0.13	0.28***	0.35***
	(0.03)	(0.01)	(0.63)	(0.36)	(0.06)	(0.62)	(0.13)	(0.16)	(0.00)	(0.00)
d(Merger Acquisition)	0.03	0.03	0.02	0.00	0.11	0.91	1.08	1.68**	0.17	0.27
	(0.62)	(0.63)	(0.65)	(0.95)	(0.91)	(0.48)	(0.17)	(0.05)	(0.86)	(0.76)
Three-month Interbank Rate	0.01	0.04	-0.10**	-0.10**	-1.92***	-2.27***	-2.04**	-2.10***	-1.49**	-1.56***
	(0.79)	(0.38)	(0.01)	(0.03)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01	0.01	0.01	0.01*	0.22**	0.22**	0.15**	0.21***	0.18**	0.18**
	(0.26)	(0.12)	(0.11)	(0.10)	(0.04)	(0.05)	(0.03)	(0.00)	(0.03)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.00	0.00
	(0.28)	(0.31)	(0.35)	(0.19)	(0.14)	(0.20)	(0.55)	(0.14)	(0.94)	(0.68)
Constant	0.35	0.12	0.49***	0.48**	14.10***	13.49***	8.84***	10.54***	8.71***	8.98***
	(0.19)	(0.57)	(0.01)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.12	0.14	0.16	0.12	0.34	0.14	0.14	0.15	0.24	0.41
AR2 test (p-value)	0.87	0.89	0.96	0.96	0.22	0.24	0.51	0.59	0.14	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.04*	-0.03	-0.06**	-0.06**	0.46*	0.64**	0.33	0.36	0.31	0.51**
$\alpha_1+\beta_1$	-0.11**	-0.08***	-0.03	-0.03	0.45	0.46	0.36	0.36	0.37	0.40
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.04	-0.03*	-0.07**	-0.07**	0.33	0.34	0.20	0.26	0.29	0.37
$\alpha'_1+\alpha'_2$	0.08*	0.06**	0.03	0.04	-0.47	0.26	-0.46	-0.46	-0.42	-0.46*
$\alpha'_1+\beta'_1$	0.04	0.02	0.09**	0.10**	-0.91**	-0.87**	-0.66**	-0.83**	-0.72**	-0.79**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.06**	0.06**	0.04	0.04	-0.51	-0.46	-0.43	-0.45	-0.31	-0.30

Table A31

Bank capitalization and the effect of excess control rights on capital ratio adjustment: an alternative method to estimate the target

This table shows the Blundell and Bond (1998) estimation results on the effect of bank capitalization on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, the target capital ratio in all the regressions is obtained by estimating a perfect adjustment model [Eq. (1)] using the generalized least squares estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Undercapitalized)* is a dummy equal to one if the Tier 1 RWA (Tier 1 Total Assets) ratio is less than 6% (4%) and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06**	-0.07*	-0.06**	-0.04*	0.74**	0.86**	0.45*	0.54**	0.46**	0.63***
	(0.02)	(0.05)	(0.02)	(0.05)	(0.01)	(0.01)	(0.07)	(0.01)	(0.01)	(0.00)
d(Undercapitalized) × *Capital Ratio Surplus* (α_2)	0.01	0.04**	0.02	0.02*	-0.10	-0.44**	-0.06	-0.21*	-0.04	-0.26*
	(0.78)	(0.03)	(0.83)	(0.09)	(0.33)	(0.05)	(0.32)	(0.07)	(0.76)	(0.07)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.08	-0.04	0.03	0.00	-0.45*	-0.46*	-0.20*	-0.13*	-0.16*	-0.20
	(0.21)	(0.32)	(0.66)	(0.87)	(0.09)	(0.05)	(0.07)	(0.08)	(0.08)	(0.10)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.05	0.04*	0.00	0.02*	0.06	0.21	0.17	-0.10	0.13	-0.06
	(0.72)	(0.06)	(0.25)	(0.10)	(0.50)	(0.25)	(0.42)	(0.55)	(0.67)	(0.56)
Capital Ratio Shortfall (α'_1)	0.09**	0.08**	0.03	0.04	-0.34	-0.06	-0.28	-0.40	-0.34	-0.50**
	(0.05)	(0.02)	(0.34)	(0.11)	(0.27)	(0.36)	(0.44)	(0.12)	(0.15)	(0.03)
d(Undercapitalized) × *Capital Ratio Shortfall* (α'_2)	0.05	0.08*	0.01	0.00	-0.10	0.32	-0.10	-0.10	-0.16	-0.16
	(0.23)	(0.05)	(0.56)	(0.90)	(0.20)	(0.54)	(0.21)	(0.54)	(0.20)	(0.38)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07**	-0.06**	0.06*	0.04*	-0.29**	-0.46**	-0.38*	-0.24*	-0.40**	-0.14
	(0.02)	(0.01)	(0.05)	(0.05)	(0.05)	(0.03)	(0.07)	(0.05)	(0.03)	(0.10)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.05	-0.05	-0.04	-0.01	-0.14	-0.45**	-0.15	-0.30**	0.11	-0.17*
	(0.13)	(0.15)	(0.32)	(0.44)	(0.53)	(0.02)	(0.76)	(0.04)	(0.55)	(0.08)
Lagged dependent variable	0.03	0.03	0.41***	0.37***	0.10***	0.11***	0.12***	0.14***	0.16***	0.17***
	(0.36)	(0.46)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.49***	-0.43***	-0.15	-0.00	-1.02	-1.10	-1.56	-0.92	-2.32	-4.68***
	(0.01)	(0.00)	(0.24)	(0.96)	(0.73)	(0.60)	(0.40)	(0.56)	(0.24)	(0.01)
d(Undercapitalized)	0.26	0.63***	-0.14	-0.22**	-1.10	-1.03	-0.38	-0.00	-3.70*	-0.88
	(0.19)	(0.00)	(0.28)	(0.05)	(0.63)	(0.66)	(0.85)	(1.00)	(0.07)	(0.67)
Deposits Total Assets	-0.01***	-0.00	0.00*	0.00**	0.02	-0.02	0.03**	0.02	0.00	0.01
	(0.00)	(0.15)	(0.06)	(0.01)	(0.34)	(0.36)	(0.04)	(0.24)	(0.97)	(0.62)
Log(Age)	-0.01	-0.01	-0.00	-0.01	-0.52***	-0.35**	-0.32**	-0.39***	-0.36**	-0.23
	(0.70)	(0.31)	(0.97)	(0.56)	(0.01)	(0.04)	(0.01)	(0.00)	(0.03)	(0.15)
d(Rescued Bank)	0.00	0.04	0.00	0.04	0.89	1.21	0.69	0.34	0.82	-0.39
	(0.98)	(0.64)	(0.97)	(0.54)	(0.53)	(0.37)	(0.42)	(0.63)	(0.48)	(0.76)
Cross-Listed Index	0.03**	0.01	0.00	0.00	0.16	0.12	0.08	0.18**	0.30***	0.46***
	(0.03)	(0.18)	(0.92)	(0.59)	(0.29)	(0.38)	(0.36)	(0.05)	(0.00)	(0.00)
d(Merger Acquisition)	0.02	0.04	0.04	0.03	0.62	0.33	1.06	1.48*	0.03	0.27
	(0.82)	(0.64)	(0.45)	(0.60)	(0.63)	(0.78)	(0.20)	(0.07)	(0.98)	(0.79)
Three-month Interbank Rate	0.02	0.02	-0.11***	-0.10**	-2.04***	-1.88**	-2.27**	-2.36***	-1.77**	-1.70***
	(0.64)	(0.70)	(0.00)	(0.02)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01**	0.01**	0.01	0.01	0.27**	0.26**	0.18***	0.26***	0.18*	0.15*
	(0.04)	(0.04)	(0.22)	(0.23)	(0.02)	(0.02)	(0.00)	(0.00)	(0.06)	(0.08)
Stock Traded	0.00	0.00	0.00	0.00*	0.01	0.02	0.01	0.01*	0.00	0.00
	(0.53)	(0.16)	(0.14)	(0.07)	(0.50)	(0.25)	(0.27)	(0.10)	(0.78)	(0.98)
Constant	0.22	0.04	0.63***	0.67***	13.19***	13.67***	9.49***	11.72***	11.43***	9.84***
	(0.36)	(0.87)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (p-value)	0.70	0.79	0.77	0.55	0.90	0.89	0.83	0.74	0.93	0.89
AR2 test (p-value)	0.91	0.97	0.90	0.96	0.29	0.27	0.40	0.59	0.14	0.16
Wald tests: $\alpha_1+\alpha_2$	-0.05**	-0.03	-0.04* *	-0.02	0.64**	0.42	0.39**	0.33	0.42**	0.37
$\alpha_1+\beta_1$	-0.14**	-0.11**	-0.03	-0.04	0.29	0.40	0.25	0.41	0.30	0.43
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.08**	-0.03	-0.01	0.00	0.25	0.17	0.36	0.10	0.39	0.11
$\alpha'_1+\alpha'_2$	0.14**	0.16**	0.04	0.04	-0.44	0.26	-0.38	-0.50	-0.50	-0.66**
$\alpha'_1+\beta'_1$	0.02	0.02	0.09**	0.08**	-0.63**	-0.52**	-0.66**	-0.64**	-0.74**	-0.64**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.02	0.05	0.06**	0.07**	-0.87**	-0.65**	-0.91**	-1.04**	-0.79**	-0.97**

Table A32

Asset structure and the effect of excess control rights on capital ratio adjustment: an alternative method to estimate the target

This table shows the Blundell and Bond (1998) estimation results on the effect of asset structure on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, the target capital ratio in all the regressions is obtained by estimating a perfect adjustment model [Eq. (1)] using the generalized least squares estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Lending Oriented)* is a dummy equal to one if the ratio of net loans (excluding interbank loans) to total assets is greater than the median value and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.07**	-0.07**	-0.07***	0.75**	0.85**	0.42**	0.45**	0.44**	0.65**
	(0.02)	(0.04)	(0.01)	(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
d(Lending Oriented) × *Capital Ratio Surplus* (α_2)	-0.02	-0.02	-0.02	-0.02	0.14	0.12	-0.01	-0.01	0.11	0.10
	(0.12)	(0.19)	(0.25)	(0.20)	(0.33)	(0.18)	(0.40)	(0.50)	(0.25)	(0.24)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.05	-0.01	0.04	0.04	-0.38*	-0.48*	-0.13*	-0.16*	-0.14*	-0.32**
	(0.32)	(0.43)	(0.15)	(0.20)	(0.10)	(0.07)	(0.10)	(0.05)	(0.06)	(0.03)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.06	0.02	-0.01	-0.02	-0.10	-0.12	-0.04	-0.03	-0.12	-0.09
	(0.15)	(0.20)	(0.27)	(0.17)	(0.25)	(0.16)	(0.17)	(0.31)	(0.11)	(0.17)
Capital Ratio Shortfall (α'_1)	0.11**	0.08**	0.04	0.04	-0.46*	-0.48*	-0.31	-0.30	-0.40	-0.57**
	(0.02)	(0.01)	(0.19)	(0.15)	(0.09)	(0.06)	(0.18)	(0.13)	(0.13)	(0.01)
d(Lending Oriented) × *Capital Ratio Shortfall* (α'_2)	0.05	0.05	0.01	0.01	0.17*	0.18*	-0.06	-0.05	0.08	-0.02
	(0.18)	(0.22)	(0.60)	(0.42)	(0.07)	(0.05)	(0.34)	(0.39)	(0.17)	(0.49)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07**	-0.05**	0.04*	0.04*	-0.44**	-0.45***	-0.27*	-0.28*	-0.38*	-0.12
	(0.02)	(0.01)	(0.06)	(0.05)	(0.01)	(0.00)	(0.05)	(0.06)	(0.09)	(0.29)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.04	-0.04	-0.00	-0.00	-0.02	-0.08	-0.30*	-0.32**	-0.10	-0.06
	(0.20)	(0.31)	(0.35)	(0.39)	(0.45)	(0.44)	(0.05)	(0.02)	(0.20)	(0.38)
Lagged dependent variable	0.04	0.03	0.43***	0.38***	0.11***	0.12***	0.12***	0.13***	0.15***	0.17***
	(0.23)	(0.37)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.56***	-0.55***	-0.21	-0.02	-1.14	-1.63	-1.89	-0.22	-2.52	-4.29**
	(0.00)	(0.00)	(0.13)	(0.87)	(0.72)	(0.44)	(0.36)	(0.90)	(0.34)	(0.04)
d(Lending Oriented)	-0.07	0.09	0.15	0.15*	0.70	2.00	-0.22	2.07*	-0.68	2.92**
	(0.65)	(0.43)	(0.15)	(0.07)	(0.73)	(0.20)	(0.87)	(0.07)	(0.70)	(0.04)
Deposits Total Assets	-0.00***	-0.00	0.00	0.00***	0.03	-0.01	0.04***	0.02**	0.01	0.00
	(0.00)	(0.12)	(0.12)	(0.01)	(0.19)	(0.78)	(0.01)	(0.04)	(0.70)	(0.84)
Log(Age)	-0.00	-0.02	-0.00	-0.00	-0.48**	-0.26	-0.34**	-0.28**	-0.32*	-0.26
	(0.79)	(0.32)	(0.77)	(0.95)	(0.01)	(0.11)	(0.01)	(0.03)	(0.05)	(0.15)
d(Rescued Bank)	0.04	0.03	0.01	0.01	0.24	1.57	0.56	0.38	0.66	0.26
	(0.71)	(0.77)	(0.85)	(0.88)	(0.86)	(0.23)	(0.57)	(0.64)	(0.60)	(0.84)
Cross-Listed Index	0.03*	0.03*	0.00	0.01	0.16	0.13	0.03	0.07	0.26**	0.38***
	(0.08)	(0.05)	(0.82)	(0.34)	(0.33)	(0.37)	(0.76)	(0.46)	(0.03)	(0.00)
d(Merger Acquisition)	0.08	0.08	0.03	0.02	0.64	0.27	1.28*	1.21	0.23	0.02
	(0.32)	(0.37)	(0.59)	(0.66)	(0.60)	(0.81)	(0.09)	(0.12)	(0.80)	(0.98)
Three-month Interbank Rate	0.02	0.03	-0.11***	-0.12***	-1.85***	-2.29***	-2.16**	-2.28***	-1.71**	-2.04***
	(0.70)	(0.54)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01*	0.01*	0.00	0.00	0.30***	0.29**	0.21***	0.24***	0.17**	0.21***
	(0.08)	(0.09)	(0.30)	(0.55)	(0.01)	(0.01)	(0.00)	(0.00)	(0.04)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.00	0.02**	0.01	0.00	0.01
	(0.26)	(0.33)	(0.17)	(0.28)	(0.39)	(0.74)	(0.04)	(0.18)	(0.91)	(0.61)
Constant	0.15	0.21	0.69***	0.72***	13.89***	14.34***	9.47***	12.22***	9.41***	13.19***
	(0.56)	(0.37)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.13	0.16	0.19	0.21	0.41	0.55	0.22	0.22	0.29	0.22
AR2 test (*p*-value)	0.78	0.89	0.99	0.89	0.29	0.32	0.49	0.50	0.12	0.16
Wald tests: $\alpha_1+\alpha_2$	-0.10**	-0.09**	-0.09**	-0.09**	0.89**	0.97**	0.41**	0.44**	0.55**	0.75**
$\alpha_1+\beta_1$	-0.13**	-0.08**	-0.03	-0.03	0.37	0.37	0.29	0.29	0.30	0.33
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.09**	-0.08**	-0.06	-0.07	0.41	0.37	0.24	0.25	0.29	0.34
$\alpha'_1+\alpha'_2$	0.16**	0.13**	0.05	0.05	-0.29	-0.30	-0.37	-0.35	-0.32	-0.59**
$\alpha'_1+\beta'_1$	0.04	0.03	0.08**	0.08**	-0.90**	-0.93**	-0.58**	-0.58**	-0.78**	-0.69**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.05	0.04	0.09**	0.09**	-0.75**	-0.83**	-0.94**	-0.95**	-0.80**	-0.77**

Table A33

Bank size and the effect of excess control rights on capital ratio adjustment: an alternative method to estimate the target

This table shows the Blundell and Bond (1998) estimation results on the effect of bank size on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, the target capital ratio in all the regressions is obtained by estimating a perfect adjustment model [Eq. (1)] using the generalized least squares estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans) and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Large Bank)* is a dummy equal to one if the bank's total assets is above the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.05*	-0.07**	-0.05**	0.85**	0.91***	0.43**	0.45**	0.46**	0.64**
	(0.02)	(0.06)	(0.02)	(0.04)	(0.01)	(0.01)	(0.07)	(0.04)	(0.04)	(0.03)
d(Large Bank) × *Capital Ratio Surplus* (α_2)	-0.02	-0.03	0.01	-0.01	0.09	0.01	0.03	-0.00	0.17	0.13
	(0.52)	(0.29)	(0.63)	(0.47)	(0.61)	(0.93)	(0.56)	(0.89)	(0.43)	(0.37)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.03	-0.01	0.04	0.02	-0.41**	-0.46**	-0.12*	-0.21*	-0.19*	-0.27
	(0.62)	(0.77)	(0.20)	(0.54)	(0.03)	(0.04)	(0.08)	(0.07)	(0.07)	(0.10)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.05	-0.01	-0.02	0.02	-0.09	-0.04	0.01	-0.02	-0.04	-0.08
	(0.51)	(0.18)	(0.92)	(0.66)	(0.23)	(0.81)	(0.91)	(0.87)	(0.41)	(0.25)
Capital Ratio Shortfall (α'_1)	0.12***	0.11***	0.02	0.03	-0.37	-0.10	-0.38	-0.37	-0.36	-1.09**
	(0.00)	(0.00)	(0.25)	(0.24)	(0.20)	(0.79)	(0.34)	(0.15)	(0.20)	(0.01)
d(Large Bank) × *Capital Ratio Shortfall* (α'_2)	0.04	0.05	0.02	0.00	-0.11	-0.12	-0.07	-0.08	-0.11	-0.10
	(0.67)	(0.46)	(0.92)	(0.92)	(0.59)	(0.91)	(0.23)	(0.42)	(0.20)	(0.56)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.05**	-0.04***	0.07*	0.04*	-0.32*	-0.63**	-0.31*	-0.27*	-0.30*	-0.07
	(0.02)	(0.00)	(0.09)	(0.08)	(0.06)	(0.02)	(0.06)	(0.05)	(0.09)	(0.23)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.06**	-0.07**	-0.08*	-0.04*	-0.42**	-0.35*	-0.49**	-0.33**	-0.38*	-0.04
	(0.01)	(0.01)	(0.09)	(0.08)	(0.03)	(0.07)	(0.02)	(0.01)	(0.09)	(0.20)
Lagged dependent variable	0.03	0.03	0.40***	0.39***	0.10***	0.12***	0.12***	0.12***	0.16***	0.17***
	(0.41)	(0.44)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.51***	-0.53***	-0.18	-0.06	-0.19	-1.18	-1.27	-0.22	-2.92*	-3.66**
	(0.00)	(0.00)	(0.16)	(0.51)	(0.95)	(0.62)	(0.44)	(0.90)	(0.10)	(0.02)
d(Large Bank)	-0.13	-0.17	-0.07	-0.03	-7.53***	-1.98	-3.31**	-1.73	-7.93***	-3.87**
	(0.59)	(0.31)	(0.58)	(0.68)	(0.00)	(0.28)	(0.03)	(0.19)	(0.00)	(0.02)
Deposits Total Assets	-0.00***	-0.00*	0.00	0.00**	0.01	-0.02	0.02	0.01	-0.01	-0.01
	(0.01)	(0.06)	(0.12)	(0.02)	(0.81)	(0.39)	(0.28)	(0.40)	(0.55)	(0.57)
Log(Age)	-0.02	-0.02	0.00	-0.00	-0.30	-0.17	-0.24*	-0.25*	-0.14	-0.12
	(0.42)	(0.31)	(0.96)	(0.98)	(0.12)	(0.30)	(0.06)	(0.06)	(0.37)	(0.45)
d(Rescued Bank)	0.04	0.01	0.02	0.00	1.79	1.45	0.79	0.39	1.01	0.62
	(0.66)	(0.89)	(0.81)	(0.96)	(0.13)	(0.29)	(0.28)	(0.62)	(0.37)	(0.59)
Cross-Listed Index	0.02	0.02*	0.01	0.01	0.10	0.07	0.03	0.12	0.20*	0.33***
	(0.21)	(0.06)	(0.55)	(0.48)	(0.54)	(0.63)	(0.77)	(0.26)	(0.06)	(0.00)
d(Merger Acquisition)	0.06	0.07	0.04	0.02	0.35	0.13	1.36*	1.33	0.15	0.13
	(0.49)	(0.39)	(0.41)	(0.73)	(0.77)	(0.92)	(0.07)	(0.10)	(0.88)	(0.90)
Three-month Interbank Rate	0.01	0.04	-0.14***	-0.11***	-1.79**	-2.07***	-2.07***	-2.36***	-1.80***	-1.81***
	(0.79)	(0.48)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.01*	0.01	0.00	0.00	0.28**	0.24**	0.20***	0.23***	0.17**	0.14*
	(0.06)	(0.11)	(0.41)	(0.54)	(0.01)	(0.04)	(0.00)	(0.00)	(0.04)	(0.08)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
	(0.51)	(0.34)	(0.37)	(0.26)	(0.70)	(0.63)	(0.20)	(0.31)	(0.53)	(0.48)
Constant	0.37	0.28	0.75***	0.58***	17.43***	13.95***	10.95***	12.45***	13.88***	12.67***
	(0.14)	(0.34)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.17	0.12	0.20	0.23	0.29	0.29	0.30	0.32	0.20	0.46
AR2 test (*p*-value)	0.95	0.97	0.87	0.96	0.30	0.24	0.50	0.53	0.14	0.16
Wald tests: $\alpha_1+\alpha_2$	-0.09**	-0.08**	-0.06**	-0.06**	0.94**	0.92**	0.46**	0.45**	0.63**	0.77**
$\alpha_1+\beta_1$	-0.10**	-0.06**	-0.03	-0.03	0.44	0.45	0.31	0.24	0.27	0.37
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.17**	-0.10**	-0.04	-0.02	0.44	0.42	0.35	0.22	0.40	0.42
$\alpha'_1+\alpha'_2$	0.16***	0.16**	0.04	0.03	-0.48	-0.22	-0.45	-0.45	-0.47	-1.19**
$\alpha'_1+\beta'_1$	0.07*	0.07*	0.09**	0.07**	-0.69**	-0.73**	-0.69**	-0.64**	-0.66**	-1.16**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.05	0.05	0.03	0.03	-1.22**	-1.20**	-1.25**	-1.05**	-1.15**	-1.30***

Table A34

Estimating the target capital ratio: excluding banks controlled by multiple ultimate owners

This table shows the Blundell and Bond (1998) estimation results of the target capital ratio based on a partial adjustment model [Eq. (3)] over the 2002–2010 period. For robustness, we exclude from the initial sample banks controlled by more than one ultimate owner and we use a sample of 281 European commercial banks corresponding to 1,705 observations. *Tier 1 Total Assets* is Tier 1 capital divided by total assets. *Tier 1 RWA* is Tier 1 capital divided by risk-weighted assets. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Log(Total Assets)* is the natural logarithm of the bank's total assets. *Return on Assets* is net income divided by total assets. *Loan Loss Provisions* is loan loss provisions divided by net loans. *Loans Total Assets* is net loans divided by total assets. *Market Discipline* is total long-term market funding divided by total funding. *d(Listed Bank)* is a dummy equal to one if the bank is publicly listed and zero otherwise. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. In the last three rows, we report the summary statistics (mean, maximum and minimum) of the estimated target capital ratio. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent variable	*Tier 1 Total Assets*	*Tier 1 RWA*
Lagged dependent variable	0.65***	0.64***
	(0.00)	(0.00)
d(Excess Control Rights)	-0.34**	-0.73***
	(0.02)	(0.00)
Log(Total Assets)	-0.52***	-0.53***
	(0.00)	(0.00)
Return On Assets	0.56***	0.59***
	(0.00)	(0.00)
Loan Loss Provisions	0.20***	0.10*
	(0.00)	(0.07)
Loans Total Assets	-0.01***	-0.03***
	(0.00)	(0.00)
Market Discipline	0.01**	0.02***
	(0.02)	(0.01)
d(Listed Bank)	-0.71***	-1.51***
	(0.00)	(0.00)
GDP Growth Rate	-0.00	0.00
	(1.00)	(0.85)
Constant	2.39***	6.13***
	(0.00)	(0.00)
Hansen test (*p*-value)	0.11	0.16
AR2 test (*p*-value)	0.39	0.22
Fitted target (%): Mean	6.89	11.34
Maximum	14.66	23.60
Minimum	1.15	4.17

Table A35

Excess control rights and capital ratio adjustment: excluding banks controlled by multiple ultimate owners

This table shows the Blundell and Bond (1998) estimation results on the effect of excess control rights on capital ratio adjustment [Eq. (6)] over the 2002–2010 period. For robustness, we exclude from the initial sample banks controlled by more than one ultimate owner and we use a sample of 281 European commercial banks corresponding to 1,705 observations. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06*	-0.04*	-0.06**	-0.05**	0.76**	0.88**	0.47**	0.47**	0.53**	0.64**
	(0.06)	(0.07)	(0.02)	(0.04)	(0.04)	(0.04)	(0.03)	(0.04)	(0.02)	(0.03)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.07	-0.04	0.03	0.02	-0.42**	-0.48*	-0.20*	-0.23**	-0.35*	-0.30*
	(0.34)	(0.29)	(0.50)	(0.78)	(0.03)	(0.07)	(0.06)	(0.04)	(0.06)	(0.06)
Capital Ratio Shortfall (α'_1)	0.15**	0.10***	0.04	0.04*	-0.34	0.08	-0.36	-0.36	-0.23	-0.63**
	(0.03)	(0.00)	(0.13)	(0.10)	(0.24)	(0.82)	(0.21)	(0.11)	(0.52)	(0.02)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.11*	-0.06*	0.04**	0.02*	-0.37**	-0.79**	-0.27**	-0.30**	-0.29*	-0.02
	(0.05)	(0.07)	(0.03)	(0.08)	(0.02)	(0.02)	(0.03)	(0.03)	(0.07)	(0.28)
Lagged dependent variable	0.03	0.03	0.38***	0.35***	0.10***	0.12***	0.12***	0.12***	0.14***	0.16***
	(0.43)	(0.41)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.25*	-0.27*	-0.14	-0.12	-2.08	-0.16	-0.66	-0.20	-1.58	-0.24
	(0.05)	(0.08)	(0.24)	(0.18)	(0.34)	(0.67)	(0.66)	(0.90)	(0.34)	(0.58)
Deposits Total Assets	-0.00	-0.00	0.00**	0.00**	0.00	-0.00	0.01	0.01	0.01	0.00
	(0.70)	(0.31)	(0.03)	(0.03)	(0.89)	(0.88)	(0.43)	(0.46)	(0.72)	(0.97)
Log(Age)	-0.03*	-0.04***	-0.01	-0.00	-0.39*	-0.33*	-0.31**	-0.28*	-0.26	-0.13
	(0.05)	(0.01)	(0.65)	(0.86)	(0.05)	(0.08)	(0.02)	(0.06)	(0.11)	(0.44)
d(Rescued Bank)	0.04	0.02	0.01	0.06	1.19	2.40	0.68	0.30	0.70	1.21
	(0.74)	(0.88)	(0.91)	(0.48)	(0.51)	(0.22)	(0.53)	(0.76)	(0.66)	(0.35)
Cross-Listed Index	0.02**	0.03***	-0.00	0.00	0.16	0.13	0.09	0.17*	0.28***	0.22**
	(0.04)	(0.01)	(0.76)	(0.82)	(0.29)	(0.40)	(0.35)	(0.06)	(0.01)	(0.03)
d(Merger Acquisition)	0.11	0.10	0.04	0.03	0.21	0.41	1.04	1.08	0.05	0.28
	(0.19)	(0.20)	(0.52)	(0.60)	(0.86)	(0.75)	(0.21)	(0.20)	(0.96)	(0.79)
Three-month Interbank Rate	0.00	0.02	-0.12**	-0.08	-1.89***	-1.87**	-1.85***	-2.29***	-1.67***	-1.50***
	(0.98)	(0.76)	(0.01)	(0.10)	(0.01)	(0.03)	(0.00)	(0.00)	(0.01)	(0.01)
GDP Growth Rate	0.01	0.01	0.00	0.00	0.18	0.21*	0.18**	0.19**	0.11	0.15*
	(0.19)	(0.33)	(0.66)	(0.50)	(0.14)	(0.08)	(0.01)	(0.01)	(0.23)	(0.09)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.00	0.00
	(0.32)	(0.10)	(0.28)	(0.25)	(0.14)	(0.16)	(0.15)	(0.12)	(0.85)	(0.83)
Constant	0.32	0.36	0.65***	0.51**	11.96***	12.18***	8.40***	10.93***	8.20***	6.77***
	(0.23)	(0.19)	(0.01)	(0.03)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Hansen test (*p*-value)	0.14	0.13	0.10	0.17	0.23	0.29	0.20	0.16	0.15	0.50
AR2 test (*p*-value)	0.89	0.93	0.86	0.90	0.72	0.65	0.90	0.91	0.15	0.15
Wald tests: $\alpha_1+\beta_1$	-0.13**	-0.08**	-0.03	-0.03*	0.34	0.4	0.27	0.24	0.18	0.34
$\alpha'_1+\beta'_1$	0.04	0.04	0.08**	0.06**	-0.71**	-0.71**	-0.63**	-0.66**	-0.52**	-0.65**

Table A36

Ownership type and the effect of excess control rights on capital ratio adjustment: excluding banks controlled by multiple ultimate owners

This table shows the Blundell and Bond (1998) estimation results on the effect of ownership type on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. We exclude from the initial sample banks for which the control chain is a cross-holding (for simplicity) and banks controlled by more than one ultimate owner (for robustness) and we use a sample of 276 European commercial banks corresponding to 2,138 observations. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Family)* is a dummy equal to one if the bank is family-controlled and zero otherwise. *d(State)* is a dummy equal to one if the bank is state-controlled and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Rescued Bank)*is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *d(Merger Acquisition)* is dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p*-values based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.12**	-0.05**	-0.07**	-0.05**	0.76**	0.81**	0.31*	0.45**	0.42**	0.62**
	(0.01)	(0.05)	(0.01)	(0.03)	(0.02)	(0.02)	(0.08)	(0.01)	(0.05)	(0.01)
d(Family) × *Capital Ratio Surplus* (α_2)	0.08	0.02	0.01	0.01	0.12	0.14	0.16	0.13	0.15	0.15
	(0.35)	(0.60)	(0.27)	(0.18)	(0.39)	(0.15)	(0.27)	(0.32)	(0.33)	(0.27)
d(State) × *Capital Ratio Surplus* (α_3)	0.07	-0.00	-0.01	0.01	0.03	0.21	0.07	0.07	0.09	0.15
	(0.36)	(0.74)	(0.31)	(0.23)	(0.68)	(0.25)	(0. 35)	(0.60)	(0.53)	(0.60)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.03	-0.00	-0.01	-0.01	-0.39	-0.40	-0.12	-0.14	-0.22	-0.30
	(0.65)	(0.90)	(0.15)	(0.72)	(0.15)	(0.60)	(0.73)	(0.70)	(0.55)	(0.29)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.06*	-0.06*	0.05*	0.02	-0.06	-0.19	-0.05	-0.17	-0.16	-0.10
	(0.06)	(0.05)	(0.06)	(0.45)	(0.60)	(0.30)	(0.65)	(0.74)	(0.88)	(0.45)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_3)	-0.01	-0.01	-0.11	-0.01	0.07	-0.16	0.02	-0.07	-0.08	-0.12
	(0.18)	(0.69)	(0.37)	(0.21)	(0.48)	(0.20)	(0.77)	(0.15)	(0.35)	(0.20)
Capital Ratio Shortfall (α'_1)	0.15**	0.08***	0.04	0.06*	-0.36	0.09	-0.41	-0.38	-0.32	-0.52**
	(0.01)	(0.00)	(0.29)	(0.05)	(0.16)	(0.66)	(0.22)	(0.17)	(0.15)	(0.02)
d(Family) × *Capital Ratio Shortfall* (α'_2)	0.10	0.06	0.02	0.01	0.05	0.08	0.07	-0.08	0.13	-0.04
	(0.15)	(0.11)	(0.76)	(0.51)	(0.38)	(0.45)	(0.28)	(0.80)	(0.30)	(0.37)
d(State) × *Capital Ratio Shortfall* (α'_3)	0.01	-0.02	-0.03	-0.00	0.04	0.04	0.07	-0.07	0.04	-0.09
	(0.77)	(0.30)	(0.68)	(0.85)	(0.68)	(0.54)	(0.35)	(0.94)	(0.62)	(0.50)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07	-0.03	0.03	0.00	-0.11	-0.48	-0.05	-0.11	-0.06	-0.06
	(0.17)	(0.16)	(0.52)	(0.64)	(0.30)	(0.31)	(0.68)	(0.19)	(0.41)	(0.29)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.16**	-0.11**	-0.00	0.03*	-0.53**	-0.67**	-0.30**	-0.38**	-0.46**	-0.12
	(0.03)	(0.02)	(0.66)	(0.06)	(0.02)	(0.01)	(0.03)	(0.01)	(0.04)	(0.18)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_3)	-0.02	0.07**	-0.04	-0.04	-0.12	-0.16	-0.13	0.12**	-0.10	0.11
	(0.58)	(0.04)	(0.66)	(0.80)	(0.17)	(0.21)	(0.44)	(0.01)	(0.30)	(0.29)
Lagged dependent variable	0.03	0.04	0.44***	0.44***	0.10**	0.13***	0.15***	0.17***	0.16***	0.18***
	(0.43)	(0.23)	(0.00)	(0.00)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.34**	-0.29*	-0.17	-0.11	-5.35**	-4.53**	-0.73	-3.81**	-0.28	-1.30
	(0.01)	(0.05)	(0.14)	(0.15)	(0.02)	(0.03)	(0.60)	(0.05)	(0.89)	(0.52)
d(Family)	-0.06	0.02	-0.13	-0.17*	3.29	-0.92	2.15	0.25	1.97	2.54
	(0.81)	(0.91)	(0.49)	(0.09)	(0.34)	(0.78)	(0.31)	(0.92)	(0.48)	(0.36)
d(State)	0.29	-0.14	0.02	-0.04	6.62*	-6.76**	1.22	-10.20***	1.86	-10.97*
	(0.15)	(0.49)	(0.87)	(0.81)	(0.09)	(0.03)	(0.58)	(0.00)	(0.56)	(0.06)

Table A36 (continued)

Deposits Total Assets	-0.00	-0.00	0.00**	0.00	0.01	0.01	0.01	0.04**	-0.01	-0.00
	(0.53)	(0.43)	(0.01)	(0.18)	(0.71)	(0.56)	(0.40)	(0.04)	(0.77)	(0.99)
Log(Age)	-0.04**	-0.04***	-0.00	0.00	-0.38*	-0.48**	-0.17	-0.32*	-0.20	-0.14
	(0.03)	(0.01)	(0.84)	(0.88)	(0.07)	(0.01)	(0.24)	(0.07)	(0.21)	(0.46)
d(Rescued Bank)	0.11	0.01	0.00	0.04	0.98	1.71	0.79	1.54	0.68	0.07
	(0.34)	(0.92)	(0.97)	(0.55)	(0.63)	(0.43)	(0.50)	(0.25)	(0.65)	(0.97)
Cross-Listed Index	0.02*	0.03***	0.00	0.01	0.13	0.19	0.10	0.08	0.21**	0.21*
	(0.06)	(0.00)	(0.79)	(0.50)	(0.34)	(0.22)	(0.31)	(0.46)	(0.04)	(0.06)
d(Merger Acquisition)	0.10	0.05	0.01	0.05	0.12	0.52	1.56*	1.07	0.07	0.16
	(0.18)	(0.54)	(0.85)	(0.26)	(0.93)	(0.69)	(0.08)	(0.28)	(0.94)	(0.89)
Three-month Interbank Rate	-0.00	0.05	-0.11**	-0.08**	-1.80**	-1.32*	-1.90***	-2.09***	-1.66***	-1.40**
	(0.96)	(0.42)	(0.02)	(0.04)	(0.02)	(0.09)	(0.00)	(0.00)	(0.00)	(0.02)
GDP Growth Rate	0.01	0.01	0.00	0.00	0.15	0.28**	0.18***	0.29***	0.17*	0.18*
	(0.16)	(0.37)	(0.57)	(0.56)	(0.19)	(0.03)	(0.01)	(0.00)	(0.06)	(0.06)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.03*
	(0.21)	(0.66)	(0.18)	(0.49)	(0.46)	(0.68)	(0.21)	(0.38)	(0.63)	(0.08)
Constant	0.35	0.28	0.65**	0.55**	11.58***	10.96***	7.91***	8.14***	8.10***	4.53
	(0.17)	(0.31)	(0.02)	(0.02)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.20)
Hansen test (*p*-value)	0.13	0.15	0.15	0.17	0.16	0.14	0.18	0.24	0.22	0.21
AR2 test (*p*-value)	0.82	0.82	0.72	0.92	0.32	0.30	0.67	0.60	0.36	0.23
Wald tests: $\alpha_1+\alpha_2$	-0.04**	-0.04**	-0.06**	-0.04*	0.88**	0.95***	0.47**	0.58**	0.57**	0.77**
$\alpha_1+\alpha_3$	-0.05*	-0.05**	-0.08**	-0.04**	0.79**	1.02**	0.38**	0.52**	0.51**	0.77**
$\alpha_1+\beta_1$	-0.15**	-0.05**	-0.08**	-0.06**	0.37	0.41	0.19	0.31	0.20	0.32
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.13**	-0.09**	-0.02	-0.03	0.43	0.36	0.30	0.27	0.19	0.37
$\alpha_1+\alpha_3+\beta_1+\beta_3$	-0.09**	-0.06**	-0.20**	-0.06**	0.47	0.46	0.28	0.31	0.21	0.35
$\alpha'_1+\alpha'_2$	0.25**	0.14***	0.06	0.07*	-0.31	0.17	-0.34	-0.46	-0.19	-0.56**
$\alpha'_1+\alpha'_3$	0.16**	0.06**	0.01	0.06*	-0.32	0.13	-0.34	-0.45	-0.28	-0.61**
$\alpha'_1+\beta'_1$	0.08***	0.05**	0.07*	0.06*	-0.47	-0.39	-0.46	-0.49*	-0.38	-0.58**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.02	0.00	0.09**	0.10**	-0.95**	-0.98**	-0.69**	-0.95**	-0.71**	-0.74**
$\alpha'_1+\alpha'_3+\beta'_1+\beta'_3$	0.07**	0.10**	0.00	0.02	-0.55	-0.51*	-0.52	-0.44	-0.44	-0.56

Table A37

Shareholder protection and the effect of excess control rights on capital ratio adjustment: excluding banks controlled by multiple ultimate owners

This table shows the Blundell and Bond (1998) estimation results on the effect of shareholder protection rights on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. For robustness, we exclude from the initial sample banks controlled by more than one ultimate owner and we use a sample of 281 European commercial banks corresponding to 1,705 observations. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target, respectively, and zero otherwise. *d(Owner Rights)* is a dummy equal to one if the shareholder protection index as defined in Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008) is greater than the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-value*s based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.10**	-0.09*	-0.06**	-0.05**	0.71**	0.88**	0.35*	0.41**	0.40***	0.65**
	(0.02)	(0.08)	(0.05)	(0.03)	(0.02)	(0.01)	(0.06)	(0.02)	(0.00)	(0.02)
d(Owner Rights) × *Capital Ratio Surplus* (α_2)	0.02	0.02	-0.01	0.01	0.12	0.07	0.14	0.14	0.14	0.19
	(0.18)	(0.11)	(0.29)	(0.27)	(0.71)	(0.23)	(0.59)	(0.90)	(0.73)	(0.39)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.07	-0.01	0.04	0.03	-0.37	-0.48	-0.05	-0.18	-0.15	-0.30
	(0.61)	(0.89)	(0.15)	(0.19)	(0.37)	(0.70)	(0.28)	(0.56)	(0.66)	(0.17)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.05	0.03	-0.02	-0.05	-0.06	-0.04	-0.17	0.06	-0.19	-0.18
	(0.81)	(0.47)	(0.20)	(0.32)	(0.44)	(0.35)	(0.16)	(0.94)	(0.15)	(0.18)
Capital Ratio Shortfall (α'_1)	0.14**	0.07**	0.04	0.04*	-0.36	-0.10	-0.37	-0.30	-0.20	-0.60**
	(0.04)	(0.01)	(0.21)	(0.10)	(0.17)	(0.59)	(0.11)	(0.24)	(0.44)	(0.02)
d(Owner Rights) × *Capital Ratio Shortfall* (α'_2)	0.04	0.09	0.01	-0.00	-0.09	0.15	-0.05	-0.26	-0.07	-0.04
	(0.32)	(0.10)	(0.83)	(0.74)	(0.92)	(0.17)	(0.87)	(0.21)	(0.12)	(0.41)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12**	-0.05**	0.04**	0.02*	-0.50***	-0.88***	-0.50**	-0.61**	-0.45*	-0.07
	(0.02)	(0.02)	(0.04)	(0.07)	(0.01)	(0.00)	(0.01)	(0.03)	(0.07)	(0.18)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.01	-0.01	-0.03	-0.03	0.35	0.29	0.48**	0.53*	0.44	0.14
	(0.92)	(0.52)	(0.77)	(0.46)	(0.22)	(0.64)	(0.04)	(0.07)	(0.42)	(0.39)
Lagged dependent variable	0.03	0.03	0.38***	0.35***	0.11***	0.11***	0.12***	0.12***	0.15***	0.16***
	(0.42)	(0.46)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.34**	-0.31**	-0.17*	-0.09	-3.55*	-2.82	-0.76	-1.00	-1.26	-1.28
	(0.04)	(0.04)	(0.10)	(0.37)	(0.07)	(0.13)	(0.54)	(0.48)	(0.52)	(0.58)
Deposits Total Assets	-0.00	-0.00	0.00**	0.00*	0.00	-0.01	0.01	0.01	-0.01	-0.00
	(0.41)	(0.42)	(0.01)	(0.08)	(0.99)	(0.74)	(0.43)	(0.35)	(0.76)	(0.92)
Log(Age)	-0.04**	-0.05***	-0.00	-0.01	-0.45**	-0.26	-0.28**	-0.26*	-0.26	-0.21
	(0.01)	(0.01)	(0.77)	(0.67)	(0.02)	(0.20)	(0.04)	(0.07)	(0.14)	(0.25)
d(Rescued Bank)	0.02	0.05	0.05	0.05	0.91	0.32	0.71	0.07	0.81	0.99
	(0.84)	(0.68)	(0.59)	(0.54)	(0.64)	(0.87)	(0.52)	(0.95)	(0.67)	(0.61)
Cross-Listed Index	0.03***	0.03***	0.00	0.00	0.16	0.17	0.13	0.08	0.23**	0.24**
	(0.00)	(0.00)	(0.80)	(0.66)	(0.27)	(0.26)	(0.11)	(0.40)	(0.04)	(0.04)
d(Merger Acquisition)	0.10	0.12	0.03	0.00	0.40	0.23	1.46*	1.39*	0.31	0.56
	(0.23)	(0.14)	(0.51)	(0.95)	(0.72)	(0.85)	(0.06)	(0.10)	(0.77)	(0.61)
Three-month Interbank Rate	-0.01	0.02	-0.11**	-0.09*	-1.60**	-1.64**	-1.89**	-2.41***	-1.57**	-1.82***
	(0.82)	(0.78)	(0.02)	(0.05)	(0.02)	(0.03)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01	0.00	0.00	0.00	0.16	0.20*	0.18**	0.24***	0.19**	0.16
	(0.17)	(0.61)	(0.39)	(0.63)	(0.19)	(0.09)	(0.01)	(0.00)	(0.05)	(0.11)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.01	0.01
	(0.20)	(0.22)	(0.22)	(0.15)	(0.11)	(0.19)	(0.21)	(0.23)	(0.58)	(0.66)
Constant	0.60**	0.49*	0.71**	0.65***	13.46***	10.94***	8.87***	10.06***	6.98**	7.20**
	(0.03)	(0.08)	(0.02)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.02)	(0.01)
Hansen test (*p*-value)	0.86	0.92	0.89	0.90	0.96	0.94	0.93	0.88	0.96	0.96
AR2 test (*p*-value)	0.89	0.95	0.88	0.93	0.74	0.64	0.92	0.78	0.14	0.14
Wald tests: $\alpha_1+\alpha_2$	-0.08**	-0.07*	-0.07**	-0.04**	0.83***	0.95**	0.49**	0.55**	0.54**	0.84**
$\alpha_1+\beta_1$	-0.17**	-0.10**	-0.02	-0.02	0.34	0.40	0.30	0.23	0.25	0.35
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.10**	-0.05**	-0.05**	-0.06**	0.40*	0.43*	0.27	0.43	0.20	0.36
$\alpha'_1+\alpha'_2$	0.18**	0.16***	0.05	0.04	-0.45	0.05	-0.42	-0.56	-0.27	-0.64**
$\alpha'_1+\beta'_1$	0.02	0.02	0.08**	0.06**	-0.86**	-0.98**	-0.87**	-0.91**	-0.65**	-0.67**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.05*	0.10**	0.06*	0.03	-0.60*	-0.54*	-0.44	-0.64	-0.28	-0.57*

Table A38

2008 financial crisis and the effect of excess control rights on capital ratio adjustment: excluding banks controlled by multiple ultimate owners

This table shows the Blundell and Bond (1998) estimation results on the effect of the 2008 financial crisis on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. For robustness, we exclude from the initial sample banks controlled by more than one ultimate owner and we use a sample of 281 European commercial banks corresponding to 1,705 observations. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time t + total assets at time t-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Crisis)* is a dummy equal to one if the observation is from 2008 or 2009 and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.06**	-0.05**	-0.05**	1.10**	1.12**	0.52**	0.64**	0.62**	0.92**
	(0.04)	(0.03)	(0.05)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.01)
d(Crisis) × *Capital Ratio Surplus* (α_2)	0.04*	0.02	-0.02	-0.01	-0.63	-0.42	-0.21	-0.27	-0.29	-0.40
	(0.06)	(0.51)	(0.10)	(0.12)	(0.57)	(0.73)	(0.68)	(0.68)	(0.36)	(0.27)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.03	-0.03	0.02	0.02	-0.64	-0.64	-0.15	-0.30	-0.31	-0.53
	(0.43)	(0.52)	(0.52)	(0.14)	(0.70)	(0.20)	(0.39)	(0.87)	(0.25)	(0.54)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.03	0.03	-0.02	-0.02	0.51	0.35	0.07	0.15	0.24	0.35
	(0.73)	(0.37)	(0.66)	(0.56)	(0.27)	(0.42)	(0.60)	(0.42)	(0.75)	(0.25)
Capital Ratio Shortfall (α'_1)	0.15**	0.11**	0.04	0.06	-0.42	0.08	-0.25	-0.31	-0.27	-0.67**
	(0.05)	(0.02)	(0.12)	(0.10)	(0.17)	(0.66)	(0.52)	(0.37)	(0.28)	(0.03)
d(Crisis) × *Capital Ratio Shortfall* (α'_2)	-0.05*	-0.05	-0.01	-0.02	-0.05	0.20	-0.22	-0.15	-0.20	0.20
	(0.10)	(0.74)	(0.33)	(0.22)	(0.79)	(0.67)	(0.53)	(0.54)	(0.37)	(0.52)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12*	-0.09*	0.06	0.06*	-0.52*	-0.97**	-0.44**	-0.52*	-0.50**	-0.16
	(0.08)	(0.08)	(0.14)	(0.08)	(0.10)	(0.03)	(0.04)	(0.06)	(0.03)	(0.50)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	0.09	0.09	-0.04	-0.05	0.49	0.20	0.42	0.52	0.61	0.35
	(0.50)	(0.59)	(0.31)	(0.51)	(0.14)	(0.55)	(0.38)	(0.29)	(0.20)	(0.43)
Lagged dependent variable	0.03	0.03	0.40***	0.35***	0.12***	0.13***	0.12***	0.14***	0.16***	0.13***
	(0.48)	(0.45)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.25	-0.35**	-0.13	-0.11	-0.88	-2.73	-1.13	-0.24	-2.21	-1.54
	(0.14)	(0.02)	(0.22)	(0.20)	(0.70)	(0.16)	(0.45)	(0.88)	(0.19)	(0.51)
Deposits Total Assets	-0.00	-0.00	0.00**	0.00**	0.00	-0.01	0.01	0.01	-0.01	-0.00
	(0.77)	(0.24)	(0.01)	(0.02)	(0.99)	(0.74)	(0.47)	(0.46)	(0.59)	(0.83)
Log(Age)	-0.03*	-0.05***	-0.00	-0.00	-0.37*	-0.31	-0.26**	-0.27*	-0.22	-0.07
	(0.05)	(0.00)	(0.97)	(0.97)	(0.06)	(0.10)	(0.04)	(0.06)	(0.21)	(0.67)
d(Rescued Bank)	0.04	0.03	0.02	0.05	0.42	2.34	0.62	0.63	0.63	1.02
	(0.74)	(0.77)	(0.80)	(0.50)	(0.81)	(0.24)	(0.54)	(0.52)	(0.70)	(0.42)
Cross-Listed Index	0.02**	0.03***	0.00	0.00	0.05	0.09	0.08	0.17*	0.24**	0.20**
	(0.04)	(0.01)	(0.84)	(0.47)	(0.75)	(0.55)	(0.41)	(0.06)	(0.02)	(0.04)
d(Merger Acquisition)	0.10	0.10	0.05	0.05	0.07	0.62	1.08	1.22	0.28	0.39
	(0.25)	(0.20)	(0.34)	(0.24)	(0.95)	(0.62)	(0.20)	(0.16)	(0.76)	(0.71)
Three-month Interbank Rate	-0.02	0.02	-0.10**	-0.08*	-1.84***	-1.87***	-1.91**	-2.23***	-1.79**	-1.41**
	(0.73)	(0.75)	(0.03)	(0.10)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.02)
GDP Growth Rate	0.01	0.01	0.00	0.00	0.14	0.16	0.18**	0.17**	0.14	0.15
	(0.29)	(0.50)	(0.90)	(0.34)	(0.26)	(0.21)	(0.01)	(0.02)	(0.17)	(0.10)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.01	0.01
	(0.33)	(0.12)	(0.30)	(0.14)	(0.13)	(0.17)	(0.20)	(0.14)	(0.72)	(0.66)
Constant	0.38	0.34	0.43**	0.45*	11.08***	11.75***	8.22***	10.66***	8.10***	5.78**
	(0.14)	(0.17)	(0.04)	(0.08)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)
Hansen test (*p*-value)	0.12	0.11	0.22	0.29	0.24	0.22	0.16	0.15	0.11	0.46
AR2 test (*p*-value)	0.96	0.94	0.89	0.92	0.63	0.58	0.87	0.89	0.14	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.04*	-0.04	-0.07**	-0.06**	0.47*	0.70**	0.31	0.37	0.33	0.52**
$\alpha_1+\beta_1$	-0.11**	-0.09**	-0.03	-0.03	0.46	0.48	0.37	0.34	0.31	0.39
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.04	-0.04*	-0.07**	-0.06**	0.34	0.41	0.23	0.22	0.26	0.34
$\alpha'_1+\alpha'_2$	0.10**	0.06**	0.03	0.04	-0.47	0.28	-0.47	-0.46	-0.47	-0.47*
$\alpha'_1+\beta'_1$	0.03	0.02	0.10**	0.12**	-0.94**	-0.89**	-0.69**	-0.83**	-0.77**	-0.83**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.07**	0.06**	0.05	0.05	-0.50	-0.49	-0.49	-0.46	-0.36	-0.28

Table A39

Bank capitalization and the effect of excess control rights on capital ratio adjustment: excluding banks controlled by multiple ultimate owners

This table shows the Blundell and Bond (1998) estimation results on the effect of bank capitalization on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period. For robustness, we exclude from the initial sample banks controlled by more than one ultimate owner and we use a sample of 281 European commercial banks corresponding to 1,705 observations. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Undercapitalized)* is a dummy equal to one if the Tier 1 RWA (Tier 1 Total Assets) ratio is less than 6% (4%) and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06**	-0.07*	-0.05**	-0.05*	0.75**	0.85**	0.45*	0.53**	0.44**	0.65***
	(0.01)	(0.06)	(0.03)	(0.05)	(0.01)	(0.01)	(0.06)	(0.01)	(0.02)	(0.00)
d(Undercapitalized) × *Capital Ratio Surplus* (α_2)	0.01	0.05**	0.00	0.03*	-0.10	-0.44**	-0.02	-0.22*	-0.01	-0.26*
	(0.85)	(0.03)	(0.95)	(0.09)	(0.35)	(0.04)	(0.40)	(0.08)	(0.90)	(0.08)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.09	-0.05	0.03	0.00	-0.44*	-0.43*	-0.21*	-0.13*	-0.15	-0.20*
	(0.21)	(0.22)	(0.58)	(0.75)	(0.09)	(0.07)	(0.06)	(0.09)	(0.11)	(0.10)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.06	0.05*	0.01	0.02*	0.10	0.21	0.19	-0.11	0.13	-0.01
	(0.70)	(0.06)	(0.14)	(0.10)	(0.45)	(0.23)	(0.45)	(0.52)	(0.50)	(0.41)
Capital Ratio Shortfall (α'_1)	0.09**	0.07**	0.03	0.04	-0.38	-0.06	-0.28	-0.40	-0.38	-0.49**
	(0.04)	(0.02)	(0.40)	(0.11)	(0.17)	(0.36)	(0.36)	(0.15)	(0.11)	(0.04)
d(Undercapitalized) × *Capital Ratio Shortfall* (α'_2)	0.03	0.07*	0.01	0.00	-0.10	0.32	-0.10	-0.11	-0.14	-0.20
	(0.35)	(0.05)	(0.66)	(0.90)	(0.21)	(0.53)	(0.25)	(0.70)	(0.20)	(0.34)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.08**	-0.06**	0.06*	0.04*	-0.30*	-0.47**	-0.42*	-0.25**	-0.40**	-0.14
	(0.01)	(0.01)	(0.06)	(0.06)	(0.05)	(0.01)	(0.05)	(0.04)	(0.02)	(0.12)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.02	-0.04	-0.02	-0.01	-0.15	-0.45**	-0.14	-0.29**	0.08	-0.16*
	(0.34)	(0.36)	(0.46)	(0.50)	(0.56)	(0.02)	(0.65)	(0.04)	(0.73)	(0.09)
Lagged dependent variable	0.03	0.05	0.41***	0.34***	0.11*	0.08	0.15***	0.14***	0.14***	0.15***
	(0.39)	(0.14)	(0.00)	(0.00)	(0.08)	(0.18)	(0.00)	(0.01)	(0.00)	(0.00)
d(Excess Control Rights)	-0.28*	-0.32	-0.26**	-0.08	-3.91	-0.03	-0.51	-2.08	-0.09	-3.53*
	(0.05)	(0.11)	(0.04)	(0.54)	(0.13)	(0.99)	(0.75)	(0.17)	(0.96)	(0.08)
d(Undercapitalized)	0.29	0.74**	-0.54***	-0.36	-4.50	-0.05	-0.64	1.58	-4.05*	-6.13
	(0.33)	(0.01)	(0.00)	(0.18)	(0.18)	(0.99)	(0.80)	(0.58)	(0.09)	(0.13)
Deposits Total Assets	-0.00	-0.00	0.00***	0.00**	0.00	0.02	0.01	0.02	0.01	-0.01
	(0.96)	(0.66)	(0.00)	(0.01)	(0.86)	(0.60)	(0.44)	(0.24)	(0.80)	(0.79)
Log(Age)	-0.02	-0.03*	-0.00	-0.02	-0.22	-0.13	-0.23	-0.19	-0.22	-0.18
	(0.20)	(0.09)	(0.97)	(0.29)	(0.37)	(0.60)	(0.16)	(0.28)	(0.34)	(0.49)
d(Rescued Bank)	0.03	0.02	0.05	0.03	0.55	0.77	0.48	0.13	1.21	1.05
	(0.83)	(0.88)	(0.57)	(0.75)	(0.79)	(0.67)	(0.66)	(0.90)	(0.51)	(0.51)
Cross-Listed Index	0.03**	0.03*	0.02	0.01	0.39**	0.23	0.19*	0.19*	0.34**	0.34**
	(0.04)	(0.07)	(0.18)	(0.53)	(0.05)	(0.24)	(0.09)	(0.10)	(0.03)	(0.05)
d(Merger Acquisition)	0.17*	0.15	0.01	0.02	0.77	0.53	0.38	0.61	0.82	0.88
	(0.05)	(0.12)	(0.93)	(0.73)	(0.63)	(0.76)	(0.72)	(0.57)	(0.45)	(0.47)
Three-month Interbank Rate	-0.04	0.02	-0.12**	-0.10*	-1.56**	-1.77**	-2.10**	-2.48***	-1.57**	-1.75***
	(0.52)	(0.71)	(0.03)	(0.05)	(0.03)	(0.03)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01	0.00	0.04***	0.04***	0.24	0.05	0.81***	0.84***	0.68***	0.71***
	(0.68)	(0.88)	(0.01)	(0.00)	(0.42)	(0.87)	(0.00)	(0.00)	(0.00)	(0.00)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.01	0.00	0.00
	(0.82)	(0.44)	(0.36)	(0.38)	(0.18)	(0.44)	(0.18)	(0.23)	(0.97)	(0.95)
Constant	0.33	0.25	0.52**	0.51**	9.55**	8.07**	7.12**	8.44***	6.39**	6.61*
	(0.21)	(0.38)	(0.04)	(0.03)	(0.02)	(0.04)	(0.01)	(0.00)	(0.04)	(0.07)
Hansen test (*p*-value)	0.50	0.55	0.45	0.52	0.75	0.70	0.78	0.52	0.89	0.80
AR2 test (*p*-value)	0.35	0.23	0.97	0.82	0.89	0.94	0.64	0.87	0.16	0.17
Wald tests: $\alpha_1+\alpha_2$	-0.05**	-0.02	-0.05*	-0.02	0.65**	0.41	0.43**	0.31	0.43**	0.39
$\alpha_1+\beta_1$	-0.15**	-0.12**	-0.02	-0.05	0.31	0.42	0.24	0.40	0.29	0.45
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.08**	-0.02	-0.01	0.00	0.31	0.19	0.41	0.07	0.41	0.18
$\alpha'_1+\alpha'_2$	0.12**	0.14**	0.04	0.04	-0.48	0.26	-0.38	-0.51	-0.52	-0.69**
$\alpha'_1+\beta'_1$	0.01	0.01	0.09**	0.08**	-0.68**	-0.53**	-0.70**	-0.65**	-0.78**	-0.63**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.02	0.04	0.08**	0.07**	-0.93**	-0.66**	-0.94**	-1.05**	-0.84***	-0.99**

Table A40

Asset structure and the effect of excess control rights on capital ratio adjustment: excluding banks controlled by multiple ultimate owners

This table shows the Blundell and Bond (1998) estimation results on the effect of asset structure on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period. For robustness, we exclude from the initial sample banks controlled by more than one ultimate owner and we use a sample of 281 European commercial banks corresponding to 1,705 observations. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively and zero otherwise. *d(Lending Oriented)* is a dummy equal to one if the ratio of net loans (excluding interbank loans) to total assets is greater than the median value and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.06**	-0.06**	-0.06**	0.74**	0.85**	0.43**	0.44**	0.45**	0.62**
	(0.01)	(0.03)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
d(Lending Oriented) × *Capital Ratio Surplus* (α_2)	-0.01	-0.02	-0.02	-0.02	0.16	0.12	-0.01	-0.00	0.11	0.06
	(0.15)	(0.20)	(0.22)	(0.21)	(0.36)	(0.25)	(0.34)	(0.52)	(0.25)	(0.20)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.04	-0.02	0.04	0.03	-0.42*	-0.47*	-0.14*	-0.15*	-0.16*	-0.34**
	(0.20)	(0.46)	(0.30)	(0.32)	(0.08)	(0.05)	(0.07)	(0.06)	(0.09)	(0.03)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.04	0.02	-0.01	-0.00	-0.14	-0.12	-0.05	-0.04	-0.09	-0.09
	(0.19)	(0.31)	(0.27)	(0.42)	(0.15)	(0.19)	(0.23)	(0.33)	(0.21)	(0.30)
Capital Ratio Shortfall (α'_1)	0.12**	0.08**	0.03	0.04	-0.49*	-0.46*	-0.33	-0.34	-0.38	-0.60***
	(0.01)	(0.01)	(0.30)	(0.21)	(0.05)	(0.05)	(0.15)	(0.17)	(0.18)	(0.00)
d(Lending Oriented) × *Capital Ratio Shortfall* (α'_2)	0.04	0.05	0.02	0.01	0.19*	0.20*	-0.04	-0.03	0.08	-0.01
	(0.23)	(0.15)	(0.37)	(0.40)	(0.08)	(0.06)	(0.23)	(0.33)	(0.21)	(0.38)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.08**	-0.05**	0.04*	0.05*	-0.48**	-0.49**	-0.29*	-0.30*	-0.39*	-0.12
	(0.01)	(0.01)	(0.07)	(0.08)	(0.01)	(0.01)	(0.05)	(0.09)	(0.10)	(0.43)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.03	-0.04	-0.02	-0.02	-0.09	-0.13	-0.32**	-0.33**	-0.10	-0.07
	(0.31)	(0.20)	(0.30)	(0.40)	(0.35)	(0.41)	(0.04)	(0.04)	(0.16)	(0.37)
Lagged dependent variable	0.04	0.04	0.40***	0.34***	0.10**	0.13***	0.13***	0.13***	0.15***	0.14***
	(0.37)	(0.28)	(0.00)	(0.00)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.48***	-0.40***	-0.16	-0.06	-3.16	-2.06	-1.03	-0.10	-0.45	-1.42
	(0.00)	(0.01)	(0.13)	(0.54)	(0.11)	(0.29)	(0.56)	(0.95)	(0.78)	(0.56)
d(Lending Oriented)	-0.16	0.04	0.09	0.25**	-0.29	0.50	0.61	2.03*	-0.62	1.86
	(0.21)	(0.73)	(0.29)	(0.01)	(0.87)	(0.75)	(0.61)	(0.08)	(0.63)	(0.20)
Deposits Total Assets	-0.00	-0.00	0.00**	0.00**	0.01	-0.01	0.03	0.02	-0.00	-0.00
	(0.44)	(0.36)	(0.01)	(0.03)	(0.61)	(0.82)	(0.15)	(0.16)	(0.91)	(0.81)
Log(Age)	-0.04**	-0.04**	-0.00	-0.01	-0.48**	-0.34*	-0.29*	-0.27**	-0.24	-0.23
	(0.02)	(0.02)	(0.91)	(0.70)	(0.01)	(0.06)	(0.07)	(0.05)	(0.16)	(0.23)
d(Rescued Bank)	0.03	0.01	0.04	0.05	1.28	0.48	0.65	0.39	0.19	0.53
	(0.79)	(0.94)	(0.64)	(0.68)	(0.50)	(0.79)	(0.64)	(0.71)	(0.92)	(0.74)
Cross-Listed Index	0.03***	0.03***	0.00	0.01	0.07	0.09	0.05	0.01	0.21*	0.14
	(0.00)	(0.00)	(0.78)	(0.60)	(0.62)	(0.54)	(0.65)	(0.95)	(0.09)	(0.27)
d(Merger Acquisition)	0.10	0.10	0.03	0.01	0.11	0.56	1.24	1.28	0.39	0.15
	(0.21)	(0.24)	(0.56)	(0.88)	(0.92)	(0.63)	(0.25)	(0.10)	(0.67)	(0.88)
Three-month Interbank Rate	-0.00	0.03	-0.11**	-0.09*	-1.74**	-1.48**	-1.85**	-2.10***	-1.70**	-1.94***
	(0.97)	(0.58)	(0.01)	(0.08)	(0.01)	(0.04)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01	0.01	0.01	0.00	0.19	0.23*	0.24***	0.24***	0.16*	0.20**
	(0.11)	(0.45)	(0.35)	(0.67)	(0.12)	(0.07)	(0.00)	(0.00)	(0.08)	(0.03)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.01	0.01	0.01
	(0.22)	(0.12)	(0.22)	(0.29)	(0.21)	(0.28)	(0.19)	(0.16)	(0.71)	(0.51)
Constant	0.32	0.35	0.63***	0.83	10.62***	9.96***	8.51***	10.66***	6.64**	8.07***
	(0.26)	(0.20)	(0.00)	(0.17)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Hansen test (*p*-value)	0.85	0.84	0.93	0.87	0.94	0.95	0.90	0.86	0.96	0.97
AR2 test (*p*-value)	0.90	0.95	0.91	0.86	0.73	0.68	0.89	0.87	0.14	0.14
Wald tests: $\alpha_1+\alpha_2$	-0.09**	-0.08**	-0.08**	-0.08**	0.90**	0.97**	0.42**	0.44**	0.56**	0.68**
$\alpha_1+\beta_1$	-0.12**	-0.08**	-0.02	-0.03	0.32	0.38	0.29	0.29	0.29	0.28
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.09**	-0.08**	-0.05	-0.05	0.34	0.38	0.23	0.25	0.31	0.25
$\alpha'_1+\alpha'_2$	0.16**	0.13**	0.05	0.05	-0.30	-0.26	-0.37	-0.37	-0.30	-0.61**
$\alpha'_1+\beta'_1$	0.04	0.03	0.07**	0.09**	-0.97**	-0.95**	-0.62**	-0.64**	-0.77**	-0.72***
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.05	0.04	0.07**	0.08**	-0.87**	-0.88**	-0.98***	-1.00***	-0.79**	-0.80***

Table A41

Bank size and the effect of excess control rights on capital ratio adjustment: excluding banks controlled by multiple ultimate owners

This table shows the Blundell and Bond (1998) estimation results on the effect of bank size on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period. For robustness, we exclude from the initial sample banks controlled by more than one ultimate owner and we use a sample of 281 European commercial banks corresponding to 1,705 observations. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Large Bank)* is a dummy equal to one if the bank's total assets is above the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.05**	-0.08**	-0.05**	0.84**	0.95***	0.44*	0.46**	0.53**	0.61**
	(0.04)	(0.03)	(0.01)	(0.04)	(0.01)	(0.00)	(0.09)	(0.05)	(0.03)	(0.04)
d*(Large Bank)* × *Capital Ratio Surplus* (α_2)	0.00	-0.05	0.01	-0.01	0.03	0.04	0.04	0.04	0.18	0.18
	(0.96)	(0.46)	(0.18)	(0.71)	(0.62)	(0.96)	(0.95)	(0.92)	(0.46)	(0.17)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.01	-0.02	0.04	0.01	-0.42**	-0.50**	-0.15*	-0.22**	-0.16*	-0.36*
	(0.70)	(0.35)	(0.29)	(0.92)	(0.02)	(0.04)	(0.10)	(0.04)	(0.07)	(0.05)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.05	-0.02	-0.03	0.04	-0.09	-0.04	-0.05	-0.08	-0.08	-0.06
	(0.79)	(0.90)	(0.74)	(0.39)	(0.66)	(0.90)	(0.65)	(0.90)	(0.48)	(0.11)
Capital Ratio Shortfall (α'_1)	0.16***	0.14**	0.03	0.06*	-0.27	-0.08	-0.36	-0.35	-0.35	-0.83**
	(0.01)	(0.01)	(0.47)	(0.10)	(0.13)	(0.15)	(0.29)	(0.18)	(0.17)	(0.03)
d(Large Bank) × *Capital Ratio Shortfall* (α'_2)	0.02	0.02	0.01	-0.01	-0.12	-0.13	-0.11	-0.12	-0.15	-0.05
	(0.58)	(0.34)	(0.86)	(0.58)	(0.84)	(0.75)	(0.62)	(0.55)	(0.23)	(0.28)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.08***	-0.07**	0.04*	0.02*	-0.40**	-0.63**	-0.34**	-0.33**	-0.36**	-0.07
	(0.01)	(0.02)	(0.09)	(0.08)	(0.02)	(0.01)	(0.05)	(0.05)	(0.04)	(0.24)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.06**	-0.07**	-0.03*	-0.05*	-0.45**	-0.27*	-0.48**	-0.35**	-0.35**	-0.08
	(0.01)	(0.01)	(0.08)	(0.07)	(0.05)	(0.07)	(0.02)	(0.03)	(0.04)	(0.62)
Lagged dependent variable	0.03	0.04	0.39***	0.37***	0.10**	0.11***	0.12***	0.12***	0.16***	0.17***
	(0.43)	(0.30)	(0.00)	(0.00)	(0.02)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.23	-0.41**	-0.12	-0.08	-2.42	-1.90	-0.62	-0.36	-2.35	-1.33
	(0.19)	(0.02)	(0.23)	(0.43)	(0.20)	(0.36)	(0.61)	(0.80)	(0.13)	(0.53)
d(Large Bank)	-0.42**	-0.30	-0.24***	-0.02	-4.05*	-1.41	-1.94	-1.58	-6.29***	-4.65**
	(0.04)	(0.10)	(0.01)	(0.84)	(0.06)	(0.44)	(0.19)	(0.25)	(0.01)	(0.03)
Deposits Total Assets	-0.00*	-0.00*	0.00	0.00	-0.02	-0.02	0.00	0.01	-0.03	-0.03
	(0.06)	(0.06)	(0.16)	(0.16)	(0.48)	(0.41)	(0.80)	(0.69)	(0.21)	(0.16)
Log(Age)	-0.02	-0.03*	0.00	-0.00	-0.21	-0.18	-0.26**	-0.25*	-0.00	-0.05
	(0.22)	(0.08)	(0.83)	(0.96)	(0.30)	(0.37)	(0.04)	(0.07)	(0.99)	(0.79)
d(Rescued Bank)	0.04	0.01	0.01	0.04	0.59	0.36	1.07	0.64	0.14	-0.02
	(0.72)	(0.95)	(0.93)	(0.65)	(0.71)	(0.84)	(0.27)	(0.50)	(0.93)	(0.99)
Cross-Listed Index	0.01	0.03***	0.01	0.01	0.02	0.01	0.04	0.04	0.12	0.11
	(0.25)	(0.01)	(0.49)	(0.50)	(0.89)	(0.91)	(0.62)	(0.61)	(0.27)	(0.33)
d(Merger Acquisition)	0.11	0.08	0.04	0.01	0.85	0.02	1.59*	1.11	0.04	0.17
	(0.15)	(0.35)	(0.51)	(0.87)	(0.48)	(0.98)	(0.09)	(0.18)	(0.97)	(0.86)
Three-month Interbank Rate	-0.01	0.03	-0.10**	-0.08*	-1.86***	-1.87**	-1.89***	-2.36***	-1.66***	-1.49***
	(0.83)	(0.62)	(0.03)	(0.08)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01	0.01	0.00	0.00	0.16	0.19	0.18***	0.21***	0.13	0.10
	(0.17)	(0.40)	(0.44)	(0.80)	(0.18)	(0.14)	(0.01)	(0.00)	(0.18)	(0.29)
Stock Traded	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.00	0.01
	(0.58)	(0.20)	(0.26)	(0.46)	(0.21)	(0.18)	(0.14)	(0.23)	(0.79)	(0.52)
Constant	0.77**	0.59*	0.81***	0.55**	13.49***	13.05***	10.87***	12.07***	12.13***	9.29***
	(0.02)	(0.06)	(0.00)	(0.03)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.93	0.79	0.89	0.83	0.94	0.87	0.87	0.91	0.88	0.89
AR2 test (*p*-value)	0.87	0.90	0.83	0.84	0.82	0.67	0.89	0.92	0.16	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.07**	-0.10**	-0.07**	-0.06**	0.87**	0.99**	0.48*	0.50**	0.71**	0.79**
$\alpha_1+\beta_1$	-0.08**	-0.07**	-0.04	-0.04	0.42	0.45	0.29	0.24	0.37	0.25
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.13**	-0.14**	-0.06	-0.01	0.36	0.45	0.28	0.20	0.47	0.37
$\alpha'_1+\alpha'_2$	0.18**	0.16***	0.04	0.05	-0.39	-0.21	-0.47	-0.47	-0.50	-0.88**
$\alpha'_1+\beta'_1$	0.08*	0.07*	0.07**	0.08**	-0.67**	-0.71**	-0.70**	-0.68**	-0.71**	-0.90**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.04	0.02	0.05	0.02	-1.24**	-1.11**	-1.29**	-1.15**	-1.21**	-1.03**

Table A42

Estimating the target capital ratio: excluding Italian banks

This table shows the Blundell and Bond (1998) estimation results of the target capital ratio based on a partial adjustment model [Eq. (3)] over the 2002–2010 period. For robustness, we exclude from the initial sample Italian banks and we use a sample of 242 European commercial banks corresponding to 1,526 observations. *Tier 1 Total Assets* is Tier 1 capital divided by total assets. *Tier 1 RWA* is Tier 1 capital divided by risk-weighted assets. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Log(Total Assets)* is the natural logarithm of the bank's total assets. *Return on Assets* is net income divided by total assets. *Loan Loss Provisions* is loan loss provisions divided by net loans. *Loans Total Assets* is net loans divided by total assets. *Market Discipline* is total long-term market funding divided by total funding. *d(Listed Bank)* is a dummy equal to one if the bank is publicly listed and zero otherwise. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. In the last three rows, we report the summary statistics (mean, maximum and minimum) of the estimated target capital ratio. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent variable	*Tier 1 Total Assets*	*Tier 1 RWA*
Lagged dependent variable	0.60***	0.67***
	(0.00)	(0.00)
d(Excess Control Rights)	-0.35**	-0.72**
	(0.02)	(0.01)
Log(Total Assets)	-0.74***	-0.54***
	(0.00)	(0.00)
Return On Assets	0.55***	0.38***
	(0.00)	(0.00)
Loan Loss Provisions	0.15***	0.13*
	(0.00)	(0.06)
Loans Total Assets	-0.01*	-0.03***
	(0.08)	(0.00)
Market Discipline	0.01***	0.02***
	(0.00)	(0.00)
d(Listed Bank)	-0.80**	-1.00*
	(0.05)	(0.05)
GDP Growth Rate	-0.00	-0.01
	(0.60)	(0.45)
Constant	7.34***	6.82***
	(0.00)	(0.00)
Hansen test (*p*-value)	0.14	0.15
AR2 test (*p*-value)	0.27	0.57
Fitted target (%): Mean	7.06	12.07
Maximum	14.25	24.07
Minimum	1.87	4.12

Table A43

Excess control rights and capital ratio adjustment: excluding Italian banks

This table shows the Blundell and Bond (1998) estimation results on the effect of excess control rights on capital ratio adjustment [Eq. (6)] over the 2002–2010 period. For robustness, we exclude from the initial sample Italian banks and we use a sample of 242 European commercial banks corresponding to 1,526 observations. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06*	-0.04*	-0.04**	-0.04**	0.88**	0.96**	0.41**	0.53**	0.48**	0.66**
	(0.06)	(0.07)	(0.03)	(0.01)	(0.01)	(0.01)	(0.03)	(0.02)	(0.05)	(0.03)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.08	-0.03	0.02	0.02	-0.44**	-0.48**	-0.13*	-0.25**	-0.27**	-0.34*
	(0.14)	(0.34)	(0.78)	(0.60)	(0.05)	(0.02)	(0.06)	(0.02)	(0.04)	(0.06)
Capital Ratio Shortfall (α'_1)	0.16***	0.11***	0.02	0.04*	-0.36	0.16	-0.34	-0.40	-0.25	-0.56**
	(0.00)	(0.00)	(0.59)	(0.09)	(0.16)	(0.57)	(0.34)	(0.11)	(0.50)	(0.02)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12***	-0.07*	0.05*	0.03*	-0.29*	-0.88**	-0.28**	-0.29**	-0.25*	-0.05
	(0.00)	(0.06)	(0.05)	(0.10)	(0.05)	(0.02)	(0.03)	(0.03)	(0.09)	(0.33)
Lagged dependent variable	0.02	0.03	0.44***	0.41***	0.13***	0.13***	0.14***	0.12***	0.15***	0.16***
	(0.48)	(0.45)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
d(Excess Control Rights)	-0.37***	-0.41*	-0.21*	-0.12	-3.48	-0.67	-0.50	-0.02	-0.82	-0.25
	(0.01)	(0.06)	(0.08)	(0.25)	(0.11)	(0.78)	(0.68)	(0.99)	(0.66)	(0.54)
Deposits Total Assets	-0.00	-0.00	0.00*	0.00**	0.02	0.00	0.03*	0.03*	0.01	0.01
	(0.10)	(0.21)	(0.08)	(0.03)	(0.50)	(0.85)	(0.06)	(0.09)	(0.58)	(0.62)
Log(Age)	-0.00	-0.02	-0.01	-0.01	-0.35*	-0.11	-0.33**	-0.24	-0.17	-0.23
	(0.86)	(0.37)	(0.51)	(0.32)	(0.10)	(0.57)	(0.03)	(0.16)	(0.36)	(0.20)
d(Rescued Bank)	0.00	0.03	0.00	0.06	1.08	0.69	0.54	0.11	0.02	0.47
	(0.99)	(0.76)	(0.99)	(0.46)	(0.40)	(0.67)	(0.47)	(0.90)	(0.99)	(0.73)
Cross-Listed Index	0.03**	0.03**	-0.00	0.00	0.26	0.27	0.16*	0.06	0.34**	0.45***
	(0.02)	(0.03)	(0.68)	(0.83)	(0.16)	(0.11)	(0.09)	(0.64)	(0.01)	(0.00)
d(Merger Acquisition)	0.10	0.09	0.05	0.01	0.61	0.35	1.11	1.32	1.11	1.51
	(0.19)	(0.28)	(0.49)	(0.93)	(0.70)	(0.81)	(0.24)	(0.22)	(0.25)	(0.13)
Three-month Interbank Rate	0.01	0.01	-0.12***	-0.12***	-2.00***	-1.93**	-2.33***	-2.54***	-1.79***	-1.81***
	(0.83)	(0.82)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.02	0.02	0.04***	0.03***	0.39	0.32	0.70***	0.70***	0.52***	0.53***
	(0.24)	(0.42)	(0.01)	(0.00)	(0.15)	(0.23)	(0.00)	(0.00)	(0.00)	(0.00)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.00	0.01
	(0.81)	(0.48)	(0.11)	(0.13)	(0.69)	(0.24)	(0.27)	(0.31)	(0.96)	(0.65)
Constant	0.15	0.14	0.53**	0.48**	12.03***	10.22**	9.47***	9.65***	7.90***	9.34***
	(0.59)	(0.61)	(0.02)	(0.02)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.15	0.11	0.18	0.22	0.24	0.32	0.12	0.15	0.27	0.40
AR2 test (*p*-value)	0.40	0.36	0.75	0.19	0.54	0.45	0.44	0.35	0.35	0.25
Wald tests: $\alpha_1+\beta_1$	-0.14**	-0.07**	-0.02	-0.03*	0.44	0.48	0.28	0.28	0.21	0.32
$\alpha'_1+\beta'_1$	0.04	0.04	0.07**	0.07**	-0.65**	-0.72**	-0.62**	-0.69**	-0.50*	-0.61**

Table A44

Ownership type and the effect of excess control rights on capital ratio adjustment: excluding Italian banks

This table shows the Blundell and Bond (1998) estimation results on the effect of ownership type on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. We exclude from the initial sample banks for which the control chain is a cross-holding (for simplicity) and Italian banks (for robustness) and we use a sample of 237 European commercial banks corresponding to 1,493 observations. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively and zero otherwise. *d(Family)* is a dummy equal to one if the bank is family-controlled and zero otherwise. *d(State)* is a dummy equal to one if the bank is state-controlled and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.12**	-0.05**	-0.07**	-0.06**	0.74**	0.83**	0.32*	0.45**	0.42**	0.63**
	(0.01)	(0.04)	(0.02)	(0.02)	(0.01)	(0.03)	(0.06)	(0.01)	(0.03)	(0.05)
d(Family) × *Capital Ratio Surplus* (α_2)	0.08	0.00	0.01	0.03	0.13	0.15	0.16	0.14	0.15	0.15
	(0.66)	(0.76)	(0.30)	(0.27)	(0.45)	(0.30)	(0.28)	(0.49)	(0.48)	(0.57)
d(State) × *Capital Ratio Surplus* (α_3)	0.06	-0.01	-0.02	0.02	0.03	0.22	0.08	0.07	0.09	0.15
	(0.45)	(0.66)	(0.21)	(0.41)	(0.89)	(0.27)	(0.39)	(0.52)	(0.24)	(0.60)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.05	-0.01	-0.00	-0.01	-0.38	-0.38	-0.12	-0.14	-0.21	-0.30
	(0.54)	(0.92)	(0.18)	(0.61)	(0.13)	(0.68)	(0.67)	(0.60)	(0.28)	(0.43)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.07*	-0.06*	0.03*	0.02	-0.06	-0.16	-0.05	-0.17	-0.17	-0.12
	(0.06)	(0.08)	(0.06)	(0.43)	(0.67)	(0.19)	(0.59)	(0.87)	(0.84)	(0.46)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_3)	-0.01	-0.01	-0.12	-0.02	0.07	-0.16	0.03	-0.07	-0.10	-0.12
	(0.28)	(0.41)	(0.43)	(0.13)	(0.39)	(0.19)	(0.67)	(0.38)	(0.21)	(0.31)
Capital Ratio Shortfall (α'_1)	0.15**	0.08**	0.04	0.06*	-0.36	0.10	-0.41	-0.40	-0.33	-0.52**
	(0.01)	(0.01)	(0.26)	(0.08)	(0.19)	(0.60)	(0.16)	(0.29)	(0.18)	(0.02)
d(Family) × *Capital Ratio Shortfall* (α'_2)	0.08	0.06	0.02	0.01	0.05	0.08	0.07	-0.09	0.15	-0.04
	(0.14)	(0.13)	(0.94)	(0.36)	(0.38)	(0.38)	(0.26)	(0.83)	(0.49)	(0.57)
d(State) × *Capital Ratio Shortfall* (α'_3)	0.01	-0.02	-0.03	-0.01	0.02	0.03	0.05	-0.07	0.04	-0.07
	(0.74)	(0.20)	(0.28)	(0.86)	(0.82)	(0.55)	(0.29)	(0.76)	(0.83)	(0.50)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07	-0.01	0.03	0.00	-0.12	-0.52	-0.07	-0.11	-0.06	-0.07
	(0.12)	(0.26)	(0.18)	(0.84)	(0.36)	(0.17)	(0.61)	(0.14)	(0.54)	(0.27)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.15**	-0.10**	-0.00	0.01*	-0.54**	-0.66**	-0.32**	-0.41**	-0.46*	-0.10
	(0.03)	(0.00)	(0.75)	(0.07)	(0.01)	(0.04)	(0.01)	(0.03)	(0.07)	(0.17)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_3)	-0.01	0.07**	-0.05	-0.02	-0.15	-0.15	-0.14	0.12**	-0.10	0.10
	(0.97)	(0.02)	(0.43)	(0.88)	(0.19)	(0.34)	(0.38)	(0.01)	(0.48)	(0.13)
Lagged dependent variable	0.02	0.01	0.49***	0.47***	0.12**	0.12**	0.19***	0.18***	0.14***	0.19***
	(0.65)	(0.74)	(0.00)	(0.00)	(0.02)	(0.02)	(0.00)	(0.00)	(0.00)	(0.01)
d(Excess Control Rights)	-0.37**	-0.56**	-0.22*	-0.17	-4.00*	-0.16	-0.43	-0.21	-0.70	-0.72
	(0.02)	(0.02)	(0.09)	(0.13)	(0.08)	(0.95)	(0.76)	(0.90)	(0.78)	(0.72)
d(Family)	-0.05	0.39	0.16	-0.14	4.00	3.29	1.80	1.71	1.17	2.13
	(0.81)	(0.25)	(0.34)	(0.38)	(0.21)	(0.34)	(0.45)	(0.49)	(0.73)	(0.54)
d(State)	0.18	0.43**	0.27*	0.12	2.92	2.96	3.32	4.29*	2.77	-4.69**

	(0.38)	(0.02)	(0.08)	(0.45)	(0.40)	(0.35)	(0.13)	(0.07)	(0.35)	(0.04)

Table A44 (continued)

Deposits Total Assets	-0.00**	-0.00	0.00	0.00	0.02	0.02	0.03*	0.03*	0.02	0.02
	(0.04)	(0.29)	(0.13)	(0.22)	(0.59)	(0.46)	(0.06)	(0.09)	(0.49)	(0.25)
Log(Age)	-0.00	-0.01	-0.00	-0.01	-0.21	-0.17	-0.22	-0.24	-0.18	-0.20
	(0.82)	(0.40)	(0.81)	(0.67)	(0.33)	(0.40)	(0.16)	(0.13)	(0.36)	(0.32)
d(Rescued Bank)	0.05	0.02	0.03	0.02	1.09	2.14	0.06	0.13	0.52	0.66
	(0.64)	(0.85)	(0.61)	(0.77)	(0.36)	(0.19)	(0.94)	(0.88)	(0.69)	(0.61)
Cross-Listed Index	0.02*	0.02*	0.00	0.00	0.25	0.19	0.09	0.09	0.28**	0.36***
	(0.05)	(0.06)	(0.80)	(0.58)	(0.17)	(0.28)	(0.41)	(0.40)	(0.03)	(0.00)
d(Merger Acquisition)	0.11	0.11	0.03	0.01	0.29	0.54	1.10	1.00	1.55	0.55
	(0.15)	(0.17)	(0.58)	(0.86)	(0.85)	(0.70)	(0.24)	(0.32)	(0.16)	(0.59)
Three-month Interbank Rate	0.01	0.04	-0.10**	-0.12***	-2.20***	-1.95***	-2.25***	-2.37***	-1.81***	-2.04***
	(0.91)	(0.45)	(0.02)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.03	0.02	0.03***	0.03***	0.32	0.18	0.75***	0.67***	0.53***	0.48***
	(0.14)	(0.19)	(0.00)	(0.00)	(0.24)	(0.54)	(0.00)	(0.00)	(0.00)	(0.00)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.01	0.00	0.00
	(0.87)	(0.44)	(0.26)	(0.43)	(0.68)	(0.91)	(0.12)	(0.25)	(0.85)	(0.84)
Constant	0.18	-0.13	0.39*	0.42**	9.63**	10.39**	6.85***	7.91***	7.52**	8.99***
	(0.50)	(0.64)	(0.09)	(0.04)	(0.02)	(0.02)	(0.00)	(0.00)	(0.01)	(0.00)
Hansen test (*p*-value)	0.12	0.14	0.15	0.10	0.20	0.16	0.17	0.15	0.13	0.10
AR2 test (*p*-value)	0.88	0.82	0.76	0.85	0.36	0.27	0.67	0.66	0.35	0.21
Wald tests: $\alpha_1+\alpha_2$	-0.04**	-0.05**	-0.06**	-0.03*	0.87**	0.98**	0.48**	0.59**	0.57**	0.78**
$\alpha_1+\alpha_3$	-0.06*	-0.06**	-0.09**	-0.04**	0.77**	1.05**	0.40**	0.52**	0.51**	0.78**
$\alpha_1+\beta_1$	-0.17**	-0.06**	-0.07**	-0.07*	0.36	0.45	0.20	0.31	0.21	0.33
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.16**	-0.12**	-0.03	-0.02	0.43	0.44	0.31	0.28	0.19	0.36
$\alpha_1+\alpha_3+\beta_1+\beta_3$	-0.12**	-0.08**	-0.21**	-0.07**	0.46	0.51	0.31	0.31	0.20	0.36
$\alpha'_1+\alpha'_2$	0.23**	0.14**	0.06	0.07*	-0.31	0.18	-0.34	-0.49	-0.18	-0.56**
$\alpha'_1+\alpha'_3$	0.16**	0.06**	0.01	0.05*	-0.34	0.13	-0.36	-0.47	-0.29	-0.59**
$\alpha'_1+\beta'_1$	0.08**	0.07**	0.07*	0.06*	-0.48	-0.42	-0.48	-0.51*	-0.39	-0.59**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.01	0.03	0.09**	0.08**	-0.97**	-1.00**	-0.73**	-1.01**	-0.70*	-0.73**
$\alpha'_1+\alpha'_3+\beta'_1+\beta'_3$	0.08**	0.12**	-0.01	0.03	-0.61	-0.54*	-0.57	-0.46	-0.45	-0.56

Table A45

Shareholder protection and the effect of excess control rights on capital ratio adjustment: excluding Italian banks

This table shows the Blundell and Bond (1998) estimation results on the effect of shareholder protection rights on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. For robustness, we exclude from the initial sample Italian banks and we use a sample of 242 European commercial banks corresponding to 1,526 observations. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are respectively the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Owner Rights)* is a dummy equal to one if the shareholder protection index as defined in Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008) is greater than the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.07*	-0.07**	-0.06**	0.71**	0.90**	0.32*	0.45**	0.39**	0.61**
	(0.01)	(0.07)	(0.01)	(0.03)	(0.04)	(0.02)	(0.07)	(0.03)	(0.01)	(0.04)
d(Owner Rights) × *Capital Ratio Surplus* (α_2)	0.01	0.03	-0.02	0.01	0.14	0.09	0.16	0.15	0.17	0.18
	(0.15)	(0.26)	(0.32)	(0.42)	(0.58)	(0.21)	(0.54)	(0.88)	(0.87)	(0.39)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.08	-0.02	0.05	0.04	-0.36	-0.49	-0.03	-0.16	-0.19	-0.30
	(0.57)	(0.67)	(0.19)	(0.19)	(0.28)	(0.63)	(0.38)	(0.62)	(0.70)	(0.31)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.05	0.01	-0.03	-0.05*	-0.08	-0.02	-0.17	0.06	-0.18	-0.15
	(0.94)	(0.67)	(0.14)	(0.09)	(0.68)	(0.68)	(0.20)	(0.91)	(0.35)	(0.33)
Capital Ratio Shortfall (α'_1)	0.14**	0.09**	0.04	0.05*	-0.35	-0.08	-0.35	-0.30	-0.19	-0.57**
	(0.04)	(0.04)	(0.33)	(0.05)	(0.20)	(0.66)	(0.16)	(0.15)	(0.58)	(0.05)
d(Owner Rights) × *Capital Ratio Shortfall* (α'_2)	0.05	0.06	0.01	-0.00	-0.09	0.16	-0.04	-0.26	-0.07	-0.05
	(0.42)	(0.17)	(0.64)	(0.96)	(0.70)	(0.43)	(0.80)	(0.20)	(0.30)	(0.33)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12**	-0.08**	0.04*	0.03*	-0.48**	-0.87**	-0.50**	-0.62**	-0.50**	-0.10
	(0.02)	(0.03)	(0.05)	(0.09)	(0.02)	(0.02)	(0.02)	(0.02)	(0.04)	(0.42)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.00	-0.00	-0.03	-0.04	0.35	0.26	0.47*	0.55*	0.45	0.14
	(0.90)	(0.96)	(0.73)	(0.42)	(0.23)	(0.21)	(0.09)	(0.09)	(0.34)	(0.24)
Lagged dependent variable	0.01	0.02	0.47***	0.44***	0.14***	0.17***	0.13***	0.17***	0.15***	0.17***
	(0.84)	(0.53)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.34**	-0.42**	-0.25*	-0.07	-1.85	-0.79	-1.13	-0.04	-1.04	-2.15
	(0.01)	(0.03)	(0.05)	(0.47)	(0.41)	(0.70)	(0.37)	(0.98)	(0.56)	(0.18)
Deposits Total Assets	-0.00	-0.00	0.00*	0.00	0.02	-0.01	0.03*	0.03**	0.01	0.02
	(0.13)	(0.12)	(0.06)	(0.16)	(0.43)	(0.76)	(0.09)	(0.05)	(0.76)	(0.44)
Log(Age)	-0.01	-0.02	-0.00	-0.00	-0.28	-0.15	-0.31**	-0.31*	-0.13	-0.15
	(0.77)	(0.44)	(0.93)	(0.73)	(0.15)	(0.46)	(0.04)	(0.06)	(0.53)	(0.46)
d(Rescued Bank)	0.01	0.02	0.01	0.07	1.23	1.74	0.54	0.36	0.05	0.23
	(0.93)	(0.87)	(0.87)	(0.33)	(0.35)	(0.18)	(0.47)	(0.65)	(0.97)	(0.86)
Cross-Listed Index	0.03**	0.03***	0.01	0.00	0.24	0.19	0.12	0.10	0.31**	0.36**
	(0.03)	(0.01)	(0.44)	(0.99)	(0.20)	(0.25)	(0.21)	(0.29)	(0.03)	(0.01)
d(Merger Acquisition)	0.12	0.11	0.06	0.06	0.13	0.27	1.22	0.88	1.18	1.01
	(0.12)	(0.12)	(0.38)	(0.33)	(0.94)	(0.84)	(0.23)	(0.36)	(0.20)	(0.28)
Three-month Interbank Rate	-0.00	0.03	-0.12**	-0.11**	-1.71**	-1.90**	-2.33**	-2.47***	-1.86**	-1.85***
	(0.97)	(0.57)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.03	0.02	0.04***	0.03***	0.39	0.35	0.71***	0.69***	0.60***	0.47***
	(0.21)	(0.21)	(0.00)	(0.00)	(0.17)	(0.16)	(0.00)	(0.00)	(0.00)	(0.00)
Stock Traded	0.00	0.00	0.00	0.00*	0.01	0.01	0.01*	0.01	0.01	0.01
	(0.96)	(0.55)	(0.31)	(0.10)	(0.58)	(0.41)	(0.09)	(0.11)	(0.64)	(0.42)
Constant	0.45	0.20	0.62**	0.49**	9.82**	11.10***	9.22***	9.48***	6.68**	8.43***
	(0.13)	(0.52)	(0.03)	(0.05)	(0.02)	(0.01)	(0.00)	(0.00)	(0.02)	(0.00)
Hansen test (*p*-value)	0.30	0.20	0.10	0.21	0.30	0.51	0.22	0.20	0.31	0.41
AR2 test (*p*-value)	0.49	0.37	0.83	0.82	0.48	0.38	0.38	0.39	0.14	0.14
Wald tests: $\alpha_1+\alpha_2$	-0.06**	-0.04*	-0.09**	-0.05**	0.85**	0.99**	0.48**	0.60**	0.56**	0.79**
$\alpha_1+\beta_1$	-0.15**	-0.09**	-0.02	-0.02	0.35	0.41	0.29	0.29	0.20	0.31
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.09**	-0.05**	-0.07**	-0.06**	0.41*	0.48*	0.28	0.50	0.19	0.34
$\alpha'_1+\alpha'_2$	0.19**	0.15**	0.05	0.05	-0.44	0.08	-0.39	-0.56	-0.26	-0.62**
$\alpha'_1+\beta'_1$	0.02	0.01	0.08**	0.08**	-0.83**	-0.95**	-0.85**	-0.92**	-0.69**	-0.67**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.07**	0.07**	0.06*	0.04	-0.57*	-0.53	-0.42	-0.63	-0.31	-0.58*

Table A46

2008 financial crisis and the effect of excess control rights on capital ratio adjustment: excluding Italian banks

This table shows the Blundell and Bond (1998) estimation results on the effect of the 2008 financial crisis on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. For robustness, we exclude from the initial sample Italian banks and we use a sample of 242 European commercial banks corresponding to 1,526 observations. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Crisis)* is a dummy equal to one if the observation is from 2008 or 2009 and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.09**	-0.06**	-0.05**	-0.06**	1.08**	1.15**	0.51**	0.63**	0.61**	0.92**
	(0.02)	(0.01)	(0.03)	(0.03)	(0.02)	(0.01)	(0.04)	(0.02)	(0.04)	(0.01)
d(Crisis) × *Capital Ratio Surplus* (α_2)	0.04*	0.03	-0.01	-0.02	-0.61	-0.41	-0.21	-0.28	-0.30	-0.39
	(0.08)	(0.54)	(0.17)	(0.10)	(0.75)	(0.69)	(0.72)	(0.59)	(0.12)	(0.27)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.03	-0.03	0.02	0.02	-0.62	-0.62	-0.16	-0.28	-0.33	-0.51
	(0.53)	(0.51)	(0.60)	(0.14)	(0.75)	(0.44)	(0.58)	(0.78)	(0.43)	(0.45)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.02	0.01	-0.01	-0.01	0.50	0.37	0.08	0.16	0.23	0.33
	(0.64)	(0.25)	(0.92)	(0.60)	(0.26)	(0.40)	(0.70)	(0.67)	(0.80)	(0.29)
Capital Ratio Shortfall (α'_1)	0.16**	0.12**	0.05	0.05	-0.42	0.07	-0.25	-0.31	-0.26	-0.66**
	(0.04)	(0.01)	(0.17)	(0.11)	(0.26)	(0.84)	(0.72)	(0.34)	(0.22)	(0.03)
d(Crisis) × *Capital Ratio Shortfall* (α'_2)	-0.06*	-0.04	-0.01	-0.01	-0.06	0.22	-0.21	-0.16	-0.21	0.21
	(0.08)	(0.82)	(0.21)	(0.20)	(0.50)	(0.68)	(0.65)	(0.59)	(0.12)	(0.81)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.13*	-0.10*	0.04	0.05*	-0.53*	-0.98**	-0.43**	-0.53*	-0.51**	-0.15
	(0.08)	(0.08)	(0.16)	(0.05)	(0.08)	(0.02)	(0.05)	(0.06)	(0.03)	(0.83)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	0.10	0.08	-0.03	-0.04	0.50	0.21	0.43	0.51	0.60	0.36
	(0.27)	(0.16)	(0.42)	(0.71)	(0.19)	(0.45)	(0.27)	(0.36)	(0.17)	(0.29)
Lagged dependent variable	0.03	0.02	0.41***	0.39***	0.12***	0.12***	0.13***	0.12***	0.15***	0.18***
	(0.42)	(0.56)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.48***	-0.40***	-0.08	-0.09	-0.08	-0.32	-0.51	-0.32	-1.30	-2.24
	(0.00)	(0.00)	(0.39)	(0.37)	(0.97)	(0.88)	(0.70)	(0.83)	(0.35)	(0.12)
Deposits Total Assets	-0.00*	-0.00**	0.00**	0.00**	0.00	-0.00	0.03**	0.02	-0.00	0.01
	(0.05)	(0.02)	(0.01)	(0.01)	(0.90)	(0.84)	(0.03)	(0.21)	(0.97)	(0.36)
Log(Age)	-0.01	-0.02	-0.00	-0.00	-0.34*	-0.36**	-0.25**	-0.23*	-0.19	-0.20
	(0.34)	(0.14)	(0.75)	(0.71)	(0.05)	(0.03)	(0.02)	(0.08)	(0.17)	(0.17)
d(Rescued Bank)	0.02	0.02	0.01	0.02	1.83	1.31	1.24	0.60	0.36	0.13
	(0.83)	(0.80)	(0.85)	(0.82)	(0.13)	(0.36)	(0.11)	(0.46)	(0.73)	(0.91)
Cross-Listed Index	0.03**	0.03***	0.00	0.00	0.20*	0.15	0.08	0.13	0.28***	0.32***
	(0.01)	(0.00)	(0.86)	(0.82)	(0.09)	(0.25)	(0.37)	(0.19)	(0.00)	(0.00)
d(Merger Acquisition)	0.01	0.03	0.01	0.03	0.71	0.82	1.48*	1.48*	0.18	0.80
	(0.90)	(0.70)	(0.83)	(0.55)	(0.50)	(0.50)	(0.07)	(0.07)	(0.85)	(0.39)
Three-month Interbank Rate	0.03	0.03	-0.11***	-0.09**	-2.20***	-2.32***	-1.95***	-2.12***	-1.36**	-1.39**
	(0.54)	(0.63)	(0.01)	(0.03)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
GDP Growth Rate	0.01	0.01	0.01	0.00	0.26**	0.26**	0.17**	0.19***	0.16**	0.20**
	(0.22)	(0.24)	(0.11)	(0.50)	(0.02)	(0.02)	(0.01)	(0.00)	(0.04)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00
	(0.43)	(0.35)	(0.27)	(0.36)	(0.35)	(0.15)	(0.72)	(0.12)	(0.97)	(0.97)
Constant	0.26	0.30	0.50***	0.48***	13.05***	13.94***	8.53***	10.83***	6.91***	8.27***
	(0.27)	(0.21)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.13	0.14	0.20	0.28	0.25	0.23	0.16	0.17	0.12	0.40
AR2 test (*p*-value)	0.90	0.92	0.89	0.91	0.65	0.58	0.85	0.85	0.14	0.16
Wald tests: $\alpha_1+\alpha_2$	-0.05*	-0.03	-0.06**	-0.08**	0.47*	0.74**	0.30	0.35	0.31	0.53**
$\alpha_1+\beta_1$	-0.12**	-0.09**	-0.03	-0.04	0.46	0.53	0.35	0.35	0.28	0.41
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.06	-0.05*	-0.05**	-0.07**	0.35	0.49	0.22	0.23	0.21	0.35
$\alpha'_1+\alpha'_2$	0.10**	0.08**	0.04	0.04	-0.48	0.29	-0.46	-0.47	-0.47	-0.45*
$\alpha'_1+\beta'_1$	0.03	0.02	0.09**	0.10**	-0.95**	-0.91**	-0.68**	-0.84**	-0.77**	-0.81**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.07**	0.06**	0.05	0.05	-0.51	-0.48	-0.46	-0.49	-0.38	-0.24

Table A47

Bank capitalization and the effect of excess control rights on capital ratio adjustment: excluding Italian banks

This table shows the Blundell and Bond (1998) estimation results on the effect of bank capitalization on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period. For robustness, we exclude from the initial sample Italian banks and we use a sample of 242 European commercial banks corresponding to 1,526 observations. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Undercapitalized)* is a dummy equal to one if the Tier 1 RWA (Tier 1 Total Assets) ratio is less than 6% (4%) and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.06*	-0.06**	-0.05*	0.72**	0.84**	0.48**	0.54**	0.46**	0.63**
	(0.01)	(0.07)	(0.03)	(0.07)	(0.02)	(0.02)	(0.04)	(0.01)	(0.01)	(0.01)
d(Undercapitalized) × *Capital Ratio Surplus* (α_2)	0.02	0.04**	0.01	0.03*	-0.05	-0.44**	-0.01	-0.22*	-0.03	-0.25*
	(0.78)	(0.03)	(0.90)	(0.07)	(0.45)	(0.05)	(0.51)	(0.07)	(0.76)	(0.06)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.08	-0.04	0.03	0.02	-0.44*	-0.42*	-0.22*	-0.13*	-0.16*	-0.18*
	(0.32)	(0.40)	(0.56)	(0.75)	(0.08)	(0.10)	(0.05)	(0.07)	(0.10)	(0.09)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.05	0.04*	0.00	0.02*	0.10	0.15	0.13	-0.07	0.08	-0.02
	(0.56)	(0.05)	(0.26)	(0.10)	(0.32)	(0.45)	(0.54)	(0.72)	(0.71)	(0.46)
Capital Ratio Shortfall (α'_1)	0.07**	0.08**	0.03	0.02	-0.37	-0.07	-0.29	-0.39	-0.40	-0.50**
	(0.05)	(0.02)	(0.38)	(0.15)	(0.26)	(0.32)	(0.33)	(0.13)	(0.11)	(0.04)
d(Undercapitalized) × *Capital Ratio Shortfall* (α'_2)	0.06	0.06*	0.02	0.01	-0.09	0.34	-0.11	-0.07	-0.12	-0.20
	(0.17)	(0.07)	(0.42)	(0.66)	(0.24)	(0.56)	(0.40)	(0.75)	(0.33)	(0.13)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.05**	-0.06**	0.06*	0.04*	-0.30*	-0.43**	-0.42*	-0.25*	-0.40**	-0.15
	(0.01)	(0.01)	(0.07)	(0.05)	(0.06)	(0.04)	(0.05)	(0.05)	(0.03)	(0.11)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.04	-0.05	-0.04	-0.01	-0.15	-0.41**	-0.15	-0.30**	0.11	-0.16*
	(0.21)	(0.22)	(0.37)	(0.30)	(0.53)	(0.04)	(0.71)	(0.04)	(0.52)	(0.07)
Lagged dependent variable	0.01	0.02	0.42***	0.40***	0.12***	0.12**	0.18***	0.16***	0.15***	0.18***
	(0.74)	(0.67)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
d(Excess Control Rights)	-0.36*	-0.43*	-0.34**	-0.02	-2.99	-0.60	-0.62	-1.31	-2.03	-3.42**
	(0.05)	(0.09)	(0.01)	(0.84)	(0.29)	(0.81)	(0.69)	(0.46)	(0.38)	(0.04)
d(Undercapitalized)	0.46*	0.52	-0.18	-0.27**	-1.64	0.11	-0.14	0.60	-3.83	-3.55
	(0.08)	(0.46)	(0.25)	(0.02)	(0.59)	(0.98)	(0.95)	(0.82)	(0.21)	(0.23)
Deposits Total Assets	-0.00**	-0.00	0.00**	0.00**	0.05*	-0.01	0.03*	0.02	0.02	0.01
	(0.02)	(0.53)	(0.05)	(0.02)	(0.07)	(0.78)	(0.08)	(0.40)	(0.47)	(0.49)
Log(Age)	-0.00	-0.02	-0.00	-0.01	-0.51**	-0.21	-0.30*	-0.29*	-0.29	-0.18
	(0.90)	(0.82)	(0.95)	(0.65)	(0.02)	(0.32)	(0.05)	(0.07)	(0.19)	(0.40)
d(Rescued Bank)	0.04	0.01	0.01	0.00	0.68	1.09	0.62	0.29	0.92	0.12
	(0.71)	(0.99)	(0.85)	(0.96)	(0.59)	(0.39)	(0.46)	(0.85)	(0.54)	(0.93)
Cross-Listed Index	0.03*	0.02	0.01	0.00	0.19	0.28	0.18*	0.24*	0.35**	0.44***
	(0.06)	(0.44)	(0.37)	(1.00)	(0.31)	(0.11)	(0.08)	(0.06)	(0.01)	(0.00)
d(Merger Acquisition)	0.11	0.14	0.08	0.08	0.64	0.02	1.33	1.28	1.19	1.47
	(0.21)	(0.24)	(0.22)	(0.19)	(0.70)	(0.99)	(0.17)	(0.21)	(0.23)	(0.15)
Three-month Interbank Rate	0.01	0.01	-0.13***	-0.13***	-1.83**	-1.84**	-2.36**	-2.53***	-2.19**	-2.13***
	(0.80)	(0.92)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.03	0.03	0.04***	0.04***	0.37	0.35	0.72***	0.70***	0.57***	0.53***
	(0.13)	(0.51)	(0.01)	(0.00)	(0.17)	(0.13)	(0.00)	(0.00)	(0.00)	(0.00)
Stock Traded	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00
	(0.82)	(0.82)	(0.16)	(0.14)	(0.77)	(0.96)	(0.18)	(0.30)	(0.59)	(0.82)
Constant	0.03	0.01	0.55**	0.58**	10.49***	11.11***	9.45***	11.09***	10.13*	10.18***
	(0.92)	(1.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.05)	(0.00)
Hansen test (*p*-value)	0.47	0.52	0.72	0.42	0.58	0.70	0.47	0.55	0.72	0.56
AR2 test (*p*-value)	0.46	0.41	0.71	0.89	0.62	0.53	0.38	0.47	0.14	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.05**	-0.02	-0.05**	-0.02	0.67**	0.40	0.47**	0.32	0.43**	0.38
$\alpha_1+\beta_1$	-0.15**	-0.10**	-0.03	-0.03	0.28	0.42	0.26	0.41	0.30	0.45
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.08**	-0.02	-0.02	0.02	0.33	0.13	0.38	0.12	0.35	0.18
$\alpha'_1+\alpha'_2$	0.13**	0.14**	0.05	0.03	-0.46	0.27	-0.40	-0.46	-0.52	-0.70**
$\alpha'_1+\beta'_1$	0.02	0.02	0.09**	0.06**	-0.67**	-0.50**	-0.71**	-0.64**	-0.80**	-0.65**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.04	0.03	0.07**	0.06**	-0.91**	-0.57**	-0.97***	-1.01**	-0.81**	-1.01**

Table A48

Asset structure and the effect of excess control rights on capital ratio adjustment: excluding Italian banks

This table shows the Blundell and Bond (1998) estimation results on the effect of asset structure on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period. For robustness, we exclude from the initial sample Italian banks and we use a sample of 242 European commercial banks corresponding to 1,526 observations. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Lending Oriented)* is a dummy equal to one if the ratio of net loans (excluding interbank loans) to total assets is greater than the median value and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.07**	-0.07**	-0.06**	0.76**	0.88**	0.46**	0.42**	0.47**	0.66***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.03)	(0.01)	(0.00)
d(Lending Oriented) × *Capital Ratio Surplus* (α_2)	-0.02	-0.02	-0.02	-0.01	0.13	0.14	-0.03	-0.00	0.15	0.10
	(0.20)	(0.29)	(0.20)	(0.20)	(0.23)	(0.18)	(0.44)	(0.39)	(0.25)	(0.20)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.05	-0.01	0.04	0.02	-0.44**	-0.48*	-0.15*	-0.12*	-0.18*	-0.35**
	(0.15)	(0.33)	(0.28)	(0.31)	(0.04)	(0.06)	(0.07)	(0.05)	(0.10)	(0.02)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.06	0.02	0.00	0.01	-0.10	-0.15	-0.09	-0.06	-0.10	-0.09
	(0.32)	(0.20)	(0.53)	(0.50)	(0.33)	(0.25)	(0.19)	(0.25)	(0.15)	(0.21)
Capital Ratio Shortfall (α'_1)	0.12**	0.09**	0.04	0.05	-0.46**	-0.48**	-0.30	-0.32	-0.35	-0.59***
	(0.01)	(0.01)	(0.22)	(0.27)	(0.04)	(0.04)	(0.14)	(0.19)	(0.12)	(0.00)
d(Lending Oriented) × *Capital Ratio Shortfall* (α'_2)	0.04	0.06	0.01	0.01	0.20*	0.26*	-0.06	-0.04	-0.05	-0.07
	(0.17)	(0.19)	(0.45)	(0.37)	(0.07)	(0.06)	(0.23)	(0.31)	(0.24)	(0.36)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.09***	-0.05**	0.04*	0.05*	-0.46**	-0.42***	-0.30*	-0.31**	-0.37*	-0.10
	(0.00)	(0.01)	(0.05)	(0.05)	(0.01)	(0.00)	(0.06)	(0.04)	(0.06)	(0.30)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.00	-0.02	-0.02	-0.03	-0.11	-0.10	-0.33**	-0.31**	-0.13	-0.07
	(0.40)	(0.22)	(0.35)	(0.33)	(0.45)	(0.40)	(0.04)	(0.02)	(0.19)	(0.33)
Lagged dependent variable	0.01	0.01	0.47***	0.42***	0.11**	0.14***	0.15***	0.14***	0.16***	0.18***
	(0.85)	(0.82)	(0.00)	(0.00)	(0.04)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.38***	-0.37**	-0.21*	-0.12	-2.00	-0.92	-0.38	-0.12	-0.46	-1.90
	(0.00)	(0.04)	(0.06)	(0.25)	(0.42)	(0.70)	(0.79)	(0.94)	(0.81)	(0.30)
d(Lending Oriented)	-0.43***	-0.21	0.12	0.16	-0.54	0.19	0.36	2.89**	-0.90	3.47**
	(0.00)	(0.15)	(0.24)	(0.11)	(0.77)	(0.92)	(0.77)	(0.01)	(0.58)	(0.02)
Deposits Total Assets	-0.00*	-0.00	0.00	0.00*	0.01	-0.01	0.03*	0.02	0.01	0.01
	(0.07)	(0.25)	(0.10)	(0.05)	(0.55)	(0.71)	(0.05)	(0.19)	(0.66)	(0.59)
Log(Age)	-0.00	-0.01	-0.00	-0.01	-0.38*	-0.09	-0.26*	-0.18	-0.19	-0.17
	(0.94)	(0.60)	(0.90)	(0.72)	(0.09)	(0.66)	(0.08)	(0.24)	(0.35)	(0.43)
d(Rescued Bank)	0.06	0.01	0.02	0.10	0.84	1.09	0.41	0.20	0.60	0.68
	(0.55)	(0.88)	(0.80)	(0.22)	(0.49)	(0.47)	(0.63)	(0.79)	(0.65)	(0.60)
Cross-Listed Index	0.04***	0.03**	0.01	0.00	0.25	0.28	0.07	0.00	0.33**	0.29**
	(0.01)	(0.02)	(0.59)	(0.77)	(0.13)	(0.14)	(0.51)	(0.97)	(0.01)	(0.03)
d(Merger Acquisition)	0.14	0.11	0.04	0.03	0.56	0.51	1.35	1.48	1.07	1.43
	(0.13)	(0.16)	(0.54)	(0.64)	(0.72)	(0.72)	(0.17)	(0.14)	(0.30)	(0.17)
Three-month Interbank Rate	-0.02	0.02	-0.12**	-0.12***	-1.78**	-2.01***	-2.51**	-2.41***	-2.09**	-2.16***
	(0.74)	(0.63)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.03	0.03	0.03***	0.03***	0.41*	0.33	0.74***	0.69***	0.58***	0.57***
	(0.11)	(0.19)	(0.00)	(0.00)	(0.08)	(0.21)	(0.00)	(0.00)	(0.00)	(0.00)
Stock Traded	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01
	(0.48)	(0.10)	(0.24)	(0.13)	(0.85)	(0.68)	(0.16)	(0.12)	(0.83)	(0.50)
Constant	0.10	0.16	0.51**	0.50**	9.89**	10.52**	9.72***	11.01***	9.60***	12.76***
	(0.74)	(0.63)	(0.02)	(0.04)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.83	0.80	0.95	0.80	0.90	0.95	0.89	0.88	0.93	0.92
AR2 test (*p*-value)	0.47	0.51	0.80	0.91	0.53	0.49	0.46	0.42	0.15	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.10**	-0.09**	-0.09**	-0.07**	0.89**	1.02**	0.43**	0.42**	0.62**	0.76**
$\alpha_1+\beta_1$	-0.13**	-0.08**	-0.03	-0.04	0.32	0.40	0.31	0.30	0.29	0.31
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.09**	-0.08***	-0.05	-0.04	0.35	0.39	0.19	0.24	0.34	0.32
$\alpha'_1+\alpha'_2$	0.16**	0.15**	0.05	0.06	-0.26	-0.22	-0.36	-0.36	-0.40	-0.66**
$\alpha'_1+\beta'_1$	0.03	0.04	0.08**	0.10**	-0.92**	-0.90**	-0.60**	-0.63**	-0.72**	-0.69**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.07	0.08	0.07**	0.08**	-0.83**	-0.74**	-0.99**	-0.98**	-0.90**	-0.83**

Table A49

Bank size and the effect of excess control rights on capital ratio adjustment: excluding Italian banks

This table shows the Blundell and Bond (1998) estimation results on the effect of bank size on the relationship between excess control rights and capital ratio adjustment over the 2002–2010 period. For robustness, we exclude from the initial sample Italian banks and we use a sample of 242 European commercial banks corresponding to 1,526 observations. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns (1) and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns (2). *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time t + total assets at time t-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Large Bank)* is a dummy equal to one if the bank's total assets is above the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.05*	-0.07**	-0.06**	0.82**	0.87**	0.45*	0.46**	0.47**	0.63**
	(0.02)	(0.06)	(0.01)	(0.02)	(0.01)	(0.01)	(0.07)	(0.02)	(0.04)	(0.04)
d(Large Bank) × *Capital Ratio Surplus* (α_2)	-0.02	-0.02	0.01	-0.01	0.08	0.02	0.03	0.04	0.16	0.12
	(0.31)	(0.30)	(0.13)	(0.80)	(0.77)	(0.76)	(0.58)	(0.25)	(0.40)	(0.42)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.02	-0.01	0.03	0.02	-0.42**	-0.46*	-0.14*	-0.18**	-0.19*	-0.33*
	(0.33)	(0.79)	(0.53)	(0.30)	(0.02)	(0.05)	(0.09)	(0.03)	(0.08)	(0.08)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.04	-0.02	-0.03	0.03	-0.09	-0.05	-0.02	-0.02	-0.09	-0.06
	(0.24)	(0.81)	(0.45)	(0.57)	(0.33)	(0.65)	(0.66)	(0.32)	(0.29)	(0.46)
Capital Ratio Shortfall (α'_1)	0.14***	0.14***	0.04	0.06	-0.34	-0.12	-0.36	-0.34	-0.38	-0.80**
	(0.00)	(0.00)	(0.36)	(0.13)	(0.16)	(0.60)	(0.29)	(0.17)	(0.14)	(0.01)
d(Large Bank) × *Capital Ratio Shortfall* (α'_2)	0.01	0.00	0.00	-0.02	-0.12	-0.10	-0.09	-0.08	-0.11	-0.08
	(0.79)	(0.77)	(0.30)	(0.32)	(0.84)	(0.42)	(0.25)	(0.81)	(0.22)	(0.27)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07***	-0.07***	0.03*	0.02*	-0.34*	-0.60*	-0.37**	-0.25**	-0.35**	-0.08
	(0.00)	(0.01)	(0.06)	(0.05)	(0.06)	(0.06)	(0.04)	(0.03)	(0.03)	(0.36)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.04**	-0.03**	-0.03*	-0.02*	-0.39**	-0.32*	-0.52**	-0.38**	-0.37**	-0.06
	(0.02)	(0.01)	(0.08)	(0.06)	(0.04)	(0.08)	(0.05)	(0.03)	(0.02)	(0.33)
Lagged dependent variable	-0.02	-0.01	0.46***	0.45***	0.13**	0.14***	0.14***	0.13***	0.17***	0.18***
	(0.64)	(0.81)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
d(Excess Control Rights)	-0.23	-0.39**	-0.18	-0.08	-2.11	-1.24	-0.62	-0.62	-0.88	-2.06
	(0.19)	(0.05)	(0.14)	(0.45)	(0.33)	(0.62)	(0.65)	(0.72)	(0.56)	(0.23)
d(Large Bank)	-0.15	-0.10	-0.13	0.13	-1.30	0.11	-1.71	-0.45	-7.46***	-3.59**
	(0.43)	(0.62)	(0.28)	(0.24)	(0.56)	(0.96)	(0.20)	(0.79)	(0.00)	(0.05)
Deposits Total Assets	-0.00*	-0.00	0.00*	0.00*	0.01	-0.01	0.02	0.02	-0.02	0.00
	(0.07)	(0.25)	(0.07)	(0.09)	(0.60)	(0.76)	(0.12)	(0.19)	(0.46)	(0.87)
Log(Age)	-0.01	-0.01	0.00	-0.00	-0.22	-0.03	-0.25*	-0.26*	-0.04	-0.14
	(0.67)	(0.69)	(0.95)	(0.86)	(0.28)	(0.86)	(0.07)	(0.10)	(0.86)	(0.51)
d(Rescued Bank)	0.02	0.04	0.03	0.03	1.22	0.97	0.16	0.45	0.01	0.68
	(0.80)	(0.70)	(0.61)	(0.64)	(0.30)	(0.49)	(0.82)	(0.59)	(1.00)	(0.59)
Cross-Listed Index	0.03*	0.03**	0.01	0.00	0.25	0.24	0.09	0.08	0.14	0.26**
	(0.06)	(0.01)	(0.38)	(0.87)	(0.18)	(0.19)	(0.40)	(0.52)	(0.31)	(0.05)
d(Merger Acquisition)	0.11	0.13	0.06	0.06	0.43	0.19	1.09	0.99	1.49	1.41
	(0.19)	(0.12)	(0.33)	(0.34)	(0.79)	(0.90)	(0.26)	(0.31)	(0.12)	(0.16)
Three-month Interbank Rate	-0.02	0.03	-0.13***	-0.12***	-1.95**	-1.82***	-2.46***	-2.51***	-1.82***	-2.18***
	(0.66)	(0.62)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.03	0.03	0.03***	0.03***	0.30	0.27	0.74***	0.75***	0.48***	0.60***
	(0.11)	(0.17)	(0.00)	(0.00)	(0.24)	(0.33)	(0.00)	(0.00)	(0.00)	(0.00)
Stock Traded	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
	(0.97)	(0.28)	(0.22)	(0.31)	(0.88)	(0.62)	(0.17)	(0.17)	(0.50)	(0.45)
Constant	0.43	0.09	0.61***	0.37*	12.10***	10.56**	9.66***	8.94***	13.70***	11.38***
	(0.12)	(0.76)	(0.00)	(0.07)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.90	0.90	0.87	0.79	0.85	0.90	0.92	0.90	0.87	0.83
AR2 test (*p*-value)	0.35	0.39	0.82	0.88	0.50	0.42	0.43	0.39	0.15	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.09**	-0.07**	-0.06**	-0.07**	0.90**	0.89**	0.48**	0.50**	0.63**	0.75**
$\alpha_1+\beta_1$	-0.09**	-0.06**	-0.04	-0.04	0.40	0.41	0.31	0.28	0.28	0.30
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.15**	-0.10**	-0.06	-0.02	0.39	0.38	0.32	0.30	0.35	0.36
$\alpha'_1+\alpha'_2$	0.15**	0.14**	0.04	0.04	-0.46	-0.22	-0.45	-0.42	-0.49	-0.88**
$\alpha'_1+\beta'_1$	0.07*	0.07*	0.07**	0.08**	-0.68**	-0.72**	-0.73**	-0.59**	-0.73**	-0.88***
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.04	0.04	0.04	0.04	-1.19**	-1.14**	-1.34**	-1.05**	-1.21**	-1.02***

Table A50

Ultimate ownership type of European commercial banks

This table reports information on ultimate ownership type for both subsamples of banks without and banks with excess control rights, on average, for the years 2004, 2006 and 2010 using a control threshold of 20%. We classify a bank as without excess control rights (*Absence of Excess Control Rights*) if it is controlled by an ultimate owner with equal control and cash-flow rights, it is widely held, or its control chain is a cross-holding (1,466 observations). We classify a bank as with excess control rights (*Presence of Excess Control Rights*) if it is controlled by an ultimate owner with greater control than cash-flow rights (738 observations). We differentiate banks according to the type of their largest ultimate controlling owner: a bank (*Bank*); an individual, a family or a manager (*Family*); a state or a public authority (*State*); a financial company, an insurance company, a mutual fund, or a pension fund (*Institutional*); an industrial firm (*Industry*); foundation or a research institute (*Foundation*). *Widely Held* and *Cross-Holding* refer to banks that are respectively widely held and those for which the control chain is a cross-holding.

	Absence of Excess Control Rights			*Presence of Excess Control Rights*		
	Percentage of observations	Number of observations	Number of banks	Percentage of observations	Number of observations	Number of banks
Bank	43.25	634	110	30.49	225	35
Family	9.55	140	30	21.82	161	34
State	2.80	41	10	21.00	155	34
Institutional	6.34	93	15	16.40	121	23
Industry	2.32	34	6	7.45	55	7
Foundation	3.41	50	7	2.85	21	4
Widely Held	31.65	464	74	-	-	-
Cross-Holding	0.68	10	3	-	-	-

Table A51

Estimating the target capital ratio: control threshold of 20%

This table shows the Blundell and Bond (1998) estimation results of the target capital ratio based on a partial adjustment model [Eq. (3)] over the 2002–2010 period. The sample consists of 341 European commercial banks corresponding to 2,204 observations. For robustness, we compute ownership variables based on a control threshold of 20%. *Tier 1 Total Assets* is Tier 1 capital divided by total assets. *Tier 1 RWA* is Tier 1 capital divided by risk-weighted assets. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Log(Total Assets)* is the natural logarithm of the bank's total assets. *Return on Assets* is net income divided by total assets. *Loan Loss Provisions* is loan loss provisions divided by net loans. *Loans Total Assets* is net loans divided by total assets. *Market Discipline* is total long-term market funding divided by total funding. *d(Listed Bank)* is a dummy equal to one if the bank is publicly listed and zero otherwise. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. In the last three rows, we report the summary statistics (mean, maximum and minimum) of the estimated target capital ratio. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Dependent variable	*Tier 1 Total Assets*	*Tier 1 RWA*
Lagged dependent variable	0.59***	0.66***
	(0.00)	(0.00)
d(Excess Control Rights)	-0.32**	-0.80***
	(0.03)	(0.00)
Log(Total Assets)	-0.51***	-0.58***
	(0.00)	(0.00)
Return On Assets	0.48***	0.53***
	(0.00)	(0.00)
Loan Loss Provisions	0.19***	0.18**
	(0.00)	(0.02)
Loans Total Assets	-0.00*	-0.03***
	(0.07)	(0.00)
Market Discipline	0.00**	0.01**
	(0.02)	(0.03)
d(Listed Bank)	-0.65***	-1.38***
	(0.00)	(0.00)
GDP Growth Rate	-0.00	-0.01
	(0.61)	(0.26)
Constant	5.33***	8.46***
	(0.00)	(0.00)
Hansen test (*p*-value)	0.11	0.11
AR2 test (*p*-value)	0.35	0.32
Fitted target (%): Mean	7.00	11.51
Maximum	14.90	25.10
Minimum	1.32	3.40

Table A52

Excess control rights and capital ratio adjustment: control threshold of 20%

This table shows the Blundell and Bond (1998) estimation results on the effect of excess control rights on capital ratio adjustment [Eq. (6)] for a sample of 341 European commercial banks (corresponding to 2,204 observations) over the 2002–2010 period. For robustness, we compute ownership variables based on a control threshold of 20% instead of 10%. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 8. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are respectively the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.06**	-0.04*	-0.05**	-0.03*	0.81**	0.94**	0.42**	0.54**	0.46**	0.70**
	(0.04)	(0.08)	(0.04)	(0.05)	(0.02)	(0.04)	(0.02)	(0.05)	(0.02)	(0.02)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.09*	-0.03	0.01	0.01	-0.38**	-0.47*	-0.20*	-0.25**	-0.21*	-0.37*
	(0.07)	(0.46)	(0.77)	(0.63)	(0.04)	(0.06)	(0.07)	(0.04)	(0.07)	(0.05)
Capital Ratio Shortfall (α'_1)	0.16***	0.10***	0.03	0.04*	-0.38	0.12	-0.29	-0.34	-0.28	-0.55**
	(0.00)	(0.00)	(0.28)	(0.06)	(0.20)	(0.68)	(0.38)	(0.12)	(0.42)	(0.02)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.13***	-0.07***	0.06*	0.03*	-0.30**	-0.84**	-0.29*	-0.33**	-0.26*	-0.05
	(0.00)	(0.00)	(0.08)	(0.07)	(0.04)	(0.02)	(0.05)	(0.04)	(0.07)	(0.30)
Lagged dependent variable	0.03	0.02	0.41***	0.38***	0.11***	0.13***	0.13***	0.12***	0.12***	0.14***
	(0.30)	(0.52)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.40**	-0.30*	-0.17	-0.00	-0.94	-0.36	-1.00	-0.80	-1.78	-0.25
	(0.02)	(0.09)	(0.15)	(0.97)	(0.65)	(0.86)	(0.53)	(0.64)	(0.31)	(0.56)
Deposits Total Assets	-0.00**	-0.00*	0.00*	0.00**	-0.01	-0.00	0.02	0.01	0.00	0.01
	(0.02)	(0.05)	(0.09)	(0.03)	(0.82)	(0.84)	(0.11)	(0.30)	(0.78)	(0.45)
Log(Age)	-0.00	-0.01	-0.00	-0.01	-0.31*	-0.29*	-0.28**	-0.17	-0.28*	-0.16
	(0.98)	(0.37)	(0.99)	(0.46)	(0.07)	(0.08)	(0.01)	(0.22)	(0.06)	(0.30)
d(Rescued Bank)	0.09	0.00	0.02	0.00	1.64	1.49	1.20	0.33	0.66	0.29
	(0.43)	(0.97)	(0.78)	(0.96)	(0.19)	(0.28)	(0.14)	(0.71)	(0.58)	(0.80)
Cross-Listed Index	0.03**	0.03***	0.00	0.00	0.20	0.10	0.13	0.11	0.29***	0.32***
	(0.03)	(0.00)	(0.89)	(0.85)	(0.10)	(0.46)	(0.10)	(0.29)	(0.00)	(0.00)
d(Merger Acquisition)	0.04	0.04	0.03	0.01	1.06	0.75	1.17	1.35	0.06	0.39
	(0.58)	(0.58)	(0.55)	(0.80)	(0.32)	(0.51)	(0.13)	(0.10)	(0.95)	(0.68)
Three-month Interbank Rate	0.01	0.02	-0.11***	-0.10**	-1.96***	-1.99***	-1.95***	-2.15***	-1.18**	-1.65***
	(0.81)	(0.79)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.03)	(0.00)
GDP Growth Rate	0.01**	0.01*	0.01	0.00	0.28**	0.22*	0.18***	0.18***	0.14*	0.16**
	(0.04)	(0.10)	(0.14)	(0.76)	(0.01)	(0.06)	(0.01)	(0.00)	(0.07)	(0.04)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.00	0.00
	(0.53)	(0.42)	(0.43)	(0.38)	(0.24)	(0.11)	(0.40)	(0.19)	(0.93)	(0.99)
Constant	0.52	0.37	0.65***	0.61***	15.01***	13.13***	8.44***	10.35***	6.84***	11.55***
	(0.12)	(0.23)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Hansen test (*p*-value)	0.13	0.14	0.12	0.10	0.50	0.37	0.18	0.14	0.19	0.23
AR2 test (*p*-value)	0.70	0.67	0.81	0.68	0.22	0.20	0.44	0.50	0.34	0.34
Wald tests: $\alpha_1+\beta_1$	-0.15**	-0.07***	-0.04	-0.02	0.43	0.47	0.22	0.29	0.25	0.33
$\alpha'_1+\beta'_1$	0.03	0.03	0.09***	0.07***	-0.68**	-0.72**	-0.58**	-0.67**	-0.54*	-0.60**

Table A53

Ownership type and the effect of excess control rights on capital ratio adjustment: control threshold of 20%

This table shows the Blundell and Bond (1998) estimation results on the effect of ownership type on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] over the 2002–2010 period. We exclude from the initial sample banks for which the control chain is a cross-holding (for simplicity) and we use a sample of 336 European commercial banks corresponding to 2,171 observations. For robustness, we compute ownership variables based on a control threshold of 20% instead of 10%. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Family)* is a dummy equal to one if the bank is family-controlled and zero otherwise. *d(State)* is a dummy equal to one if the bank is state-controlled and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. *Deposits Total Assets* is total customer deposits divided by total assets. *Log(Age)* is the natural logarithm of bank age. *d(Rescued Bank)* is a dummy equal to one if the bank was rescued during the 2008 financial crisis and zero otherwise. *Cross-Listed Index* is an index equal to the number of stock markets on which the bank is listed, and zero if the bank is privately owned. *d(Merger Acquisition)* is a dummy equal to one if the bank experienced a merger-acquisition event during the sample period and zero otherwise. *Three-month Interbank Rate* is the three-month interbank rate. *GDP Growth Rate* is the real gross domestic product (GDP) growth rate. *Stock Traded* is the value of listed shares divided by GDP. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.13**	-0.06**	-0.06**	-0.06**	0.78**	0.80**	0.34**	0.44**	0.43**	0.63**
	(0.01)	(0.04)	(0.03)	(0.02)	(0.04)	(0.04)	(0.05)	(0.01)	(0.04)	(0.02)
d(Family) × *Capital Ratio Surplus* (α_2)	0.06	0.02	0.01	0.02	0.16	0.17	0.15	0.14	0.14	0.12
	(0.25)	(0.80)	(0.32)	(0.27)	(0.35)	(0.20)	(0.22)	(0.38)	(0.40)	(0.38)
d(State) × *Capital Ratio Surplus* (α_3)	0.08	-0.02	-0.01	0.02	0.03	0.22	0.07	0.07	0.07	0.18
	(0.43)	(0.80)	(0.26)	(0.22)	(0.67)	(0.31)	(0.32)	(0.68)	(0.54)	(0.45)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.03	-0.00	-0.02	-0.02	-0.44	-0.42	-0.13	-0.18	-0.23	-0.32
	(0.65)	(0.89)	(0.20)	(0.70)	(0.30)	(0.55)	(0.78)	(0.75)	(0.36)	(0.26)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.07*	-0.06*	0.05*	0.02	-0.10	-0.20	-0.09	-0.18	-0.19	-0.10
	(0.06)	(0.08)	(0.06)	(0.18)	(0.42)	(0.15)	(0.62)	(0.73)	(0.89)	(0.44)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_3)	-0.03	-0.02	-0.14	-0.02	0.09	-0.13	0.06	-0.10	-0.10	-0.15
	(0.30)	(0.62)	(0.30)	(0.19)	(0.40)	(0.20)	(0.62)	(0.30)	(0.35)	(0.29)
Capital Ratio Shortfall (α'_1)	0.15**	0.09***	0.04	0.04*	-0.39	0.10	-0.44	-0.40	-0.35	-0.55**
	(0.02)	(0.00)	(0.23)	(0.09)	(0.12)	(0.67)	(0.15)	(0.20)	(0.16)	(0.02)
d(Family) × *Capital Ratio Shortfall* (α'_2)	0.12	0.08	0.02	0.02	0.09	0.06	0.09	-0.10	0.19	-0.06
	(0.14)	(0.13)	(0.73)	(0.50)	(0.36)	(0.34)	(0.32)	(0.78)	(0.45)	(0.43)
d(State) × *Capital Ratio Shortfall* (α'_3)	0.03	-0.04	-0.03	-0.00	0.04	0.05	0.09	-0.07	0.06	-0.08
	(0.85)	(0.32)	(0.36)	(0.97)	(0.75)	(0.58)	(0.32)	(0.72)	(0.75)	(0.40)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07	-0.02	0.03	0.00	-0.14	-0.48	-0.05	-0.12	-0.08	-0.08
	(0.23)	(0.20)	(0.40)	(0.94)	(0.33)	(0.27)	(0.70)	(0.17)	(0.45)	(0.31)
d(Family) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.16**	-0.10**	-0.00	0.02*	-0.55**	-0.64**	-0.33**	-0.43**	-0.44*	-0.13
	(0.04)	(0.02)	(0.90)	(0.10)	(0.01)	(0.01)	(0.04)	(0.02)	(0.06)	(0.11)
d(State) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_3)	-0.01	0.07*	-0.06	-0.04	-0.15	-0.16	-0.11	0.14**	-0.11	0.15
	(0.69)	(0.06)	(0.45)	(0.86)	(0.14)	(0.32)	(0.23)	(0.05)	(0.34)	(0.14)
Lagged dependent variable	0.01	0.01	0.50***	0.48***	0.12**	0.11**	0.19***	0.19***	0.15***	0.15***
	(0.73)	(0.72)	(0.00)	(0.00)	(0.03)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.34**	-0.36*	-0.22*	-0.11	-4.65**	-0.41	-0.67	-0.01	-0.47	-2.61
	(0.03)	(0.10)	(0.09)	(0.28)	(0.03)	(0.86)	(0.65)	(0.99)	(0.84)	(0.26)
d(Family)	-0.08	0.59*	0.14	-0.06	4.94	3.82	2.31	3.39	1.04	4.55
	(0.68)	(0.05)	(0.41)	(0.69)	(0.14)	(0.24)	(0.32)	(0.21)	(0.75)	(0.20)
d(State)	0.16	0.16	0.32**	0.26	3.92	0.36	4.00*	3.11	2.15	-1.15
	(0.50)	(0.33)	(0.03)	(0.10)	(0.29)	(0.92)	(0.08)	(0.14)	(0.49)	(0.65)

Table A 53 (continued)

Deposits Total Assets	-0.00*	-0.00	0.00	0.00	0.03	0.01	0.03*	0.03*	0.02	0.03
	(0.08)	(0.45)	(0.13)	(0.14)	(0.39)	(0.72)	(0.06)	(0.05)	(0.55)	(0.23)
Log(Age)	-0.00	-0.02	-0.00	-0.01	-0.20	-0.14	-0.21	-0.25	-0.20	-0.15
	(0.91)	(0.25)	(0.98)	(0.53)	(0.35)	(0.47)	(0.20)	(0.12)	(0.31)	(0.47)
d(Rescued Bank)	0.02	0.03	0.05	0.02	1.28	1.47	0.13	0.53	0.36	0.66
	(0.87)	(0.77)	(0.45)	(0.70)	(0.26)	(0.26)	(0.87)	(0.51)	(0.78)	(0.63)
Cross-Listed Index	0.02**	0.02	0.00	0.01	0.22	0.11	0.08	0.06	0.30**	0.30**
	(0.05)	(0.14)	(0.81)	(0.49)	(0.19)	(0.52)	(0.45)	(0.60)	(0.01)	(0.02)
d(Merger Acquisition)	0.12	0.08	0.04	0.03	0.33	0.78	0.88	1.21	1.45	1.03
	(0.12)	(0.36)	(0.58)	(0.63)	(0.83)	(0.60)	(0.34)	(0.23)	(0.19)	(0.34)
Three-month Interbank Rate	-0.00	0.04	-0.12**	-0.11***	-2.20***	-1.82**	-2.20***	-2.31***	-1.84***	-1.84**
	(0.98)	(0.50)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
GDP Growth Rate	0.02	0.02	0.03***	0.03***	0.29	0.29	0.74***	0.71***	0.55***	0.55***
	(0.22)	(0.28)	(0.00)	(0.00)	(0.28)	(0.35)	(0.00)	(0.00)	(0.00)	(0.00)
Stock Traded	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01
	(0.88)	(0.69)	(0.21)	(0.19)	(0.94)	(0.85)	(0.13)	(0.22)	(0.74)	(0.64)
Constant	0.12	0.16	0.41*	0.41**	7.69*	7.26*	6.45**	7.59***	8.20***	6.67**
	(0.70)	(0.58)	(0.07)	(0.03)	(0.06)	(0.06)	(0.02)	(0.00)	(0.01)	(0.03)
Hansen test (*p*-value)	0.15	0.17	0.10	0.15	0.15	0.20	0.21	0.18	0.15	0.19
AR2 test (*p*-value)	0.82	0.90	0.72	0.92	0.33	0.32	0.64	0.62	0.38	0.32
Wald tests: $\alpha_1+\alpha_2$	-0.07**	-0.04**	-0.05**	-0.04*	0.94**	0.97**	0.49**	0.58**	0.57**	0.75***
$\alpha_1+\alpha_3$	-0.05*	-0.08**	-0.07**	-0.04**	0.81**	1.02**	0.41**	0.51**	0.50**	0.81**
$\alpha_1+\beta_1$	-0.16**	-0.06**	-0.08**	-0.08*	0.34	0.38	0.21	0.26	0.20	0.31
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.17**	-0.10**	-0.02	-0.04	0.40	0.35	0.27	0.22	0.15	0.33
$\alpha_1+\alpha_3+\beta_1+\beta_3$	-0.11**	-0.10**	-0.23**	-0.08**	0.46	0.47	0.34	0.23	0.17	0.34
$\alpha'_1+\alpha'_2$	0.27**	0.17**	0.06	0.06*	-0.30	0.16	-0.35	-0.50	-0.16	-0.61**
$\alpha'_1+\alpha'_3$	0.18**	0.05**	0.01	0.04*	-0.35	0.15	-0.35	-0.47	-0.29	-0.63**
$\alpha'_1+\beta'_1$	0.08**	0.07**	0.07*	0.04*	-0.53	-0.38	-0.49	-0.52*	-0.43	-0.63**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.04	0.05	0.09**	0.08**	-0.99**	-0.96**	-0.73**	-1.05**	-0.68*	-0.82**
$\alpha'_1+\alpha'_3+\beta'_1+\beta'_3$	0.10**	0.10**	-0.02	0.00	-0.64	-0.49*	-0.51	-0.45	-0.48	-0.56

Table A54

Shareholder protection and the effect of excess control rights on capital ratio adjustment: control threshold of 20%

This table shows the Blundell and Bond (1998) estimation results on the effect of shareholder protection rights on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] for a sample of 341 European commercial banks (corresponding to 2,204 year observations) over the 2002–2010 period. For robustness, we compute ownership variables based on a control threshold of 20% instead of 10%. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Owner Rights)* is a dummy equal to one if the shareholder protection index as defined in Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008) is greater than the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.07**	-0.06*	-0.06**	-0.06**	0.74**	0.90**	0.32*	0.42**	0.39**	0.60**
	(0.01)	(0.09)	(0.02)	(0.04)	(0.04)	(0.03)	(0.09)	(0.04)	(0.03)	(0.03)
d(Owner Rights) × *Capital Ratio Surplus* (α_2)	0.02	0.02	-0.01	0.01	0.13	0.07	0.13	0.13	0.14	0.17
	(0.11)	(0.26)	(0.26)	(0.25)	(0.60)	(0.18)	(0.60)	(0.76)	(0.85)	(0.29)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.08	-0.01	0.04	0.04	-0.38	-0.46	-0.05	-0.18	-0.17	-0.27
	(0.57)	(0.87)	(0.19)	(0.17)	(0.45)	(0.58)	(0.60)	(0.64)	(0.70)	(0.35)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.06	0.01	-0.03	-0.05*	-0.06	-0.03	-0.18	0.07	-0.16	-0.15
	(0.73)	(0.72)	(0.17)	(0.06)	(0.63)	(0.61)	(0.25)	(0.92)	(0.19)	(0.14)
Capital Ratio Shortfall (α'_1)	0.15**	0.08**	0.04	0.06**	-0.35	-0.08	-0.39	-0.27	-0.18	-0.60**
	(0.04)	(0.03)	(0.39)	(0.04)	(0.17)	(0.57)	(0.26)	(0.26)	(0.58)	(0.03)
d(Owner Rights) × *Capital Ratio Shortfall* (α'_2)	0.05	0.07	0.01	-0.00	-0.11	0.16	-0.03	-0.25	-0.09	-0.03
	(0.32)	(0.16)	(0.64)	(0.92)	(0.87)	(0.28)	(0.88)	(0.43)	(0.21)	(0.25)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12**	-0.06*	0.03*	0.03*	-0.51**	-0.82**	-0.47**	-0.61**	-0.46*	-0.07
	(0.01)	(0.04)	(0.07)	(0.05)	(0.02)	(0.01)	(0.03)	(0.01)	(0.06)	(0.40)
d(Owner Rights) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.00	-0.00	-0.04	-0.03	0.36	0.25	0.45	0.57*	0.41	0.14
	(0.94)	(0.99)	(0.64)	(0.48)	(0.43)	(0.25)	(0.10)	(0.08)	(0.30)	(0.45)
Lagged dependent variable	0.01	0.02	0.48***	0.44***	0.14***	0.16***	0.16***	0.17***	0.16***	0.17***
	(0.78)	(0.54)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.33**	-0.36*	-0.21*	-0.08	-1.99	-0.05	-0.80	-0.51	-1.35	-2.06
	(0.02)	(0.08)	(0.10)	(0.40)	(0.35)	(0.98)	(0.55)	(0.69)	(0.49)	(0.19)
Deposits Total Assets	-0.00	-0.00*	0.00**	0.00	0.02	-0.01	0.03*	0.04**	0.01	0.02
	(0.17)	(0.07)	(0.04)	(0.15)	(0.49)	(0.81)	(0.08)	(0.04)	(0.80)	(0.31)
Log(Age)	-0.00	-0.02	-0.00	-0.01	-0.25	-0.12	-0.28*	-0.29*	-0.15	-0.19
	(0.88)	(0.44)	(0.88)	(0.60)	(0.22)	(0.58)	(0.08)	(0.09)	(0.47)	(0.32)
d(Rescued Bank)	0.01	0.01	0.01	0.04	1.14	1.35	0.66	0.49	0.03	0.36
	(0.91)	(0.91)	(0.91)	(0.51)	(0.36)	(0.30)	(0.37)	(0.53)	(0.98)	(0.77)
Cross-Listed Index	0.03**	0.03**	0.00	0.00	0.25	0.18	0.12	0.10	0.29**	0.34**
	(0.02)	(0.02)	(0.66)	(0.85)	(0.16)	(0.32)	(0.19)	(0.34)	(0.03)	(0.01)
d(Merger Acquisition)	0.12	0.14*	0.05	0.08	0.39	0.61	1.31	1.03	1.46	1.44
	(0.14)	(0.10)	(0.41)	(0.20)	(0.82)	(0.70)	(0.18)	(0.29)	(0.13)	(0.15)
Three-month Interbank Rate	0.00	0.02	-0.13***	-0.12***	-1.79**	-1.47**	-2.40***	-2.37***	-2.01***	-1.95***
	(0.93)	(0.72)	(0.01)	(0.01)	(0.02)	(0.05)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.03	0.02	0.04***	0.04***	0.43	0.22	0.69***	0.77***	0.62***	0.46***
	(0.15)	(0.17)	(0.01)	(0.00)	(0.14)	(0.46)	(0.00)	(0.00)	(0.00)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00*	0.01	0.00	0.02*	0.01	0.01	0.01
	(0.94)	(0.79)	(0.23)	(0.07)	(0.73)	(0.77)	(0.08)	(0.12)	(0.56)	(0.58)
Constant	0.35	0.23	0.64***	0.48*	10.23**	8.95**	9.14***	8.83***	8.00***	9.70***
	(0.17)	(0.40)	(0.01)	(0.06)	(0.01)	(0.03)	(0.00)	(0.00)	(0.01)	(0.00)
Hansen test (*p*-value)	0.29	0.21	0.18	0.30	0.40	0.56	0.28	0.20	0.33	0.40
AR2 test (*p*-value)	0.47	0.39	0.84	0.83	0.46	0.39	0.41	0.39	0.14	0.14
Wald tests: $\alpha_1+\alpha_2$	-0.05***	-0.04*	-0.07**	-0.05**	0.87**	0.97**	0.45**	0.55**	0.53**	0.77**
$\alpha_1+\beta_1$	-0.15**	-0.07**	-0.02	-0.02	0.36	0.44	0.27	0.24	0.22	0.33
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.07**	-0.04**	-0.06**	-0.06**	0.43**	0.48*	0.22	0.44	0.20	0.35
$\alpha'_1+\alpha'_2$	0.20**	0.15**	0.05	0.06	-0.46	0.08	-0.42	-0.52	-0.27	-0.63**
$\alpha'_1+\beta'_1$	0.03	0.02	0.07**	0.09**	-0.86**	-0.90**	-0.86**	-0.88**	-0.64**	-0.67**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.08**	0.09***	0.04**	0.06	-0.61**	-0.49	-0.44	-0.56	-0.32	-0.56*

Table A55

2008 financial crisis and the effect of excess control rights on capital ratio adjustment: control threshold of 20%

This table shows the Blundell and Bond (1998) estimation results on the effect of the 2008 financial crisis on the relationship between excess control rights and capital ratio adjustment [Eq. (7)] for a sample of 341 European commercial banks (corresponding to 2,204 observations) over the 2002–2010 period. For robustness, we compute ownership variables based on a control threshold of 20% instead of 10%. In all the regressions, the fitted target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Crisis)* is a dummy equal to one if the observation is from 2008 or 2009 and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08***	-0.06**	-0.04**	-0.06**	1.10**	1.13***	0.54**	0.63**	0.60**	0.90**
	(0.00)	(0.02)	(0.04)	(0.01)	(0.02)	(0.00)	(0.02)	(0.02)	(0.05)	(0.04)
d(Crisis) × *Capital Ratio Surplus* (α_2)	0.05*	0.02	-0.01	-0.01	-0.61	-0.44	-0.22	-0.27	-0.29	-0.39
	(0.08)	(0.48)	(0.15)	(0.12)	(0.84)	(0.73)	(0.74)	(0.44)	(0.14)	(0.36)
d(Excess Control Rights) × Capital Ratio Surplus (β_1)	-0.04	-0.02	0.02	0.03	-0.61	-0.64	-0.18	-0.30	-0.31	-0.54
	(0.57)	(0.48)	(0.70)	(0.20)	(0.81)	(0.31)	(0.53)	(0.92)	(0.41)	(0.41)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.03	0.02	-0.03	-0.02	0.49	0.36	0.06	0.17	0.21	0.36
	(0.70)	(0.36)	(0.83)	(0.69)	(0.22)	(0.33)	(0.76)	(0.89)	(0.80)	(0.30)
Capital Ratio Shortfall (α'_1)	0.15**	0.11**	0.05	0.05	-0.42	0.08	-0.25	-0.33	-0.24	-0.66**
	(0.04)	(0.01)	(0.17)	(0.14)	(0.23)	(0.86)	(0.68)	(0.49)	(0.25)	(0.03)
d(Crisis) × *Capital Ratio Shortfall* (α'_2)	-0.05	-0.05	-0.02	-0.01	-0.06	0.17	-0.20	-0.15	-0.18	0.19
	(0.39)	(0.78)	(0.20)	(0.22)	(0.42)	(0.74)	(0.66)	(0.59)	(0.16)	(0.79)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.12*	-0.09*	0.05	0.06*	-0.49*	-0.94**	-0.41*	-0.50*	-0.49**	-0.16
	(0.05)	(0.05)	(0.13)	(0.07)	(0.08)	(0.02)	(0.06)	(0.06)	(0.01)	(0.60)
d(Crisis) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	0.09	0.09	-0.03	-0.05	0.48	0. 21	0.42	0.52	0.60	0.35
	(0.26)	(0.18)	(0.35)	(0.79)	(0.19)	(0.22)	(0.66)	(0.29)	(0.13)	(0.28)
Lagged dependent variable	0.03	0.03	0.41***	0.39***	0.12***	0.12***	0.13***	0.12***	0.15***	0.17***
	(0.42)	(0.47)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.50***	-0.33**	-0.07	-0.06	-0.15	-0.34	-0.42	-0.70	-1.37	-2.05
	(0.00)	(0.02)	(0.42)	(0.53)	(0.95)	(0.86)	(0.76)	(0.63)	(0.34)	(0.28)
Deposits Total Assets	-0.00**	-0.00**	0.00**	0.00**	0.00	-0.02	0.03**	0.01	-0.00	0.01
	(0.03)	(0.03)	(0.01)	(0.01)	(0.92)	(0.38)	(0.03)	(0.43)	(0.91)	(0.44)
Log(Age)	-0.02	-0.02	-0.00	-0.00	-0.32*	-0.38**	-0.26**	-0.24*	-0.18	-0.22
	(0.32)	(0.14)	(0.80)	(0.84)	(0.06)	(0.02)	(0.02)	(0.07)	(0.18)	(0.11)
d(Rescued Bank)	0.03	0.01	0.02	0.01	1.69	1.57	1.36*	0.69	0.39	0.36
	(0.77)	(0.90)	(0.78)	(0.93)	(0.16)	(0.24)	(0.08)	(0.38)	(0.71)	(0.73)
Cross-Listed Index	0.03***	0.03***	0.00	0.00	0.20*	0.10	0.07	0.14	0.28***	0.31***
	(0.01)	(0.00)	(0.74)	(0.92)	(0.09)	(0.43)	(0.36)	(0.16)	(0.00)	(0.00)
d(Merger Acquisition)	0.01	0.02	0.01	0.02	0.77	0.68	1.48*	1.34	0.16	0.43
	(0.88)	(0.79)	(0.82)	(0.66)	(0.48)	(0.57)	(0.06)	(0.11)	(0.87)	(0.65)
Three-month Interbank Rate	0.03	0.02	-0.11***	-0.08*	-2.22***	-2.50***	-1.93**	-2.22***	-1.35**	-1.34**
	(0.63)	(0.72)	(0.01)	(0.06)	(0.00)	(0.00)	(0.01)	(0.00)	(0.02)	(0.01)
GDP Growth Rate	0.01	0.01	0.01	0.00	0.26**	0.27**	0.16**	0.18***	0.15*	0.19**
	(0.20)	(0.16)	(0.11)	(0.58)	(0.02)	(0.02)	(0.01)	(0.00)	(0.05)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00
	(0.47)	(0.50)	(0.28)	(0.33)	(0.32)	(0.16)	(0.74)	(0.14)	(0.99)	(0.97)
Constant	0.28	0.31	0.49***	0.45**	13.27***	14.95***	8.43***	11.13***	6.73***	8.58***
	(0.23)	(0.21)	(0.01)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.18	0.15	0.11	0.17	0.20	0.21	0.20	0.12	0.17	0.20
AR2 test (*p*-value)	0.80	0.89	0.92	0.85	0.22	0.20	0.45	0.62	0.36	0.37
Wald tests: $\alpha_1+\alpha_2$	-0.03*	-0.04	-0.05**	-0.07**	0.49*	0.69**	0.32	0.36	0.31	0.51**
$\alpha_1+\beta_1$	-0.12**	-0.08**	-0.02	-0.03	0.49	0.49	0.36	0.33	0.29	0.36
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.04	-0.04*	-0.06**	-0.06**	0.37	0.41	0.20	0.23	0.21	0.33
$\alpha'_1+\alpha'_2$	0.10**	0.06**	0.03	0.04	-0.48	0.25	-0.45	-0.48	-0.42	-0.47*
$\alpha'_1+\beta'_1$	0.03	0.02	0.10**	0.11**	-0.91**	-0.86**	-0.66**	-0.83**	-0.73**	-0.82**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.07**	0.06**	0.05	0.05	-0.49	-0.48	-0.44	-0.46	-0.31	-0.28

Table A56

Bank capitalization and the effect of excess control rights on capital ratio adjustment: control threshold of 20%

This table shows the Blundell and Bond (1998) estimation results on the effect of bank capitalization on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, we compute ownership variables based on a control threshold of 20%. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Undercapitalized)* is a dummy equal to one if the Tier 1 RWA (Tier 1 Total Assets) ratio is less than 6% (4%) and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.07*	-0.05**	-0.04*	0.75**	0.86**	0.45*	0.55**	0.48**	0.66***
	(0.01)	(0.05)	(0.03)	(0.05)	(0.01)	(0.01)	(0.05)	(0.01)	(0.02)	(0.00)
d(Undercapitalized) × *Capital Ratio Surplus* (α_2)	0.02	0.05**	0.01	0.03*	-0.02	-0.45**	-0.01	-0.23*	-0.03	-0.27**
	(0.75)	(0.01)	(0.87)	(0.06)	(0.48)	(0.04)	(0.51)	(0.06)	(0.74)	(0.04)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.09	-0.06	0.03	0.01	-0.45*	-0.44**	-0.23*	-0.18*	-0.17*	-0.20*
	(0.27)	(0.26)	(0.52)	(0.65)	(0.10)	(0.05)	(0.06)	(0.09)	(0.10)	(0.08)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.07	0.05*	0.00	0.03*	0.05	0.16	0.19	-0.10	0.11	-0.03
	(0.55)	(0.05)	(0.25)	(0.10)	(0.43)	(0.21)	(0.40)	(0.35)	(0.63)	(0.56)
Capital Ratio Shortfall (α'_1)	0.09**	0.08**	0.03	0.02	-0.38	-0.10	-0.29	-0.39	-0.40	-0.50**
	(0.02)	(0.01)	(0.40)	(0.18)	(0.23)	(0.35)	(0.44)	(0.17)	(0.12)	(0.03)
d(Undercapitalized) × *Capital Ratio Shortfall* (α'_2)	0.05	0.06*	0.02	0.02	-0.09	0.29	-0.10	-0.05	-0.16	-0.18
	(0.30)	(0.05)	(0.60)	(0.58)	(0.34)	(0.38)	(0.25)	(0.47)	(0.22)	(0.23)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.07**	-0.06**	0.06**	0.04*	-0.30*	-0.48**	-0.39*	-0.19**	-0.42**	-0.10
	(0.01)	(0.02)	(0.04)	(0.05)	(0.05)	(0.01)	(0.05)	(0.03)	(0.02)	(0.19)
d(Undercapitalized) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.04	-0.05	-0.07	-0.00	-0.18	-0.42**	-0.13	-0.28**	0.09	-0.17*
	(0.16)	(0.20)	(0.30)	(0.49)	(0.51)	(0.02)	(0.56)	(0.04)	(0.55)	(0.07)
Lagged dependent variable	0.04	0.03	0.40***	0.36***	0.11***	0.12***	0.12***	0.14***	0.16***	0.17***
	(0.26)	(0.44)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.48***	-0.31*	-0.17*	-0.05	-0.21	-0.61	-1.27	-0.75	-1.58	-2.76*
	(0.00)	(0.05)	(0.07)	(0.49)	(0.92)	(0.77)	(0.38)	(0.59)	(0.32)	(0.06)
d(Undercapitalized)	0.18	0.55***	-0.24**	-0.17**	-2.49	-2.00	-1.41	0.62	-3.30*	-2.37
	(0.39)	(0.00)	(0.03)	(0.04)	(0.24)	(0.37)	(0.37)	(0.69)	(0.08)	(0.19)
Deposits Total Assets	-0.00**	-0.00**	0.00**	0.00*	0.01	-0.01	0.02*	0.02	-0.01	0.00
	(0.01)	(0.02)	(0.05)	(0.07)	(0.51)	(0.76)	(0.09)	(0.15)	(0.69)	(0.78)
Log(Age)	-0.01	-0.02	-0.01	-0.01	-0.41**	-0.31*	-0.31**	-0.30**	-0.32**	-0.23
	(0.39)	(0.24)	(0.55)	(0.61)	(0.02)	(0.08)	(0.01)	(0.02)	(0.04)	(0.15)
d(Rescued Bank)	0.00	0.05	0.00	0.01	1.01	0.96	0.64	0.62	0.98	0.17
	(0.97)	(0.57)	(0.96)	(0.88)	(0.47)	(0.48)	(0.45)	(0.46)	(0.46)	(0.89)
Cross-Listed Index	0.03**	0.03***	0.00	0.00	0.19	0.15	0.10	0.11	0.32***	0.37***
	(0.01)	(0.00)	(0.92)	(0.86)	(0.17)	(0.27)	(0.25)	(0.28)	(0.00)	(0.00)
d(Merger Acquisition)	0.02	0.01	0.05	0.03	0.43	0.02	1.48*	1.64**	0.25	0.54
	(0.81)	(0.93)	(0.27)	(0.57)	(0.71)	(0.99)	(0.06)	(0.05)	(0.80)	(0.60)
Three-month Interbank Rate	0.03	0.04	-0.12***	-0.10**	-2.18***	-2.78***	-2.13**	-2.27***	-1.52**	-1.70***
	(0.55)	(0.54)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.02**	0.01	0.01	0.00	0.25**	0.30***	0.19***	0.23***	0.16*	0.18**
	(0.02)	(0.15)	(0.25)	(0.40)	(0.03)	(0.01)	(0.00)	(0.00)	(0.06)	(0.03)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.00	0.00
	(0.19)	(0.25)	(0.16)	(0.13)	(0.33)	(0.27)	(0.17)	(0.12)	(0.81)	(0.79)
Constant	0.24	0.11	0.70***	0.64***	14.45***	15.92***	10.13***	10.36***	10.36***	10.29***
	(0.33)	(0.69)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.55	0.73	0.69	0.81	0.91	0.86	0.79	0.55	0.88	0.75
AR2 test (*p*-value)	0.92	0.96	0.81	0.98	0.27	0.24	0.51	0.55	0.15	0.16
Wald tests: $\alpha_1+\alpha_2$	-0.06**	-0.02	-0.04*	-0.01	0.73**	0.41	0.44**	0.32	0.45**	0.39
$\alpha_1+\beta_1$	-0.17**	-0.13**	-0.02	-0.03	0.30	0.42	0.22	0.37	0.31	0.46
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.08**	-0.03	-0.01	0.03	0.33	0.13	0.40	0.04	0.39	0.16
$\alpha'_1+\alpha'_2$	0.14**	0.14**	0.05	0.04	-0.47	0.19	-0.39	-0.44	-0.56	-0.68**
$\alpha'_1+\beta'_1$	0.02	0.02	0.09**	0.06**	-0.68**	-0.58**	-0.68**	-0.58**	-0.82**	-0.60**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.03	0.03	0.04**	0.08**	-0.95**	-0.71**	-0.91***	-0.91***	-0.89***	-0.95**

Table A57

Asset structure and the effect of excess control rights on capital ratio adjustment: control threshold of 20%

This table shows the Blundell and Bond (1998) estimation results on the effect of asset structure on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, we compute ownership variables based on a control threshold of 20%. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Lending Oriented)* is a dummy equal to one if the ratio of net loans (excluding interbank loans) to total assets is greater than the median value and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.09***	-0.06**	-0.07**	-0.06**	0.77**	0.86**	0.45**	0.43**	0.45**	0.63***
	(0.00)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.00)
d(Lending Oriented) × *Capital Ratio Surplus* (α_2)	-0.01	-0.03	-0.02	-0.03	0.17	0.10	-0.00	-0.00	0.13	0.12
	(0.20)	(0.21)	(0.20)	(0.29)	(0.23)	(0.15)	(0.36)	(0.45)	(0.35)	(0.29)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.05	-0.02	0.04	0.02	-0.42*	-0.50**	-0.15*	-0.17*	-0.16*	-0.33**
	(0.33)	(0.40)	(0.19)	(0.23)	(0.06)	(0.03)	(0.05)	(0.06)	(0.05)	(0.02)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	0.06	0.04	-0.00	0.01	-0.11	-0.10	-0.05	-0.07	-0.10	-0.10
	(0.22)	(0.15)	(0.37)	(0.35)	(0.22)	(0.24)	(0.31)	(0.31)	(0.19)	(0.20)
Capital Ratio Shortfall (α'_1)	0.12***	0.08**	0.04	0.04	-0.45*	-0.45*	-0.32	-0.28	-0.35	-0.58***
	(0.00)	(0.01)	(0.21)	(0.21)	(0.05)	(0.06)	(0.23)	(0.21)	(0.25)	(0.00)
d(Lending Oriented) × *Capital Ratio Shortfall* (α'_2)	0.03	0.04	0.01	0.01	0.21*	0.24*	-0.03	-0.03	0.03	-0.03
	(0.27)	(0.29)	(0.40)	(0.30)	(0.06)	(0.06)	(0.22)	(0.26)	(0.25)	(0.36)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.09**	-0.04**	0.06*	0.05*	-0.45**	-0.45**	-0.27*	-0.26*	-0.41*	-0.12
	(0.01)	(0.01)	(0.05)	(0.06)	(0.01)	(0.01)	(0.05)	(0.08)	(0.08)	(0.30)
d(Lending Oriented) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.03	-0.04	-0.03	-0.02	-0.05	-0.08	-0.28**	-0.30**	-0.08	-0.06
	(0.20)	(0.31)	(0.35)	(0.39)	(0.45)	(0.44)	(0.04)	(0.03)	(0.22)	(0.40)
Lagged dependent variable	0.04	0.03	0.42***	0.37***	0.10***	0.12***	0.13***	0.14***	0.16***	0.16***
	(0.24)	(0.45)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.52***	-0.48***	-0.15	-0.05	-0.66	-0.48	-0.21	-0.71	-0.97	-2.94*
	(0.00)	(0.01)	(0.14)	(0.62)	(0.77)	(0.82)	(0.89)	(0.62)	(0.57)	(0.07)
d(Lending Oriented)	-0.14	0.02	0.15	0.18**	-0.10	1.30	0.22	2.85***	-1.11	3.05**
	(0.23)	(0.88)	(0.10)	(0.03)	(0.95)	(0.42)	(0.83)	(0.01)	(0.42)	(0.03)
Deposits Total Assets	-0.00**	-0.00**	0.00*	0.00**	0.01	-0.01	0.03**	0.02*	-0.00	0.01
	(0.03)	(0.04)	(0.10)	(0.02)	(0.67)	(0.73)	(0.02)	(0.07)	(0.98)	(0.56)
Log(Age)	-0.02	-0.02	-0.00	-0.00	-0.42**	-0.23	-0.31**	-0.22*	-0.24*	-0.27*
	(0.39)	(0.17)	(0.87)	(0.78)	(0.02)	(0.16)	(0.01)	(0.06)	(0.09)	(0.09)
d(Rescued Bank)	0.02	0.01	0.03	0.04	1.66	1.46	0.92	0.27	0.26	0.47
	(0.85)	(0.92)	(0.66)	(0.61)	(0.18)	(0.30)	(0.29)	(0.73)	(0.83)	(0.70)
Cross-Listed Index	0.03***	0.04***	0.00	0.01	0.19	0.15	0.02	0.04	0.31***	0.27***
	(0.00)	(0.00)	(0.75)	(0.42)	(0.15)	(0.34)	(0.80)	(0.67)	(0.00)	(0.01)
d(Merger Acquisition)	0.08	0.05	0.01	0.01	0.31	0.49	1.95**	1.54**	0.02	0.06
	(0.30)	(0.56)	(0.84)	(0.77)	(0.79)	(0.67)	(0.02)	(0.05)	(0.98)	(0.95)
Three-month Interbank Rate	0.02	0.03	-0.12***	-0.12***	-1.76***	-2.04***	-2.13**	-2.42***	-1.79**	-2.18***
	(0.65)	(0.53)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
GDP Growth Rate	0.01*	0.01	0.00	0.00	0.26**	0.28***	0.21***	0.24***	0.15*	0.20***
	(0.05)	(0.14)	(0.36)	(0.48)	(0.02)	(0.01)	(0.00)	(0.00)	(0.06)	(0.01)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.02*	0.01	0.00	0.01
	(0.31)	(0.22)	(0.19)	(0.21)	(0.50)	(0.33)	(0.06)	(0.21)	(0.96)	(0.60)
Constant	0.11	0.24	0.73***	0.77***	12.66***	14.47***	9.94***	12.91***	9.30***	13.36***
	(0.66)	(0.32)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.14	0.15	0.20	0.21	0.38	0.56	0.21	0.28	0.30	0.27
AR2 test (*p*-value)	0.85	0.90	0.90	0.87	0.27	0.26	0.57	0.56	0.13	0.15
Wald tests: $\alpha_1+\alpha_2$	-0.10**	-0.09**	-0.09**	-0.09**	0.94**	0.96**	0.45**	0.43**	0.58**	0.75**
$\alpha_1+\beta_1$	-0.14**	-0.08**	-0.03	-0.04	0.35	0.36	0.30	0.26	0.29	0.30
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.09**	-0.07**	-0.05	-0.06	0.41	0.36	0.25	0.19	0.32	0.32
$\alpha'_1+\alpha'_2$	0.15**	0.12**	0.05	0.05	-0.24	-0.21	-0.35	-0.31	-0.32	-0.61**
$\alpha'_1+\beta'_1$	0.03	0.04	0.10**	0.09**	-0.90**	-0.90**	-0.59**	-0.54**	-0.76**	-0.70**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.03	0.04	0.08**	0.08**	-0.74**	-0.74**	-0.90**	-0.87***	-0.81**	-0.79**

Table A58

Bank size and the effect of excess control rights on capital ratio adjustment: control threshold of 20%

This table shows the Blundell and Bond (1998) estimation results on the effect of bank size on the relationship between excess control rights and capital ratio adjustment for a sample of 341 European commercial banks (2,204 observations) over the 2002–2010 period. For robustness, we compute ownership variables based on a control threshold of 20%. In all the regressions, the target capital ratio is obtained by estimating a partial adjustment model [Eq. (3)] using the Blundell and Bond (1998) estimation method. The target capital ratio is Tier 1 capital divided by total assets (*Tier 1 Total Assets*) in Columns 1, 3, 5, 7, and 9 and Tier 1 capital divided by risk-weighted assets (*Tier 1 RWA*) in Columns 2, 4, 6, 8, and 10. *Δ Tier 1* is the annual change in Tier 1 capital less current retained earnings divided by average assets. *Retained Earnings* is current net income less current dividend payment divided by average assets. *Δ Assets*, *Δ Loans*, and *Δ RWA* are, respectively, the annual changes in total assets, net loans (excluding interbank loans), and risk-weighted assets divided by average assets. We define average assets as (total assets at time *t* + total assets at time *t*-1) / 2. *Capital Ratio Surplus* and *Capital Ratio Shortfall* denote the absolute value of the gap between the fitted target and the lagged Tier 1 ratios when the bank is above or below its target respectively, and zero otherwise. *d(Large Bank)* is a dummy equal to one if the bank's total assets is above the median value and zero otherwise. *d(Excess Control Rights)* is a dummy equal to one if control rights are greater than cash-flow rights and zero otherwise. The definition of other variables is provided in Table 4. Country and year dummies are included but not reported. *Hansen test* is a test of exogeneity of all instruments as a group. *AR2 test* is a test of the absence of second order residual autocorrelation. *p-values* based on robust standard errors are shown in parentheses. *, ** and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Capital adjustment				Assets adjustment					
Dependent variable	*Δ Tier 1*		*Retained Earnings*		*Δ Assets*		*Δ Loans*		*Δ RWA*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Ratio Surplus (α_1)	-0.08**	-0.05**	-0.08**	-0.04*	0.82**	0.87**	0.41*	0.45**	0.52**	0.62**
	(0.01)	(0.04)	(0.02)	(0.06)	(0.02)	(0.01)	(0.07)	(0.01)	(0.02)	(0.02)
d(Large Bank) × *Capital Ratio Surplus* (α_2)	-0.02	-0.03	0.01	-0.03	0.09	0.03	0.03	-0.00	0.18	0.16
	(0.47)	(0.66)	(0.18)	(0.41)	(0.63)	(0.76)	(0.63)	(0.81)	(0.41)	(0.22)
d(Excess Control Rights) × *Capital Ratio Surplus* (β_1)	-0.03	-0.02	0.05	0.01	-0.39**	-0.45**	-0.12*	-0.19**	-0.19*	-0.36*
	(0.79)	(0.39)	(0.28)	(0.83)	(0.02)	(0.05)	(0.08)	(0.04)	(0.09)	(0.08)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Surplus* (β_2)	-0.03	-0.02	-0.03	0.03	-0.11	-0.04	-0.06	-0.03	-0.06	-0.06
	(0.49)	(0.85)	(0.35)	(0.47)	(0.29)	(0.65)	(0.79)	(0.46)	(0.23)	(0.19)
Capital Ratio Shortfall (α'_1)	0.13***	0.12***	0.03	0.04	-0.32	-0.10	-0.35	-0.35	-0.39	-1.10***
	(0.00)	(0.00)	(0.40)	(0.13)	(0.18)	(0.47)	(0.33)	(0.12)	(0.14)	(0.00)
d(Large Bank) × *Capital Ratio Shortfall* (α'_2)	0.02	0.02	0.01	-0.00	-0.15	-0.10	-0.07	-0.07	-0.10	-0.07
	(0.52)	(0.21)	(0.83)	(0.64)	(0.59)	(0.45)	(0.22)	(0.82)	(0.20)	(0.35)
d(Excess Control Rights) × *Capital Ratio Shortfall* (β'_1)	-0.06***	-0.05***	0.04*	0.03*	-0.32**	-0.64**	-0.29*	-0.23**	-0.31*	-0.07
	(0.00)	(0.00)	(0.06)	(0.07)	(0.03)	(0.02)	(0.06)	(0.04)	(0.09)	(0.16)
d(Large Bank) × *d(Excess Control Rights)* × *Capital Ratio Shortfall* (β'_2)	-0.04**	-0.05***	-0.03*	-0.03*	-0.39**	-0.37*	-0.52**	-0.37**	-0.36**	-0.07
	(0.02)	(0.00)	(0.06)	(0.06)	(0.05)	(0.05)	(0.05)	(0.03)	(0.02)	(0.39)
Lagged dependent variable	0.03	0.03	0.40***	0.38***	0.11***	0.12***	0.12***	0.13***	0.18***	0.16***
	(0.35)	(0.43)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
d(Excess Control Rights)	-0.39***	-0.54***	-0.12	-0.06	-0.21	-1.19	-1.01	-1.49	-1.94	-3.43**
	(0.00)	(0.00)	(0.22)	(0.55)	(0.90)	(0.57)	(0.39)	(0.32)	(0.15)	(0.02)
d(Large Bank)	-0.17	-0.11	-0.19*	-0.00	-3.10	-1.41	-1.98	-1.63	-6.44***	-5.08***
	(0.39)	(0.46)	(0.06)	(1.00)	(0.13)	(0.42)	(0.15)	(0.22)	(0.00)	(0.00)
Deposits Total Assets	-0.00**	-0.00**	0.00**	0.00*	-0.00	-0.02	0.01	0.01	-0.02	-0.01
	(0.02)	(0.02)	(0.05)	(0.09)	(0.97)	(0.44)	(0.52)	(0.39)	(0.27)	(0.64)
Log(Age)	-0.02	-0.02	-0.00	-0.00	-0.26	-0.18	-0.20*	-0.19	-0.11	-0.06
	(0.34)	(0.17)	(0.90)	(0.82)	(0.13)	(0.28)	(0.07)	(0.14)	(0.47)	(0.73)
d(Rescued Bank)	0.03	0.01	0.01	0.02	2.07*	1.26	1.26	0.74	0.80	0.72
	(0.72)	(0.95)	(0.92)	(0.79)	(0.08)	(0.31)	(0.10)	(0.32)	(0.48)	(0.59)
Cross-Listed Index	0.02*	0.03**	0.01	0.00	0.11	0.04	0.03	0.06	0.19*	0.22**
	(0.09)	(0.01)	(0.51)	(0.92)	(0.42)	(0.78)	(0.73)	(0.54)	(0.06)	(0.04)
d(Merger Acquisition)	0.03	0.06	0.05	0.03	0.40	0.29	1.49**	1.47*	0.19	0.01
	(0.70)	(0.47)	(0.28)	(0.60)	(0.73)	(0.81)	(0.05)	(0.06)	(0.85)	(0.99)
Three-month Interbank Rate	0.01	0.03	-0.12***	-0.10***	-1.99***	-1.88**	-2.13***	-2.42***	-1.89***	-1.72***
	(0.78)	(0.56)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
GDP Growth Rate	0.02**	0.01	0.00	0.00	0.22**	0.27**	0.18***	0.23***	0.14*	0.18**
	(0.04)	(0.13)	(0.44)	(0.68)	(0.04)	(0.02)	(0.01)	(0.00)	(0.09)	(0.02)
Stock Traded	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
	(0.33)	(0.25)	(0.30)	(0.29)	(0.60)	(0.48)	(0.13)	(0.19)	(0.68)	(0.36)
Constant	0.37	0.33	0.72***	0.61***	15.93***	13.25***	10.96***	11.96***	14.17***	11.86***
	(0.13)	(0.21)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen test (*p*-value)	0.17	0.10	0.23	0.21	0.28	0.39	0.28	0.26	0.23	0.47
AR2 test (*p*-value)	0.87	0.86	0.84	0.90	0.27	0.21	0.54	0.53	0.15	0.17
Wald tests: $\alpha_1+\alpha_2$	-0.10**	-0.08**	-0.07**	-0.07**	0.91**	0.90**	0.44**	0.45**	0.70**	0.78**
$\alpha_1+\beta_1$	-0.11**	-0.07**	-0.03	-0.03	0.43	0.42	0.29	0.26	0.33	0.26
$\alpha_1+\alpha_2+\beta_1+\beta_2$	-0.16**	-0.12**	-0.05	-0.03	0.41	0.41	0.26	0.23	0.45	0.36
$\alpha'_1+\alpha'_2$	0.15**	0.14**	0.04	0.04	-0.47	-0.20	-0.42	-0.42	-0.49	-1.17**
$\alpha'_1+\beta'_1$	0.07*	0.07*	0.07**	0.07**	-0.64**	-0.74**	-0.64**	-0.58**	-0.70**	-1.17**
$\alpha'_1+\alpha'_2+\beta'_1+\beta'_2$	0.05	0.04	0.05	0.04	-1.18**	-1.21**	-1.23**	-1.02**	-1.16**	-1.31***