

Does IFRS 9 increase banks' resilience?



By Arndt Kund (European Central Bank) and
Daniel Rugilo (University of Cologne)

JEL codes: E58, G21, G28, M41, M48.

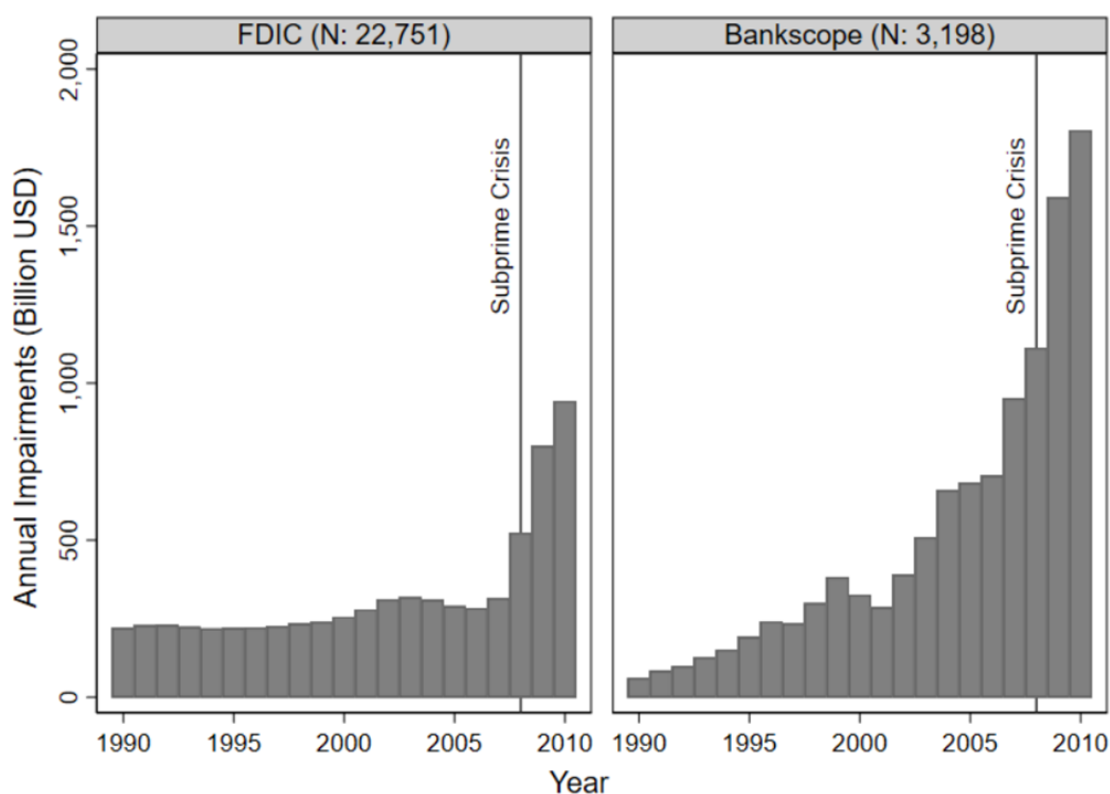
Keywords: Bank Stress Test, CET1, Impairment, Procyclicality.

IFRS 9 substantially affects the financial sector by changing the impairment methodology for credit losses from an incurred to an expected credit loss model. In light thereof, two opposing effects with regard to bank resilience occur: First, an attenuation of the cliff-effect, which refers to a sudden increase in impairments that occurred under IAS 39 due to the delayed recognition of credit losses. Second, a front-loading effect from realising losses that have not yet occurred, and thereby possibly constraining banks' profitability and potential for capital generation by retaining earnings. This paper empirically assesses the net impact of the two effects from the change in accounting using the EBA/ECB bank stress test data. We find that the drawbacks of IFRS 9 prevail in the short-term, but are overcompensated in the long-term and increase banks' resilience in particular at the onset of potential crises.

Incurred loss accounting may have amplified the subprime crisis

Under IAS 39 credit losses were only recognised after the occurrence of a loss-event. In a worst case, this means that losses, which materialised immediately after loan origination, would only be reflected as of the subsequent balance sheet date. This timely discrepancy between the loss-event and its recognition has proven to be one of the drivers that fuelled the financial crisis that started in 2007. In retrospect, regulators around the globe concluded that the IAS 39 accounting was doing “[...] too little, too late [...]”.¹ Figure 1 attests to this conclusion by highlighting how the majority of impairments that originated from losses incurred during the financial crisis that started in 2007, were only realised thereafter. This observation holds true for banks in the U.S. as well as an international sample as obtained from Bankscope on the left and right side of the figure, respectively.

Figure 1: Delay between loss-event and recognition of the respective impairment



G20 enacts a new forward-looking model of expected credit losses

In response thereto, and following a call for change by the G20, the International Accounting Standards Board (IASB) has comprehensively revised the methodology for calculating loan loss provisions. Instead of recognising loan losses only after their occurrence, the new IFRS 9 accounting framework recognises expected credit losses (ECL) that have not yet materialised. Based on their credit quality, loans are assigned to one of three different stages of the impairment model, where a lower stage implies higher credit quality. Based on the respective stage, expected loan losses are calculated for either the next 12-months in the instance of good loans, or until their maturity in the case of underperforming and defaulted loans, respectively. Where loans are considered non-performing, the interest rate is furthermore only calculated on the net book value, as shown in Table 1.

¹ G20 (2009): Declaration on Strengthening the Financial System at the London Summit.

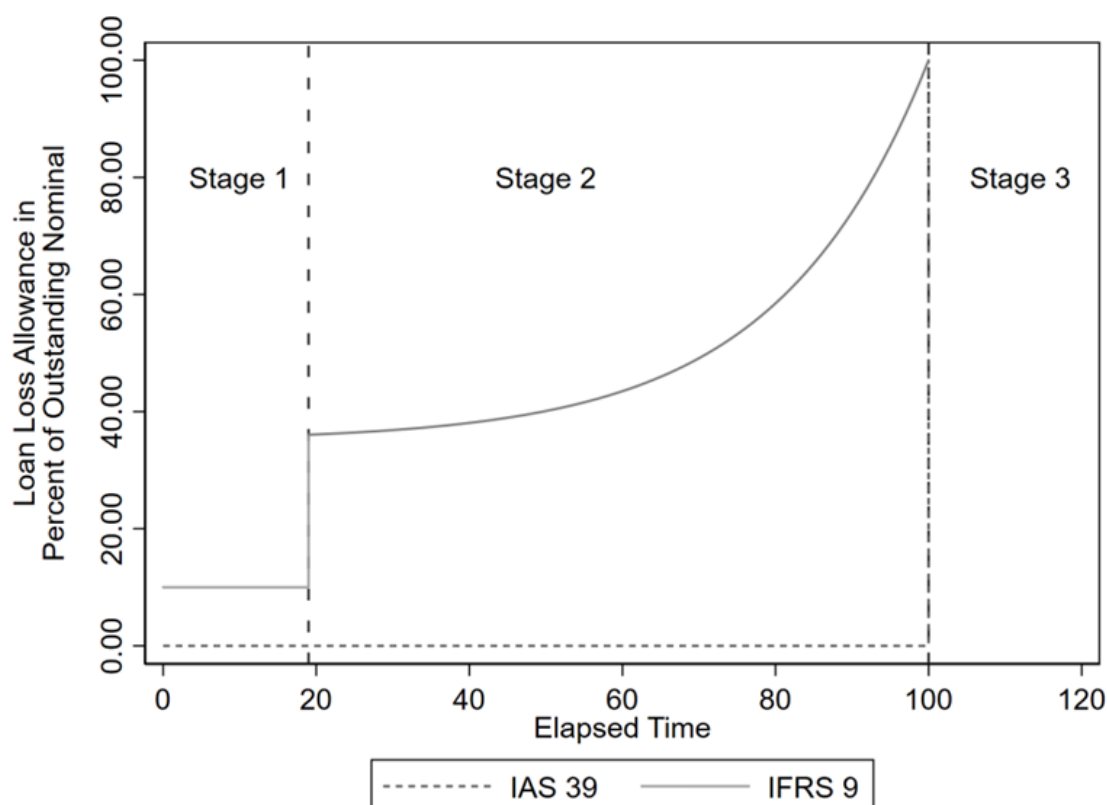
Table 1: Overview of the three stages of IFRS 9

	Stage 1	Stage 2	Stage 3
Classification	performing	under-performing	non-performing
Expected Loss	12 months	lifetime	lifetime
Interest Rate Calculation	gross book value	gross book value	net book value

Doing so creates two opposing effects

This paradigm shift in the loan loss provisioning has substantial implications for the financial sector, which are empirically analysed in this ECB Working Paper. In more detail, the revised accounting framework unleashes two opposing effects with regard to bank resilience. Figure 2 below illustrates them for the former IAS 39 and the newly implemented IFRS 9 accounting framework (cf. full and dashed line, respectively). On one hand, the recognition of expected, but not yet realised credit losses constitutes a notable front-loading effect in Stage 1. This accounting for unrealised losses possibly diminishes banks' resilience by reducing their profitability and consequentially constraining their capital generation by means of retaining earnings. On the other hand, this very front-loading effect reduces the volatility of impairments. Because imminent credit losses are already partially reflected in the expected credit losses, the need for additional impairments is reduced as they build up more gradually, in particular in Stages 2 and 3. This feature likely increases banks' resilience as they remain – in relative terms – more profitable at the onset of a crisis. As both effects are of opposing nature, this paper addresses a gap in the literature and investigates the net impact of the introduction of IFRS 9 in the context of bank resilience.

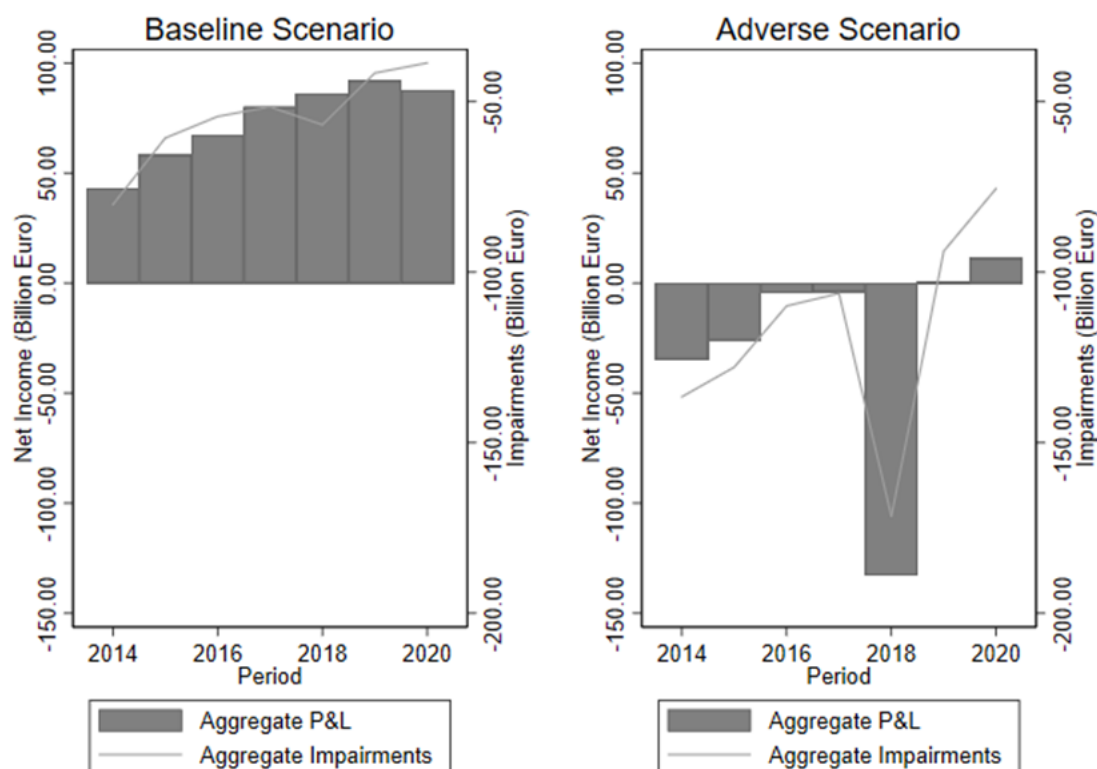
Figure 2: Differences in loan loss provisioning between incurred and expected loss accounting



Negative impact in the short-term

Indeed, we find that the realisation of expected credit losses is detrimental to banks' profitability in the short-term for an adverse macroeconomic scenario, as described by the EBA/ECB bank stress test. However, we find this effect to not be as pronounced as suggested by an initial impact study of the EBA, which concluded that banks would need additional capital of roughly 47 bps CET1 equivalent to maintain capital ratios.² In fact, for an economic baseline scenario that assumes a continuation of current economic trends, we find that – despite the introduction of IFRS 9 in 2018 – banks remain profitable, irrespective of potential concerns with regard to the front-loading effect. Figure 3 below illustrates our observations.

Figure 3: Profitability of banks in a baseline and adverse scenario



Positive impact in the long-term, in particular at the onset of crisis

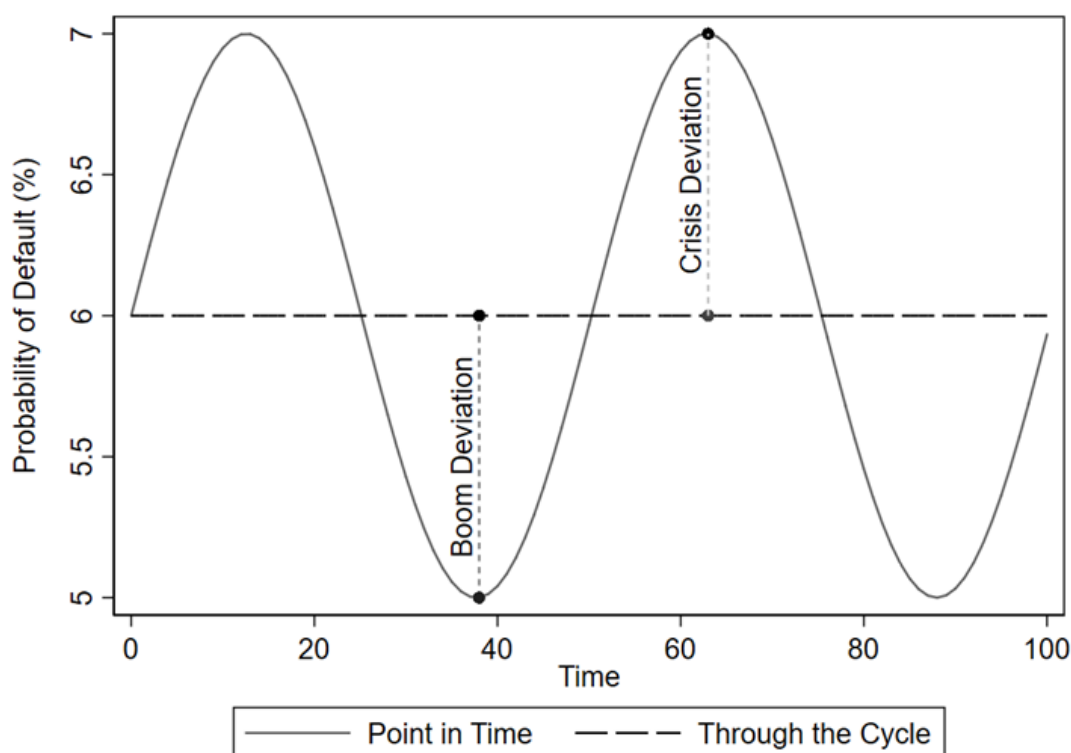
At the same time, our results indicate that, in the long-term, the advantages of a timelier recognition of loan losses under IFRS 9, increases bank resilience. In line with our prediction, the provisioning for expected losses reduces the actual loan loss provisioning at the onset of an economic downturn. As a result, banks become less constrained when the economy slows down, and thereby have the potential to act as a dampening factor, instead of amplifying the economic downturn by selling assets at distressed prices or overly tightening lending standards to maintain capital ratios. We find that this effect grows in magnitude, where the crisis is more severe, which appears also valuable from a macroprudential point of view. Taken together, these long-term benefits outweigh initial negative impacts expected in the short-term.

² EBA (2018): First Observations on the Impact and Implementation of IFRS 9 by EU Institutions.

IFRS 9's reach extends beyond microprudential implications

While our results show that the introduction of IFRS 9 reduces excessive loan origination of banks in times of economic expansion, and increases it during the downturn, the issue of procyclicality – that is the positive correlation between loan origination and the economic cycle – is not fully resolved. Figure 4 below illustrates two possible approaches of estimating probabilities of default of obligors and how they may (not) amplify economic activity. Under the so-called point-in-time approach, only the most recent data points are taken into account, when estimating the solvency of potential obligors. As such, the risk of failure may be underestimated during economic expansion or overestimated during economic contraction, thereby also impacting the willingness of banks to originate loans. In contrast to that the through-the-cycle approach considers an average of the last observed data, which makes it less volatile such that boom and crisis deviations, as illustrated below, may be less pronounced or not even occur in the first place.

Figure 4: Differences in estimating the probability of default in a point-in-time or through-the-cycle approach



However, because information usefulness is the primary goal of accounting frameworks, such as IFRS, there is an inherent tension against the counter cyclical tendencies of banking regulation.³ The usage of point-in-time estimates for the estimation of IFRS 9 probabilities of default vis-à-vis through-the-cycle estimates in internal models for capital requirements, illustrates this tension in unparalleled ways. Because these opposing goals are unlikely to be resolved, it is imperative, that other measures from the macroprudential toolbox are used to address procyclicality, where warranted. Against this background, the observation that only one out of 28 reporting countries in our sample fully exhausts measures such as the countercyclical capital buffer (CCyB), appears notable.⁴ Complimentary tools, such as limits on loan-to-value (LTV) or debt-service ratios (DSR) should become more than a theoretical instrument.

³ IASB (2018): Conceptual Framework for Financial Reporting 2018 – Basis for Conclusions.

⁴ BIS (2022): Countercyclical capital buffer (CCyB) according to: <https://www.bis.org/bcbs/ccyb/>.

In addition, our results follow the theory of the weakest link: if the individual bank becomes more resilient due to the application of IFRS 9, it is reasonable to assume that the financial sector as a whole also benefits therefrom. Exemplary, the risk of contagion from a failing bank is decreased, if IFRS 9 necessitates prudent loan loss provisioning, such that the bank would not fail in the first place. Hence, this paper does not only inform the microprudential, but also macroprudential policy discussion.

IFRS 9 increases bank resilience and attenuates procyclicality

IFRS 9 has fundamentally changed the loan loss provisioning of financial institutions. In doing so, two opposing dynamics have been released: first a front-loading of not yet realised losses, which, second, stands against a reduction of impairments and their volatility, in particular in times of economic distress. The net impact of these diametrical forces constitutes on average a benefit for the individual bank, and thereby fosters its resilience. The benefits of IFRS 9 exceed the individual bank, as increasing its stability also benefits the financial system as a whole. Ultimately, the recognition of expected credit losses disciplines banks loan origination and consequentially address procyclical forces. Nevertheless, procyclicality is not yet entirely resolved, and it is unlikely that this will be fully achieved from an accounting point of view. Against this background, this paper informs the current regulatory discussion also on a macroprudential level and urges regulators to apply the CCyB and other tools such as LTV and DSR without prejudice. ■

About the authors

Arndt Kund completed his Ph.D. in Systemic Risk and Financial Stability at the University of Cologne and Copenhagen Business School. He has since worked for the Single Supervisory Mechanism at the European Central Bank. In his role as a supervisor in a Joint Supervisory Team, he primarily deals with internal ratings-based models and analyses the viability and sustainability of banks' business models. In addition thereto, he covers the EBA/ECB Bank stress tests and contributes to ad hoc tasks on Capital Reductions and CoCo bonds. Dr. Kund holds numerous certificates from the Financial Stability Institute of the Bank for International Settlements and Basel Committee on Banking Supervision, i.a. on the identification and dealing with weak banks as well as systemically important institutions.

Daniel Rugilo completed his Ph.D. in Financial Accounting and Prudential Banking Regulation at the University of Cologne. Since then he has been working in the risk management for a banking association. His responsibilities include specific Basel framework requirements under Pillar I and II, market risk, NPL management, stress testing, AI regulation and the representation of interests at both national and international levels.

SUERF Publications

Find more **SUERF Policy Briefs** and **Policy Notes** at www.suerf.org/policynotes

SUERF

The European Money
and Finance Forum

SUERF is a network association of central bankers and regulators, academics, and practitioners in the financial sector. The focus of the association is on the analysis, discussion and understanding of financial markets and institutions, the monetary economy, the conduct of regulation, supervision and monetary policy.

SUERF's events and publications provide a unique European network for the analysis and discussion of these and related issues.

SUERF Policy Briefs (SPBs) serve to promote SUERF Members' economic views and research findings as well as economic policy-oriented analyses. They address topical issues and propose solutions to current economic and financial challenges. SPBs serve to increase the international visibility of SUERF Members' analyses and research.

The views expressed are those of the author(s) and not necessarily those of the institution(s) the author(s) is/are affiliated with.

All rights reserved.

Editorial Board

Ernest Gnan
Frank Lierman
David T. Llewellyn
Donato Masciandaro
Natacha Valla

SUERF Secretariat
c/o OeNB
Otto-Wagner-Platz 3
A-1090 Vienna, Austria
Phone: +43-1-40420-7206
www.suerf.org • suerf@oenb.at