EUROPEAN CENTRAL BANK
BANKING SUPERVISION

Systemic risk mitigation: the roles of capital and corporate governance

Speech by Ignazio Angeloni, Member of the Supervisory Board of the ECB, Conference on “Banks, Systemic Risk, Measurement and Mitigation”, Panel on: “Systemic risk mitigation; is capital enough? The crucial role of corporate governance”, Università La Sapienza, Rome, 17 March 2017

1. Introduction[1]

The organisers have chosen a very relevant topic for this panel. The first part of the title poses a question which is relatively straightforward to answer: capital in itself is clearly *not* enough to prevent systemic risk in the banking sector (nor for that matter, excessive idiosyncratic risk). Many banks that ran into trouble during the crisis were comfortably capitalised. Lehman Brothers, for example, had a Tier 1 ratio of 11% up to its demise.[2] Even banks that did not fail saw their capital sharply and unexpectedly depleted.[3] In sum, the assurance provided by capital *alone* is limited, and depends on imponderable factors.

The second part of the title is less obvious. While capital is the quintessential measure of solvency, other prudential standards (on liquidity, funding, distribution of resources, etc) are needed to support and preserve it before that “safeguard of last resort” is reached. Governance, which has no direct link to any part of the bank balance sheet, can nonetheless be thought of as performing a similar function: it protects bank capital by making sure it is administered safely and soundly. One way of putting it is that governance is the first line of defence of a bank’s soundness, whereas capital is the last one.

The ECB, which assumed supervisory duties in November 2014, conducts a supervisory process covering all prudential instruments considered by EU and national law, including, of course, capital requirements and governance control. The ECB started, in 2014, by conducting a comprehensive assessment of the banks that would fall under its supervision. That assessment was focused on the banks’ balance sheets only, and specifically on the quality of their assets (asset quality review) and their resilience to shocks (stress test). As a result, some banks were asked to raise their capital. As such, in keeping with the constraints and limits imposed by the SSM Regulation, governance was not taken into consideration at all in the assessment, neither when performing the analysis nor when imposing any requirements on banks. This explains in part why the assessment, while accurately identifying the weaker banks in our supervised population, turned out in the end not to be sufficient to fully redress their situation.

In my remarks today, I will first review the main lessons that can, from a supervisory perspective, be drawn from the recent research on these subjects. I will then describe the ECB’s supervisory process, in particular the set of analyses that we use to assess bank risks and to quantify capital requirements. Governance is one element in that set, among many others. Finally, I will outline those ECB activities which, by contrast, are specifically focused on governance, including the fit and proper test of bank managers and administrators.

2. Bank capital, systemic risk and governance: research results

The aftermath of the global financial crisis saw a surge in research on the relationship between banks’ capitalisation levels, their contribution to systemic risk through individual risk-taking, and the extent to which the latter is influenced by underlying governance structures. Intuitively, one may be tempted to conclude that more capital should always make banks safer. However, this assertion rests on a “ceteris paribus” assumption, namely that bank behaviour would remain unchanged. When this is not the case, the outcomes may be different; the relations between capital levels, risk and governance become more complex. Let’s examine some of the relevant lines of arguments.

Banks and the optimal level of capital

Capital is central from a prudential point of view, since it is a yardstick for the maximum unexpected loss a bank may withstand while remaining in business. This suggests that, all else being equal, more capital should be associated with a more distant prospect of bankruptcy. However, there are two broad caveats to this conclusion.

First, capitalisation levels may affect managerial decisions. Insofar as the incentives of managers and shareholders are aligned, sound risk management should follow.[4] However, more stringent capital requirements may shift bank preferences towards more risk-taking.[5] Second, potential second-round effects may ensue from capitalisation requirements insofar as they are associated with higher funding costs for banks, reduced bank lending and deleveraging. These effects are systemic in nature, because they hinge on the transmission of effects to, and feedback from, the economy as a whole. Although negative feedback effects may differ across banks so that the systemic impact may not be clear-cut, opponents of higher capital requirements[6] argue that their detrimental effects on overall financial intermediation might ultimately run counter to the health of banks themselves, and possibly increase systemic risks as well, also by shifting intermediation out of the banking system.

The answer to this question therefore depends on the measurement of the cost of capital and of its effects on bank behaviour. A number of studies have estimated that the impact on the cost of capital stemming from higher capital requirements is low, in part because both equity and debt become safer (and thus cheaper) when the equity cushion increases.[7] A recent BIS working paper shows that better capitalised banks enjoy lower funding costs as well as higher growth in both debt funding and lending volumes.[8] It has also been noted that more weakly capitalised banks were associated with reduced lending levels in the wake of the crisis,[9] and that the long-term impact of (increased) bank capital cannot reliably be associated with lower lending in any case.[10] On this basis, the post-crisis trend towards higher capital standards was clearly appropriate. Conversely, some authors have noted that higher capital requirements reduce the supply of liquidity services by banks,[11] while some case studies suggest that higher capital requirements have a negative effect on bank lending.[12]

No clear-cut research results are available quantifying the optimal level of capital by banks. A recent IMF paper[13] finds that a capital ratio of 15-23% would have been sufficient to absorb losses in the majority of past banking crises, thereby avoiding forcing losses on bank creditors (through bail-ins) and taxpayers (through bail-outs). This level of capital is broadly consistent with the range for loss absorption put forward by the Financial Stability Board and the Basel Committee on Banking Supervision (BCBS) for systemically important entities. It is worth noting, however, that this range is significantly higher than the capital levels observed in the real world, regardless of location, size, and business models.

Idiosyncratic versus systemic risk

Intuition suggests that increased risk-taking by banks (on either side of the balance sheet) should lead to a more fragile system. However, a strand of the literature suggests that the differences in banks' relative contributions to systemic risk may be significant, depending on their size as well as on their business models. For example, large banks tend to invest more in risky market-based activities and also rely more on wholesale funding. Though these entities tend to be more diversified and therefore not necessarily riskier on an individual basis, their contribution to systemic risk is disproportionally high.[14]

A number of research contributions have explored the interactions between individual banks' risk-taking decisions and the build-up of systemic risk.[15] Individual banks may deliberately choose to link their individual destiny to that of the system as a whole by taking large and correlated risks. For example, several papers have shown that banks' herding behaviour may be an optimal strategy to follow in a bid to either (i) avoid negative externalities on surviving banks (arising from the costs of recession) or (ii) secure a large-scale, public sector bailout, associated with multiple bank failures.[16] Concerning liquidity and funding risk, some contributions have analysed the determinants of banks' excessive maturity mismatches and of aggregate liquidity shortages, stemming from either excessive reliance on short-term funding[17] or from over-investment in illiquid assets[18] . Also the degree of competition plays a role in explaining why banks opt to be exposed to common risk sources and diversify less.[19]

Banks' governance and risk-taking

Some contributions have taken a detailed look at the relation between governance and risk-taking. Ownership structures have been shown to be relevant, with more shareholder-focused corporate governance structures being associated with higher levels of systemic risk.[20] Regulatory frameworks play a role in shaping banks' risk-taking incentives, and conversely, the same regulation may have different effects on risk-taking across banks depending on their ownership structure.[21] Some papers have also expanded on what makes banks different to non-financial entities from a governance point of view, namely the multiplicity of their stakeholders and the complexity of their operations, and the problems which this entails (including lower levels of control by stakeholders, too-big-to-fail and agglomeration issues).[22] The role of executive compensation in influencing banks' risk-taking behaviour has also been examined. In this context, a key issue is whether compensation schemes encourage managers to take excessive bets (from the perspective of shareholders), or whether such schemes align the objectives of managers and shareholders.[23]

Implications for policy

Taking these elements together, I would highlight three policy takeaways:

First, most evidence suggests, with the benefit of hindsight, that pre-crisis levels of capitalisation were on average insufficient. Although consensus on an optimal capitalisation level is elusive, there should be no doubt that the regulatory push which took place in the aftermath of the crisis towards more and better quality capital was appropriate. It is more difficult to judge whether the present levels are adequate. My personal reading of the research evidence is that the present levels, though much increased in recent years, may still be on the low side, especially considering that capital requirements based on idiosyncratic risks were not sufficient when one accounts for systemic risk. This is therefore particularly the case for systemic institutions.

Second, concerning banks' governance, the interactions between regulation and underlying governance structures (and the differential effects which these might have) call for a holistic approach towards tackling potentially excessive risk-taking by banks.[24] Experience suggests that some banks were subjected to a less intense degree of scrutiny by markets relative to non-financial corporates, implying that banks' borrowing costs did not always reflect their implicit risk profile.[25] In turn, these findings suggest that prudential supervisors cannot be satisfied with solely focusing on capitalisation as a way of reducing systemic risk – their approach must include governance elements as well.

3. SREP and other risk analyses at the ECB

Among the analyses of bank riskiness at the ECB, the Supervisory Review and Evaluation Process (SREP), which has taken place on an annual basis since 2015, takes centre stage. The SREP assembles criteria and quantified methods to assess and measure bank risks stemming from a variety of sources and to map those risks to prudential requirements. It is no exaggeration to call the introduction of the SREP a real milestone in European banking supervision, because for the first time all euro area banks were reviewed and benchmarked using a single methodology.

The SREP is a comprehensive process organised around four main elements: business model; governance and risk management; risks to capital; risks to liquidity. Taken together, these elements include all proximate and remote determinants of bank risk. The SREP process includes a quantification of capital and liquidity needs, including a comprehensive review of the institutions' Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP), as well as stress tests, assessing banks' resilience to future adverse shocks. These elements are quantified using various scoring approaches and then assembled to arrive at an overall assessment. The culmination of this process is the quantification of capital (Pillar 2, divided further into a requirement, or P2R, and a guidance, or P2G) and liquidity needs and, where needed, the formulation of other measures, also of a qualitative nature (e.g. to deal with shortcomings in risk management), formalised in the SREP decisions taken by the ECB. The SREP involves the ECB supervisory structures at multiple levels, including the horizontal function, in charge of the methodologies and the level playing field, and the Joint Supervisory Teams (JSTs), each responsible for supervising an individual banking group.

Let us focus on two of the elements that are more relevant for our topic: risks to capital and governance.

Concerning *risks to capital*, supervisors analyse whether a bank has sufficient margin to absorb losses arising from a variety of shocks, such as adverse market developments or borrowers' insolvencies. We divide our assessment into three blocks. The first provides the supervisory perspective. Both risk levels and risk controls are assessed against a variety of metrics, including credit risk, market risk, operational risk and interest rate risk in the banking book. The assessment of risk controls is qualitative, whereas that of risk levels involves a combination of quantitative measures and supervisory judgement. This part of the process is characterised by information-gathering, the generation of automated scores for different dimensions (e.g. NPLs, provisions) and comprehensive analysis (including benchmarking against peer groups). The second block provides the banks' perspectives, notably through our assessment of banks' ICAAP reports. The third block brings in the forward-looking perspective through various stress-testing exercises (conducted by the ECB, partly in conjunction with the EBA).

As regards *governance*, our SREP assessment is qualitative, and embraces different aspects. First, our staff examine the functioning and effectiveness of the board, seeking an understanding of how key decisions are reached, particularly on key issues such as strategy, risk awareness and management, transparency towards shareholders, availability of adequate information, and so on. Second, we look at the banks' risk appetite frameworks and the extent to which an appropriate risk culture is effectively ensured throughout the organisation, starting from the board and working down the hierarchical ladder. Third, we assess remuneration policies, also in the light of the EBA guidelines, looking specifically at the different components of remuneration and dividend distributions, etc. We are convinced that the structure of incentives, in conjunction with the internal risk culture and ethical standards, are crucial in this regard. Fourth, we examine the internal controls functions, internal audit, as well as the risk management and compliance function.

To complement the SREP, we also launch a number of *ad-hoc initiatives*. For example, a thematic review of banks' management bodies and risk appetite was carried out in 2015, identifying good practices and addressing letters to banks with recommendations for improvement on a number of metrics where necessary.[26] These recommendations are then monitored through the normal supervisory dialogue between the JSTs and the banks. We are now planning another thematic review of banks' compliance with the BCBS principles on risk data aggregation and risk reporting for 2017. We see this exercise as an extension of the work on risk governance and risk appetite, as both depend on sound risk reporting and high-quality risk data.

I should emphasise that all our assessment and analyses, and the SREP in particular, are firmly grounded in the existing banking legislation, including in particular the Capital Requirements Regulation and Directive (CRR/CRD IV) as well as the relevant guidelines, technical standards and implementing standards issued by the EBA. Two challenges arise in this context. First, the legislation relevant for the ECB includes not only European law, but also national law, to the extent that this transposes European Directives or covers areas that are not treated by European legislation. This gives rise to a composite and uneven legal terrain, which occasionally makes attaining a level playing field more complex. I shall illustrate this shortly with reference to fit and proper assessments. Second, the European legislation itself is evolving over time, requiring adaptation also in the ECB methodologies. This latter aspect is particularly relevant now, when a major review of the entire body of the CRR/CRD IV is underway.

Most of the European Commission's proposals for this review are promising from a supervisory perspective. For example, the proposed introduction of a common basis for the capital guidance within Pillar 2 will be a welcome addition. To recall, the guidance, or P2G, is a novelty of last year, triggered by a Commission suggestion, which consists in distinguishing within Pillar 2 a strictly mandatory component (P2R), which banks must fulfil at all times and the breach of which triggers automatic supervisory reaction, from a P2G component, which comes on top of all other requirements (i.e. subject to be depleted first when banks consume capital). P2G is quantified by means of stress test results. It differs from P2R in that, although the supervisor expects it to be normally fulfilled, it does not trigger an automatic supervisory action in case of breach, but only measures decided on a case-by-case basis. In 2016, we have used this distinction without an explicit legal basis. The prospect of it being given a more formal legislative frame is positive, as I mentioned, provided sufficient flexibility and discretion is left for the supervisor to determine its amount and to calibrate its response to breaches in a way that takes into account the specifics of each bank.

More generally, it should be recognised that in banking supervision one cannot possibly foresee and codify precisely every situation that may arise. A margin of subjective judgement and discretion by the supervisor must always be preserved. This observation is particularly relevant for the SREP, because the Commission proposes that it should be framed through a Regulatory Technical Standard (RTS). Again, greater methodological clarity is welcome, but an RTS approach may turn counterproductive if it excessively restricts the supervisor's possibility to address risks in a tailored manner.

Likewise, the current legislative proposals also provide for restrictions to the supervisor's ability to conduct ad-hoc reporting requests when information is already available to the competent authority in a different format or level of granularity. While it is clear that duplication of statistical work by the banks should be avoided, and that reporting burdens should be eased to the extent possible, this specific initiative might curtail the ECB's ability to conduct thematic reviews in a timely manner and thereby impinge on one of the key advantages afforded by supranational supervision – i.e. the comprehensive benchmarking of significant banks against their peers.

Overall, I would like to stress that the supervisory process is a chain composed of integrated segments (information, assessment, judgement, decision) that is only as effective as its weakest link. It is essential that the legislation, while making supervisory policy more systematic and even-handed, does not err on the opposite side by making it excessively mechanical and formal. There is thus a need to preserve the supervisory holistic approach which complements the more granular risk-by-risk assessment. The ECB, as the supervisory authority of the banking union, is developing an intense dialogue with the Commission to ensure that its experience and needs are properly taken into account. The ECB will also in due time publish a legal opinion on this legislative review.

4. Fit and proper analysis within the supervision of corporate governance

Before concluding, I would like to highlight another supervisory tool that is key to ensure prudent and sound governance of banks: the fit and proper analysis, aimed at ensuring that managers and board members satisfy, individually and collectively, the personal and professional criteria that are appropriate for the tasks which they perform and the responsibility which they have in the institution. Also key function holders (persons who have significant influence over the direction of the bank but do not sit on the boards) deserve special attention from supervisors.

Board members need to be of good repute, have the required experience for the role and sufficient time to perform it. The relevant requirements are set at European level by the CRD IV, which is, in this field, a minimum harmonisation directive that needs to be transposed into the legal framework of the Members States by national legislation. The ECB thus applies each national law, considering all its specificities, when assessing the fitness and propriety of members of management bodies. A very large number of positions (around 2500) are assessed each year. The ECB has conducted a major effort to ensure high quality and consistency in its assessments across the euro area. This has been made possible through the development of an SSM wide stance and close interaction with all national competent authorities that have upgraded their practices.

However, we still face significant challenges. The application of national laws revealed numerous divergences in supervisory practices across Member States. To address this challenge, the SSM has developed a policy stance to attain a more harmonised and consistent fit and proper supervision. The Draft guide to fit and proper assessments (undergoing a public consultation which closed in end-January 2017) is the outcome of this work. Coupled with the EBA's suitability guidelines (whose revision is scheduled to be finalised this summer) and the amendments foreseen to the CRD, this should bring further progress towards harmonisation.

Looking ahead, the ECB would like to see full transposition of the CRD by all Member States and further alignment of transposition. Legislative asymmetries are undesirable, because they imply that board members cannot be measured with the same yardstick across the banking union. The ECB would also like to see greater alignment on how and when candidates should be assessed by the supervisor. A revision of CRD in this respect would be much welcome. The supervisor should act in this field as a 'gatekeeper', ensuring that all members of the boards are suitable since the start and during all mandates. From a prudential perspective, fit and proper assessments should be conducted by the banks or its shareholders before appointments, and by supervisors at least before the board member takes up its position (*ex-ante* assessments). Experience shows that it is much more difficult to remove members once they are appointed and the reputational risk for the institution is also much higher.

It is essential to understand that fit and proper tests are not tick-in-the-box exercises; they need to be proportionate, taking into account the specificities of each institution (its size, nature and complexity, namely of the business model) and of the position to be undertaken (executive or non-executive, Chairman, Chairman of committees, etc). The assessment must stem from an individual analysis and will always include a certain amount of discretionary judgment by the supervisor.

Finally, it should be kept in mind that the real impact of fit and proper testing is not easily measurable. We are frequently asked about the number of rejections as a tentative indication of the effectiveness of the tool. That measure is often misleading. Banks and shareholders are primarily responsible for appointing suitable board members. The increasing clarity and transparency on the requirements that need to be met will contribute, over time, to a better ex-ante selection by banks, based on the criteria enshrined in the law and further detailed by the supervisor.

5. Conclusions

To wrap-up this discussion, I would like to draw three broad conclusions.

First, banking supervision is an organic process made of a variety of steps and instruments, each linked to the others. Some instruments provide support to bank solvency more directly, others more from a distance. All are important, because if the latter fail, the former are at risk. Corporate governance supervision, and fit and proper assessment within it, are very good examples of this.

Second, the ECB has made, in the last two years, a quantum leap in making its own supervisory process sound and systematic, by introducing on its own SREP. I believe that our SREP, though little known outside, is at the frontier of the supervisory profession. Its different parts sum up to a complete analysis of all sources of risk, and encompass, at least in principle, all supervisory instruments, including specifically governance supervision. By its nature, governance supervision is less subject to precise quantification and measurement, and relies more on subjective supervisory judgement. In relation to this, and more generally, we need to keep in mind that supervision is not an exact science, which can be conducted following a fully codified methodology. Whether it will become so in the future is a question for academics. Since for now it is not, it is essential that legislation and standards do not try to limit, beyond a certain point, the room for supervisory discretion, lest making the whole supervisory process unworkable and ineffective. This point is particularly important in Europe now, while the legislators are engaged in the first major revision of our banking law since the launch of the banking union.

Third and more specifically, the fit and proper assessment is an important component of corporate supervision, but it is insufficiently developed. The ECB played its part by proposing a new approach that has just undergone a public consultation, but this is not sufficient. A stronger legislative basis for supervisory power is also necessary. At European level, to the extent that the use of directives cannot be avoided at least for now, it is essential that an effective and harmonised transposition into national legislation takes place in all member states.

Thank you for your attention.

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[1]I am grateful to Francisco Ramon-Ballester for preparing a first draft of this speech and to Veerle de Vuyst, Floriana Grimaldi, Angela Maddaloni, Agnese Leonello and Sofia Toscano Rico for useful contributions. I am solely responsible for the views expressed here and for any errors.

[2]See for example The Economist, 21 January 2010.

[3]See E. S. Rosengren, “Bank capital: lessons from the U.S. financial crisis”, speech delivered at the BIS Forum on Key Regulatory and Supervisory Issues in a Basel III World, Seoul, February 2013.

[4]See for example Holmstrom, B. and J. Tirole. (1997), “Financial intermediation, loanable funds, and the real sector,” *Quarterly Journal of Economics*, Vol. 112, No. 3, pp. 663-691. The authors show that all forms of capital tightening hit poorly capitalised firms the hardest, but that interest rate effects and the intensity of monitoring depend on relative changes in the various components of capital.

[5]For example, see Diamond, D.W. and R. Rajan, (2013) “A Theory of Bank Capital”, *Journal of Finance*, vol. LV No. 6, 2000. A macro version of this model can be found in I. Angeloni and E. Faia, (2013) “Capital regulation and monetary policy with fragile banks”, *Journal of Monetary Economics*, 60(3).

[6]See for example IIF (2011), “The Cumulative Impact on the Global Economy of Changes in the Financial Regulatory Framework”.

[7] See for example Admati, A. and M. Hellwig (2013), “The Bankers' New Clothes: What’s Wrong with Banking and What to Do about It”; Princeton University Press, and Kashyap, A., J. Stein and S. Hanson (2010), “An Analysis of the Impact of “Substantially Heightened” Capital Requirements on Large Financial Institutions”, mimeo.

[8]See Gambacorta, L. and H.S. Shin (2016), “Why bank capital matters for monetary policy”, BIS Working Papers No 558.

[9]See Gambacorta L. and D. Marques-Ibañez (2011), “The bank lending channel: Lessons from the crisis”, BIS working papers no 345.

[10]See C. M. Buch and E. Prieto (2012), “Do better capitalized banks lend less? Long-run panel evidence from Germany”, University of Tübingen Working Papers in Economics and Finance, No. 37.

[11]See Calomiris C. and C. Kahn, (1991), “The role of demandable debt in structuring optimal banking arrangement”, *American Economic Review* 81, pp. 497-513; D. Diamond, R. Rajan, (2000).

[12]See Aiyar S, C. Calomiris, and T. Wieladek, (2014), “Does macro-prudential regulation leak? Evidence from a UK policy experiment*”, Journal of Money, Credit and Banking*, 46.1. See also Thakor A. (1996), “Capital requirements, monetary policy, and aggregate bank lending: theory and empirical evidence”, Journal of Finance 51, pp. 279-324.

[13]See Dagher, J. et al, “Benefits and Costs of Bank Capital” (2016), IMF Staff Discussion Note SDN/16/04.

[14]See for example Laeven, L., L. Ratnovski, and H. Tong (2014), “Bank Size and Systemic Risk”, IMF Staff Discussion Note, SDN/14/04.

[15]For a recent comprehensive survey of this literature, see Benoit S. et al (2016), “Where the Risks Lie: A Survey on Systemic Risk”, *Review of Finance*, 1-44.

[16]See for example Acharya, V. V. (2009), “A theory of systemic risk and design of prudential bank regulation”, *Journal of Financial Stability* 5, 224–255 and Acharya, V. V. and Yorulmazer, T. (2008), “Cash-in-the-market pricing and optimal resolution of bank failures”, *Review of Financial Studies* 21, 2705–2742.

[17]See Brunnermeier, M. K. and Oehmke, M. (2013), “The maturity rat race”, *Journal of Finance* 68, 483–521.

[18]See Bhattacharya, S. and Gale, D. (1987), “Preference shocks, liquidity and central bank policy”, in: W.Barnett and K. Singleton (eds.), *New Approaches to Monetary Economics,* Cambridge University Press, New York, NY, pp. 69–88.

[19]See Anginer D, A. Demirguc-Kunt, and M. Zhu (2014), “How does competition affect bank systemic risk?”, *Journal of Financial Intermediation*, 23(1):1–26.

[20]See Iqbal J., Strobl, S. and S. Vähämaa (2015), “Corporate Governance and the Systemic Risk of Financial Institutions”, *Journal of Economics and Business*, Vol. 82, No. 1, pp. 42-61.

[21]See Laeven, L. and Levine, R. (2009), “Bank governance, regulation, and risk-taking”, *Journal of Financial Economics* 93:259-273.

[22]See Mehran, H. Morrison, A. and J. Shapiro (2012), “Corporate Governance and Banks: What Have We Learned from the Financial Crisis?” in Dewatripont, M. and X. Freixas (eds), The crisis aftermath: new regulatory paradigms, CEPR.

[23]Mehran, H. Morrison, A. and J. Shapiro (2012), op. cit.

[24]Dewatripont and Freixas (2012) define excessive risk-taking as “a level of risk such that, had it been known and taken into account ex ante by banks’ stakeholders, it would have made the net present value of the bank’s investment project negative”. See “The crisis aftermath: new regulatory paradigms”, CEPR publication.

[25]Mehran, H. Morrison, A. and J. Shapiro (2012), op. cit.

[26]The ECB published a **statement on governance and risk appetite**, summarising the outcome of the thematic review and related supervisory expectations.

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