

Looking at reported Q1 numbers alone might have lulled credit investors into a sense that the Covid-19 recession is a non-event for Italian banks. But we see things getting worse from here. Additional IFRS 9 model provisions are likely in Q2 2020, specific provisions will start to creep into P&Ls in the second half of the year and more substantial asset-quality deterioration will hit the banks in 2021.

UniCredit most conservative in provisions and guidance. We expect most banks to book additional IFRS 9 model provisions, as several have already hinted. UniCredit may be the notable exception, as the bank already factored in fairly severe assumptions in its Q1 results.

Provisioning policies largely reflect supervisory recommendations. In compliance with recent recommendations, banks have not reclassified loans under moratoriums as non-performing, or even Stage 2. Recent provisioning efforts have either remained generic or targeted to increase coverage of existing buckets, with coverage ratios going up both on performing and non-performing loans.

More IFRS 9 model provisions to build up in Q2. Looking at most recent consensus macro estimates, we expect further adjustments in Q2 related to IFRS 9 models. We also foresee specific provisions increasing in towards the end of the year, when we may start to see a pick-up in migration from Stage 1 to Stage 2 and possibly from performing to non-performing status as moratoriums expire.

Large banks best placed to absorb provisions. Short term, we expect additional provisions to be absorbed through ordinary profitability and with limited damage to capital. However, with few exceptions we expect cost of risk to wipe out profits for this year.

Sector well capitalised entering the crisis. We see the sector as well capitalised, with material buffers over MDA triggers, which have increased with the latest supervisory moves to allow the Pillar 2 Requirement (P2R) to be fulfilled via a mix of CET1 and capital securities. Solid capital positions are supportive of Italian banks' credit quality. We do not currently foresee material capital erosion, as RWA inflation should be contained by partial government guarantees on loans.

Second lockdown would pose material downside risk. Downside risks to this relatively benign scenario primarily derive from the possibility of a deeper and longer recession, which could be triggered if a second Covid-19 infection peak forces a second lockdown later in the year or if the gradual lifting of the lockdown fails to restore economic activity through the end of the year.

Asset quality will deteriorate. While positive asset-quality trends are intact for the time being, this will eventually change. We acknowledge the significant government efforts to cushion the impact of the lockdown on households and businesses through government guarantees and payment moratoriums, but we think a proportion of borrowers will still fail to resume payments once the moratoriums are over. We expect NPEs to start ticking up towards the end of the year, and to continue to increase through 2021.

Exposure to sovereign risk will increase. We consider the recently announced government guarantees on business loans to be a crucial mechanism that will limit credit losses in the current cycle. However, these guarantees will also increase banks' concentration risk towards the Italian sovereign, which already represents a material credit concentration for most lenders. On 15 May, Scope affirmed the sovereign rating of Italy at BBB+ but revised the Outlook to Negative.

#### **Analysts**

Marco Troiano, CFA m.troiano@scoperatings.com

Alessandro Boratti a.boratti@scoperatings.com

#### **Team Leader**

Dierk Brandenburg d.brandenburg@scoperatings.com

#### Media

Keith Mullin k.mullin@scopegroup.com

#### **Related Research**

Spanish banks: cost of risk manageable in 2020 but watch the shape of any recovery April 2020

COVID-19: an acid test of European banks' diversification and de-risking strategies April 2020

COVID-19 impacts on European banks: pre-existing financial health condition matters

### **Scope Ratings GmbH**

3rd Floor 111 Buckingham Palace Road UK-London SW1W 0SR

Phone +44 20 3457 0444

### **Headquarters**

Lennéstraße 5 10785 Berlin

Phone +49 30 27891 0 Fax +49 30 27891 100

info@scoperatings.com www.scoperatings.com



in Male Bloomberg: SCOP

20 May 2020 1/12



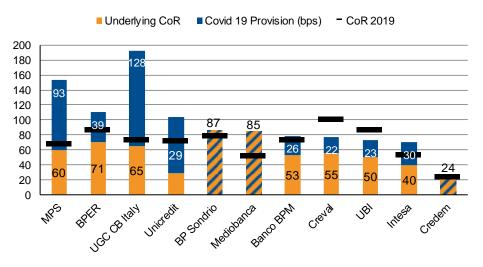
UniCredit forecasting 15% GDP drop for Italy, sees cost of risk at 200-230bp for the year

## UniCredit stands out as the most aggressive in provisioning and guidance

For the first quarter, UniCredit reported EUR 1.26bn of loan loss provisions, corresponding to a cost of risk of 104bp; most of it (74bp) due to updated IFRS 9 macro scenarios, and referred to Stage 2 loans. The bank also provided details of Cost of Risk (CoR) on a divisional basis. For the Italian commercial bank, CoR stood at 193bp, including 128bp stemming from IFRS 9 model adjustments.

UniCredit management took an extremely aggressive approach, forecasting a GDP drop for Italy of around 15%, and guiding towards CoR of around 200bp-30bp for the Italian division in 2020.

Figure 1: Italian banks' Q1 CoR relative to FY2019 and split between underlying and exceptional Covid-19 provisions



Source: SNL, Scope Ratings Note: Mediobanca's CoR 2019 refers to its fiscal year terminated in June 2019

Intesa's guidance for full year CoR at 90bp

Domestic banks' management comments also point to CoR of less than 100bp

By comparison, Intesa's take was more sanguine: out of EUR 791m, Intesa booked about EUR 300m of provisions in anticipation of future impacts from the crisis (in the Stage 2 portfolio). In addition, management earmarked a pre-tax capital gain of EUR 1.2bn, to be booked in Q2/Q3 on the sale of its merchant business, to further strengthen its balance sheet. During the earnings call, the CEO gave a CoR guidance of 90bp for 2020.

Banco BPM posted a total CoR of 79bp in the first quarter, including 26bp of crisis-related provisions. The CEO didn't give precise guidance on the CoR for 2020 but stated that 70bp could be a reasonable number if factoring in support from the government.

As opposed to most of its larger peers, UBI Banca did not update its IFRS 9 macro scenarios and reported CoR of 73bp (roughly 50/50 between underlying and extra provisions). This is below the 2019 figure of 87bp, which included extra impairments for NPE disposals. The group booked extra provisions to increase coverage for Unlikely-to-Pay (UTP) loans in the most impacted sectors (UTP loans do not benefit from State guarantees). The group will update IFRS 9 scenarios in Q2.

Banca MPS took a reasonably large extraordinary hit of EUR 193m (93bp), on top of ordinary provisions of EUR 122m (60bp). By our calculation, MPS's provisions are second only to UniCredit in Italy, albeit its underlying GDP assumptions are less harsh than those of Intesa and Banco BPM. Of the exceptional provision, EUR 119m (58bp) related to increased coverage of the existing non-performing portfolio, while the remaining EUR 74m related to the performing portfolio (primarily Stage 2 loans)

20 May 2020 2/12



Cost of risk will be much higher in consumer credit

In the first quarter, Mediobanca booked EUR 100m (85bp) of credit impairments, a sizeable increase from the record EUR 44m (39bp) of Q4 2019. The bank did not provide a detailed split between underlying CoR and extraordinary provisions. However, management highlighted that cost of risk for the consumer finance business doubled in March compared to usual monthly levels. For the full year, management expects CoR in consumer finance of 350bp (185bp in Q4 2019). Mediobanca will further update its macro scenarios in June, concomitant with the closing of its fiscal year.

Creval reported a CoR of 77bp in the quarter, of which 22bp for the revision of IFRS 9 macro scenarios. Underlying credit impairments were lower than 2019, benefiting from a recovery of some UTP positions and probably reflecting management's efforts to improve credit underwriting standards in the past year. For 2020, the cost of risk should not surpass 90bp/100bp, according to management.

Credem and BP Sondrio gave less visibility on Q1 provisioning. Credem's CoR remained one of the lowest of the sector, at 24bp, whereas Banca Popolare di Sondrio posted a cost of risk of 87bp, higher than 2019's average (78bp).

## Q1 cost of risk increase reflects IFRS 9 models adjustments; more to come in Q2

For most banks, provisions were not materially higher than last year and for some banks (such as UBI and Creval) they were even lower. However, these banks' 2019 results included large one-off provisions related to NPL portfolio sales. Most banks clearly flagged the amount of extraordinary provisions in their results. These were as high as 75bp for UniCredit (128bp for the Italian commercial banking division) and 93bp for MPS, but otherwise in the 20bp-40bp range for most domestic Italian banks. Mediobanca, Credem and BP Sondrio did not provide a split of their provisioning efforts.

Given the circumstances, Italian banks' reported CoR was quite low – with UniCredit and MPS being notable exceptions.

These provisions did not reflect an observation of higher defaults, but rather higher expected credit losses to come, both on the current stock of non-performing exposures and on performing loans (mostly Stage 2).

The process with which banks arrive at their provisioning numbers has always been opaque to outside observers, relying on modelled expected credit losses. This opaqueness has increased given the flurry of supervisory announcements in the aftermath of the Covid-19 crisis. Moreover, banks' own assumptions and modelling of expected credit losses influences model outputs. Our understanding is that banks still have material room for discretion when booking provisions.

Comparing Q1 provisions, it is clear that UniCredit decided to front-load a higher amount of provisions on performing loans than other banks – on account of a more pessimistic macro scenario. MPS's provisions are explained by the higher stock of non-performing loans on which the bank decided to increase coverage in the quarter – also reflecting the deteriorated macro environment.

YoY comparisons offer little insight, as banks sold NPLs in 2019

Q1 provisions unlikely to fully reflect credit deterioration

Provisioning process is opaque to outside observers

UniCredit's macro assumptions reflect severe GDP decline in 2020

Figure 2: Italian GDP assumptions for 2020 and 2021, selected Italian banks

	Intesa	UniCredit	Banco BPM	MPS
2020	-8% / -10.5%	-15%	-8%	-7%
2021	4.5% / 7%	9%	NA	3.50%

Source: Italian banks, Scope Ratings

20 May 2020 3/12



Other banks will likely have to book additional provisions for model adjustments in Q2

In recent weeks, however, consensus estimates on GDP growth have continued to trend downwards, towards the -10% mark. With UniCredit being the notable exception, we see potential downside to the above scenarios, which may result in further IFRS 9 model-related provisions in coming quarters.

Some other banks explicitly signalled that further adjustment of IFRS 9 scenarios should be expected.

Mediobanca, for example, will adjust its IFRS 9 indicators to the new macro scenario in July, when it publishes full-year results.

Credit Emiliano said the process of updating the IFRS 9 models will continue and will be further refined for the half-year report.

We believe other second and third-tier banks have taken a similar, more gradual approach to adjusting their models and as such expect more Covid-19 related provisions in future quarters.

A key date will be June 4, when the ECB publishes its updated economic forecasts – which will anchor Q2 IFRS 9 model adjustments for the banks. In Q2, we expect some convergence in economic scenarios used by Italian banks, which will allow greater comparability of the model provisions taken.

At the same time, we flag the risk of a second lockdown later in the year as a key risk to current GDP consensus with respect not only to the depth but also to the duration of the Covid-19 recession, which would trigger a second round of model adjustments. Our understanding is that current scenarios do not entertain the possibility of a second lockdown in Italy.

It is also clear that the difference between UniCredit's Italian provisions and those booked by its domestic peers is unlikely be explained entirely by the different macro assumptions.

For example, Intesa has also been using fairly conservative assumptions – yet its provisions are on a different scale. The bank pre-announced that it will earmark EUR 1.2bn from future capital gains to loan-loss provisions related to Covid-19. Together with the EUR 300m taken in Q1, this would bring total Covid-19 related provisions to EUR 1.5bn, worth 37bp of loans on an annualised basis according to our calculations.

Had the bank booked these provisions in Q1, its extraordinary provision would have equalled 148bp of loans – higher in fact than the provision booked by UniCredit.

What we find more puzzling is the difference in the guidance the two market leaders gave. UniCredit's cost of risk guidance for the Italian commercial bank for the full year was 200bp-230bp while Intesa's CEO expects at most 90bp.

We believe that UniCredit's guidance is based on a much harsher view of the extent of potential credit deterioration in its performing book than Intesa and most other most peers, and in particular on the future performance of loans currently under payment moratoriums.

A second lockdown would further challenge the economic outlook, and generate further needs for provisions

Material divide between Intesa and UniCredit on full year cos of risk guidance

20 May 2020 4/12

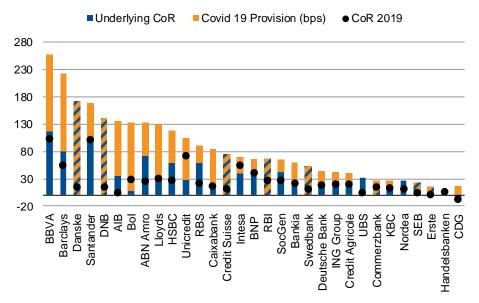


International comparisons also point to downside risk

Given the larger proportion, on average, of legacy non-performing loans on Italian banks' balance sheets, we had expected the sector to report comparatively higher cost of risk than European peers. The opposite was true: provisions taken by Italian banks in Q1 are low in comparison to other international banks (Figure 3).

Spanish banks, for example, reported, for the same quarter, extraordinary Covid-19 provisions ranging from 35bp to 141bp (for more details please see our report Spanish banks: cost of risk manageable in 2020 but watch the shape of any recovery).

Figure 3: Top European banks - Cost of risk in Q1 2020 vs 2019



Source: Banks' data, Scope Ratings Notes: CoR for Q1 2020 has been annualised

## Banks continued to shed NPEs in the quarter

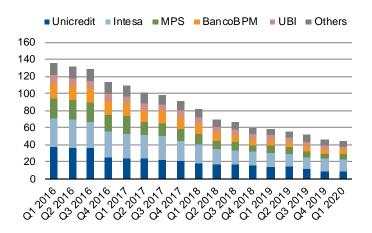
### Asset-quality trends intact for now but problems will emerge in 2021

For the time being, the evolution of key asset-quality indicators remains benign. For our sample of 10 independent Italian banking groups, we calculate that cumulative NPEs, net of provisions, declined to EUR 44.4bn at the end of March (from EUR 45.4bn in December 2019). The improvement in asset quality is very broad based. At differing speeds, NPEs are declining for all of the banks we sampled, with most banks now reporting gross NPE ratios under 10%. This is a continuation of a multi-year trend, which has seen banks focused on balance-sheet de-risking, often prodded by supervisors'.

20 May 2020 5/12

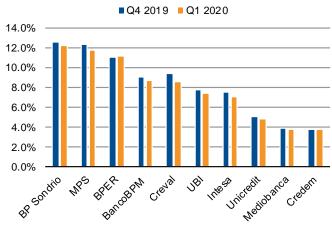


Figure 4: Top 10 independent Italian banks' net NPE stock, EUR bn



Source: Scope Ratings \*Sample includes Intesa, UniCredit, MPS, BPM, UBI, Credem, Creval, BPER, BP Sondrio, Mediobanca

Figure 5: Italian banks – Gross NPE ratio (Q1 2020 vs Q4 2019)



Source: Company data, Scope Ratings Note: BP Sondrio as of YE 2019

Trends will reverse, with NPEs increasing from next year

We now expect this trend to reverse. While legal moratoriums and consensual concessions may delay the onset of credit problems, we think the sharp deterioration of credit quality in some segments is unavoidable.

There is usually a lagged correlation between GDP recessions and NPL formation. We would expect this lag to be longer in the current cycle – on account of a more widespread use of concessions and moratoriums, alongside supervisory forbearance. With this in mind, we foresee NPEs increasing from the end of 2020 – and most likely continuing to do so in 2021.

A likely slowdown in NPL securitisation activity amid reduced investor appetite and a higher cost for GACS guarantees (which is linked to a widening in secondary market credit spreads) could also throw a wrench into some banks' pre-Covid de-risking plans with regard to the pre-existing stock of NPLs<sup>1</sup>.

### Italian banks enter the crisis with heavily de-risked balance sheets

Existing NPEs are excluded from the scope of public guarantees

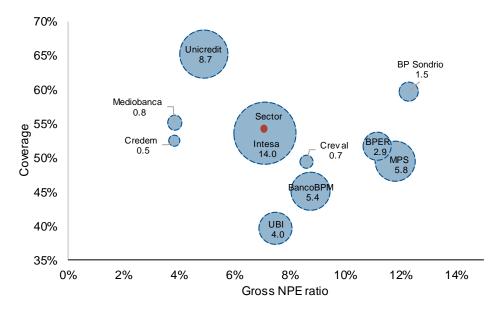
In the face of a much-deteriorated operating environment, legacy asset-quality issues will gain renewed prominence. As NPEs are excluded from public guarantee programmes, any recovery will depend on workout activity or sales. With significant uncertainty over the economic outlook, realisation values are more at risk. Figure 6 gives an overview of the top banking groups' asset quality at the end of March.

20 May 2020 6/12

<sup>&</sup>lt;sup>1</sup> For a more detailed explanation of the drivers of the slowdown in NPL securitisations, please read our report "Covid-19: 2020 slowdown in Italian NPL securitisation" published on 28 April



Figure 6: Italian banks - Key asset quality metrics as of Q1 2020



Source: Company data, SNL, Scope Ratings

Banks have materially de-risked, though the picture is mixed

Supervisory pressure has been a key driver for the de-risking

Migration from moratorium to NPEs will be a key factor to watch

The picture is mixed, with UniCredit. Mediobanca and Credem best placed in terms of legacy non-performing credit. At the other end of the spectrum, BPER, MPS and BP Sondrio look more vulnerable. The latter confirmed on May 13 that it is close to completing an NPL securitisation of EUR 1bn, to be followed by a further EUR 400m derisking exercise later in the year. It is worth noting that without exception, the current asset-guality picture is much more reassuring than even a couple of years ago.

A key driver for the sector's de-risking in recent years has been relentless pressure from supervisors to clean up legacy bad loans from the global financial and euro area sovereign crises. The impulse came directly from the Single Supervisory Mechanism and was initially unwelcome among Italian banks' managers and shareholders, as it forced loss recognition and capital increases at some banks.

However, from a credit risk standpoint, the SSM's approach has proved to be correct, as we believe the sector would have been significantly more vulnerable if it had entered the new crisis while still dealing with a large legacy of bad loans.

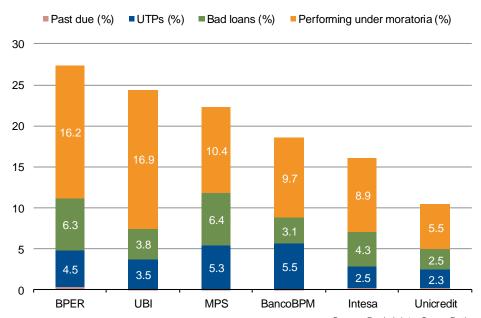
Starting in Q1, banks started reporting on the number of customers under payment moratoriums. We welcome this disclosure, as the outcome on these loans once moratoriums expire in September will be an important driver of loan losses in Q4 and into 2021. We also flag the possibility that moratoriums may be extended beyond September, hence further delaying loss recognition – though possibly also allowing some customers more time to restore the viability of their businesses.

In booking provisions, banks generally complied with supervisory and accounting guidelines with respect to loss recognition under IFRS 9. In this respect, banks were advised to not over-weight short-term very adverse macroeconomic circumstances, and to consider the impact of supporting government measures (debt moratoriums and public guarantees) in their forecasts. An especially relevant assumption is that the mere existence of payment moratoriums does not automatically result in heightened credit risk, and that therefore loans under moratoriums do not have to be reclassified as non-performing, nor mechanistically moved from Stage 1 to Stage 2 (which would result in material increases in cost of risk given the amounts involved).

20 May 2020 7/12



Figure 7: Italian banks - NPE split and performing loans under moratoriums



Source: Banks' data, Scope Ratings Note: NPE as of March 31. Moratoria as of the end of April

Even reclassifying loans as Stage 2 could trigger provision increase Looking at banks disclosures, we note that the coverage ratio of Stage 1 loans typically stands at around 20bp, while coverage of Stage 2 loans typically exceeds 2%-3%. This means that even if a small percentage of loans currently under moratoriums ends up being moved to Stage 2, it could trigger material provisioning needs.

Finally, we understand that a majority of the loans under moratoriums relate to SME loans. With the recently announced government guarantee measures for SMEs, we see the possibility that some of the loans under moratoriums could be rolled into guarantee programmes at a later stage, hence limiting economic losses for the banks.

## Cost of risk will not reach previous crisis levels but will likely wipe out most of this year's profits

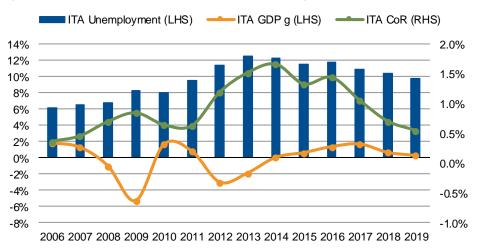
The challenges in estimating cost of risk for the year are manifold, from the ongoing uncertainty over economic scenarios to the effectiveness of the unprecedented public measures fielded by different authorities. Banks' own collective behaviour with respect to the provision of liquidity to customers will also play a role, as will the attitude of supervisors to force loss recognition early on. Finally, the extent to which banks will be able to offload credit losses onto the public balance sheet via recently announced guarantee schemes will also play a key role.

In previous crisis, the average CoR stayed above 100bp for five years, peaking at close to 175bp in 2014 Referencing Italian banks' average historical CoR over the previous cycle, we note that it stayed well above 100bp of loans throughout the 2012-2017 period, reaching 1.75% at its peak. Dispersion around the average was significant, depending on each bank's business model and loan-book quality, among other factors.

20 May 2020 8/12



Figure 8: Italian banks\* - Cost of risk, historical average



Source: Italian banks, Scope Ratings \*The sample includes 22 large to medium sized Italian banks:

We expect the current cycle to be less severe on banks' credit quality Judging by first quarter provisioning levels, banks seem to assume that this cycle will be more benign. We agree. Compared to the Italian sovereign crisis and ensuing austerity-driven recessions, we acknowledge a much more forceful policy reaction, which includes co-ordinated expansionary measures from monetary and fiscal authorities.

In addition, we believe that, as opposed to 2012-2013, when banks were still in the process of adjusting to Basel 3/CRD 4 capital requirements and facing imminent scrutiny by a new supervisor (including an in depth asset-quality review) Italian banks will not tighten their standards in a similar way. Their new lending will benefit from significant risk mitigation via government guarantees, extremely cheap funding via TLTRO III, and low capital absorption for the guaranteed part. In other words, we do not foresee a credit crunch on the Italian corporate sector.

We expect CoR of 100bp-150bp for 2020

While acknowledging the uncertainty, our current expectation for full-year cost of risk in the range of 100bp-150bp for the year on average for the sector, based on our alternative scenario envisaging a 12.5% decline in GDP, banks comments, soft guidance, and our own assumptions on the take-up of moratoriums, government guarantees and on the cure rate at the end of the moratoriums.

We expect most of the provisioning needs to initially come from model adjustments, the bulk of it in Q1 and Q2. As mentioned above, Italian banks took some extraordinary provisions in Q1, but we believe they do not yet reflect the full extent of macro deterioration which has become evident in recent weeks — UniCredit being a notable exception. Barring a second infection peak and lockdown later in the year, GDP estimates should stabilise around current consensus (consistent with our Alternative 1 scenario of -12.5% GDP for Italy).

Specific provisions will be backend loaded We also expect specific provisions to start creeping up into banks' P&Ls, although these will be back-end loaded, as payment moratoriums expire in September. The fourth quarter will be a crucial moment to gauge how many customers struggle to resume payments and will require longer-term debt forbearance (possibly triggering a move to Stage 2) or move into non-performing status.

This amount should prove manageable for most Italian banks, which would probably wipe out profits for this year but not drive material capital erosion. However, this level of provision could drive net losses among banks with structurally lower pre-provision profitability, such as some of the former popolari banks in our sample.

20 May 2020 9/12

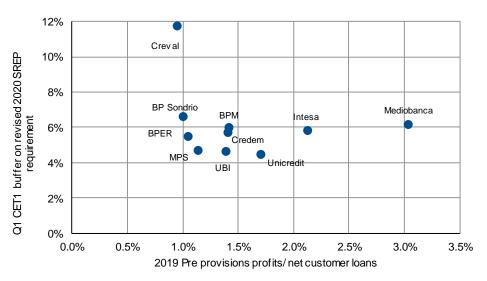


Provisions could obliterate banks' profits, with few exceptions

Our expectation is that the larger banks will remain profitable for the year, owing to their above-average level of pre-provision profitability. In the Q1 conference call, Intesa's CEO confidently guided for a net profit this year of over EUR 3bn.

The profit outlook is less benign for the rest of the sector and specifically for banks with sub-par pre-provision profitability – which may see profits wiped out for this year. However, even less profitable banks are currently sitting on abundant capital buffers, with distances to MDA triggers improved after recent changes to regulatory requirements with respect to P2R composition and, to a lesser extent, countercyclical buffers.

Figure 9: Italian banks – pre-provision profitability (X axis) and capital buffers (Y axis)



Source: Italian banks, Scope Ratings Note: Mediobanca's PPP/net loans refers to its 2019 FY terminated in June 2019

We expect a large take-up of government guarantee programmes

## Government guarantee programmes crucial to limit credit losses but could reinforce links between banks and sovereign risk

Banks' credit losses are being temporarily shielded by debt moratoriums. Once these expire we expect a proportion of customers will face difficulties returning to full performance. Our working assumption is that banks will proactively work with viable customers to transition them back to full performance. This will likely require the extension of new finance, while cash flows remain impaired. For business loans, the government will guarantee new loans, in some cases for up to 100%.

We consider this mechanism to be crucial to limit banks' exposure to credit losses in the current cycle. At the same time, we note that the activation of such guarantees will increase banks' exposure to domestic sovereign risk – which is already high for several banks.

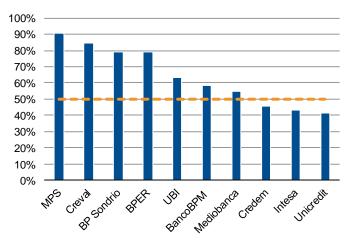
Loan guarantees will (indirectly) increase banks' exposure to sovereign risk

On 15 May, Scope affirmed its BBB+ ratings on the Republic of Italy but changed the Outlook to Negative, citing rapidly deteriorating public finance metrics in response to the Covid-19 recession and the likely permanent nature of the ensuing damage to the public balance sheet. While we do not see a valid reason for mechanistically linking our credit analysis on banks to sovereign risk, highly concentrated exposure to sovereign risk is a factor in our credit analysis. For most Italian banks, such exposure already exceeds 100% of their capital base, although exposure is lower for Intesa, Mediobanca and UniCredit, partly on account of greater diversification in their bond portfolios.

20 May 2020 10/12

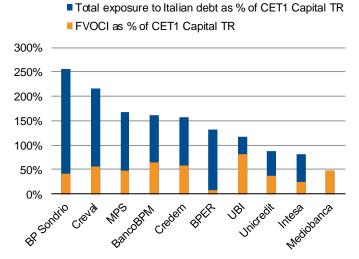


Figure 10: Italian bonds as % of government portfolio, 2019Y



Source: Company data, Scope Ratings Note: BP Sondrio as of YE 2019

Figure 11: Total and Fair Value through Other Comprehensive Income (FVOCI) exposure to Italian sovereign debt as a % of transitional CET1, 2019Y



Source: Company data, Scope Ratings Note: BP Sondrio as of YE 2019

20 May 2020 11/12



### **Scope Ratings GmbH**

### **Headquarters Berlin**

Lennéstraße 5 D-10785 Berlin

Phone +49 30 27891 0

#### London

3rd Floor 111 Buckingham Palace Road London SW1W 0SR

Phone +44 20 3457 0444

#### Oslo

Haakon VII's gate 6 N-0161 Oslo

Phone +47 21 62 31 42

info@scoperatings.com www.scoperatings.com

#### Frankfurt am Main

Neue Mainzer Straße 66-68 D-60311 Frankfurt am Main

Phone +49 69 66 77 389 0

#### **Madrid**

Paseo de la Castellana 95 Edificio Torre Europa E-28046 Madrid

Phone +34 914 186 973

#### **Paris**

1 Cour du Havre F-75008 Paris

Phone +33 1 8288 5557

#### Milan

Via Paleocapa 7 IT-20121 Milan

Phone +39 02 30315 814

#### **Disclaimer**

© 2020 Scope SE & Co. KGaA and all its subsidiaries including Scope Ratings GmbH, Scope Analysis GmbH, Scope Investor Services GmbH and Scope Risk Solutions GmbH (collectively, Scope). All rights reserved. The information and data supporting Scope's ratings, rating reports, rating opinions and related research and credit opinions originate from sources Scope considers to be reliable and accurate. Scope does not, however, independently verify the reliability and accuracy of the information and data. Scope's ratings, rating reports, rating opinions, or related research and credit opinions are provided 'as is' without any representation or warranty of any kind. In no circumstance shall Scope or its directors, officers, employees and other representatives be liable to any party for any direct, indirect, incidental or other damages, expenses of any kind, or losses arising from any use of Scope's ratings, rating reports, rating opinions, related research or credit opinions. Ratings and other related credit opinions issued by Scope are, and have to be viewed by any party as, opinions on relative credit risk and not a statement of fact or recommendation to purchase, hold or sell securities. Past performance does not necessarily predict future results. Any report issued by Scope is not a prospectus or similar document related to a debt security or issuing entity. Scope issues credit ratings and related research and opinions with the understanding and expectation that parties using them will assess independently the suitability of each security for investment or transaction purposes. Scope's credit ratings address relative credit risk, they do not address other risks such as market, liquidity, legal, or volatility. The information and data included herein is protected by copyright and other laws. To reproduce, transmit, transfer, disseminate, translate, resell, or store for subsequent use for any such purpose the information and data contained herein, contact Scope Ratings GmbH at Lennéstraße 5 D-10785 Berlin.

Scope Ratings GmbH, Lennéstraße 5, 10785 Berlin, District Court for Berlin (Charlottenburg) HRB 192993 B, Managing Director: Guillaume Jolivet.

20 May 2020 12/12