

The main factors for the subdued profitability of significant banks in the Banking Union

Banking Union Scrutiny



External author:

Andrea Resti



The main factors for the subdued profitability of significant banks in the Banking Union

Is the ECB's supervisory response conclusive and exhaustive?

Abstract

Most significant institutions in the euro area generate returns below the risk-adjusted rate required by investors. This paper surveys some recent studies on the causes of this low profitability, and then discusses several actions that the SSM may want to undertake, to support banks in their quest for higher returns.

This document was provided by the Economic Governance Support Unit at the request of the ECON Committee.

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

AUTHORS

Andrea RESTI, Bocconi University

ADMINISTRATOR RESPONSIBLE

Marcel MAGNUS

EDITORIAL ASSISTANT

Solveiga KUMSARE

LINGUISTIC VERSIONS

Original: EN

ABOUT THE EDITOR

The Economic Governance Support Unit provides in-house and external expertise to support EP committees and other parliamentary bodies in shaping legislation and exercising democratic scrutiny over EU internal policies.

To contact Economic Governance Support Unit or to subscribe to its newsletter please write to:

Economic Governance Support Unit

European Parliament

B-1047 Brussels

E-mail: egov@ep.europa.eu

Manuscript completed in December 2019

© European Union, 2019

This document and other supporting analyses are available on the internet at:

<http://www.europarl.europa.eu/supporting-analyses>

DISCLAIMER AND COPYRIGHT

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy.

CONTENTS

LIST OF ABBREVIATIONS	6
LIST OF FIGURES	7
LIST OF TABLES	7
EXECUTIVE SUMMARY	8
1. FOREWORD	9
2. THE ECB'S ANALYSES AND OTHER EMPIRICAL STUDIES	10
2.1. EU bank profitability in a nutshell	10
2.2. The impact of Fintech and digitalisation	14
2.3. The EU-US divide	15
3. EURO AREA VS. USA: A QUICK DATA-CHECK	17
4. SOME POSSIBLE SUPERVISORY RESPONSES	21
4.1. Ensure that banks can choose their risk appetite levels	21
4.2. Ensure timely, predictable unambiguous responses	22
4.3. Do not err (too much) on the safe side	23
5. QUESTIONS FOR THE SSM CHAIR	24
6. FINAL REMARKS	25
REFERENCES	27

LIST OF ABBREVIATIONS

EBA	European Banking Authority
ECB	European Central Bank
EEA	European Economic Area
GAAP	Generally accepted accounting principles
G-SIB	Global systemically-important bank
NPL	Non-performing loan
ROA	Return on assets
ROE	Return on equity
SMEs	Small and medium enterprises
SREP	Supervisory review and evaluation process
SSM	Single Supervisory Mechanism

LIST OF FIGURES

Figure 1: ROE and COE in the ECB data	10
Figure 2: ROE (left) and cost-to-income ratio (right) by size class	12
Figure 3: Loan growth, net interest margin and price-to-book ratio	13
Figure 4: Government bonds, loans to customers and customer deposits	14
Figure 5: returns on equity over time	17
Figure 6: returns on equity and size	18
Figure 7: performance indicators (median values)	19
Figure 8: structure of the income statement (median values, scaled by total assets)	19
Figure 9: structure of the balance sheet (median values, share of total assets)	20
Figure 10 - Market multiples for top US and euro area banks	20
Figure 11: structure of the balance sheet (median values, share of total assets)	22

LIST OF TABLES

Table 1: European banks in 2000-2016	12
Table 2: European versus US-based systematically important banks	15

EXECUTIVE SUMMARY

Most significant institutions in the euro area generate returns below the risk-adjusted rate required by investors. Best performers have invested in IT, and improved efficiency by expanding revenues; meanwhile, low-profitability banks have been struggling with legacy assets and a weak income-generation capacity. Negative market rates have made retail deposits less profitable, while leading to an increase in lending volumes and to lower loan-loss provisions. Banks burdened by low profitability have less room to invest in digitalisation and in the maintenance of legacy systems, putting their long-term survival at risk.

According to ECB top officials, mergers and acquisitions may improve the industry's overall profits, although there is no clear evidence that large institutions enjoy consistently higher returns. Nevertheless, smaller institutions would likely benefit from consolidation, although the role of "community banks" should somehow be recognised by *ad hoc* regulations.

A significant gap emerges between euro area banks and their US-based counterparts, as the latter are less encumbered by non-performing assets and enjoy higher customer-related margins. Additionally, the US have benefited from bolder policies after the 2007-2009 crisis, with equity capital and cheap liquidity being quickly injected into the banking system.

Euro area banks may need short-term support to preserve net interest income in an era of low growth and negative interest rates. To this aim, some form of targeted capital relief may be devised for new loans meeting minimum quality standards (including forms of environmentally-conscious lending).

The main factors affecting bank profitability (the real economy, which in turn drives monetary policy, regulation, competition, excess capacity and digitalisation) are mostly beyond the supervisors' remit. Still, the latter may put in place several actions to support banks in their quest for higher returns.

First, they should not prevent lenders from embracing higher-risk businesses that generate additional returns. Once banks have in place adequate risk management systems, capital and liquidity, they should not be restrained from investing e.g. in speculative-grade loans, or in the management of non-performing exposures, which will otherwise accrue to an ever-growing shadow banking system.

Secondly, supervisory decisions should become timelier and more predictable. Greater disclosure on the contents and motivations of decisions regarding individual banks would help set clear precedents that other lenders can use to calibrate their expectations on future supervisory responses. Improved coordination among supervisors regarding guidelines and data requests would also help, by minimising the risk of conflicting interpretations and overlapping demands.

Finally, the SSM should refrain from using capital add-ons as a remedy against non-financial risks, i.e., as a substitute for non-capital related measures, which ends up depressing leverage and return on equity. To this to occur, however, European lawmakers may have to enhance the ECB's intervention powers, e.g., in areas like the removal of unsuitable directors.

1. FOREWORD*

In 2016, the European Central Bank (ECB) started to assess in greater depth the profitability of significant institutions¹ in the euro area. Since then, bank returns have been carefully monitored by the Single Supervisory Mechanism (SSM), also due to the lenders' inability to go back to the profitability levels observed before the financial and sovereign debt crises.

The ECB's concerns for bank profitability are well motivated. As noticed by some of its top officials (de Guindos 2019b), persistently low returns limit a bank's ability to endogenously generate new capital, making it harder to build up buffers against unexpected shocks. Secondly, unprofitable institutions prove unattractive to investors, making it harder to raise new capital and support growth. Finally, non-lucrative lenders lacking a sustainable business model may be tempted to "gamble for resurrection" by massively mis-allocating funds to poorly-priced, high-risk assets; as a result, competition will be distorted, real growth constrained, and financial bubbles amplified.

In this report, based on recent studies and on a brief empirical analysis, we look at the main factors underlying the weak returns on equity experienced by European lenders, as well as the profitability gap between them and US-based institutions. We then look at some possible avenues that the ECB may want to explore, as it strives to identify constraints on bank profitability and help banks overcome them in a safe and sustainable way.

* Although the views expressed in this paper are only mine, I gratefully acknowledge suggestions and advice from Aurelio Maccario (Unicredit Group), Marcel Magnus (E-GOV, European Parliament), Marco Onado (Bocconi University) and Gianfranco Torriero (Italian Bankers' Association).

¹ Significant institutions are large banking groups that are directly supervised by the ECB, albeit with the support of national supervisors.

2. THE ECB’S ANALYSES AND OTHER EMPIRICAL STUDIES

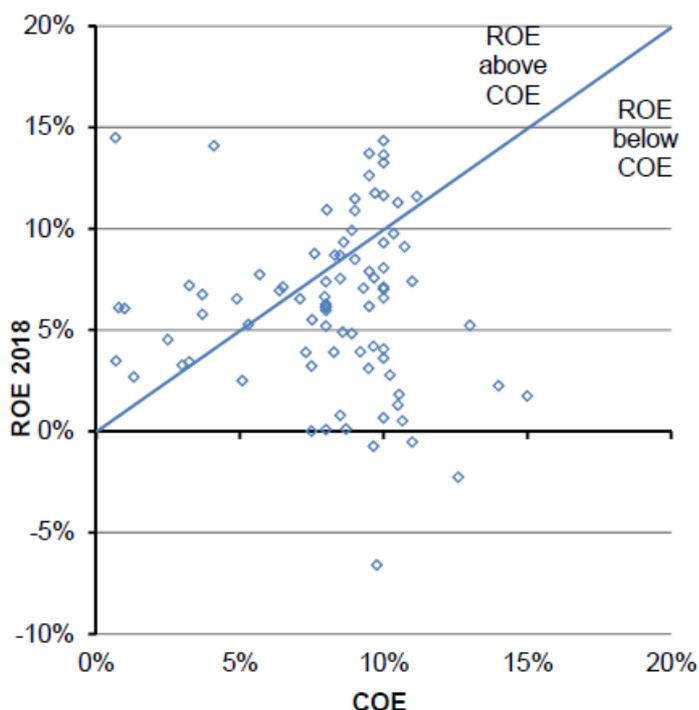
2.1. EU bank profitability in a nutshell

The weak profitability of many European banks has long been a matter of concern to the ECB and the SSM. Since 2016, the latter has engaged in an *ad hoc* off-site examination (“the SSM thematic review of profitability and business models”), involving all significant institutions in the euro area. The results (European Central Bank 2018a) show that lenders face a wide range of challenges, including pressure on revenues due to competition and low interest rates, significant write-offs on non-performing loans, the legacy costs of overly granular branch networks, and the need to adapt to tougher regulations.

Bank-by-bank inspections carried out by the ECB as part of this thematic review have also shown that many institutions lack “strategic steering capabilities”, as the management cannot set a clear path towards long-term profitability objectives. Additionally, costs are not effectively allocated to individual business lines and distribution channels; risk-sensitivity, internal reporting and loan pricing schemes also need improving.

Further analyses carried out by the SSM (European Central Bank 2019a; 2018b) have shown that, in 2017, only one in three significant institutions was generating a return on equity (“ROE”) above its estimated cost of equity (“COE”, the risk-adjusted rate of return required by market participants to invest in a bank’s equity capital). This led to low stock prices for listed banks, often below book values. The situation was roughly unchanged in 2018 (see Figure 1), although the average ROE improved slightly, from 6.1% to 6.4%².

Figure 1: ROE and COE in the ECB data



Source: (Enria 2019a).

² According to (Andersson et al. 2018), the cost of equity of the Euro Stoxx banks was about 11% in 2008-2018, with an average value mostly between 7% and 10% in the last five years of their analysis.

Such concerns have been repeatedly discussed in the ECB's Financial Stability Review. To begin with, (Andersson et al. 2018) have analysed a sample of 13 "best performing banks"³ and found that they managed to reduce their cost-to-income ratio by significantly expanding revenues (rather than by just slashing expenses). The latter, in turn, were fuelled by fee-based income; net interest margin, while decreasing, proved more resilient than for other banks. On the cost side, the best performers' IT expenses have gone up by roughly 60% in 2009-2017, compared to roughly 10% for the remaining institutions.

More recently, (Andreeva et al. 2019) have looked at low-profitability banks, to find that they mostly include a large number of institutions struggling with legacy assets (like NPLs), as well as with weak income-generation capacity and various cost inefficiencies. According to the study, an increase in market power for small-to-medium banks (e.g. via mergers and acquisitions) might improve their profitability⁴ without jeopardising stability.

In fact, ECB top officials have often called for greater consolidation, both within and across national borders (de Guindos 2019b; 2019a; Enria 2019b; 2019a; Nouy 2017). Mergers and acquisitions are expected to trigger cost synergies and rationalisations in the banks' branch networks, while cross-border banking groups may prove more resilient to local shocks and less vulnerable to the sovereign-bank loop. Additionally, cross-border banks are said to show a better performance in revenues, although national ring-fencing of liquidity and capital may prevent them from achieving an optimal allocation of risks across countries.

The ECB's concerns have been echoed by the European Banking Authority ("EBA") in its periodic assessments of European banks. The 2018 edition of its Risk Assessment Report⁵ indicates that net interest income follows a slowly declining trend, despite growing lending volumes⁶, due to the repricing of new loans at lower interest rates, the inability to pass negative rates on to depositors and increased competition from Fintech firms. European banks have also faced material costs due to replacements, outages and failures of old ICT systems. On the bright side, commission income has slightly picked up, while lower credit-related impairments have helped overall profitability. The decrease in provisions, however, has shown some signs of reversal in the first half of 2019, as noted in the latest EBA's Risk Dashboard⁷. The same source shows that large banks do not seem to enjoy any special advantage in terms of ROE and cost-to-income ratio, although univariate evidence (see e.g. Figure 2) may not control for other significant factors.

³ "Best-performing banks" were defined as those banks that have an average ROE above 5% in 2014-17 and managed to decrease their cost-to-income ratio and increase ROE compared to 2009-13.

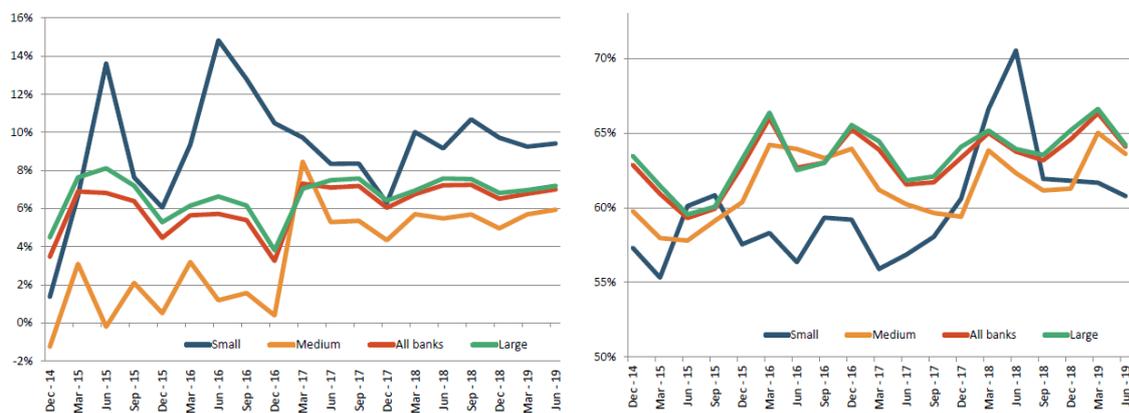
⁴ According to (European Central Bank 2019b), "mid-sized" banks with total assets between €100 billion and €200 billion show comparatively lower returns on assets (less than 0.3%, with other size classes ranging between 0.4 and 0.5).

⁵ (European Banking Authority 2018). The Risk Assessment Report builds on the quarterly supervisory reporting data submitted to the EBA by 187 banks from 25 European Economic Area (EEA) countries. The sample covers about 80% of the EU banking sector.

⁶ According to the Risk Assessment Report, loans at end-June 2018 were up by roughly €0.5 trillion relative to end 2016. Between 2014 and 2016, however, they experienced a reduction, consistent with the data shown below in Table 1.

⁷ (European Banking Authority 2019b). The risk dashboard is based on a sample of 183 European banks. The full list is available on the EBA's website under <https://www.eba.europa.eu/risk-analysis-and-data>.

Figure 2: ROE (left) and cost-to-income ratio (right) by size class



Source: (Enria 2019a).

The work done by the ECB and the EBA on bank profitability is part of a wide stream of literature originated by academics, practitioners and international institutions over the last years. Some of those studies are summarised below.

(Detragiache, Tressel, and Turk-Ariss 2018) look at a sample of 114 European banks in 2000-2016. Their sample period is broken into four subperiods: pre-boom, (2000-04), boom (2005-07), crisis (2008-12) and post crisis (2013-16). Some key findings of the study are summarised in Table 1.

Unsurprisingly, both ROE and return on assets (ROA) drop significantly when moving from the boom to the post-crisis years. In the meantime, capitalisation increases by approximately one third (from 3.4% to 4.6%), due to a more conservative stance in regulatory requirements and supervisory practices. After witnessing a fast rise in the credit bubble years, total assets and loans first freeze, then drop by 6%-7% per year in the post-crisis period. NPLs on gross loans increase from 2,1% to 6,7%, while net interest income stays roughly unchanged⁸.

Table 1: European banks in 2000-2016

	Pre-boom	Boom	Crisis	Post-crisis
Return on assets	0.6%	0.7%	0.2%	0.2%
Return on equity	13.3%	15.7%	3.1%	3.2%
Tangible equity on tangible assets	3.8%	3.4%	3.4%	4.6%
Assets growth (<i>per annum</i>)	16.7%	22.4%	0.8%	-7.2%
Loan growth (<i>per annum</i>)	17.1%	22.4%	1.4%	-5.9%
NPLs on gross loans	2.7%	2.1%	4.7%	6.7%
Net interest income (on total assets)	1.6%	1.3%	1.3%	1.2%

Source: (Detragiache, Tressel, and Turk-Ariss 2018).

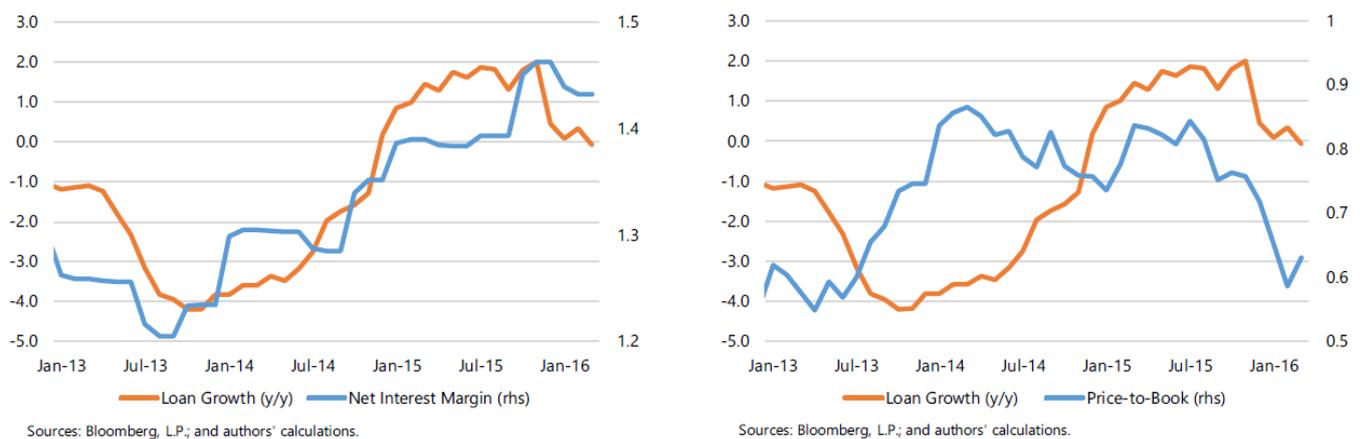
⁸ Banks located in six “euro-crisis countries” (Cyprus, Greece, Ireland, Italy, Portugal and Spain) experience a much sharper decline in ROA (0.9% to 0.0%) and ROE (16.3% to -2.1%) between the boom and the post-crisis years. Over the same time window, their NPLs increase from 2.5% to 14.5% of gross loans.

The same study also uses a multivariate model to further investigate the change in ROA experienced by European banks. The latter appears to be driven by several factors, including the macroeconomic cycle and the banks' ability to contain NPLs, reduce operating costs and cut reliance on wholesale funding. Diversified income sources (featuring more fees and commission income) do not apparently lead to greater profits in the post-crisis environment.

These results are broadly consistent with those by (Xu, Hu, and Das 2019), who look at 431 publicly-traded banks in 2004-2017 including all GSIBs⁹ and other US and European institutions. According to this study, NPLs and the cost-to-income ratio are negatively associated with various measures of bank profitability and the price-to-book ratio. Interestingly, a drop in short-term rates is found to exert a negative impact on ROA, but also a positive effect on risk-adjusted ROA and ROE, meaning that low policy rates lead to lower, but also less volatile profits¹⁰.

(Antoshin et al. 2017) focus on the role of credit growth in sustaining bank profitability. Based on a wide set of countries observed in 2000-2015, they find that credit growth explains roughly 50% (40%) of a bank's gross (net) interest income. (Jobst and Lin 2016) show that the return to positive growth rates for loans may have helped offset the adverse effects of negative interest rates on bank interest-based income and profits (see Figure 3, left panel). However, they also note that negative rates may exert a detrimental impact on bank profitability in the long run, clouding earnings prospects and thus depressing market multiples (see again Figure 3, right panel), which in turn may constrain loan supply.

Figure 3: Loan growth, net interest margin and price-to-book ratio



Source: (Jobst and Lin 2016).

Concerning negative rates, the ECB has recently claimed that their overall effect on European banking has so far been neutral¹¹; furthermore, a "multi-tier" remuneration scheme has recently been adopted,

⁹ "G-SIBs" are global systemically important banks, as identified by the Financial Stability Board's on the basis of a publicly-available methodology. See e.g. (Financial Stability Board 2011) for further details.

¹⁰ A downward shift in the yield curve is also beneficial in terms of capital gains on the banks' exposures to bond and stock markets. Additionally, as debt costs become more sustainable for non-financial firms, default rates may drop, leading to lower loan-loss provisions.

¹¹ See, (Draghi 2019), quoting (Altavilla, Boucinha, and Peydró 2018). The latter find that the main components of bank profitability are asymmetrically affected by accommodative monetary conditions, with a positive impact on loan loss provisions and non-interest income largely offsetting the negative one on net interest income. In the long run, lower interest-based profits are also counterbalanced by improved macroeconomic conditions. Finally, market-based measures of expected bank profitability and credit risk are found to be favourably affected by the announcement of looser monetary policies.

whereby part of the banks' excess reserves can be left with the ECB at no cost¹². Even so, (Lakhani, Reid, and Templeman 2019) have argued that negative rates have imposed a tax worth about €8bn on the European banking industry, and that the opportunity cost of not being able to pass on negative rates to household customers amounts to 5% of aggregate net interest income. The same study sees negative rates as "a fiscal transfer mechanism and redistributes cash from core Europe to the periphery", as some national banking systems can use ultra-cheap, negatively-priced wholesale funding to support lending and investments in government bonds, at the expense of those countries where customer deposits exceed loans to households and non-financial companies¹³. Figure 4, based on the latest ECB data, shows that such asymmetries might exist, although costs and benefits cut across "core" and "periphery" Member States.

Figure 4: Government bonds, loans to customers and customer deposits

	Loans net of deposits over total assets	Loans and government securities net of deposits over total assets	Loans net of deposits (€ billions)	Loans and government securities net of deposits (€ billions)
CY	-20.0%	-10.7%	13.3	7.1
MT	-19.3%	-12.3%	8.3	5.3
SI	-14.7%	-1.2%	6.2	0.5
LU	-12.6%	-8.4%	147.6	98.5
BE	-12.5%	-7.6%	133.5	81.3
GR	-9.2%	-2.3%	29.2	7.2
LT	-9.0%	-5.0%	2.7	1.5
LV	-8.0%	-3.6%	1.8	0.8
PT	-6.9%	6.8%	27.5	26.9
ES	-6.6%	2.1%	178.5	57.5
DE	-4.9%	-1.8%	420.9	157.0
IE	-4.0%	0.6%	49.3	7.2
IT	-1.0%	11.1%	39.3	427.5
AT	0.8%	5.3%	7.0	46.4
SK	1.9%	11.4%	1.6	9.8
FR	3.1%	5.1%	306.3	501.4
EE	3.4%	4.7%	1.0	1.4
NL	3.4%	5.8%	86.4	147.9
FI	11.0%	12.4%	77.8	87.9

Source: ECB data ("Balance sheets of Monetary Financial Institutions"), September 2019. Loans to monetary and financial institutions (« MFI ») and deposits from MFI are not included

2.2. The impact of Fintech and digitalisation

As noted by (Huljak et al. 2018), digitalisation may offer significant cost-saving opportunities for banks in the medium-to-long term, but also entails material one-off costs (for branch rationalisation, severance costs, process automation, etc.) and running expenses (e.g. for cybersecurity systems). Leading innovators may benefit from additional revenues via market share gains and new premium products. Still, digital financial services can prove more vulnerable to competition (including from non-bank fintechs), as customers find it easier to shop around and compare prices. Even when new competitors cannot reach significant market shares, they force banks to lower their prices (Koskinen and Manninen 2019); while being beneficial to consumers, such a process can further undermine profitability.

By running a two-stage least squares panel regression on a sample of 1,768 euro-area bank financial statements in 2005-17, (Huljak et al. 2018) show that IT expenses are negatively affected by poor returns on assets and high credit risk. This suggests that banks burdened by loan loss provisions and/or

¹² Up to 6 times the minimum reserve requirement.

¹³ In other words, while the costs associated with negative rates on the ECB deposit facility should overall be offset by the ultra-low rates paid on central bank loans, such costs and benefits may be asymmetric when one looks at individual countries and institutions.

enjoying low overall profits have less room to invest in digitalisation, as well as in the maintenance of their legacy IT systems. Such banks may then get “caught in a profitability trap, where balance sheet fragility creates a longer-term competitive disadvantage”.

Nordic banks provide an interesting success story when it comes to digitalisation. Due to a stronger penetration rate of digital services in their national economies¹⁴, less widespread branch networks¹⁵ and significantly higher IT investments¹⁶, they seem to enjoy lower cost-to-income rates¹⁷ and higher overall profitability¹⁸.

2.3. The EU-US divide

(Detragiache, Tressel, and Turk-Ariss 2018) also analyse 12 European G-SIBs, comparing them to similar institutions located in China, Japan, Switzerland (“CH”) and the US. Table 2 reports the main findings for European and US lenders.

Table 2: European versus US-based systematically important banks

		Pre boom	Boom	Crisis	Post crisis
Return on assets	EU	0.6%	0.6%	0.2%	0.1%
	US	1.0%	1.0%	0.3%	0.6%
Return on equity	EU	13.4%	16.3%	2.7%	2.4%
	US	15.0%	15.0%	4.2%	8.4%
Tangible equity on tangible assets	EU	3.1%	2.5%	2.7%	4.1%
	US	4.7%	4.1%	3.9%	5.6%
Assets growth (per annum)	EU	14.6%	24.1%	1.2%	-7.9%
	US	22.0%	14.6%	12.6%	-3.3%
Loan growth (per annum)	EU	11.0%	21.1%	2.7%	-4.8%
	US	50.0%	10.2%	7.7%	11.3%
NPLs on gross loans	EU	2.4%	2.2%	3.9%	4.6%
	US	1.2%	0.4%	2.9%	1.9%
Net interest income (on total assets)	EU	1.4%	1.0%	1.1%	1.2%
	US	2.3%	1.9%	1.9%	1.7%

Source: (Detragiache, Tressel, and Turk-Ariss 2018)

¹⁴ According to (Andersson et al. 2018), EU countries show a 91% correlation between the share of population (aged between 16 and 74) using internet banking and the so-called “Digital Economy and Society Index” (calculated as the weighted average of five dimensions: connectivity, human capital, use of the internet, integration of digital technology and digital public services).

¹⁵ As of 2016 Finland had less than 10 bank branches for 100,000 inhabitants, while Sweden, Latvia and Estonia had less than 20. This compared to roughly 40 branches for France, 50 for Italy and 70 for Spain (Grym, Koskinen, and Manninen 2018).

¹⁶ Based on S&P Global Market Intelligence data, funds allocated to IT investments in 2005-2017 exceed 30% for Nordic institutions, compared to a median value below 20% for Europe’s top 50 banks (Koskinen and Manninen 2019).

¹⁷ According to (Koskinen and Manninen 2019), DNB and Swedbank report a cost-to-income of approximately 40%, while Nordea, Danske Bank, SEB and Handelsbanken hover around 50%. This compares to values well above 60% for France’s largest institutions, and above 80% for Deutsche Bank, Commerzbank, UBS and Credit Suisse.

¹⁸ According to (Detragiache, Tressel, and Turk-Ariss 2018), in the post-crisis period the levels of ROA (0.5%) and ROE (9.1%) reported by Nordic banks have proven significantly higher than the average values for euro area banks (0.2% and 3.2%, respectively) shown in Table 1 above.

Relative to their EU counterparts, US banks seem to have partly offset the drop in profitability (ROA and ROE) experienced during the crisis. Higher capital levels may have helped achieve a less severe cut in assets, while loans have continued to expand, even in the post crisis period, helped by a more benign macroeconomic cycle that also lead to lower NPLs.

The role of macroeconomic conditions as a driver of the EU-US profitability gap has also been highlighted by (Carbó Valverde, Cobau, and Rodríguez Fernández 2019), who also identify a surge in US banks' M&A activity, which has not been mirrored by European banks. The same study also recalls that the US have adopted a bolder stance towards the 2007-2009 crisis, quickly injecting equity capital and cheap liquidity into the system; this has made it easier for American lenders to quickly dispose of toxic assets and to achieve capital ratios well above those of European institutions.

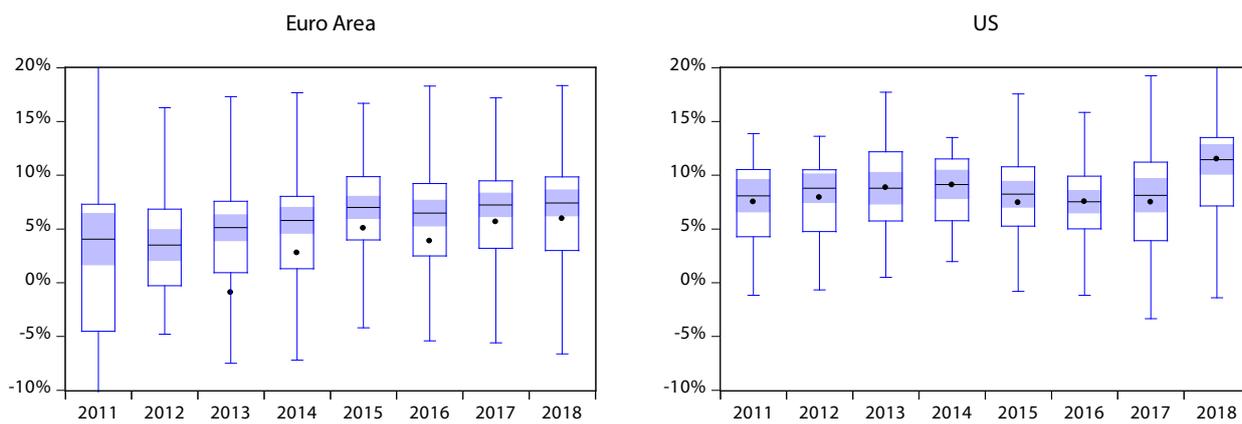
3. EURO AREA VS. USA: A QUICK DATA-CHECK

We further investigate the determinants of the profitability gap between European and US banks. Our analysis covers a time window between 2011 and 2018 and two samples, including banking groups based in the euro area and in the United States¹⁹.

Figure 5 shows the evolution of ROE over time, as well as the distribution of individual values. The white boxes include the middle 50% of data, the median is a line cutting across the box²⁰ and the mean is shown as a black dot; black lines (“whiskers”) indicate data dispersion outside the middle 50%.

One can see that euro area banks, besides showing lower median values, are also considerably more heterogenous²¹. This was especially true in the first part of our time window, when institutions located in peripheral countries were hit hard by the sovereign debt crisis²².

Figure 5: returns on equity over time



Although larger groups may certainly benefit from scale economies, our data suggest no immediate link between profitability and size, neither in the euro area, nor in the US (see Figure 6).

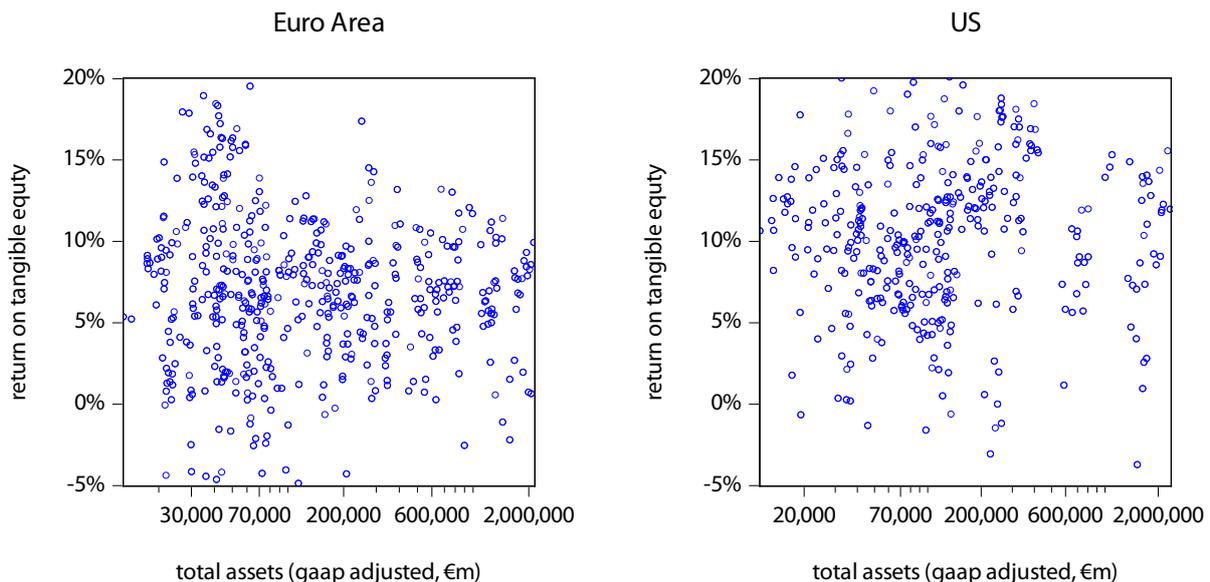
¹⁹ We start by extracting consolidated statements for the top 100 groups (by total assets) in the euro area and in the US. We then remove duplicated entries (e.g. for US bank holding companies that also have a sub-holding company), groups where banking is not the main business (e.g. insurance groups that also have a limited presence in banking services) and lenders under liquidation (Dexia). It should be noted that our sample is an unbalanced panel, meaning that not all banks are available for all years. Also, our “top” euro area lenders do not fully overlap with significant institutions.

²⁰ The purple shadow in the box provides a confidence interval of the median.

²¹ While an analysis of individual countries within our sample would certainly go beyond the scope of this short paragraph, national segmentations play a role in explaining the larger heterogeneity observed for euro area banks. E.g., macroeconomic conditions differ across Member States, as well as taxes, labour costs, market concentration and customer protection rules.

²² Banks with negative equity were excluded from the sample. Even so, the mean is severely affected by worst-performing banks and could not be shown in the graph for 2011 and 2012.

Figure 6: returns on equity²³ and size



In Figure 7, we use medians to compare banks based on several performance indicators. The profitability gap between the euro and the US becomes even wider when one moves from ROEs to ROAs, meaning that the former’s return on equity benefits from a higher (if declining) leverage. The share of operating income drained by costs is roughly similar in the two subsamples, but US banks experience a decrease in recent years. On the other hand, euro area lenders increase their reliance on fee-based income, possibly because of poor net interest revenues. European banks also pay a high toll to loan losses, even though the worse seems to be over. The last two rows indicate the amount of fee-based and interest-based income per euro of customer loans and deposits²⁴: US-based institutions seem to be extracting more revenues from their client basis²⁵.

²³ Return on tangible equity are computed as net profit over tangible equity (equity minus goodwill, when available). Size is measured with total assets. To account for the fact that US banks account for derivatives through different GAAPs (generally accepted accounting principles), we adjust total assets by subtracting the banks’ net position in derivatives (assets minus liabilities) if the latter is positive (Le Leslé and Avramova 2012).

²⁴ Note that the indicators are based on total fee- and interest-based income (including income from non-customers, like banks). The assumption behind these ratios is that non-bank customers provide the vast majority of a bank’s operating income, hence it makes sense to focus on their loans and deposits rather than looking at a less homogeneous aggregate like total assets.

²⁵ As large-to-medium companies find it easier to turn to capital markets to raise debt, American banks may also benefit from a loan portfolio that is more tilted towards smaller entities and natural persons: a more lucrative – if riskier – class of borrowers.

Figure 7: performance indicators (median values)

Euro area	2011	2012	2013	2014	2015	2016	2017	2018
Net interest margin	1.4%	1.3%	1.3%	1.4%	1.4%	1.3%	1.3%	1.3%
Net FV-based income	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
Net fee-based income	0.9%	0.8%	1.0%	1.0%	1.1%	0.9%	1.0%	1.0%
Operating costs	-1.5%	-1.5%	-1.7%	-1.5%	-1.5%	-1.5%	-1.5%	-1.6%
Loan loss provisions	-0.4%	-0.5%	-0.4%	-0.3%	-0.2%	-0.1%	-0.1%	-0.1%
Tax and other	-0.3%	-0.1%	-0.1%	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%
Net result	0.1%	0.1%	0.2%	0.4%	0.6%	0.5%	0.5%	0.6%
US	2011	2012	2013	2014	2015	2016	2017	2018
Net interest margin	2.9%	2.8%	2.8%	2.5%	2.5%	2.5%	2.6%	2.7%
Net FV-based income	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
Net fee-based income	1.5%	1.6%	1.8%	1.6%	1.6%	1.6%	1.6%	1.5%
Operating costs	-2.9%	-2.9%	-2.9%	-2.8%	-2.7%	-2.6%	-2.6%	-2.7%
Loan loss provisions	-0.4%	-0.3%	-0.1%	-0.1%	-0.1%	-0.2%	-0.1%	-0.1%
Tax and other	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%	-0.3%
Net result	0.8%	1.0%	1.2%	0.9%	1.0%	1.0%	1.0%	1.2%

Figure 8 and Figure 9 depict a stylised overview of the income statements and balance sheets. European banks show lower values for both revenues and operating costs (although not for loan loss provisions). For both groups, the aggregate contribution of fair value-based revenues (like trading profits) is almost negligible. Net interest margin in the US benefits from the temporary rise experienced by policy rates in the last years of our time window, while the prolonged growth of the real economy helps keep loan losses under control.

Figure 8: structure of the income statement (median values, scaled by total assets)

Euro area	2011	2012	2013	2014	2015	2016	2017	2018
Net interest margin	1.4%	1.3%	1.3%	1.4%	1.4%	1.3%	1.3%	1.3%
Net FV-based income	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
Net fee-based income	0.9%	0.8%	1.0%	1.0%	1.1%	0.9%	1.0%	1.0%
Operating costs	-1.5%	-1.5%	-1.7%	-1.5%	-1.5%	-1.5%	-1.5%	-1.6%
Loan loss provisions	-0.4%	-0.5%	-0.4%	-0.3%	-0.2%	-0.1%	-0.1%	-0.1%
Tax and other	-0.3%	-0.1%	-0.1%	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%
US	2011	2012	2013	2014	2015	2016	2017	2018
Net interest margin	2.9%	2.8%	2.8%	2.5%	2.5%	2.5%	2.6%	2.7%
Net FV-based income	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
Net fee-based income	1.5%	1.6%	1.8%	1.6%	1.6%	1.6%	1.6%	1.5%
Operating costs	-2.9%	-2.9%	-2.9%	-2.8%	-2.7%	-2.6%	-2.6%	-2.7%
Loan loss provisions	-0.4%	-0.3%	-0.1%	-0.1%	-0.1%	-0.2%	-0.1%	-0.1%
Tax and other	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%	-0.3%

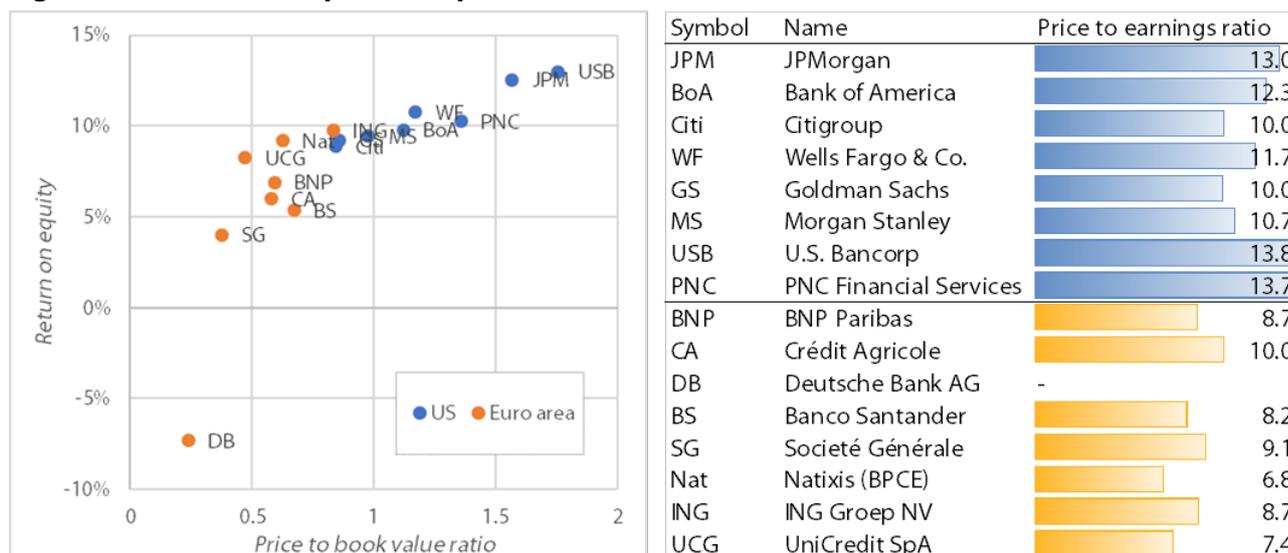
The balance sheet data in Figure 9 suggest that US banks enjoy a stronger presence in client-related items, including loans and (especially) customer deposits. This may explain why they achieve larger revenues on total assets, but also bear higher costs.

Figure 9: structure of the balance sheet (median values, share of total assets)

Euro area	2011	2012	2013	2014	2015	2016	2017	2018
Loans	60%	61%	60%	59%	60%	59%	59%	60%
Other earning assets	30%	31%	33%	33%	30%	29%	29%	28%
Non-earning assets	7%	7%	7%	7%	7%	7%	7%	7%
Customer deposits	44%	47%	51%	51%	52%	53%	58%	61%
Other interest-bearing liabilities	41%	38%	33%	30%	28%	27%	26%	25%
Equity and reserves	30%	28%	26%	26%	25%	24%	22%	21%
US	2011	2012	2013	2014	2015	2016	2017	2018
Loans	62%	63%	63%	64%	64%	60%	61%	63%
Other earning assets	26%	26%	26%	26%	26%	29%	29%	26%
Non-earning assets	11%	11%	11%	11%	11%	11%	11%	11%
Customer deposits	71%	73%	72%	72%	71%	72%	69%	71%
Other interest-bearing liabilities	10%	9%	8%	9%	9%	9%	9%	10%
Equity and reserves	21%	20%	19%	19%	21%	20%	20%	20%

Figure 10 compares market multiples for top US and euro area banks, showing that the latter look less attractive to investors: in fact, while the price to book ratio clearly reflects differences in ROE, market prices are comparatively lower even when returns are roughly the same (with European lenders in the 8%-10% ROE range, e.g., lying left of their US counterparts). This becomes even more apparent when one looks at price to earnings ratios, as euro area institutions prove considerably cheaper. The reasons for this gap could be twofold: investors may expect future profits to grow more (decrease less) in the United States (e.g., because of a more benign macroeconomic environment) and/or may require higher risk premia in the euro area due to a more challenging institutional/regulatory framework.

Figure 10 - Market multiples for top US and euro area banks



Source: market data as of November 28, 2019 – Financial data as of third quarter 2019 (second quarter 2019 for Unicredit). ROE and P/E are based on trailing 12-month income data.

4. SOME POSSIBLE SUPERVISORY RESPONSES

The factors underlying low bank profitability are mostly beyond the supervisors' remit and point to the real economy (which in turn drives monetary policy and interest rates), the regulatory framework, market concentration, competition, excess capacity and IT-based innovations. Having said that, we now discuss a few areas where the SSM may want to further calibrate its policies to support the banks' efforts towards higher returns and lower costs. While none these areas is decisive in itself, they may provide some hints for possible actions.

4.1. Ensure that banks can choose their risk appetite levels

Banks can be seen as a portfolio of different activities, including service-based businesses and financial investments. The former can generate profits without generating significant financial risks: this is the case, e.g., of asset management and payment services, where banks execute transactions on behalf of their customers. Such areas, however, are increasingly targeted by new competitors, including players that are not encumbered by legacy assets, face milder regulatory constraints and enjoy substantial scale economies. These competitors – including Internet-based payment systems and exchange-traded funds – can price their services aggressively, reducing the banks' market shares and margins.

Financial investments (e.g., loans and securities) are characterised by a strong relationship between risks and returns. To keep negative externalities under control, supervisors must ensure that banks taking on riskier assets have effective risk management systems, as well as enough capital and liquidity. Once risks have been appropriately measured and provisioned, lenders should be allowed to choose their own degree of risk aversion (a possible exception being those institutions that benefit from State aid because market investors have consistently shied away from them). There have been instances, however, where banks have been forced out of potentially profitable businesses, in order to curb their overall risk profile.

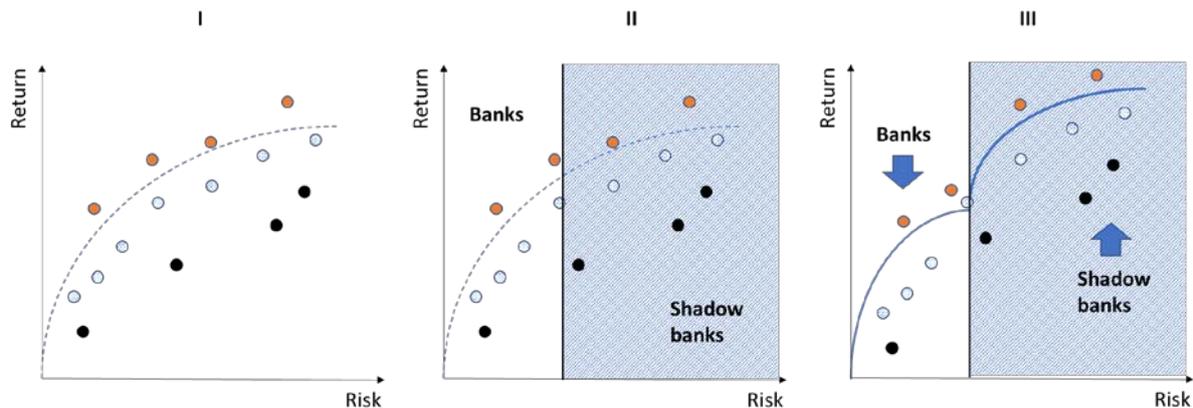
Non-performing loans (NPLs) are a case in point. Not only have supervisors asked banks to update net book values and to improve collection practices (following a more professional approach to collateral valuation and recoveries); they have also requested that a considerable amount of defaulted exposures be swiftly sold to non-bank investors. This triggered large losses (partly due to the significant discounts requested by buyers, who were concerned about the opaqueness of the purchased assets), while banks had to give up future upsides from a business where third-party investors expect to reap double-digit returns (Resti 2017).

Another interesting example comes from the recent EBA draft guidelines on loan origination and monitoring (European Banking Authority 2019a). While they must be praised for providing a sound framework that European banks will use to improve credit-related processes, these guidelines also appear to be directing lenders towards low-risk (hence low-margin) exposures. In fact, they dictate that – before issuing a loan – banks assess the borrower's repayment capacity and financial position even under adverse macroeconomic and idiosyncratic events²⁶. Such a conservative stance may cause banks to ration credit to a large layer of non-investment grade borrowers (including innovative SMEs), depressing credit volumes and profit margins. Low-risk loans may, in turn, become even less lucrative, as banks compete more fiercely at the best end of the credit risk spectrum.

²⁶ This includes, e.g., a severe decline in borrower's revenues, a significant reputational damage, an increase in leverage, a macroeconomic downturn, an increase in the cost of funding.

By inducing lenders to focus on higher quality investments, supervisors may not only depress bank profitability, but also increase the role of less transparent, loosely-regulated institutions (like private equity and credit funds) whose growth could eventually weaken systemic stability. This is summarised in Figure 11²⁷, where supervisors first ensure that banks do not take on exposures where risks are not adequately rewarded (the black dots in Panel I), then also prevent them from invest in higher risk businesses (the grey area in Panel II); in turn, this biases the risk-return relationship faced by banks and shadow institutions (Panel III).

Figure 11: structure of the balance sheet (median values, share of total assets)



4.2. Ensure timely, predictable unambiguous responses

In doing business and deploying their market strategies, banks depend increasingly on supervisory approval. The ECB's prior consent is required, e.g., for major changes to internal rating systems, including those stemming from supervisory requests or regulatory developments. M&As also need to get supervisory clearance, which sometimes entails requests for additional capital and other constraints that can significantly alter the risks and returns expected by the deal. Another example are the so-called "SREP decisions", through which the SSM constrains the lenders' risk-taking capacity by asking them to hold capital in excess of the regulatory minima to offset deficiencies in their risk assessment tools, governance schemes and business models.

While supervisory scrutiny of a bank's long-term viability and (risk) management systems is certainly beneficial, it should not be overly slow or unpredictable, unless it is to become an additional drag on bank profitability. Accordingly, the SSM may decide to commit to some maximum time length when validating changes to risk management systems and to provide greater *ex post* transparency (e.g. in its annual report²⁸) on how long it takes to process the banks' applications. The ECB may also disclose the main contents and motivations of decisions regarding individual banks, in order to make its assessments more predictable by setting clear precedents that banks can use to calibrate future

²⁷ The dots in the charts represent different risk-return trade-offs, with the best combinations being located North-West. The black line can be seen as an efficient frontier; however, as information on risk is incomplete and markets are partially segmented, some dots may be located slightly above the frontier, as the borrower has to pay more than her fair risk-adjusted rate would be. Dots in the lower-left portion of the chart can be seen as loans to investment-grade, cash-rich borrowers, while those on the right may represent loans to SMEs and other higher-risk obligors.

²⁸ The SSM's annual report for 2018 reports the number of supervisory decisions performed by the Single Supervisory Board but provides little detail on the amount of time required to process bank applications. Given the confidentiality constraints that surround the ECB's activities, it is unclear whether such aspects can be effectively monitored by the European Court of Auditors in its periodic assessments (Resti 2019).

expectations. Providing (anonymised) details of specific decisions – unlike releasing guidance papers to illustrate generic “supervisory expectations” – would also minimise the risk of creating an additional layer of rules that may supersede Level 1 legislation without being subjected to a formal cost/benefit analysis. Higher transparency standards may also be used when communicating SREP decisions to individual banks on a bilateral basis: following a “risk-by-risk” approach to define Pillar 2 requirements would make results more predictable, and possibly less sticky over time.

In a similar vein, when issuing clarifications and requesting data on new requirements set out by European law and Level 2 texts, the ECB may further coordinate with the EBA and the national authorities, in order to minimise the risk of providing banks with what has sometimes been seen as conflicting interpretations and overlapping demands.

4.3. Do not err (too much) on the safe side

Whenever risks cannot be accurately mapped, supervisors like to “err on the safe side” by requesting banks to set aside additional capital against potential “unknown” losses; this is understandable, given the huge losses that poorly-monitored vulnerabilities may inflict to depositors, taxpayers and other stakeholders. Extra capital charges may also act as an incentive for banks to remove the weaknesses that have caused them. Accordingly, they have often been used to address a wide range of vulnerabilities, including e.g. poor governance and misconduct. There is a risk, however, that they be used as an all-purpose “blanket” against aspects like weak business models and fit-and-proper issues that should be tackled by different means.

Using capital add-ons as a remedy against non-financial risks may end up depressing bank leverage and return on equity. To contrast such practices, European lawmakers could enhance the ECB’s intervention powers (e.g., in terms of removal of unsuitable directors). For their part, supervisors should refrain from using Pillar 2 requirements as a substitute for non-capital related measures.

Additionally, the SSM may adopt a more favourable stance towards cheap risk management tools that, while imprecise at a single-exposure level, can provide a reasonable assessment of average portfolio risks. This is the case, e.g., of “advanced statistical models” that could be used to reevaluate real estate collaterals but are still confined to monitoring purposes by a strict interpretation of the Capital Requirements Regulation (and can only be used to trigger valuations performed by expensive human experts)²⁹.

²⁹ (European Banking Authority 2019a).

5. QUESTIONS FOR THE SSM CHAIR

Most capital buffers dictated by post-crisis regulations are now firmly in place: the capital conservation buffer has been fully phased in, the O-SII/GSIB buffers have been implemented and some jurisdictions have adopted counter-cyclical buffers and constraints on the banks' loan-to-value ratios. In light of the above, would the SSM consider the possibility to use Pillar 2 requirements as a counter-cyclical tool, as the European economy shows clear signs of a slowdown?

Although euro area banks clearly need to develop fee-based income in the long term, net interest margin still contributes significantly to total revenues. Such interest-based income may be negatively affected, in the next few years, by a scenario where negative rates coexist with decreasing lending volumes. Against this backdrop, how would the SSM evaluate the introduction of some form of temporary capital relief (to be phased out based on a pre-agreed schedule) on new loans that comply with minimum quality standards? Could new environmentally-conscious loans directed to eco-friendly investments also benefit from such a temporary capital discount?

6. FINAL REMARKS

As discussed above, most significant institutions in the euro area generate ROEs below the risk-adjusted rate of return required by investors. Best performers have invested in IT and improved efficiency by expanding revenues. Meanwhile, low-profitability banks have been struggling with legacy assets and a weak income-generation capacity. Negative market rates have made retail deposits less profitable, while leading to increased lending volumes and lower loan-loss provisions. Banks burdened by low profitability have less room to invest in digitalisation and in the maintenance of legacy systems, putting their long-term survival at risk.

According to ECB top officials, mergers and acquisitions may improve profits, even though the analyses surveyed in this paper do not show any straightforward evidence that large institutions enjoy consistently higher returns. Such analyses, however, are mostly centred on medium-to-large institutions. Scale economies may therefore be easier to exploit for the (very) small lenders not covered in these studies (which represent an important feature of several Member States' banking industries). Such "community banks" would likely benefit from consolidation; still, they may also deserve *ad hoc* regulations that recognise their social function while addressing the risk of political meddling and inappropriate behaviours.

A significant gap emerges between euro area banks and their US-based counterparts, as the latter are less encumbered by non-performing assets and enjoy higher customer-related margins. Additionally, the US have benefited from bolder policies after the 2007-2009 crisis, with equity capital and cheap liquidity being quickly injected into the banking system.

While they prepare for a wide-ranging transformation towards digitalisation and fee-based services, euro area banks need short-term support to ensure that net interest income does not overly suffer in an era of low growth and negative interest rates. To this aim, the SSM – and the European lawmakers – may want to consider some form of capital relief for new loans meeting minimum quality standards (including forms of environmentally-conscious lending).

Such initiatives, however, should focus on specific situations, bearing in mind that a rise in loans can support real growth, not replace it. Today's profitability crisis originated in an era when cheap credit flew loosely across the euro area, creating imbalances whose consequences are still to be healed. Accordingly, targeted measures to revive loan growth should go hand in hand with a renewed attention to problem assets, including complex securities.

The main factors affecting bank profitability (the real economy, which in turn drives monetary policy, regulation, competition, excess capacity and digitalisation) are mostly beyond the supervisors' remit. Still, the latter may consider a few actions to support banks in their quest for higher returns:

- supervisors should not prevent lenders from embracing higher-risk businesses that generate additional returns. Accordingly, once they have in place adequate risk management systems, capital and liquidity, banks should not be restrained from investing e.g. in speculative-grade loans, or in the management of non-performing exposures, which will otherwise accrue to an ever-growing shadow banking system;
- supervisory decisions like those concerning M&As, changes to internal rating systems and Pillar 2 requirements should become timelier and more predictable. Greater disclosure on the contents and motivations of decisions regarding individual banks would help set clear precedents that other lenders can use to calibrate their future strategies on expected supervisory responses. Individual SREP decisions based on a "risk-by-risk" approach may prove more transparent, making it easier for banks to overcome their weaknesses and gain access to

lower Pillar 2 requirements. Increased coordination among supervisors regarding guidelines and data requests would also help, by minimising the risk of conflicting interpretations and overlapping demands;

- finally, the SSM should refrain from using capital add-ons as a remedy against non-financial risks, i.e., as a substitute for non-capital related measures that ends up depressing leverage and return on equity. To this to occur, however, European lawmakers may have to enhance the ECB's intervention powers, e.g., in areas where national rules still prevail, like the removal of unsuitable directors.

REFERENCES

- Altavilla, Carlo, Miguel Boucinha, and José-Luis Peydró. 2018. 'Monetary Policy and Bank Profitability in a Low Interest Rate Environment'. *Economic Policy* 33 (96): 531–586.
- Andersson, Magnus, Christoffer Kok, Harun Mirza, Csaba Móri, and Jonas Mosthaf. 2018. 'How Can Euro Area Banks Reach Sustainable Profitability in the Future?' *Financial Stability Review* 2 (November): 125–42.
- Andreeva, Desislava, Maciej Grodzicki, Csaba Móri, and Alessio Reghezza. 2019. 'How Can Euro Area Banks Reach Sustainable Profitability in the Future?' *Financial Stability Review* 2019 (2): 125–42.
- Antoshin, Sergei, Mr Marco Arena, Nikolay Gueorguiev, Mr Tonny Lybek, Mr John Ralyea, and Mr Etienne B Yehoue. 2017. *Credit Growth and Economic Recovery in Europe after the Global Financial Crisis*. International Monetary Fund.
- Carbó Valverde, Santiago, Timothy Cobau, and Francisco Rodríguez Fernández. 2019. 'Analysing Differences in Bank Profitability: Europe versus the US'. *SEFO - Spanish and International Economic & Financial Outlook* 8 (2): 6–14.
- Detragiache, Enrica, Thierry Tresselt, and Rima Turk-Ariss. 2018. *Where Have All the Profits Gone? European Bank Profitability over the Financial Cycle*. IMF Working Papers, WP/18/99. Washington D.C.: International Monetary Fund.
- Draghi, Mario. 2019. 'Letter by the ECB President to Mr Miguel Viegas, MEP', 14 June 2019. https://www.ecb.europa.eu/pub/pdf/other/ecb.mepletter190614_viegas~2c3a2d407b.en.pdf.
- Enria, Andrea. 2019a. 'Is Less More? Profitability and Consolidation in the European Banking Sector'. presented at the CIRS Annual International Conference, Lisbon, July 4.
- ———. 2019b. 'Post-Crisis Repair and the Profitability Malady'. presented at the Analysis Forum, Milan, September 17.
- European Banking Authority. 2018. 'Risk Assessment of the European Banking System'. London: European Banking Authority.
- ———. 2019a. 'Consultation Paper - Draft Guidelines on Loan Origination and Monitoring'. EBA/CP/2019/04. Paris: European Banking Authority.
- ———. 2019b. 'Risk Dashboard - Data as of Q2 2019'. Paris: European Banking Authority.
- European Central Bank. 2018a. 'SSM Thematic Review on Profitability and Business Models - Cerca Con Google'. European Central Bank. https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.thematicreviewprofitabilitybusinessmodels_201809.en.pdf.
- ———. 2018b. 'Profitability: Banks See Gentle Upward Trend Continuing'. Newsletter, no. November 2018 (November).
- ———. 2019a. 'Profitability Numbers Are Looking up, but Not Enough'. Newsletter, no. August 2019 (August).
- ———. 2019b. 'Supervisory Statistics'. Banking Supervision - ECB.
- Financial Stability Board. 2011. 'Policy Measures to Address Systemically Important Financial Institutions'. https://www.fsb.org/wp-content/uploads/r_111104bb.pdf.

- Grym, Aleks, Kimmo Koskinen, and Otso Manninen. 2018. 'Nordic Banks Go Digital'. Bank of Finland Bulletin, no. 2 (May): 3–10.
- Guindos, Luis de. 2019a. 'Challenges for Bank Profitability'. In . London.
- ———. 2019b. 'Euro Area Banks: The Profitability Challenge'. In . London.
- Huljak, Ivan, Katri Mikkonen, Harun Mirza, Csaba Mór , and Cristian Perales. 2018. 'Digitalisation and Its Impact on Banks' Costs and Profitability'. Financial Stability Review 2 (November): 129–32.
- Jobst, Andreas Andy, and Huidan Lin. 2016. 'Are We There Yet? Implications of Negative Interest Rate for Monetary Transmission and Bank Profitability'. Zeitschrift F r Das Gesamte Kreditwesen 69 (22): 19–21.
- Koskinen, Kimmo, and Otso Manninen. 2019. 'The Impact of Digitalisation on Bank Profitability'. Bank of Finland Bulletin, no. 2 (May): 1–7.
- Lakhani, Kinner, Jim Reid, and Luke Templeman. 2019. 'How to Fix European Banking ... and Why It Matters'. Thematic Research. Deutsche Bank.
- Le Lesl , Vanessa, and Sofiya Avramova. 2012. Revisiting Risk-Weighted Assets. International monetary fund (IMF). <http://www.asbaweb.org/E-News/enews-29/SUPER/5%20SUPER.pdf>.
- Nouy, Dani le. 2017. 'Too Much of a Good Thing? The Need for Consolidation in the European Banking Sector'. In . Madrid.
- Resti, Andrea. 2017. 'Provisioning Policies for Non-Performing Loans: How to Best Achieve a Clean Balance Sheet'. PE 602.106. In-Depth Analysis. Brussels: European Parliament - Directorate-General for Internal Policies - Economic Governance Support Unit. [http://www.europarl.europa.eu/thinktank/it/document.html?reference=IPOL_IDA\(2018\)614506](http://www.europarl.europa.eu/thinktank/it/document.html?reference=IPOL_IDA(2018)614506).
- ———. 2019. The next SSM Term: Supervisory Challenges Ahead. PE 634.388. Brussels: European Parliament. [http://www.europarl.europa.eu/RegData/etudes/IDAN/2019/634388/IPOL_IDA\(2019\)634388_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2019/634388/IPOL_IDA(2019)634388_EN.pdf).
- Xu, Ms TengTeng, Kun Hu, and Mr Udaibir S Das. 2019. 'Bank Profitability and Financial Stability'. IMF Working Papers WP/19/5. Washington D.C.: International Monetary Fund.

Most significant institutions in the euro area generate returns below the risk-adjusted rate required by investors. This paper surveys several studies on the causes of this low profitability. It then discusses several actions that the SSM may want to put in place, to support banks in their quest for higher returns.

This document was provided by the Economic Governance Support Unit at the request of the ECON Committee).
