

Can Supervisors Enforce Transparent Reporting When The Rules Leave Room for Management Discretion?

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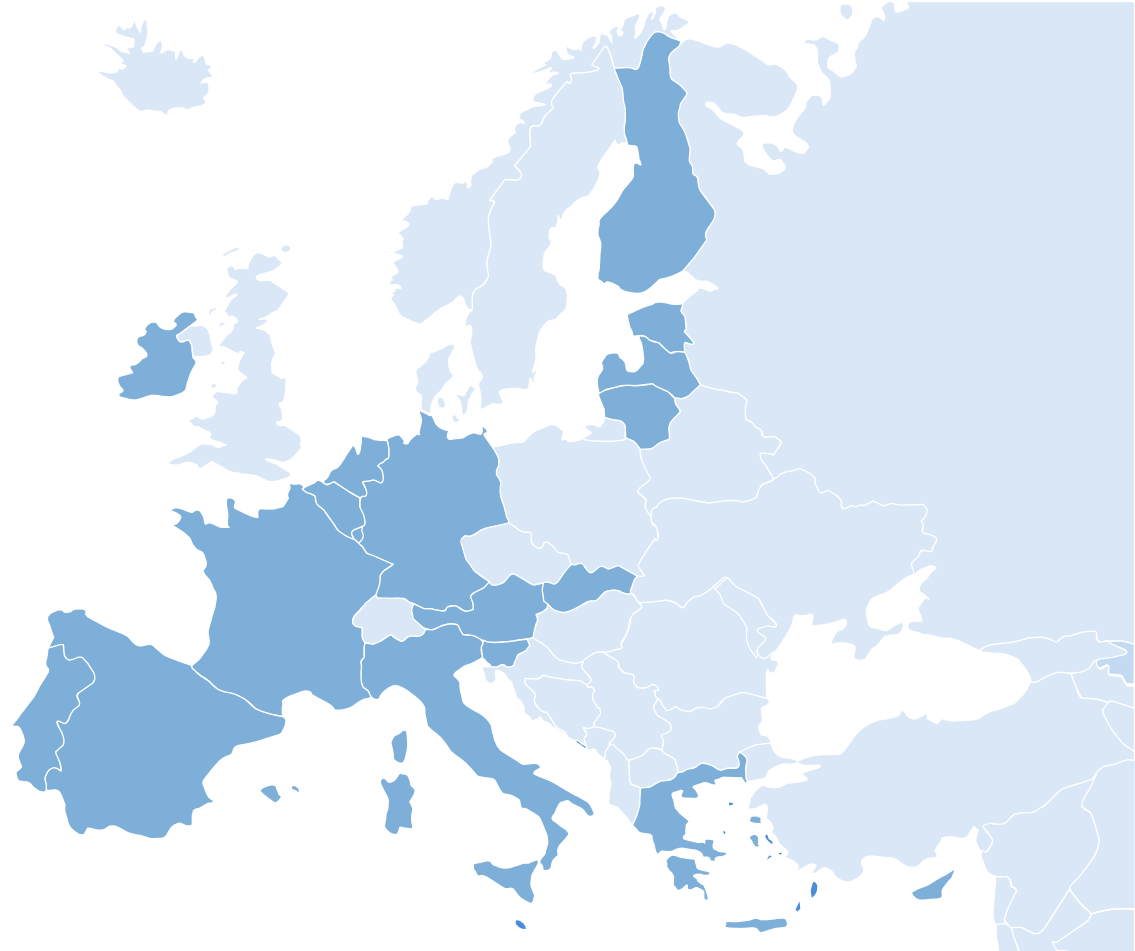
Overview

Can supervisors enforce transparent reporting if managers use discretion within the boundaries of accounting rules?

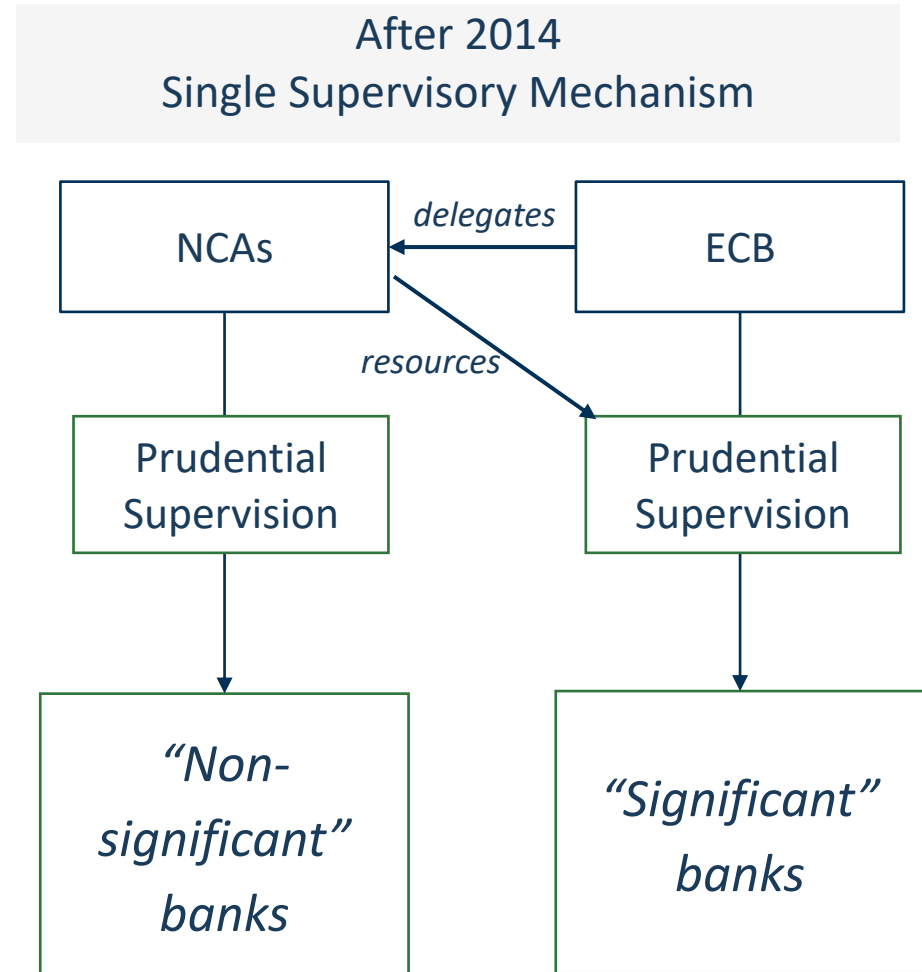
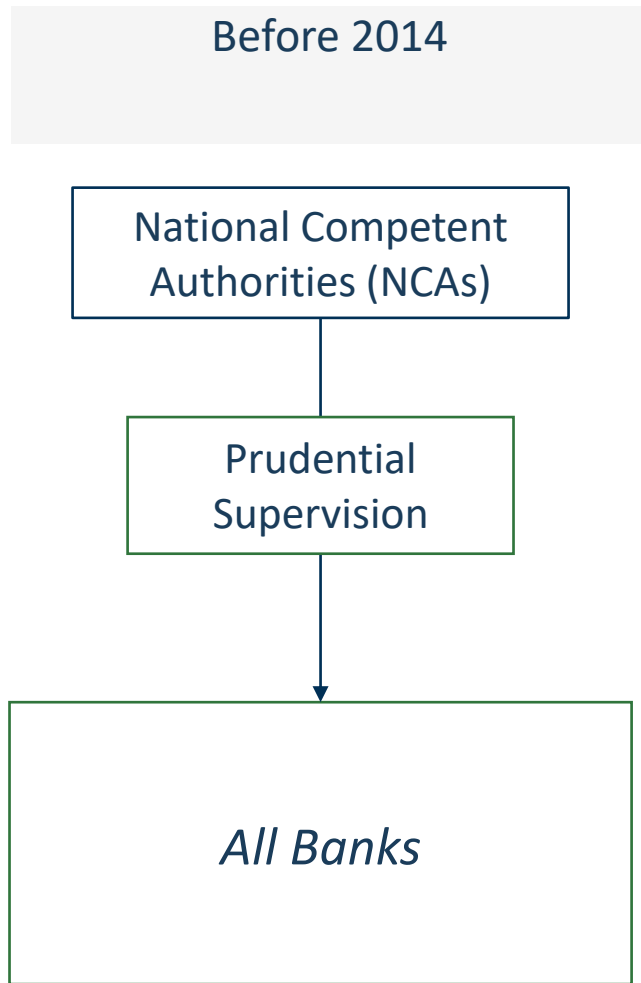
- Formal enforcement not an option when discretion used within the boundaries of accounting rules
- Unclear whether informal supervisory tools can push banks to adjust their reporting behavior in line with the supervisor's reporting preference, particularly under dual supervision
- Informal supervisory actions, and reporting preferences, are generally unobservable, but Asset Quality Review (AQR) reveals differences in local enforcement outcomes and ECB preferences
- SSM shifted supervisory responsibility to the ECB for significant Eurozone banks
- Before the ECB assessed with the AQR the audited financial statements of SSM banks and published the findings

Setting: SSM

- In 2014 the ECB took over the supervision of 120 significant banks in the Eurozone from national regulators
- Significant bank:
 - >30bn total assets, or
 - Among country's three largest institutions, or
 - Significant cross-border activities



Setting: SSM



Setting: AQR

- Extensive balance sheet review
- >6,000 staff involved
- Harmonize measurement of banks' risk exposures
- **Loan loss provisions, collateral valuations, classification of non-performing loans, level 3 fair values**
- Increase quality of public information on these exposures

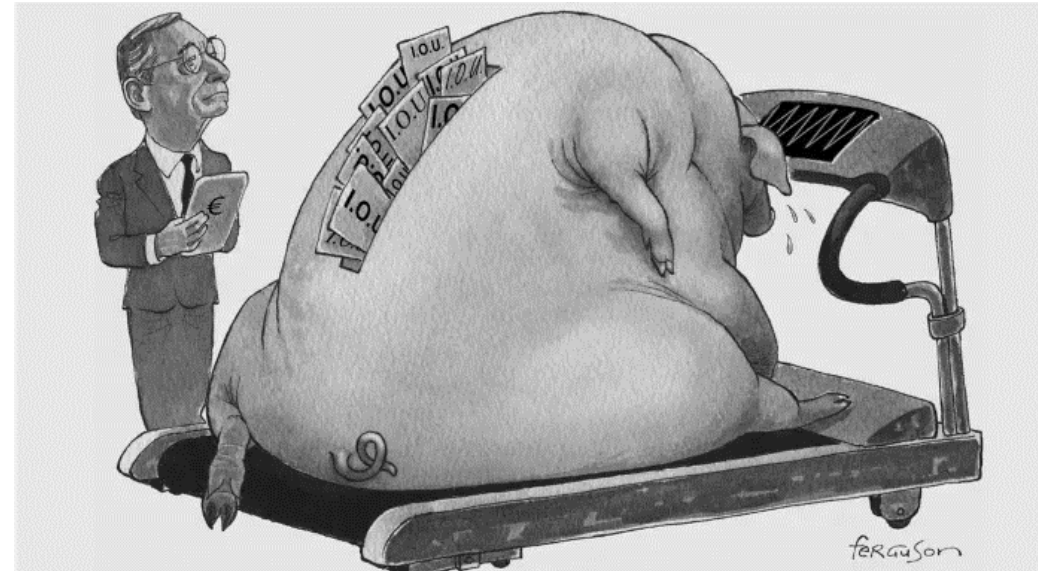
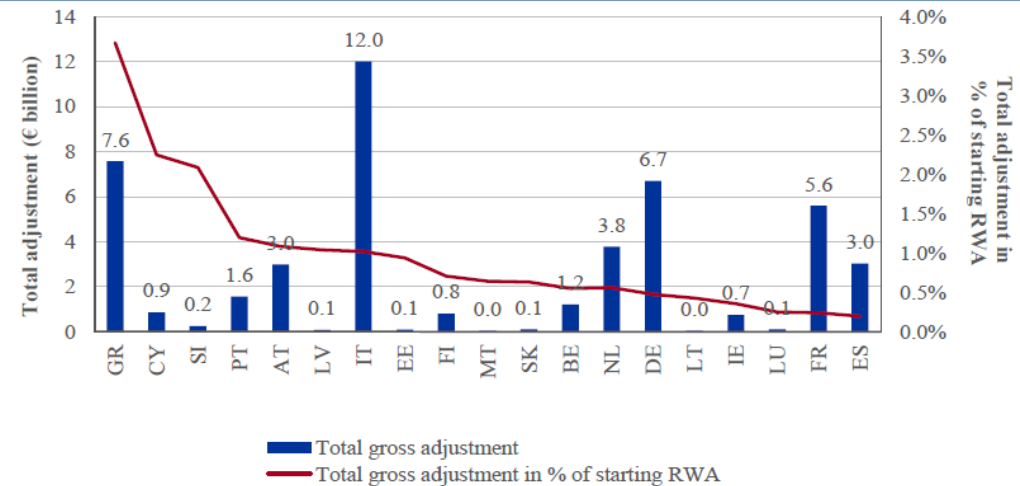


Figure 1 Gross AQR adjustment by country of participating bank



Setting: AQR

→
AQR breakdown

↓
Asset class breakdown

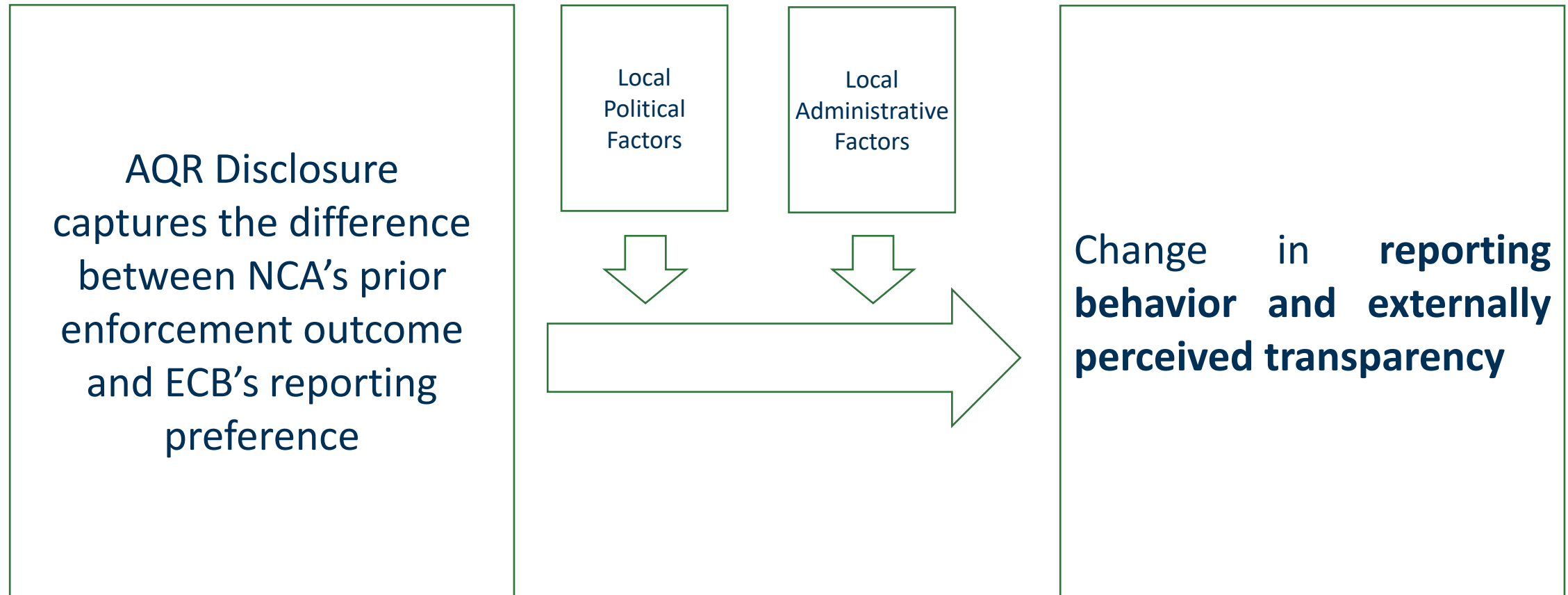
D1	Total credit exposure
D2	Sovereigns and Supranational non-governmental organisations
D3	Institutions
D4	Retail
D5	<i>thereof SME</i>
D6	<i>thereof Residential Real Estate (RRE)</i>
D7	<i>thereof Other Retail</i>
D8	Corporates
D9	Other Assets

Units of Measurement

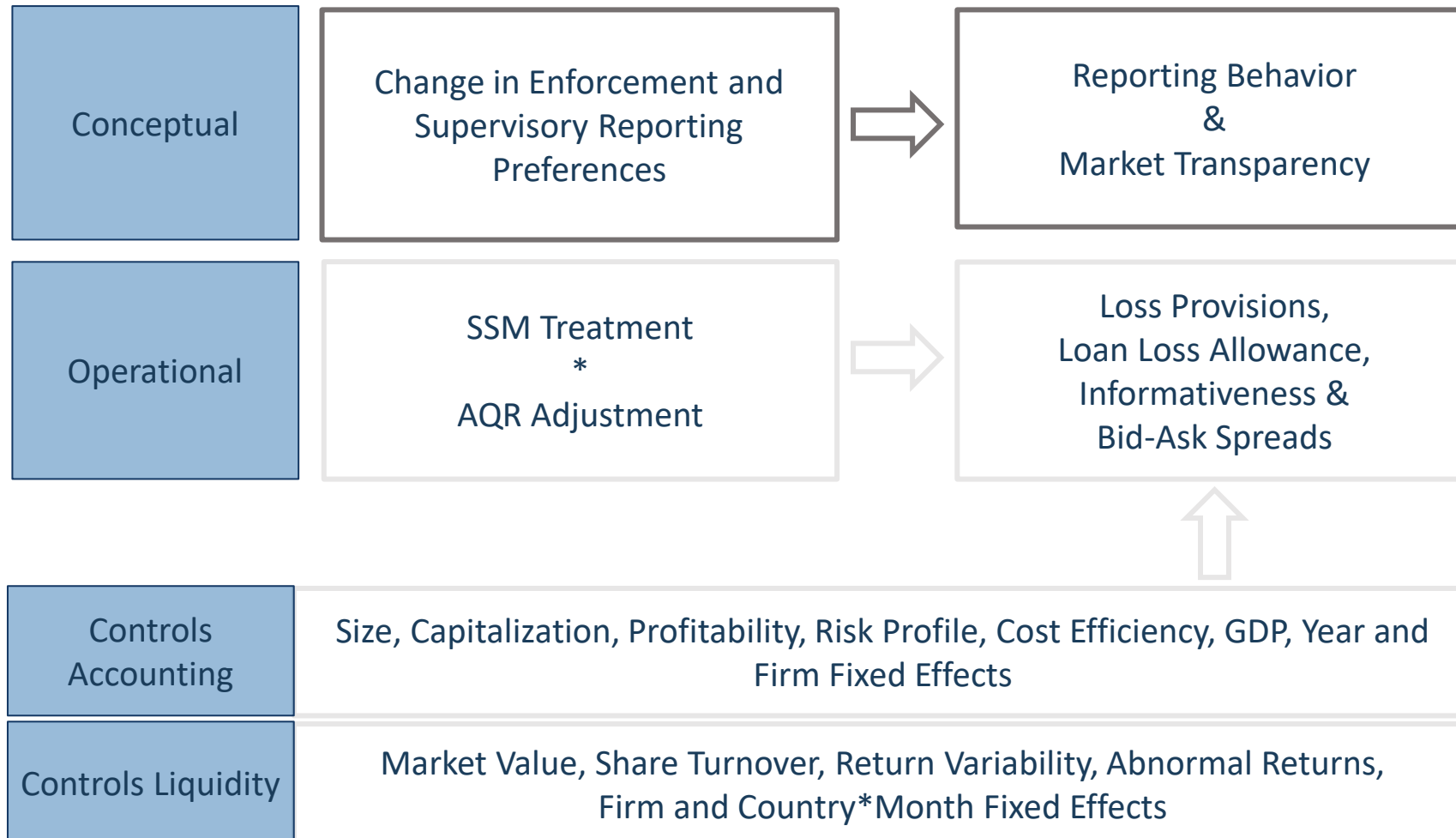
D.A Credit Risk RWA year end 2014 ²	D.B Portfolio selected in Phase 1	D.C Adjustments to provisions on sampled files		D.D Adjustments to provisions due to projection of findings		D.E Adjustment to provisions due to collective provisioning review		D.F Impact on CET1 capital before any offsetting impact	
		Basis Points	Mill. EUR	Basis Points	Mill. EUR	Basis Points	Mill. EUR	Basis Points	Mill. EUR
Mill. EUR	% of RWA selected in Phase 1								
9,291.00	40 - 60%	79	78.36	4	3.64	40	39.78	-122	-121.78
311.00	0%	0	0.00	0	0.00	0	0.00	0	0.00
469.00	0%	0	0.00	0	0.00	0	0.00	0	0.00
2,280.00	40 - 60%	0	0.00	0	0.00	12	12.41	-12	-12.41
558.00	40 - 60%					10	9.88	-10	-9.88
744.00	20 - 40%	0	0.00	0	0.00	2	1.75	-2	-1.75
978.00	40 - 60%					1	0.78	-1	-0.78
5,989.00	60 - 80%	79	78.36	4	3.64	27	27.37	-110	-109.37
242.00	0%	0	0.00	0	0.00	0	0.00	0	0.00

² D1 Total credit exposure includes securitisations

Hypotheses



Empirical Strategy



Research Design

$$\begin{aligned}
 \text{Loss_Recognition} = & \beta_0 + \beta_1 \text{SSM_Treated} + \beta_2 \text{SSM_Treated} * \text{AQR} + \sum \beta_i \text{Controls}_i \\
 & + \sum \beta_j \text{Fixed Effects}_j + \varepsilon
 \end{aligned}
 \tag{1}$$



AQR

AQR adjustment: Disclosed additionally required loan loss provision scaled by loan loss allowance

Controls
Accounting

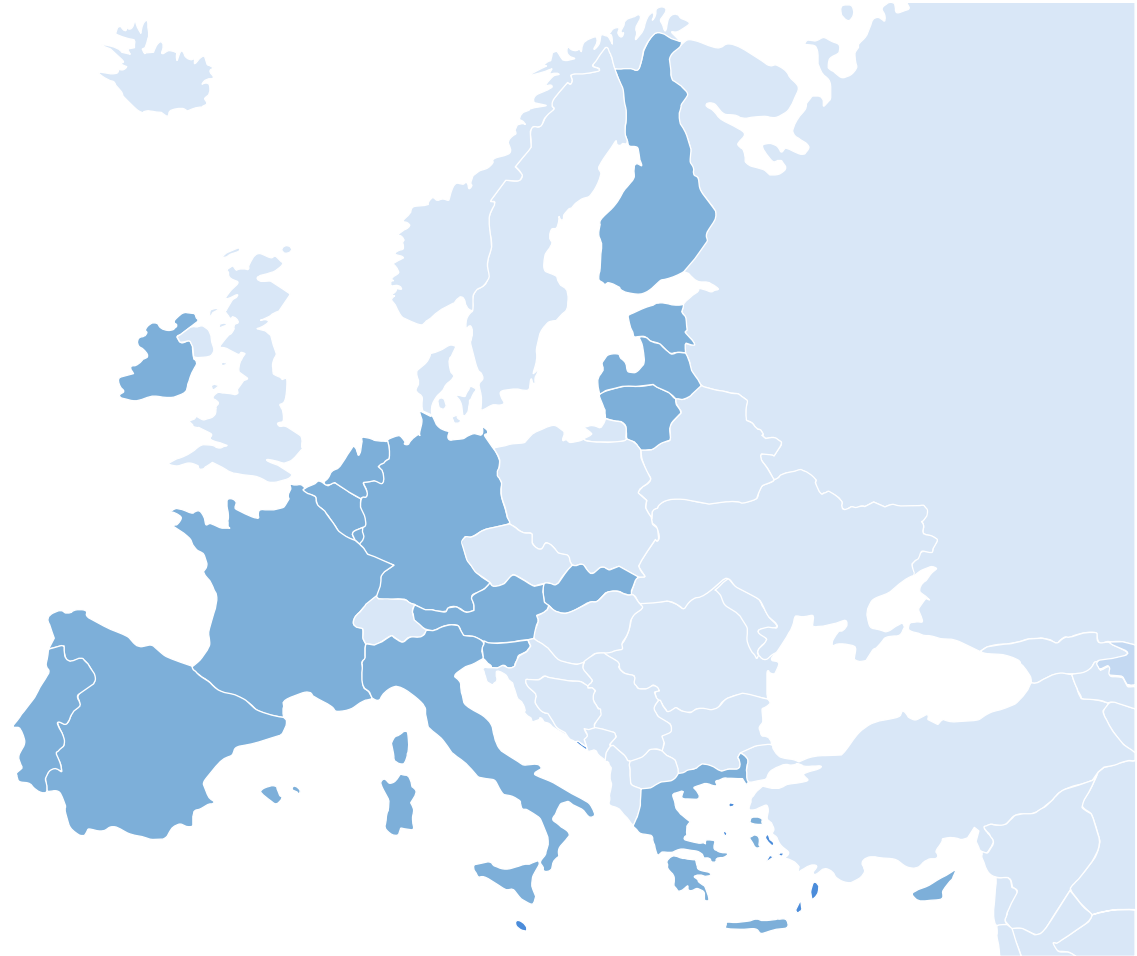
Size, Capitalization, Profitability, Risk Profile, Cost Efficiency, GDP

Fixed Effects

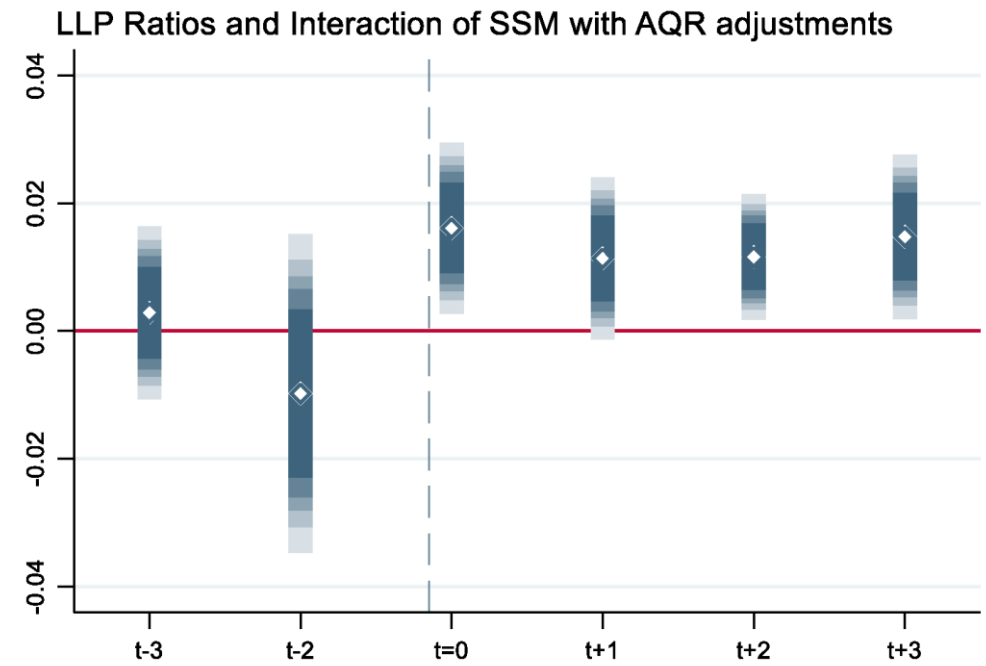
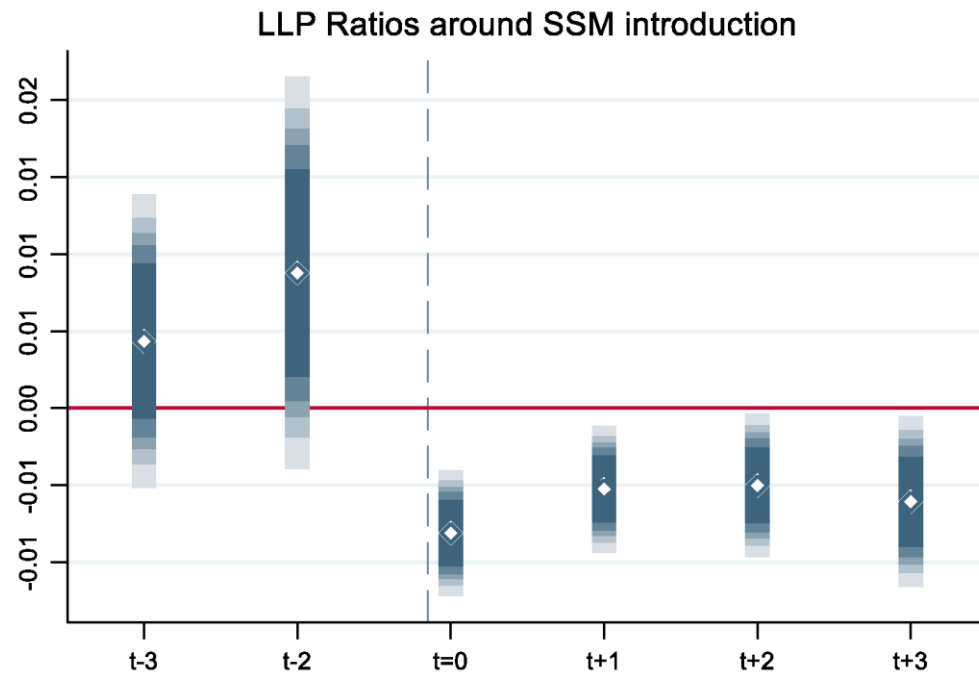
Year and Firm Fixed Effects

Sample

- 102 treatment banks with AQR data and under SSM supervision
- 612 European control banks
 - that are at least as large as the smallest treatment bank (Gropp et al., RFS 2019)
- Robustness: Entropy balanced Matched Sample, Fuzzy RDD
- Sample period **2011-2017**
- Data
 - Capital IQ
 - Eikon (Datastream)
 - AQR data from the ECB



Parallel Trends and Effect Timing



Accounting Outcomes

Table 3: Loan loss reporting following the introduction of the SSM

Dependent Variable:	(1) <i>LLP</i>	(2) <i>LLP</i>	(3) <i>LLA</i>	(4) <i>LLA</i>
Test Variables				
<i>SSM Treated</i>	-0.002* (0.054)	-0.005*** (0.002)	-0.009** (0.012)	-0.017*** (0.000)
<i>SSM Treated*AQR</i>		0.017*** (0.002)		0.044*** (0.004)
Control variables				
<i>Tier 1</i>	-0.002 (0.803)	-0.002 (0.772)	-0.095*** (0.000)	-0.096*** (0.000)
<i>Size</i>	0.006*** (0.000)	0.005*** (0.000)	-0.013*** (0.005)	-0.013*** (0.004)
<i>Cost-to-Income</i>	-0.006** (0.039)	-0.006** (0.025)	0.009 (0.191)	0.008 (0.264)
<i>RoA</i>	0.113 (0.127)	0.107 (0.149)	1.001*** (0.000)	0.986*** (0.000)
<i>GDP</i>	-0.101*** (0.000)	-0.097*** (0.000)	0.113** (0.038)	0.124** (0.021)
<i>RWA</i>	0.000 (0.919)	0.000 (0.998)	-0.051*** (0.000)	-0.052*** (0.000)
Fixed Effects	Year, Firm	Year, Firm	Year, Firm	Year, Firm
N	3,577	3,577	3,577	3,577
Adj. R ²	0.510	0.513	0.797	0.798

Cross-Sectional Variation in Accounting Outcomes

Table 4: Institutional characteristics and reporting behavior around the SSM

<i>Split Variable</i>	Institutional Resources and Power			Institutional Capture		
	(1) <i>High Regulatory Quality</i>	(2) <i>High Government Efficiency Quality</i>	(3) <i>High Resources (Staff)</i>	(4) <i>Country Level Forbearance</i>	(5) <i>Fiscal Constraints</i>	(6) <i>Anti EU Party</i>
Dependent Variable:	<i>LLP</i>	<i>LLP</i>	<i>LLP</i>	<i>LLP</i>	<i>LLP</i>	<i>LLP</i>
<i>SSM Treated</i>	-0.009*** (0.006)	-0.009*** (0.006)	-0.005*** (0.003)	-0.004** (0.011)	-0.003** (0.048)	-0.002 (0.162)
<i>SSM Treated * AQR</i>	0.045*** (0.006)	0.038*** (0.004)	0.034** (0.013)	0.011** (0.011)	0.005* (0.080)	0.002 (0.344)
<i>SSM Treated * Split</i>	0.006 (0.187)	0.005 (0.178)	0.004** (0.047)	-0.007 (0.244)	-0.002 (0.373)	-0.005 (0.126)
<i>SSM Treated * AQR * Split</i>	-0.036** (0.035)	-0.029** (0.043)	-0.032** (0.023)	0.041* (0.096)	0.017* (0.062)	0.021** (0.036)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Year, Firm	Year, Firm	Year, Firm	Year, Firm	Year, Firm	Year, Firm
N	3,577	3,577	2,506	3,576	3,231	1,896
Adj. R ²	0.515	0.515	0.513	0.514	0.506	0.589

Cross-Sectional Variation in Accounting Outcomes

<i>Split Variable</i>	Cooperation		
	(1) <i>Central Bank Supervisor</i>	(2) <i>Small GAAP Difference</i>	(3) <i>ECB Top vs. Bottom Contributor</i>
Dependent Variable:	<i>LLP</i>	<i>LLP</i>	<i>LLP</i>
<i>SSM Treated</i>	-0.003* (0.050)	0.000 (0.924)	-0.003** (0.040)
<i>SSM Treated * AQR</i>	0.005* (0.084)	0.003 (0.538)	0.004 (0.225)
<i>SSM Treated * Split</i>	-0.004 (0.165)	-0.006** (0.036)	-0.005** (0.049)
<i>SSM Treated * AQR * Split</i>	0.025** (0.039)	0.021** (0.043)	0.029** (0.046)
Controls	Yes	Yes	Yes
Fixed Effects	Year, Firm	Year, Firm	Year, Firm
N	3,576	2,873	2,008
Adj. R ²	0.513	0.521	0.502

LLAs and Future Loss-Realization

Table 6: Informativeness of loan loss provisions about future loan charge-offs

Dependent Variable:	(1) <i>CO</i>	(2) <i>CO_{t+1}</i>	(2) <i>CO_{t+2}</i>
<i>SSM Treated</i>	0.002 (0.530)	-0.001 (0.691)	0.005* (0.056)
<i>SSM Treated * LLA</i>	-0.097 (0.326)	-0.022 (0.766)	-0.098 (0.228)
<i>SSM Treated * AQR</i>	-0.021* (0.055)	-0.012 (0.257)	-0.023* (0.075)
<i>SSM Treated * LLA * AQR</i>	0.852** (0.045)	0.839* (0.074)	1.570*** (0.001)
<i>LLA * AQR</i>	-1.035** (0.029)	-1.000** (0.031)	-0.610* (0.079)
Controls	Yes	Yes	Yes
Fixed Effects	Year, Firm	Year, Firm	Year, Firm
N	768	621	487
Adj. R ²	0.522	0.499	0.492

Market Liquidity

Table 8: Changes in market liquidity following the introduction of the SSM

Dependent Variable:	(1)	(2)
	<i>Log(Bid-Ask Spread)</i>	<i>Log(Bid-Ask Spread)</i>
Test Variables:		
<i>SSM Treated</i>	-0.185* (0.054)	-0.037 (0.741)
<i>SSM Treated * AQR</i>	–	-0.865** (0.037)
Control Variables:		
<i>Log(Market Value_{t-12})</i>	-0.117** (0.038)	-0.111* (0.052)
<i>Log(Share Turnover_{t-12})</i>	-0.057** (0.015)	-0.062*** (0.009)
<i>Log(Return Variability_{t-12})</i>	0.025 (0.568)	0.032 (0.459)
<i>Abs(Abnormal Stock Return_t)</i>	0.250 (0.115)	0.253 (0.113)
Fixed Effects	Firm, Country*Month	Firm, Country*Month
N	5,565	5,565
Adj. R ²	0.922	0.922

Conclusion

- The switch to a European supervisor and the disclosure of the AQR adjustments significantly affected the reporting behavior and market liquidity of affected banks
- Banks with larger AQR adjustments increased their loan loss provisions and allowances more relative to other SSM banks
- Banks that are subject to the greatest shift in the institutional strength and with NCA's that are likely to foster cooperation between NCA and ECB exhibit the strongest increase in bank transparency

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Thank you for your attention

