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Moody's Views on Non Performing Loans (NPLs)

EIFR Workshop, Paris

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Agenda

1. Asset quality in Moody's Banks methodology
2. Asset quality metrics have materially improved at large EU banks
3. EU minimum provisioning requirements are designed to operate as a backstop

1

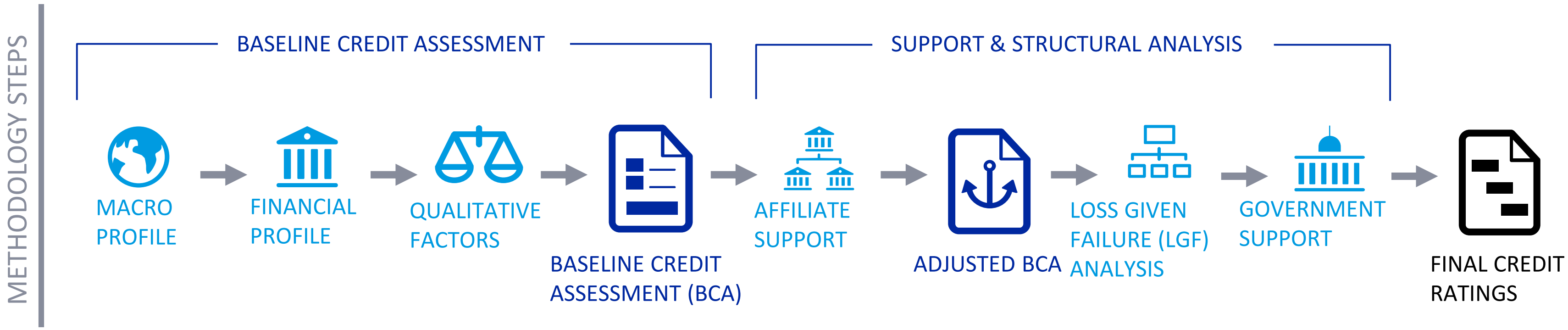
Asset quality in Moody's Banks methodology

NPLs have numerous implications for banks' metrics

- Dampen net interest income
- Augment credit cost
- Surge in funding cost
- Induce additional capital requirement (higher risk weighted assets)
- Increase operational costs to collect NPLs
- Reduce ability to lend

Baseline Credit Assessment (BCA)

- **Baseline Credit Assessment (BCA):** The BCA reflects Moody's assessment of the GRI's standalone strength – its ability to service and repay outstanding debt without recourse to extraordinary support from the supporting government.
- **Applicable Methodology:** When assigning a BCA, standalone strength is evaluated using the published sector-specific methodology that is most suitable for the predominant activities of the GRI (e.g. banks or non-bank financial companies).
- **Uplift:** Having assigned a BCA, we then determine the GRI's debt rating, including any uplift due to systemic support



BASELINE CREDIT ASSESSMENT

BCA COMPONENTS:

- **Macro Profile:** Captures the bank's operating and economic environment
- **Financial Profile:** Captures the bank's financial health, gauging key solvency and liquidity ratios, together with Macro Adjusted Scores and judgments, creating a forward looking assessment
- **Qualitative Factors:** Adjust Financial Profile to reflect non-financial qualitative judgments

SUPPORT & STRUCTURAL ANALYSIS

SUPPORT & STRUCTURAL ANALYSIS:

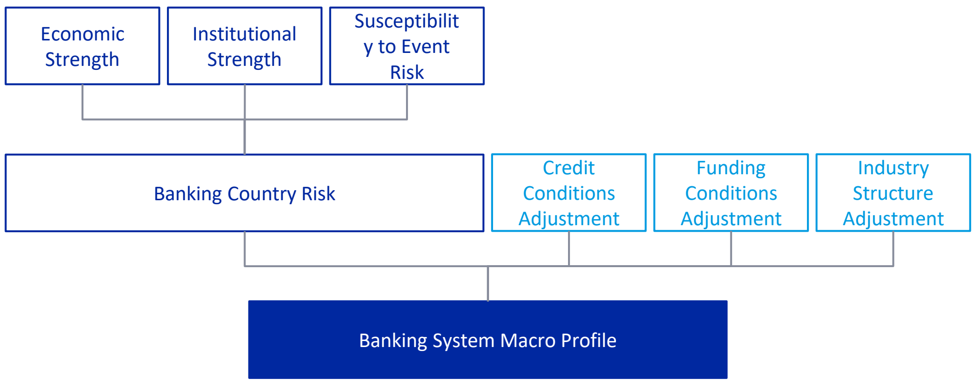
- **Affiliate Support:** Adjusts the BCA to capture the likelihood of affiliate support from parent and/or cooperative group support, resulting in the Adjusted BCA
- **The Loss Given Failure (LGF) Analysis:** Captures the risks different creditors are exposed to in the event of the bank's failure, absent government support
- **Government Support:** Captures the extent to which risk to each creditor class is mitigated by public support and adds uplift at the instrument class level

Deriving the macro profile

The Macro Profile captures the bank's operating and economic environment

BANKING SYSTEM MACRO PROFILE

Each Banking System Macro Profile is a combination of the individual Banking Country Risk (drawn from our sovereign analysis) and banking system specific adjustments (the strength of a sovereign may not correlate with the strength of the banking system)



CREDIT CONDITIONS: High levels of debt or rapid credit expansion can signal credit-quality problems that emerge later

FUNDING CONDITIONS: Banks are highly vulnerable to withdrawals of funding following loss of market confidence; in interconnected systems a problem with one institution can be swiftly transmitted to another through counterparty exposures

INDUSTRY STRUCTURE: Structural characteristics may indicate strengths or vulnerabilities such as irrational pricing, weak underwriting standards or triggers of rapid credit expansion

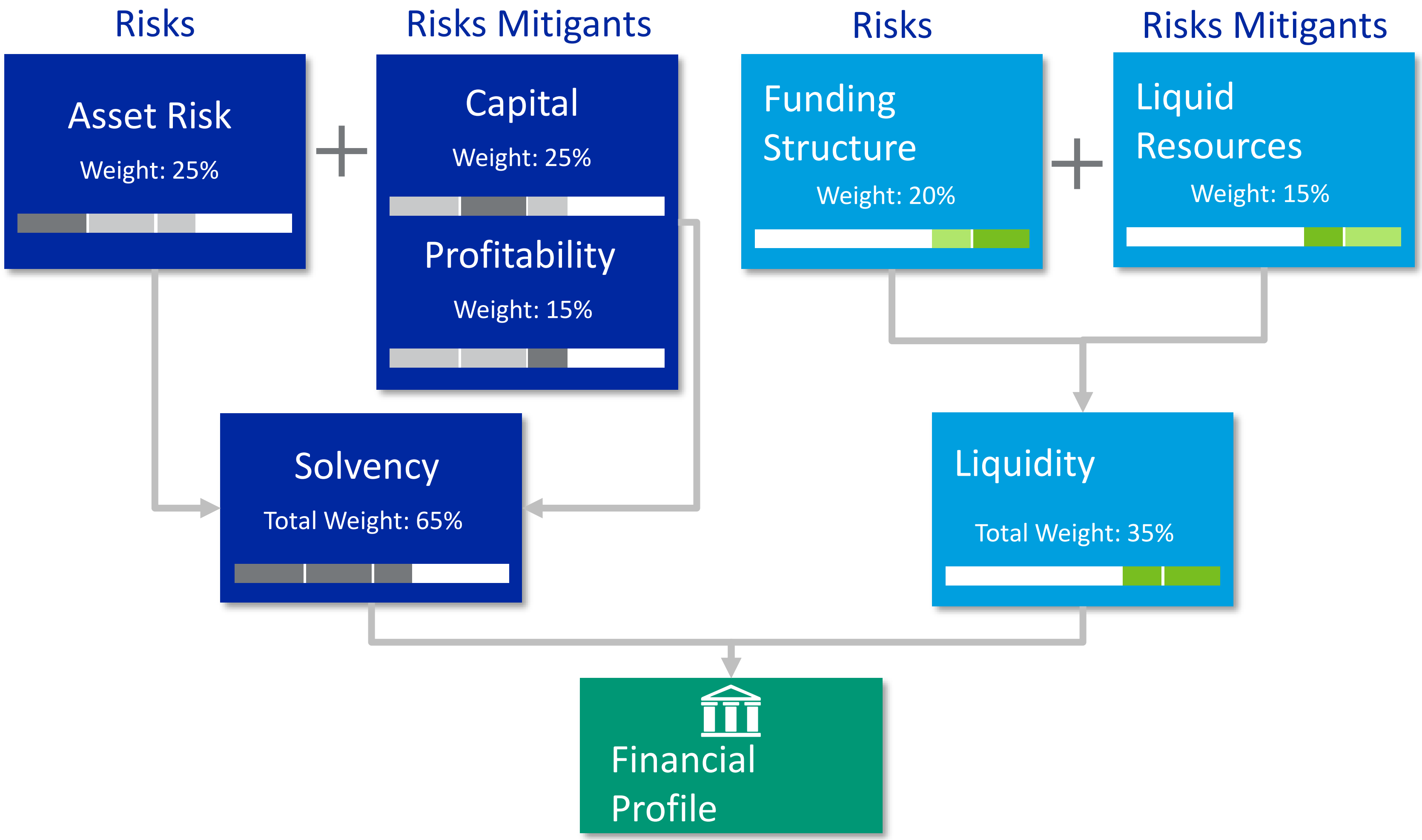
BANK'S MACRO PROFILE

BANK SPECIFIC MACRO PROFILE:

- Each bank's Macro Profile reflects the mix of its activity and each conditioned financial score therefore incorporates this assessment
- Where a bank operates in a range of countries, the applicable Macro Profile will usually be a weighted average of the Macro Profiles of the principal Banking Systems in which the bank operates
- We typically weight the individual profiles by balance-sheet presence in each system, as measured either by Total Assets, Exposure at Default or by Revenues

Financial factors

Our assessment of a bank's financial profile is structured around key risks and their mitigants



Financial factor scores

FINANCIAL FACTOR RATIOS

CATEGORIES

	VS+	VS	VS-	S+	S	S-	M+	M	M-	W+	W	W-	VW+	VW	VW-
ASSET RISK	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	>
Problem Loans / Gross Loans	0.5%	0.75%	1.0%	1.5%	2.0%	3.0%	4.0%	5.0%	6.0%	8.0%	10.0%	15.0%	20.0%	25.0%	25.0%
CAPITAL	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	<
TCE / RWAs (Basel I)	19.7%	17.7%	15.8%	14.8%	13.8%	12.8%	11.8%	10.8%	9.9%	8.9%	7.9%	6.9%	5.9%	4.9%	4.9%
TCE / RWAs (Basel II)	20.7%	18.6%	16.6%	15.5%	14.5%	13.5%	12.4%	11.4%	10.4%	9.3%	8.3%	7.2%	6.2%	5.2%	5.2%
TCE / RWAs (Basel III)	20.0%	18.0%	16.0%	15.0%	14.0%	13.0%	12.0%	11.0%	10.0%	9.0%	8.0%	7.0%	6.0%	5.0%	5.0%
PROFITABILITY	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	<
Net Income / Tangible Assets	2.5%	2.25%	2.0%	1.75%	1.5%	1.25%	1.0%	0.75%	0.5%	0.375%	0.25%	0.125%	0.0%	-1.0%	-1.0%
FUNDING STRUCTURE	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	>
Market Funds / Tangible Banking Assets	2.5%	3.75%	5.0%	7.5%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	60.0%	70.0%	70.0%
LIQUID RESOURCES	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	<
Liquid Banking Assets / Tangible Banking Assets	70.0%	60.0%	50.0%	40.0%	35.0%	30.0%	25.0%	20.0%	15.0%	10.0%	7.5%	5.0%	3.75%	2.5%	2.5%

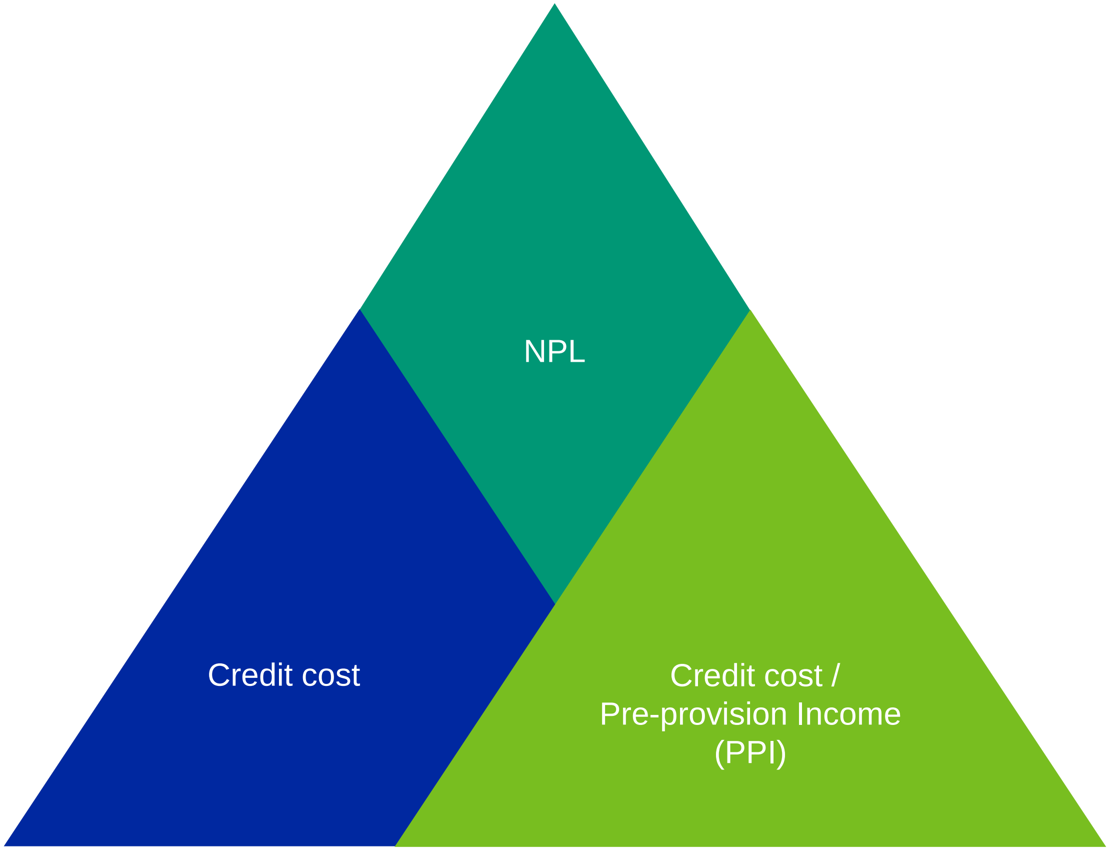
FINANCIAL FACTOR SCORES

MACRO PROFILE		VS+	VS	VS-	S+	S	S-	M+	M	M-	W+	W	W-	VW+	VW	VW-
VERY STRONG +	(VS+)	aaa	aaa	aa1	aa1	aa2	aa3	a1	a3	baa1	baa2	ba1	ba3	b2	caa1	caa3
VERY STRONG	(VS)	aaa	aa1	aa1	aa2	aa3	a1	a2	a3	baa1	baa3	ba1	ba3	b2	caa1	caa3
VERY STRONG -	(VS-)	aa1	aa1	aa2	aa2	aa3	a1	a2	baa1	baa2	baa3	ba2	b1	b2	caa1	caa3
STRONG +	(S+)	aa1	aa2	aa2	aa3	a1	a2	a3	baa1	baa2	ba1	ba2	b1	b3	caa1	caa3
STRONG	(S)	aa2	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba3	b1	b3	caa1	caa3
STRONG -	(S-)	aa3	aa3	a1	a2	a3	a3	baa2	baa3	ba1	ba2	ba3	b2	b3	caa2	caa3
MODERATE +	(M+)	a1	a1	a2	a3	a3	baa1	baa2	baa3	ba2	ba3	b1	b2	b3	caa2	caa3
MODERATE	(M)	a2	a2	a3	baa1	baa1	baa2	baa3	ba1	ba2	ba3	b1	b3	caa1	caa2	caa3
MODERATE -	(M-)	a3	a3	baa1	baa2	baa3	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3
WEAK +	(W+)	baa1	baa2	baa2	baa3	ba1	ba2	ba2	ba3	b1	b2	b3	b3	caa1	caa2	caa3
WEAK	(W)	baa2	baa3	ba1	ba1	ba2	ba3	ba3	b1	b2	b3	b3	caa1	caa2	caa2	caa3
WEAK -	(W-)	baa3	ba1	ba2	ba3	ba3	b1	b2	b2	b3	b3	caa1	caa1	caa2	caa2	caa3
VERY WEAK +	(VW+)	ba1	ba3	ba3	b1	b2	b2	b3	b3	caa1	caa1	caa2	caa2	caa2	caa3	caa3
VERY WEAK	(VW)	ba3	b1	b2	b3	b3	caa1	caa1	caa1	caa2	caa2	caa2	caa2	caa3	caa3	caa3
VERY WEAK -	(VW-)	b1	b3	caa1	caa1	caa2	caa2	caa2	caa3	caa3	caa3	caa3	caa3	caa3	caa3	caa3

2

Asset quality metrics have materially improved at large EU banks

Asset quality through three metrics



The level of problem loans has materially improved between 2013 and 2018

NPL ratios at the largest EU banks at year-end 2013, 2017 and 2018
Problem loans / Gross Loans (%)

Source: Moody's Financial Metrics

Cost of risk has also trended down between 2013 and 2018

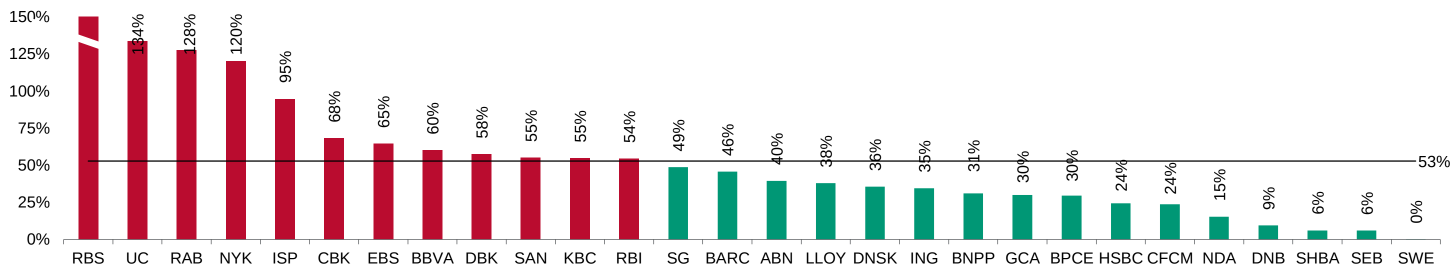
Cost of risk at the largest EU banks at year-end 2013, 2017 and 2018
Loan Loss Provisions / Average Gross Loans (bps)

Source: Moody's Financial Metrics

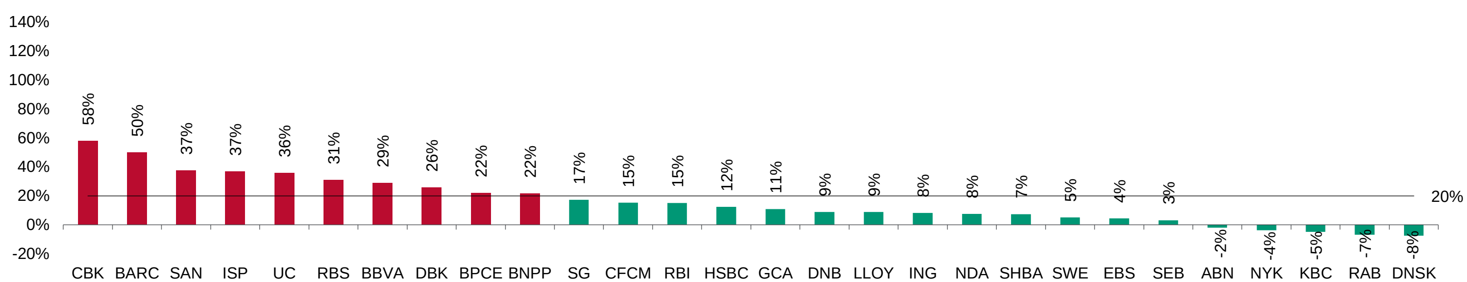
Credit costs relative to banks' PPI also markedly declined between 2013 and 2018

Credit costs over PPI at the largest EU banks at year-end 2013, 2017 and 2018
Loan Loss Provisions / Pre Provision Income (%)

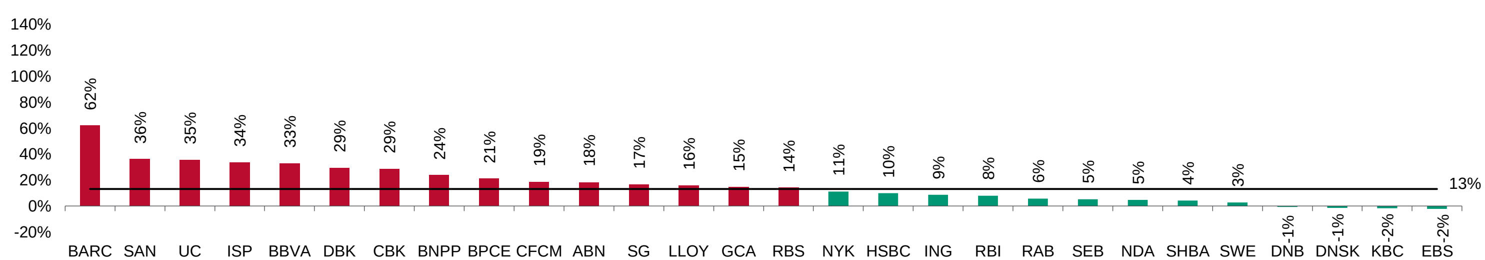
2013



2017



2018

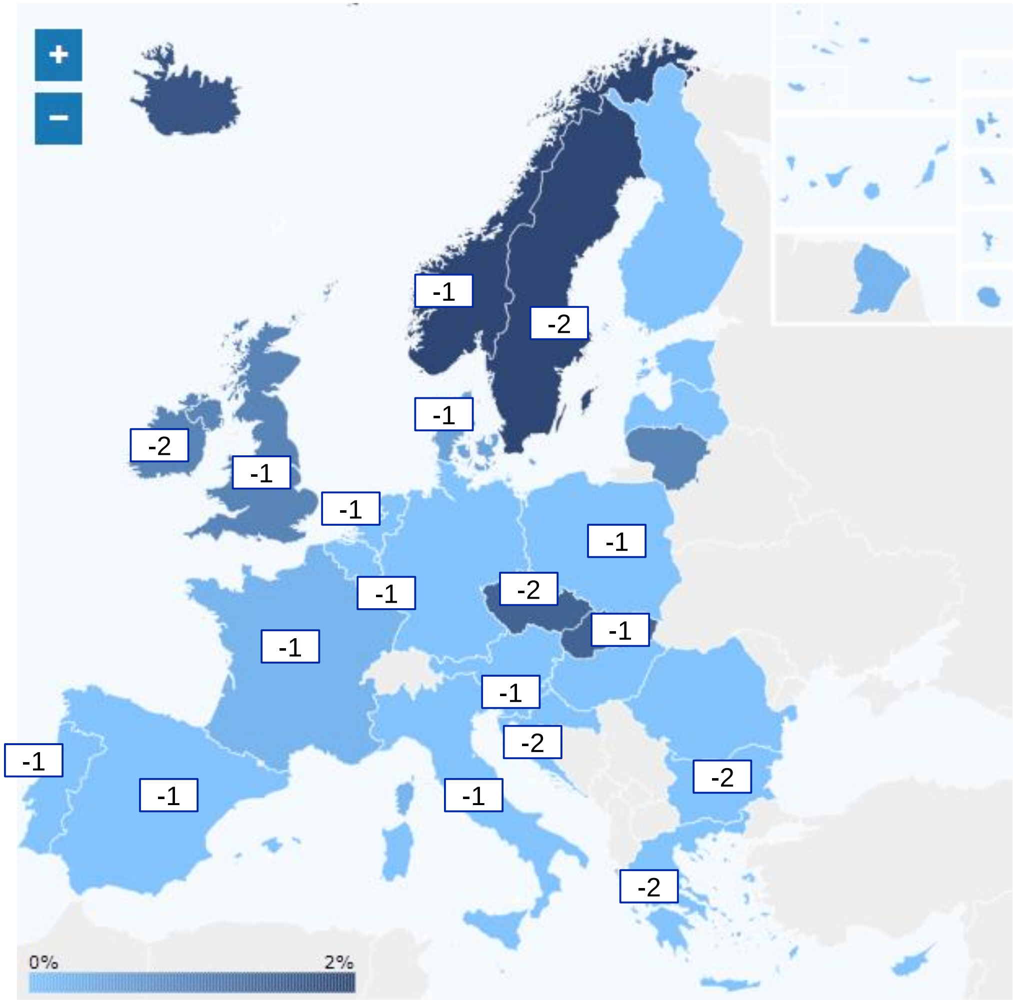


Source: Moody's Financial Metrics

Yet risks are building

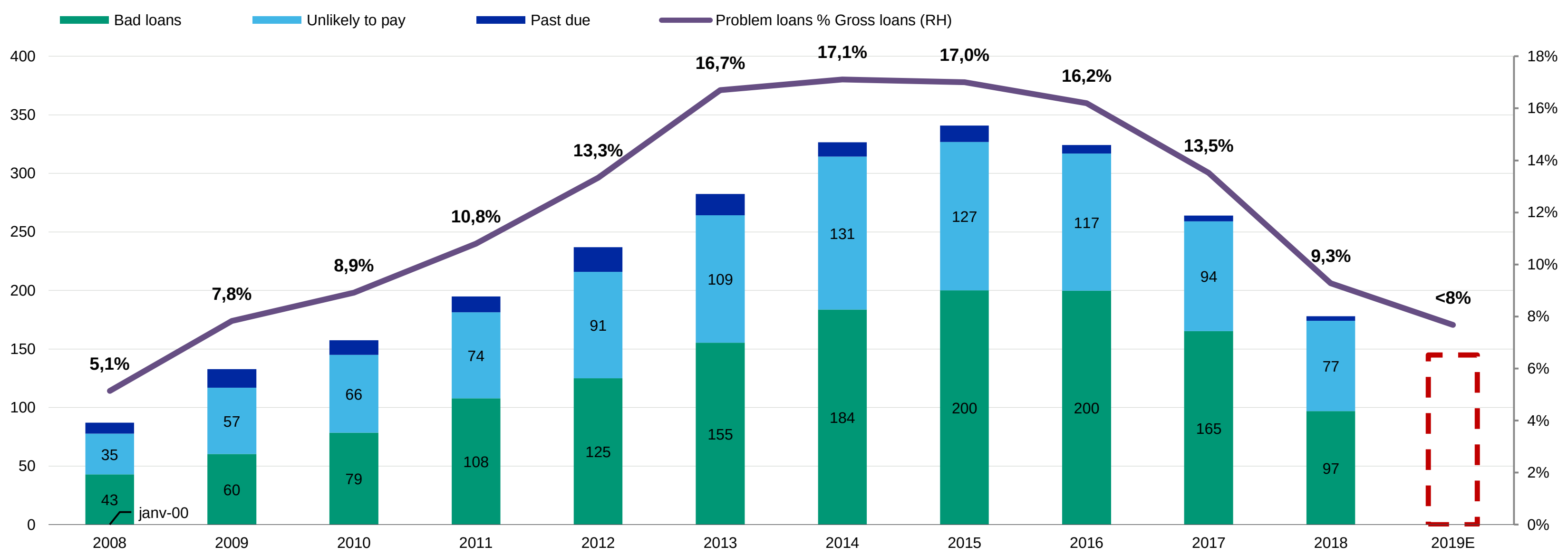
Counter-cyclical buffers and credit condition adjustments

- » A negative adjustment for credit conditions applies in almost all countries where a CCyB applies or is expected to apply in 2020.
- » Forthcoming CCyB:
  - – Luxembourg: 0.25% (Jan. 2020)
  - – Germany: 0.25% (July 2020)
  - – Belgium: 0.5% (July 2020)



Source: European Systemic Risk Board, Moody's Investors Service

Italian banks' NPLs still above EU average



Source: Moody's Investors Service, Bank of Italy

3

EU minimum provisioning requirements are designed to operate as a backstop

What is the NPL regulation’s rationale ?

1 2008’s crisis: « Too little too late »

2 Under IFRS 9 credit cost is estimated on a forward looking basis

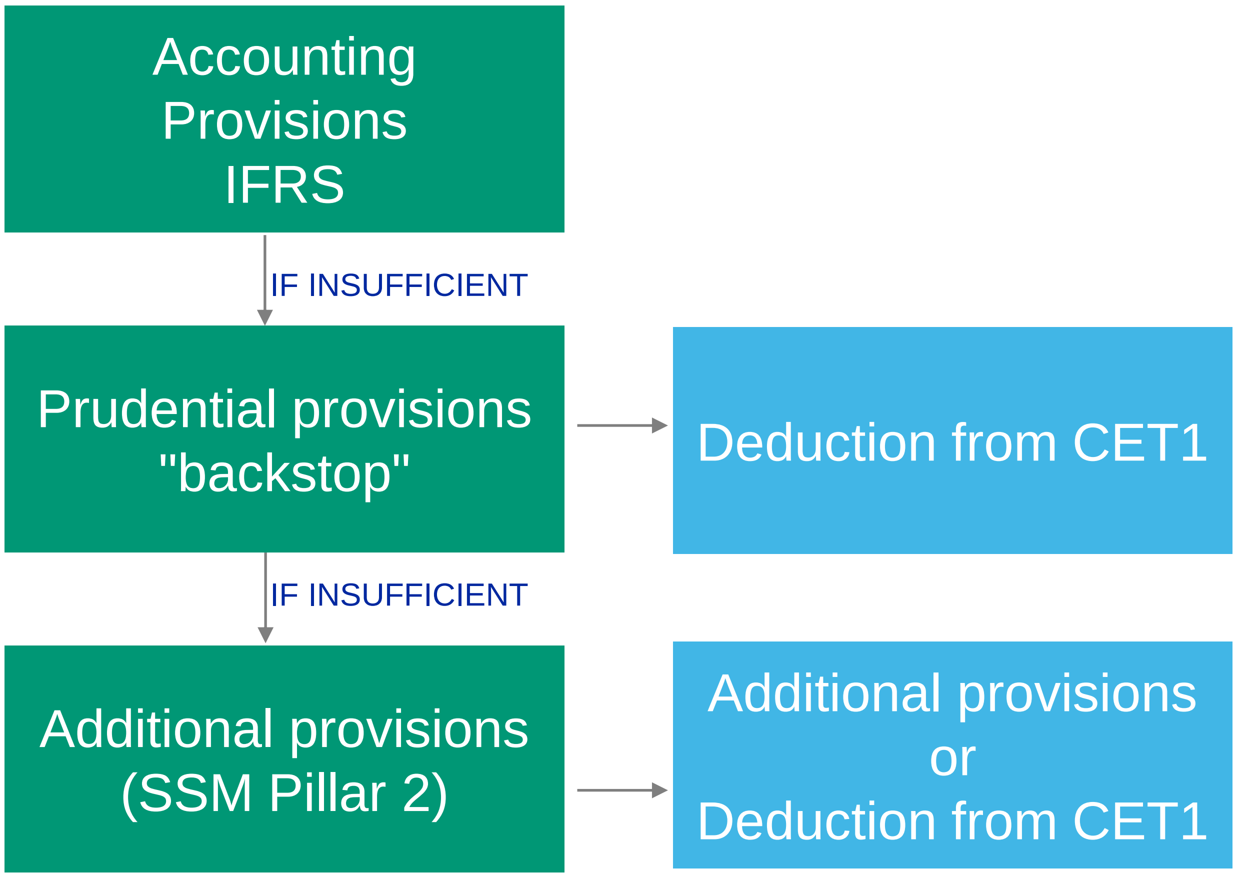
3 Yet supervisors needed more power/powder to act

4 A « backstop » to accounting standards

5 All EU banks will be subject to the same “standard”

NPL/minimum provisioning requirement

Process



Expected impact of EU regulation on banks' provisioning

- IFRS 9 is the first line of defense
- Backstop's activation will depend on banks' portfolios (short term/long term loans; secured/unsecured)
- Activation of backstop implies a hit on CET1…
- …may trigger more NPLs sales throughout the EU (quantum?)
- Interaction with "IRB shortfall" (no impact on CET1)

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Banking - European Union

New bad loan regulation is credit positive: Answers to frequently asked questions

Summary

» On 14 March the European Parliament voted for a regulation setting minimum loan loss provisioning requirements for non-performing exposures (NPEs) [1]. The regulation aims to prevent the excessive accumulation of soured loans, as seen in several European countries during the global financial crisis. The new rules will be credit positive for EU banks.

» **All European banks will be subject to the same prudential standards**. Until now, banks' provisions were driven by two factors; (i) accounting rules, which have been recently amended with a view to making them more prudent and forward-looking (IFRS 9); and (ii) supervisors' expectations, recently made more explicit by the euro-area banking supervisor, the Single Supervisory Mechanism (SSM) in the form of both qualitative and quantitative guidance. The SSM's quantitative guidance on NPL coverage (the so-called "addendum") has been criticised on the grounds that the SSM is not entitled to act as a rule-setter, which is the joint responsibility of the European Council (of governments) and the European Parliament.

» **The new provisioning rules will operate as a backstop**. The new regulation will operate as a "backstop" to the accounting standard (IFRS 9), which can be interpreted in different ways in different jurisdictions. The SSM will continue to have some influence over banks' provisioning decisions in rare occurrences where it considers the NPE regulation does not result in appropriate coverage.

» **The new rules will not tackle the outstanding stock of NPLs but we expect them to have an impact over time.** NPLs still represent a large proportion of banks' loans portfolios in several EU countries including Italy (above 10%[2]). The scope of the NPL regulation, however, is restricted to new loans EU banks will extend from the date of implementation. Consequently EU banks' provisioning decisions on legacy NPLs will still be driven by IFRS 9 accounting rules and guidance from the SSM. Nevertheless, we expect the SSM's approach to legacy NPLs will mirror the new regulation, and at some point banks will find it untenable to maintain two parallel provisioning policies.

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Banking - Europe

Despite significant progress, problem loans are still an issue for some large banks

Summary

Four years after the end of the sovereign debt crisis, large stocks of problem loans continue to weigh on the balance sheets of some European banks, both large and small, undermining their creditworthiness.

Problem loans remain a burden on many European banks. Nonperforming loans (NPLs)[1] are declining across Europe but sluggish economic growth in some countries as well as idiosyncratic weaknesses at some banks over recent years has meant progress has been uneven. The euro area has more than double the levels of bad loans of other regional blocs around the world. The Council of the European Union has set in train an action plan on NPLs that aims to facilitate the cleanup of banks' balance sheet whereas the European Central Bank (ECB), as euro-area supervisor, is pressuring banks with high level of NPLs to speed up disposals and execute sales. This is starting to yield some tangible results.

Bad loans at large banks create systemic risks. A sample of the 28 largest EU banks shows that for many banks the challenge remains large, while for others NPLs have dropped back to pre-crisis levels. NPLs were particularly high in 2013 in the aftermath of the sovereign debt crisis at 6% of total loans on average. The ratio has dropped to around 4% four years later. The improvement is significant but it is not compelling at all banks. Persistently large volumes of NPLs leave banks vulnerable to a renewed downturn in the euro area.

Provisioning charges have fallen, yet continue to dent some banks' profitability. Loan-loss provisioning charges show the cash cost of high NPLs for the banks. In 2013, aggregate loan-loss provisioning at the 28 large banks that are the focus of this report had absorbed 53% of their aggregate pre-provision income (Exhibit 7). That fell to an average of 20% in 2017, helped by economic recovery in Europe, but provisioning charges remain very high at a core group of banks.

Stronger capital provides good loss absorption. Capital buffers have risen at nearly all the banks in our sample. This will allow the banks to better absorb the costs of credit risk. On average Tier 1 capital ratio for the 28 banks improved to 17.2% at end-2017 from 14.2% at end-2013, which is a significant improvement. Nevertheless, the upcoming 2018 stress test spearheaded by the European Bank Authority (EBA) jointly with the ECB will help to ascertain the extent to which the largest banks have the capacity to absorb external shocks.

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