The European path towards a sound Pillar 2 framework for banks

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1. Introduction [1]

Pillar 2 is a cornerstone of prudential regulation for banks. It was introduced in 2004 in the Basel 2 Accord with rather ambitious objectives, i.e. to incentivize financial institutions to better measure and manage risks and to make capital requirements more risk-sensitive than under Basel 1. ([2]) The underlying key idea was quite simple: to complement the minimum requirements prescribed by regulators (Pillar 1) with tailored supervisory measures based on a comprehensive analysis of the banks' riskiness, including a review of their self-assessment (Pillar 2). Regulators had recognized that the banking business is so complex and the risks are so heterogeneous that the first line of defence is proper risk quantification and management by the banks themselves. Specific disclosure requirements (Pillar 3) completed the picture, with the aim to promote market discipline.

The Capital Requirements Directive (CRD) – bringing the Basel principles into European law – entered into force in 2006; the Directive, among other things, implemented Pillar 2 by distinguishing the ICAAP (Internal Capital Adequacy Assessment Process, i.e. the bank self-assessment) from the SREP (Supervisory Review and Evaluation Process, i.e. the evaluation of bank risk profile carried out by the supervisor). However, Members States and supervisory authorities began working on implementation right before the outbreak of the financial crisis. In such a context, the implementation of Pillar 2 principles slowed down, since supervisory priorities suddenly changed: the objective became to restore the stability of the financial system, along the lines indicated by the G20 Leaders. Today, in the run-up to the completion of post-crisis regulatory reform, the debate has regained momentum and the finalization of a sound supervisory framework can be done under more favourable conditions. On the regulatory side, the revised CRR/CRD rules and the EBA Guidelines aim at completing the common framework for EU banks; on the supervisory side, the Single Supervisory Mechanism (SSM) has been working since inception (2014) in the direction of building a common toolkit for a supervisory assessment of banks' risks. Against this background, there is a number of issues that need to be carefully monitored in the new implementation phase, so as to ensure that Pillar 2 keeps its key original properties and results fully effective.

2. The regulatory and supervisory framework

On the regulatory side, the Basel Committee on Banking Supervision (BCBS) set forth the Pillar 2 principles and objectives for the first time in 1999; after five years of discussion, those principles were consolidated in the final version of the Accord, confirming the strong commitment of regulators to give a prominent role to the supervisory review process and to the interaction between banks and supervisors.[3] Indeed, the Basel Accord acknowledged that – although more complex and risk-sensitive than before – Pillar 1 requirements for credit, counterparty, market and operational risks were not (and could not be) sufficient to capture a bank's risk profile.

The high-level and non-binding nature of the Basel principles with regard to Pillar 2 implies the need for an adequate degree of harmonization across jurisdictions. Nevertheless, such process had slowed down because of new priorities in the aftermath of the financial crisis. Implementation of the Pillar 2 framework has been rather heterogeneous, both globally and in the EU, in light of different supervisory models across jurisdictions. In Europe, the transposition in 2013 of the Basel Pillar 2 framework through CRDIV is spelled out in relatively general terms, leaving room for different solutions. For this reason, the issuance of the EBA SREP Guidelines (EBA GL) – entered into force in 2016 – represented an important milestone in the harmonization process.

A major innovation introduced in the CRDIV lies in the nature of Pillar 2: indeed, the capital add-on to be held in excess of Pillar 1 has become a binding requirement. The EBA GL on SREP state that Pillar 2 requirements (P2R) are to be met *at all times*, thus representing a ground-breaking element in comparison with the Basel framework, where additional capital requirements (on top of Pillar 1) were treated as supervisory expectations (e.g. trigger/target ratios). Indeed, in the EU an institution failing to meet P2R could even face, in a worst-case scenario, the withdrawal of its authorization (Art. 18 CRDIV). By the same token, Art. 32 of BRRD considers an infringement of the requirements for continuing authorization (i.e., among other things, the P2R) as one of the circumstances that identify an institution as failing or likely to fail (FOLTF).

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[2] Even though very innovative at international level, the principles embedded in Pillar 2 had already been implemented in a number of jurisdictions well before Basel 2. In Italy, for example, non-binding target capital ratios had been set in 2001 for the largest banks and the 'supervisory dialogue' between supervisors and institutions was a cornerstone of national supervisory practices.

[3] The Pillar 2 framework has been built around four principles: *Bank's own assessment of capital adequacy; Supervisory review process; Capital above regulatory minima; Supervisory intervention.*

As regards stress testing, a generic reference as one of the core SREP ingredients is included in the CRDIV (Art. 97), whereas Art. 100 explicitly introduces supervisory stress testing as a tool *to facilitate the review and evaluation process*.

The EBA GL extensively describe the supervisory powers, providing a non-exhaustive list of measures that can be applied for each risk profile, consistently with the concept that measures are meant to *address specific deficiencies identified in the assessment of SREP elements.* The overall SREP score expresses the *viability* of a bank, i.e. the potential for risks to cause its failure, thus indicating the need for early intervention measures ([4]) and/or for determining whether the institution can be considered to be FOLTF. Supervisory measures can be quantitative (e.g. addressing capital or liquidity) or qualitative in nature. After considering the outcome of the assessment of risks-to-capital, supervisors quantify the additional own funds needed to cover material risks. This allows them to define size and composition of the regulatory 'capital demand'. In particular, the GL indicate that banks' internal capital adequacy assessment (ICAAP) should be the starting point for determining additional requirements on a risk-by-risk basis; ([5]) in all cases, internal calculations should be challenged by risk-specific supervisory benchmarks and supplemented with other relevant inputs gathered during the SREP. The high degree of heterogeneity in the quality of ICAAP across banks and jurisdictions has been one of the main drivers of the diversity of supervisory approaches in Europe so far.

In addition, the EBA GL clarify that supervisors should use stress testing to assess the adequacy of institutions' own funds and to contribute to setting Pillar 2 requirements.([6]) A revised version of the guidelines on common procedures and methodologies for SREP and supervisory stress testing (EBA/GL/2018/03) entered into force on 1 January 2019. The new text includes, among other things, the framework for the Pillar 2 Guidance (P2G), which is defined as follows: 'a *non-legally binding capital expectation at level over and above overall capital requirements (OCR) based on the SREP findings, in particular: i) the ability to meet the applicable own funds requirements in stressed conditions, or (ii) supervisory concerns over the (excessive) sensitivity of an institution towards scenarios assumed in supervisory stress testing*.'

More recently, a number of further changes to the EU rules on Pillar 2 have been introduced within the review of the CRD/CRR, with specific regard to the introduction of a stronger 'risk-by-risk' perspective in the assessment of banks (art. 104a) and a fully-fledged framework for the Pillar 2 Guidance (art. 104b).

On the supervisory side, the SSM for the Euro area has been particularly active in the implementation of Pillar 2. The Supervisory Manual provides a comprehensive guide on how off- and on-site supervisory activities are conducted. ([7]) In this context, SREP is one piece of a broader framework, that *"forms the basis for a decision on the adequacy of the levels of capital and liquidity and for additional supervisory measures to be adopted at least on an annual basis and updated whenever necessary"*. ([8])

In line with the EBA Guidelines, the SSM SREP is organized around four main elements, which cover all major drivers of bank riskiness: business model; governance and risk management; risks-to-capital; liquidity. Such elements are looked at together when drawing up the overall assessment and preparing the SREP decision ([9]), and are assembled to get an overall assessment and, in turn, a consistent supervisory decision that might include the quantification of a capital add-on - divided into a binding requirement (P2R) and a non-binding component (P2G) - liquidity needs and qualitative measures.([10])

As of today, further work is under way in two major and interrelated areas. First, the SSM is working to enhance the role of the ICAAP and develop a methodology to better integrate the supervisory, bank and forward-looking perspectives.([11]) In accordance with this objective, the SSM has launched a multi-year plan for ICAAP and ILAAP to foster improvements and set out supervisory expectations for banks' internal capital adequacy assessment processes.

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[4] Article 27 BRRD.

[5] The GL read as follows: 'Competent authorities should determine additional own funds requirements on a risk-by-risk basis, using supervisory judgment supported by the following sources of information:

a. the ICAAP calculations;
b. the outcome of supervisory benchmark calculations; and
c. other relevant inputs, including those arising from interaction and dialogue with the institution.'

[6] The GL read as follows: 'competent authorities should determine the adequacy of the institution's own funds (quantity and composition) to cover volatility over the economic cycle and whether measures are required to address potential inadequacies. To do so, competent authorities should use stress testing (the institution's own and/or supervisory testing) to determine the impact of a baseline and adverse scenarios on available own funds and whether these are sufficient to cover capital requirements (OCR and TSCR) or any other relevant target ratio set by competent authorities for system-wide stress tests.'

[7] The Supervisory Manual was published in 2018 to make market participants aware of the toolkit used to conduct ongoing supervisory activity and comply with the SSM accountability principles; ECB (2018a).

[8] More recently, a staggered approach has been conceived to foster a gradual harmonization of the SREP frameworks adopted at national level for the risk assessment of Less Significant Institutions (LSIs) and align policies and methodologies to the ones used by the SSM for Significant Institutions; ECB (2018b).

[9] The SREP decision is a decision issued by the ECB at the end of the SREP cycle to communicate to the bank the outcome of its assessment as well as the areas of improvement identified.

[10] Total SREP Capital Demand: P1R + P2R + Combined buffer requirement + P2G. The P2G is not MDA relevant; the MDA trigger represents the CET1 ratio threshold that, if breached, would lead to automatic restrictions on capital distributions and variable remunerations.

[11] ECB (2018d).

Second, consistently with the new EBA Guidelines on SREP, the SSM is strengthening the risk-by-risk assessment perspective in the SREP by leveraging banks' estimates of ICAAP. An enhanced risk-by-risk methodology will provide institutions with a higher degree of disclosure on how the supervisory measures adopted as a result of the SREP are determined so as to strengthen the link with the deficiencies identified in the supervisory assessment and incentivize banks to address them promptly.

3. Key features of Pillar 2

As discussed above, the European framework for Pillar 2 is rather complete at this stage (i.e. high-level principles, rules and supervisory guidelines). What is missing is its fully-fledged implementation, even though the experience gathered so far shows that supervisors are going in the right direction. In this context it is essential that all key features of Pillar 2 are properly considered, i.e. 1) comprehensive; ii) flexible; iii) risk-based; iv) forward-looking; v) transparent. With regard to these, the SSM in particular should continue its efforts in order to make the whole Pillar 2 framework fully effective.

3.1 Comprehensive

As envisaged by the Basel 2 Accord, Pillar 2 is at the heart of prudential supervision for banks. Not only does it cover the ongoing assessment of bank's risks but it does represent the broad frame (in terms of both process and methodology) under which supervisors challenge the individual banks and, accordingly, implement the supervisory response to the identified weaknesses. To this regard, Pillar 2 has two objectives: address risks to capital not covered or insufficiently covered by Pillar 1, and incentivize banks to overcome a specific and well-defined deficiency. Therefore, the identification of Pillar 2 with capital only is clearly wrong, other than incomplete and biased.

On the one hand, the strong emphasis on capital in recent years is easy to understand in the light of policymakers' response to the financial crisis. On the other hand, things might be different under 'normal' conditions where the entire range of potential supervisory measures should be implemented: as highlighted in the Basel rules, capital is a key tool available to supervisors to address a bank's weaknesses, but cannot be used as a substitute for other measures. Capital is not a panacea, i.e. its function is not to fix flaws in areas such as governance and business models, nor does it help curb liquidity mismatches or risks stemming from a poor management system. Indeed, supervisors should assess all bank's characteristics, i.e. risks which do not directly constitute risks to capital, such as the organizational structure and processes, the risk control and management framework, the business model and liquidity. For these elements, a separate quantification is clearly needed and might be facilitated by a risk-by-risk assessment perspective in the SREP (as the SSM has already embarked on). In case of deficiencies, a penalty could be imposed to incentivize banks to take appropriate mitigating action. To determine this penalty, the full range of supervisory powers should be used: requiring the strengthening of arrangements, processes, mechanisms and strategies; presenting a plan to restore compliance with supervisory expectations; restricting or limiting business activities that pose excessive risk to the soundness of an institution. A capital add-on should be considered only as a last resort, as an interim requirement to be reassessed based on the progress made by the institution.

3.2 Flexible

Notwithstanding the binding nature that the EU legislative framework assigns to Pillar 2 requirements, a broad interpretation of Pillar 2 (including also the capital buffers introduced by the CRD4) is consistent with a multifaceted set of supervisory tools, defined by different objectives and degrees of flexibility: *Pillar 2 add-ons* should be seen as contributors to the binding capital demand and thus calibrated to reflect to the extent possible banks' actual exposure to risks; CRD 4 *capital buffers* as flexible tools to be accumulated before risks materialize and to be used the other way round (thus, not to be crystalized as binding capital requirements themselves); *Pillar 2 Guidance* as a supplementary, non-binding buffer aimed at covering potential risks stemming from hypothetical economic scenarios. The supervisory response (particularly in case of a breach) should thus be fine-tuned to take into account features and objectives of the different components of the capital demand. Therefore, supervisors should be able to swiftly raise but also to lower the bar to respond to the bank's actions and their effect on the risk profile under scrutiny; accordingly, the 'stacking order' of capital components must always be respected, especially in the case of supervisory response to breaches.

Some degree of flexibility might also be introduced as regards the quality of capital needed to cover Pillar 2 capital requirements. On the one hand, it is widely recognized that CET1 capital is the one with the strongest loss-absorbing properties; on the other hand, we cannot ignore that the Basel framework has always envisaged a broad spectrum of capital instruments, not limited to CET1 only, with the twofold objective of increasing the degree of banks' capitalization and developing a secondary market. In addition, the latter is also incentivised by the MREL framework, which will push banks in the coming years to issue capital instruments other than CET1 capital. In this context, the debate over the type of capital needed to cover Pillar 2 risks, especially those that have a limited impact if they materialize, is still open. This is also confirmed by the new CRD text, clearly stating that supervisory authorities will have the power to require that P2R must be met solely with CET1 capital where necessary and having regard to the specific characteristics of the institution.

3.3. Risk-based

The Basel Accord states that bank's management must be primarily responsible for understanding the nature and level of risks being taken on and how these risks relate to capital levels. A sound and credible risk-based framework rests on a proper measurement of risks. The underlying idea of the Basel paradigm is that, as a complement to the supervisory perspective, banks are in an even better position to measure the risks arising from the business. This is where the role of the ICAAP comes from, also as a starting point for the discussion with the supervisor. Banks should be made more aware of the benefits of better integrating the internal capital adequacy process into risk management and strategic decision making. This integration is likely to produce, among other things, an enhanced monitoring of the capital adequacy system (so as to take preventive actions or determine capital allocation), an ICAAP-based risk-adjusted performance framework (that will enrich the risk culture and contribute to the determination of variable remuneration) and a clearer link between risks, capital adequacy and the strategic objectives of a bank.

The ongoing initiatives in the EU to further improve the reliability of banks' ICAAP, e.g. at the SSM level, seem to be moving in the right direction and are fully consistent with the Basel concept. In our view, this remains the sole feasible option to continue developing a risk-based prudential framework. It is fair to say that, for banks with a complex banking business, risks cannot be captured by simplified supervisory models. This does not mean that supervisors should abdicate their role. Indeed, they need to intensify their assessment. This should be done via a targeted interaction with institutions to improve the quality of the ICAAP estimates, by launching supervisory campaigns (e.g. on-site inspections, deep dives, thematic reviews) to gain a better understanding of banks' capital allocation process, and through a rigorous process for challenging banks' estimations to prevent opportunistic behaviours. In this regard, proper tools for understanding, assessing and back-testing banks' estimates are needed. Such tools should be able to identify potential outliers, triggering discussion about the possible underlying reasons in the context of the supervisory dialogue: they should never be applied mechanistically nor should they substitute supervisory judgement. An adequate balance between flexibility (that accommodates a tailor-made calculation of the risks) and comparability (that enables a level playing field) is therefore needed.

3.4 Forward-looking

Given its role in driving the supervisory action on individual banks, Pillar 2 is expected to contain also a forward-looking component. The indicators used in the risk assessment are or can be adjusted in this direction but some more refined analytical tools, such as stress tests, can also be used in order to capture the possible evolution of banks' financial conditions in predefined hypothetical scenarios.

In recent years stress testing has taken on an increasingly important role in banking, going from being an internal risk management tool for assessing the potential vulnerability of a financial institution under hypothetical conditions to become one of the tools used by supervisors to strengthen their forward-looking view on banks.([12]) The 1996 Market Risk Amendment and the 2004 Basel 2 Accord confirmed the role of stress testing in prudential regulation, both in a Pillar 1 context (i.e. to set minimum capital to be held by banks to cover potential losses under adverse scenarios) and in the Pillar 2 framework. As for the latter, several jurisdictions – such as the US, UK and the euro area – make use of supervisory stress tests to evaluate capital adequacy and/or to set capital buffers above minimum capital requirements.

In the EU this tool has been used in very different ways over time ([13]): starting as a recapitalization exercise (as it was in 2011 and 2014), its nature has changed, becoming a key tool for identifying potential vulnerabilities in the banking system (as it was in 2016 and 2018) and contributing to the (non-binding) Pillar 2 Guidance for banks. In addition, the results of stress testing have an express role in the crisis management framework under the BRRD, in particular to determine whether a precautionary recapitalization is warranted. Stress testing is therefore a powerful tool that can serve a number of purposes; as a result, a clear idea of what the objectives should be and what the limitations are in a Pillar 2 context is needed.

Regarding the objectives, it is widely accepted that the SREP assessment should incorporate a forward-looking perspective, which is not necessarily captured by ordinary supervisory models (i.e. Risk Assessment System in the SSM taxonomy). The definition of an adequate supervisory response to the specific deficiencies of a bank over a pre-defined time horizon cannot disregard the potential evolution of all risk profiles.

At the same time, such exercise can be used to gather more specific information on the bank's risk management capability system. As for the limitations, a large range of empirical literature is available on the shortcomings of stress testing models,([14]) serving to emphasize that – regardless of the specific methodologies used – stress tests are always based on models, which are *by construction* a simplified representation of what could happen in the near future and therefore capture a high degree of uncertainty: scenarios, data, metrics, communication and risk managers' skills are among the major drivers that contribute to determining overall reliability of a stress testing framework.

[12] Financial Stability Institute (2018).
[13] Enria (2018).
[14] Financial Stability Institute (2018), Thun (2012).

The idea of using stress testing in a Pillar 2 context goes back to Basel, although within the ICAAP framework and not as an explicit supervisory tool. Nevertheless, as used in the euro area, stress testing methodologies in the ICAAP are not advanced enough at this stage. So called 'bottom-up' supervisory stress tests somehow fill the gap, even though the pros and cons have to be kept clearly in mind in using the results. ([15]) On the one hand, all banks in the same jurisdiction are subject to the same methodology and types of scenario, and are therefore assessed in a fully comparable way; in addition, the quality of submitted data and information is closely scrutinized and challenged by supervisors to ensure the reliability and the comparability of the results. On the other hand, common methodologies and scenarios (even though potentially calibrated to reflect some specific characteristics, such as those of the country) cannot take into consideration all idiosyncratic risks that banks are exposed to; in addition, if the 'static approach' is adopted, no management actions by the bank in response to the adverse scenarios can be considered, therefore making the exercise less realistic.

A supervisory stress test – from a bottom-up perspective – seems to still be the most valuable option at this juncture, since banks are incentivized to further improve their own data aggregation and stress test capabilities. However, in the near future, following further development of banks' internal stress testing, we would expect an approach combining the two perspectives (supervisory exercises and banks' ICAAP frameworks) to be taken. Such a medium-term solution could better inform the supervisory assessment, integrating institution-specific features with the current stress testing approach. In particular, with the ICAAP framework, the bank would tailor methodologies and scenarios to its own risk appetite and business strategy; accordingly, supervisors would gain a comprehensive view of its vulnerabilities that might not be fully captured under the bottom-up perspective[16].

In any case, no automatic incorporation of stress test results should be considered in a Pillar 2 context. Currently, the EBA GL provide for a mechanistic rule to derive the P2G, although some adjustments can be made. We believe that supervisory judgement must be fully exercised to this regard, in part to ensure that, in addition to having a complementary view on capital adequacy, both banks and supervisors are in a position to extract informative value from stress testing (from a qualitative perspective as well) and to better inform their respective (management and supervisory) actions.

3.5 Transparent

As previously discussed, one of the objectives of Pillar 2 is to align bank incentives in the direction of strengthening their risk management capabilities and overcome the shortcomings identified by supervisors. In the light of this, a certain degree of transparency by supervisors is a key ingredient. The ongoing debate is focussing around two distinct dimensions: the disclosure of the methodology used by supervisors to assess banks' risks and the disclosure of the results of the SREP.

As for the first dimension, in recent years most supervisors have increased the degree of disclosure of their SREP methodology. With regard to the SSM, in 2018 the ECB published a rather comprehensive version of the SSM Supervisory Manual (ECB, 2018b), although is it an abridged version of the text used by supervisory analysts, and it is not excluded that in the future some more details of the SREP methodology will be made public. Disclosure is meant to accomplish two objectives: first, accountability towards the market and the relevant stakeholders, which is particularly important when a degree of judgement is exercised in making the supervisory assessment; second, the need to make banks aware of the rationale underlying the supervisory assessment so they can improve and be encouraged to correct possible deficiencies.

With regard to the second dimension, the approaches adopted across jurisdictions vary greatly. UK authorities expect banks to communicate the P2A to the public, the US supervisors publish CCAR results (playing a key role in the determination of the capital requirements), while the SSM neither prevents nor dissuades institutions from disclosing SREP capital requirements, leaving whether to do so to the banks' discretion. In Europe the European Market Abuse Regulation (MAR) states that institutions with publicly traded securities are expected to evaluate whether Pillar 2 requirements meet the criteria of inside information (e.g. price-sensitive) and should be publicly disclosed. More recently, the revised CRD/CRR have introduced a requirement for large banks to disclose, from 2020 onwards, their Pillar 2 requirements.

4. Conclusion

Pillar 2 represents one of the major innovations in international regulation in the last twenty years. The Basel principles, introduced in the 2004 Accord, have been confirmed through the subsequent development of the Basel framework: focus on risks, incentives for banks to improve risk management, an enhanced dialogue between banks and supervisors. Nevertheless, the concrete implementation of those principles has been rather heterogeneous across jurisdictions, given the different institutional and economic contexts as well as market developments.

[15] In this type of exercise, the supervisors define the scenario and the methodology, while banks are allowed to use their own models to project the results, subject to quality assurance. As an alternative to the bottom-up approaches, the supervisors can make use of top-down exercises; in this context, supervisors collect data to use in their models to assess banks' performance under stress, with limited involvement of institutions.

[16] It is worth noting that a discussion on the future of stress testing has just started. See A. Enria Speech at ESRB Annual Conference: *The future of stress testing – realism, relevance and resources*

In general terms, the content of Pillar 2 has evolved from the original Basel concept. This is not surprising given that the implementation of Pillar 2 has coincided with the eruption of the financial crisis and the greatest regulatory reform of the financial sector in the last few decades.

Indeed, the Basel principles were designed in a pre-crisis environment, when a set of key concepts seemed to be rock solid: market-friendly regulation and (in some cases) light-touch supervision, reliance on banks' self-assessment, and the idea that major banking risks are adequately covered by Pillar 1 capital requirements and that possible capital add-ons can intervene in a flexible way only when the latter are insufficient. In the post-crisis environment, Pillar 2 implementation (at least in the EU) has moved in a direction where: Pillar 2 requirements are as binding as those of Pillar 1, capital measures represent the main response to banks' shortcomings, it has been a struggle to integrate banks' self-assessments (ICAAP) into the framework, and Pillar 2 risks that are not covered in Pillar 1 are material.

This approach is understandable for the time being, given the context in which supervisory authorities have had to intervene to make the system safer. The high-level framework for Pillar 2 designed by Basel has been used by supervisors in a very pragmatic way in the aftermath of the financial crisis to enhance their action with regard to banks' risks. This confirms *per se* the soundness of the original Basel idea. Nevertheless, the issues identified in the note have to be closely monitored in order to avoid Pillar 2 losing its key properties. In summary, Pillar 2 has proven to be resilient in *bad times*, it needs to be fully effective also in *good times*.

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