Is the Comprehensive Assessment really comprehensive?

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Abstract

Analysing the database made available by ECB and EBA, we evaluate the Comprehensive Assessment (CA) - Asset Quality Review (AQR) and Stress Test (ST) - of banks carried out in 2014. In a nutshell, the main results are:

- i) risk-adjusted capital ratios are negatively related to AQR shortfalls, but not to CA shortfalls, whereas leverage ratios always play a significant role:
- ii) CA is predominantly concentrated on traditional credit activity rather than on banks' financial assets;
- iii) CA seems to be characterized by double standards. Non-core countries were penalized by the AQR, medium-sized banks were either more risky or were penalized in both exercises and the use of national discretion in capital requirements and state aid did not help mostly peripheral countries to pass the assessment.

The analysis leads to a puzzle: comparatively, the assessment per se led to significant adjustments for solid banks and to large shortfalls for weak banks. The puzzle can be resolved by referring to the legacy of country's former supervisory activity and to the low level of capitalization of weak banks in peripheral countries in particular.

1. CA constituents





AQR and ST exercises have different goals:

- AQR to define a level playing field in Euro area, basis for ECB supervision
- ✓ ST to determine the soundness of banks' balance sheets

2. CA in numbers

- Finland:3 (0)
- √ 130 banks for AQR (103 banks for ST) in 19 countries;
- √ €22 tr in assets, 81.6% of euro system under SSM;
- √ €5.5 tr in RWA;

- Latvia:3 (0) Lithuania:3 (0)
- Ireland:5 (0.9)

Estonia:3 (0)

NL:7 (0.0) B:6 (0.5) Germany:25 (0.2)

Malta:3 (0)

Lux:6 (0) Slovakia:3 (0.0) Austria:6 (0.9) France:

Portugal:3 (1.1)

Spain:15 (0)

Slovenia:3 (0.1) Italy:15 Greece:4 (8.7)

banks in EA country

(9.7)Cyprus:4 (2.4)

- ✓ 25 banks with capital deficit, Shortfalls (SF) for €24.6 bn;
- ✓ Adj. for €47.5 bn (AQR, €43 bn for credit) + €215 bn (adv.scenario ST).

3. Reference model

We focus on AQR SF & CA SF considering a set of exogenous variables:

$$SF_i = k + \beta_1 \cdot cet_i + \beta_2 \cdot \ln A_i + \beta_3 \cdot \ln^2 A_i + \beta_4 \cdot npe_i + \beta_5 \cdot cr_i + \beta_6 \cdot sys_i + \beta_7 \cdot mktCap_j + \gamma'\underline{X} + \epsilon_i$$

- ✓ cet: common equity Tier 1 ratio
- ✓ Ir (leverage ratio): equity over total assets
- √ npe: non-performing credit exposure over total exposure
- √ cr (quality indicator of balance sheet): cover ratio for npe
- ✓ sys (national champion): ratio of bank's assets over country GDP
- ✓ mktCap: stock exchange capitalization over GDP (country index)

4. Main results: Shortfalls

Depend.	1	II	III	IV	V	VI	VII	VIII
variable	SF_AQR	SF_AQR	SF_AQR	SF_AQR	SF_CA	SF_CA	SF_CA	SF_CA
cet	-0.098***	-0.099***	-	- cet	-0.071	-0.079	-	-
	[0.027]	[0.020]			[0.046]	[0.049]		
lr	-	-	-0.188***	-0.194***	-	-	-0.617***	-0.652***
			[0.059]	[0.057]			[0.148]	[0.143]
lasset	0.615***	0.786**	0.873	1.143**	1.750**	1.841**	1.574	1.663
	[0.188]	[0.343]	[0.605]	[0.560]	[0.805]	[0.872]	[0.987]	[1.089]
lasset ²	-0.060**	-0.082	-0.13	-0.174**	-0.195**	-0.222**	-0.2	-0.229
	[0.025]	[0.052]	[0.094]	[0.083]	[0.098]	[0.110]	[0.123]	[0.142]
npe	0.021**	0.031***	0.054***	0.065***	0.096***	0.100***	0.153***	0.160***
	[0.009]	[0.011]	[0.012]	[0.018]	[0.035]	[0.036]	[0.033]	[0.031]
cr	-0.010*	-0.019***	-0.012*	-0.022**	-0.020**	-0.020*	0.006	0.006
	[0.005]	[0.006]	[0.007]	[0.009]	[0.010]	[0.011]	[0.009]	[0.011]
sys	-0.005*	-0.012***	-0.008***	-0.015***	-0.013	-0.019*	-0.016**	-0.023***
	[0.003]	[0.004]	[0.002]	[0.004]	[0.009]	[0.010]	[0.007]	[0.008]
mktCap	-0.010**	-0.018***	-0.016**	-0.024***	-0.026**	-0.034**	-0.038***	-0.050***
	[0.004]	[0.005]	[0.007]	[0.007]	[0.012]	[0.014]	[0.010]	[0.013]
level3	-0.087	-0.149*	-0.044	-0.057	0.057	0.041	0.019	-0.03
	[0.071]	[0.079]	[0.059]	[0.067]	[0.129]	[0.126]	[0.112]	[0.110]
Drestr.	-	0.696***	-	0.737***	-	1.041*	-	1.207**
		[0.234]		[0.273]		[0.592]		[0.518]
Dirb	-	-0.196*	-	-0.216	-	0.255	-	0.085
		[0.099]		[0.152]		[0.496]		[0.396]
const.	-0.082	0.135	-0.214	-0.047	-2.768	-2.515	-0.533	-0.026
	[0.359]	[0.546]	[1.013]	[1.077]	[1.775]	[1.977]	[1.904]	[2.048]
sigma	0.279***	0.206***	0.404***	0.357***	1.338***	1.287***	1.020***	0.933***
	[0.068]	[0.029]	[0.071]	[0.053]	[0.255]	[0.236]	[0.159]	[0.117]
F statist.								
(pValue)	0	0	0	0	0.004	0.005	0	0
Uncens.	16	16	16	16	25	25	25	25

Notes: 129 Obs. Tobit estimator. Cluster-robust standard errors appear in parentheses

Relevant (for SF)

Non-relevant (for SF)

✓ cet for CA as a whole

- leverage ratio is an important indicator
- ✓ level 3 ✓ IRB
- most significant SF for medium size banks
 - systemic role of a bank
- a well developed financial market
- ratio of npe (balanced by a high cr)

5. Further results

✓ Core vs non Core (Tables 8-9 in the paper):

Interactions: Ir, npe, sys. Differences (significant at 1% level) in AQR & CA

√ Adjustments (Table 10 in the paper):

AQR: Weak evidence of bank-specific factors affecting the adjustment

CA: More severe for solid banks than banks in weak conditions (!)

✓ National discretions (Table 11 in the paper):

National heterogeneity in bank supervision at the root of CA's results

6. Policy Implications

- ✓ CA: an important step towards a level playing field in the banking sector;
- ✓ ...however too concentrated on credit activity rather than financial assets;
- √ reinforcement of regulation on state aid at EU level: a positive change;
- √ focus of new Basel III rules on leverage ratio: an appropriate choice.

Bibliography Sketch

- V. Acharya, R. Engle and D. Pierret (2014) Testing macroprudential stress tests: the risk of regulatory risk weights, Journal of Monetary Economics, 65: 36-53 V. Acharya and S. Steffen (2014) Benchmarking the European Central Bank's asset quality
- review and stress test: a tale of two leverage ratios, VOX (November)
- F. Betz, S. Oprica, T. Peltonen and P. Sarlin (2013) Predicting distress in European banks, J. of Banking & Finance, 45: 225-241
- V. Le Leslé and S. Avramova (2012) Revisiting risk-weighted assets, IMF working paper, 12/90.
- M. Mariathasan and O. Merrouche (2014) The manipulation of Basel risk weights, Journal of Financial Intermediation, 23: 300-321.

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