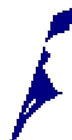
РАЗДЕЛ 2
КОРПОРАТИВНОЕ
УПРАВЛЕНИЕ
В БАНКАХ

SECTION 2
CORPORATE GOVERNANCE
IN BANKS



# BANK CAPITAL AND BASEL 3 IMPACTS ON ITALIAN BANKS

***Franco Tutino*, Giuliana Birindelli*, Paola Ferretti*****

**Abstract**

The issues raised by Basel III, with specific reference to the introduction of more stringent capital requirements, are numerous and touch upon different aspects, such as cost and profitability-related problems and the repercussions concerning strategies implemented by banks. Our aim is to clarify the impact on Italian banks. We will first present some general considerations addressing the main implications for bank management, before illustrating the results of a survey aimed at detecting possible fears and doubts, on the part of banks, with reference to the extent to which some of the capitalisation proposals included in the reform can actually be pursued.

**Keywords:** Bank, Capital, Basel3, Italy

**University "Sapienza", Roma, Italy*
***University "G. d'Annunzio", Chieti-Pescara, Italy*
****University of Pisa, Italy*
*Tel.: 329-7378359*
*Fax: 050-2216267*
*Email: ferretti@ec.unipi.it*

## 1. Introduction

The main critical issues that surfaced during the crisis include non-harmonised capital structures, weak disclosure of capital components, and governmental actions in favour of banks featuring high Tier 1 ratios but low levels of Common Equity, net of regulatory adjustments. These phenomena have led to a capital requirement revision aimed at more substantial, as well as better-quality allocations. In fact, non-Common Equity instruments have often proven to be unable to absorb losses, and as a consequence the market has rewarded the "best" capitalised banks, while losing confidence in Tier 1 Capital as a capital adequacy measure, and focusing on indicators considered to be more significant (primarily, Core Tier 1 ratio and Tangible Common Equity ratio).

The regulatory revision (BCBS, 2010b), known as "Basel III", has been developed along several lines. The most significant ones include: enhancing the core component, which complies with the requirements concerning permanence and the ability to absorb losses on an ongoing concern basis; harmonising the regulatory adjustments and deducting them mainly from the core component; providing more specific criteria for the inputting of capital components, while always safeguarding the character of permanence (the proscription of provisions concerning step-up, or other incentives to early reimbursement for non-Common Equity instruments, should be interpreted in this sense);

simplifying aggregates (Tier 2 Capital sub-categories and Tier 3 Capital are eliminated); and strengthening disclosure, in order to enable a reliable comparison between banks based in different countries.

The pressure to strengthen the capital core component, which has resulted in several recapitalisation operations carried out by Italian banks – the ones we have examined – at an earlier date than the adjustment deadlines, and the fear of "gridlocks" in the issuance of shares give rise to doubts concerning the actual ability of the market to absorb a higher offer of shares. Essentially, the question is whether and to what extent the process is feasible and sustainable, in consideration of the recourse to market on the part of other issuers (both sovereign and private entities) and the not-so-bright profitability prospects of banks. The latter are significant both in order to capture the extent to which it will be possible to count on income flows to feed capital growth, and in order to attract investors by means of appealing returns, as well as in order to reduce possible repercussions on credit spreads deriving from the higher costs of the raising of capital. Actually, the cost of share capital is subject to diverging stimuli: it is increasing due to the uncertainty of a difficult economic recovery, the yet unclear economic perspective of banks, and the drives generated by the national public debt spread; it is decreasing due to the relieved climate following recapitalisation and, therefore, to the greater stability and solidity perceived by investors, partly thanks to the abidance to the financial leverage ratio introduced by the new international regulations.

Non-Common Equity instruments also present possible issuance-related problems: let us consider the strictness of the eligibility criteria and the reduction in the range of instruments that can be offered for reasons connected, for instance, to the elimination of Tier 2 sub-categories, the removal of Tier 3, and the numerous common elements shared by Common Equity and Additional Tier 1.

The result might be penalisation in terms of instrument marketability and, therefore, difficulties in procuring financial resources.

The issues raised by the introduction of more stringent capital requirements, therefore, are numerous and touch upon different aspects, such as cost and profitability-related problems and the repercussions concerning strategies implemented by banks. Our aim is to clarify the impact on Italian banks. We will first present some general considerations addressing the main implications for bank management, before illustrating the results of a survey aimed at detecting possible fears and doubts, on the part of banks, with reference to the extent to which some of the capitalisation proposals included in the reform can actually be pursued.

The rest of the paper is divided as follows: section 2 includes a review of literature concerning bank capital, with specific reference to the financial crisis and the related response on the part of the supervisory authorities; section 3 includes considerations regarding the main forms of impact on management deriving from the new capital regulations; section 4 illustrates the position of Italian banks with respect to the most relevant issues raised by the regulations; and section 5 draws the conclusions.

## 2. Bank capital: evidence from the literature

The literature has dealt with the operative and strategic importance of bank capital from different points of view. The approaches that come later have been increasingly influenced by the evolution of the credit and finance sector in the last decades both in terms of progressive internationalisation and higher competition with consequences on the management choices of single intermediaries required to satisfy the needs of an ever more diversified stakeholder community. The relevant in-depth studies have also been affected by market factors (neutrality versus turmoil), more intrinsically connected with issues concerning the supervisory of the bank sector and of the financial stability.

Works on bank capital have therefore tried to provide an in-depth view of various aspects taking different directions. We will point out only a few research paths concerning the topics we dealt with, leaving the other topics to the extensive existing literature. Among the main studies, we find bank capital regulation. An accurate analysis of the different works produced up to 2000 is provided by (Santos, 2001). Over the years the regulation of bank capital grows in importance while other types of banking regulation reduce. This has inevitably influenced the issue concerning how much equity banks should use in their capital structure (see Giuliani, 2011, on the optimum capital structure). The issue of capital level, of the forms that can compose it, and of the associated high costs is of major importance considering the financial crisis started in 2007 and the regulatory response known as Basel III. This is the context in which we developed our paper aimed at understanding the main impacts of the new capital rules on bank management equilibria. Conceptual considerations were further enriched by the results of a field investigation we carried out by surveying a sample of 31 Italian banks. The aim of the survey was to illustrate banks expectations, fears and behaviours in the view of the upcoming alignment with Basel III.

A few studies analysed bank resilience during the crisis, in particular the relationship between capital and performance. These include the work by

(Demirgüç-Kunt et al., 2010) according which capital is positively connected to banks' stock returns during the crisis. Other authors (Beltratti and Stulz, 2009) show that large banks with more Tier 1 capital and higher reliance on deposits for short term funding in 2006 have higher stock returns during the crisis. As far as systemically important banks are concerned, (Kato et al., 2010) show that stock returns from 2007 to 2008 are not correlated to the Tier 1 capital ratio, but positively correlated to the deposit-to-liability ratio. Again on stock returns, the paper by (Das and Sy, 2012) highlights that the relationship with Risk Weighted Assets (RWA) is weaker where banks have more discretion in the calculation of RWA. Specifically, in countries that had implemented Basel II before the onset of the financial crisis, investors look to other balance-sheet measures of risk exposure but not RWA. The academic and institutional community is widely investigating the importance of RWA for reporting purposes and, consequently, the efficacy of the ratios based on them for measuring capital adequacy. Such threat is clearly highlighted in the work by (Ayadi et al., 2012, p. 49): "(…) there is concern that regulatory arbitrage and politically driven policies have put the appropriateness of risk-sensitive regulations in question"; in particular as far as a few business models are concerned, such as the one of investment banks, "more disposed and inclined to use sophisticated derivatives instruments to divert the risks away from their balance sheets".

Keeping the financial crisis and the new prudential supervisory system as the *fil-rouge* of our review, interesting studies on capital investigate the following issue: does bank capital affect lending? Several studies indeed are aimed at understanding whether and to what extent the crisis, combined with the Basel III rules on capital (and more), affects the typical bank activity, credit activity and, more generally, real economy, Analysis refer to several periods (pre-crisis and/or during the crisis) as well as to bank- and/or market-specific variables such as geographic areas as well as size and various business characteristics; there are also works focussed on comparative surveys aimed at understanding the combined effect of several influence factors. The study by (Carlson et al., 2011) belongs to the field above; for the UK market the works by (Mora and Logan, 2010) and by (Osborne et al., 2012). Estimates on implications of credit offer and the relevant costs are included in the studies by (Macroeconomic Assessment Group, 2010a and 2010b; BCBS, 2010a); as far as the national context is concerned the works by (Bancad'Italia, 2010; Locarno, 2011) are worth mentioning. The topic is also dealt with by referring to the impact that higher capital requirements have on banks' cost of funding, and then analysing how this might affect the interest rate charged on loans (di Biase and D'Apolito, 2011). Implications on credit offer to enterprises are also dealt with by referring to countercyclical capital (Jiménez et al., 2012 for the experience of Spain).

Further in-depth studies on bank capital also considered its connection with bank remuneration policies whose importance was clearly highlighted by the crisis, requiring national and international control authorities to reconsider the issue. The works by (Bhagat and Bolton, 2011) and by (Acharya et al., 2009) belong to the abovementioned path; see (Brogi, 2010) for the Italian system.

## 3. Main management and strategic implications

The provisions concerning the measure and composition of the different components of the minimum regulatory capital have an impact on:

- the *share capital management* policies, through increases aimed at expanding the common equity component;
- the *allocation of profits*;
- the policies concerning the funding through *debt instruments* that can be part of Additional Tier 1 or Tier 2.

The close connection between share capital increases and profit allocation is evident. Also in a context driven by the new regulatory provisions, at a first sight, the usual relationship of mutual complementarity and substitutability still applies: the aim of increasing the common equity component might be pursued by following either method. But actually selecting one or the other, in this case, is not inconsequential. The reasons are, above all, linked to a specific aspect that constitutes the major difference between the ordinary situation faced by any enterprise that decides to increase its equity and the extraordinary and binding situation banks are facing as a result of the new provisions: the targets concerningminimum regulatory capital increases must be attained within a determined timeframe. Therefore, *time* is the first discriminating factor: share capital increases would not be necessary if future profitability was at such levels that the net profits, accumulated and set aside as reserve over the years, were sufficient to cover the greater capital required. Time – a requirement that affects all banks equally – is accompanied by two other discriminating factors whose relevance is different for each individual bank: the *uncertainty of future profitability* that we have just mentioned; and the *capital divide* between the current level, measured with the new quality criteria, and the new minimum level required. This divide could beincreased by the presence, in the capital, of shares belonging to categories that are no longer permitted and by the deductions represented by asset items.

The strategic management of capital, therefore, needs to be reconsidered starting from the choice between profitability allocated to reserves and capital increases from external sources. It is a matter of defining the decision-making criteria and, in case of capital increases, the most suitable timing for the bank, regardless of the time constraints imposed by the new provisions. However, this is not sufficient. The capital reinforcement undoubtedly has positive effects on the bank's management equilibria (Table 1).

**Table 1.** Capital levels and quality: connections with the bank management's equilibria

| **New Basel III provisions** | **Risk Equilibrium** | **Economic Equilibrium** | **Financial Equilibrium** | **Capital Equilibrium** |
|---|---|---|---|---|
| | Reduction of the insolvency risk | Higher net economic results in the absence of costs due to interest on more funds available as common equity. Lower potential costs from funding in the markets and lesser risk of reduction in intermediation volumes against reduced reputational risk thanks to capital level and quality higher than the minimum requirements. | Greater availability of financial means, lesser dependence on funding markets | Capital "reserves" for loss absorption |

As a consequence, the analytical approach to this topic cannot be limited to considering as fully satisfactory the attainment of the minimum *regulatory requirements* within the pre-fixed timeframe for the gradual capital growth. *Requirements* and *market opportunities* are equally present in this strategic decision-making process and need to be both taken into account. For instance, the requirement originating from the level of trust a bank enjoys in the market, the consequent reputational risk, and the cost of the funding: a capital growing faster and above the minimum regulatory thresholds will certainly be seen in positive terms. Another example is provided by the opportunity that higher capital levels – more quickly reached – can support new investments leading to growth also through competitive strategies and actions, resulting in additional profitability opportunities. Therefore, can the capital reinforcement policy be based only on future profit results, even when these appear to be possibly sufficient with respect to the minimum regulatory levels to be attained?

The management of capital, in its common equity component, forces everybody to reflect on the need, or opportunity, to follow both methods: capital increases, the accumulation of profit reserves. The transition period to 2019 cannot be seen merely in terms of the attainment of minimum regulatory levels, to be reached within the indicated timeframe, when a bank's current capital is not sufficient or qualitatively adequate. This is also true when the future profitability expected over the years appears to be fully sufficient to attain the target: if it were high, capital increases should not be unwelcome or beyond the comprehension of shareholders. New financial commitments and the temporary renouncement of dividends could, in fact, be more than adequately levelled-off by the even higher additional results that might derive from seizing the growth opportunities offered in a situation characterised by change, for reasons due to both the trend and perspectives of the economies and markets, as well as the impact of the new regulations. Quite probably, over time we will witness diversified choices in terms of common equity increase policies on the part of different banks; and, considering the unstable context in which they operate, the same banks might have to change their strategies over time, adjusting them in consideration of the extent of the divide between actual capital and minimum requirements, regulatory requirements to be abided by, profit results attained over time, their destination towards capital reinforcement, dividend distribution policies, market constrains and opportunities, changes in the economic-financial contexts, adjustments to the provisions possibly issued by the authorities on the basis of the experimentation results, and the evolution of the economic-financial context.

Banks will also have to redefine – and probably reconsider over time – their policies concerning funding through the *debt instruments* that might be part of the Additional Tier 1 or Tier 2. There are two specific aspects requiring consideration: the characteristics these new instruments will need to feature in order to be used to abide by the requirements; the expected reduction – over 10 years starting from 2013 – of the debt instruments issued and used in order to abide by the current requirements, which can no longer be input in the share capital. Besides these specific elements, there are the considerations expressed above with reference to common equity management policies. Just think about the positive effects due to early common equity increases and higher than the minimum levels required: they might enhance the

possibility of issuing adequate debt instruments and reduce their costs. Therefore, we will be the witnesses of reconciliation times and themes between strategies and policies concerning common equity increases, issuing policies of new debt instruments, possible periods of early refund of old existing debt instruments.

Reconciliation over time between the need of increasing capital and profitability trends is made more complex by the need to abide by the requirement concerning the establishment of a capital conservation buffer. This new capital reserve needs to be fed with undistributed profits. The mandatory destination of profits must abide by the two limits mentioned earlier: the prohibition to distribute profits in a decreasing proportion compared to the actual growth of the reserve, the gradual attainment of minimum percentages with respect to the ultimate 2.5 percent target. The combination of these two limits defines the amount of net profits that need to be allotted to the reserve over time. Only the remaining part of the profits – after the dividends that the bank deems appropriate to distribute – can be directed towards the increase in common equity over the years, up to attaining 4.5 percent, in accordance with the minimum regulatory levels. The part falling short will have to come from capital increases. Similar considerations in terms of reconciliation with the other rules aimed at capital reinforcement might be expressed if, in the future, the authorities of each individual country should choose to introduce the counter-cyclical buffer.

Setting a minimum limit on the required capital, together with the provision of measures concerning indebtedness and liquidity, means limiting the operating choices on the part of banks, reducing the risks they can take on, as well establishing asset dykes aimed at absorbing losses possibly deriving from the operating choices made and the risks run. The new requirements affect all of the equilibria in the bank's management (as for the capital, see Table 1; for the other requirements, see Tutino et al., 2011).

Profitability requires further examination. The most evident and note-worthy impacts produced by capital regulations include the limits placed on the growth of intermediation volumes, the increase in minimum requirement, the improvement of quality in terms of composition, and the increase of weighting criteria concerning market and counterparty risks.

The limits sets on the overall intermediation volumes reduce, in absolute terms, the size of interest-bearing assets and their margins of contribution, gross of the corresponding funding costs. In this regard, it is necessary to recall the distinction between the *nominal* total amount of interest-bearing assets and the total amount of *risk-weighted* interest-bearing assets, as well as underline their effects on profitability. Limits on the growth of intermediation volumes are applied while taking into account the weighting based on risks; the interest income come from the combination of rates, amounts, and the investment time of the nominal interest-bearing assets. Their growth could be high in the absence of limits related to risk weighting. The interest income, therefore, could grow further: their maximum potential growth limit would be defined by the availability of funds to be lent. It is a well-known issue. However, it is appropriate to recall it because of the more stringent aforementioned requirements introduced by Basel 3 with reference to the minimum capital and the weighting of certain types of risk.

The relationship between *net equity* and *profitability* is important for other reasons, and needs to be interpreted in a different way. The direct impact affects shareholders: a reduction is expected in the profitability of the capital they have invested and that they will probably have to increase. The increase in the common equity minimum requirements and the limits posed on the distribution of dividends reduces the profitability per unit of capital invested in banking shares. This reduction – for shareholders – is additional to that deriving from the limits posed by the new regulatory requirements, and is included in a general economic and financial context that has recorded low profitability performance in recent years and is not showing any sign of fast or substantial recovery in the future.

From the perspective of the relationship between *risks* and *profitability*, some considerations are also necessary. We are not considering – as it is neither possible here nor relevant – the theme concerning the actual efficacy of the new rules and their overall impact on banks: both will be measured and commented variously on in the next few months and years by scholars and analysts. Instead, we move from the question concerning the need of risk control: authorities must take action through these and other measures. This is necessary both to contribute to safeguarding the stability of the financial system and the individual banks, as well as because the lack of stability can have negative effects – in a clearly negative circle – on the profitability of the banks themselves. However, it is also necessary to ask ourselves, starting from the present, what effects such demanding measures will produce on the profitability of banks; and, moreover - when the general stability of the financial system allows for it- we should assess whether, to what extent and in which directions the new requirements can and have to be reviewed and modified.

Before these considerations can lead to possible revisions of the provisions, it is necessary that the banks' management acquire a thorough and

meaningful awareness of the limiting impact the new rules will have on banking profitability, and take subsequent action, identifying ways to recover profitability and redefining their corporate strategies.

## 4. The Response to the Capital Framework of a Sample of Italian Banks

The considerations concerning the main impacts of Basel III on banking management equilibria are integrated below with the evidence obtained from a survey. The purpose is to identify the expected effects, fears, probable behaviour and/or the conduct already adopted in view of the adjustments to the new prudential rules. The survey itself was carried out by means of a questionnaire (included in the appendix) sent in January 2012 to a sample of 31 Italian banks representing all size categories identified by the Bank of Italy: major, large, medium, small, and minor (Bancad'Italia, 2012, Appendice, pp. 307-309). The incidence of the sample in terms of total assets is slightly over 70 percent of the total assets in the entire Italian banking system (2). In the case of holding companies of banking groups, the answers provided refer to the entire group.

The answers provided by intermediaries are outlined below in the form of indicators grouped into 4 classes:

1. Acceptance indicators;
2. Impact indicators;
3. Behaviour indicators;
4. Cost, profitability and credit indicators.

### *4.1. "Acceptance" indicators*

This first group includes the questions concerning the degree of acceptance with reference to the capital framework and the composition of Common Equity Tier 1.

84 percent of the banks in the sample consider the current revision also necessary for Italian institutes. This need is due to both their low capital ratios at an international level and to their imbalance, that has occurred in recent years, towards non-Common Equity instruments; i.e., towards Additional Tier 1 and Tier 2. The remaining intermediaries consider the rules currently applicable to be adequate, even though this clashes with the alarming signals launched with reference to Italian banks (see, as representative, Eba, 2011) and the various recapitalisation operations carried out in anticipation of the Basel III deadlines which started, especially, in 2011. Among those who do not consider the revision necessary, some manifest doubts concerning the efficacy of stricter rules (also see Masera, 2010): will the mechanical application of rules – even though stricter – be adequate to safeguard the stability of the financial system on the occasion of new future difficulties, while a significant worsening in the quality of assets and great difficulties to access financing sources exist? Is it possible that the application of quantitative parameters, deemed congruent in order to ensure the banks' solvency, will prove unreliable on the occasion of fast and radical changes in asset risk and the availability of financing sources? This aspect is definitely worth consideration and forces us to reflect on which alternative is the most effective: a careful, thorough supervision on the individual entities, or a mechanical application of quantitative parameters and principles?

The second indicator expresses the degree of acceptance with regard to the composition of Common Equity Tier 1, which is considered as penalising by most respondents (81 percent). The remaining banks consider the composition adequate with respect to the risk profile, while none, as expected, consider the composition still to be too lenient. The prevailing opinion that the definition of Common Equity is penalising for Italian banks is caused by how preferred stocks and preference shares are considered for both the advantages to holders upon payment and compensation mechanisms that are privileged and proportional to the instrument's nominal value: preferred stocks and preferred shares are excluded, with a progressive reduction in the amount (a 10 percent reduction per year), starting from January 1 2013 (BCBS, 2010b, § 94 (g) and § 95). The respondents specify that these instruments cannot be considered as comparable to those whose inclusion in the regulatory capital is questioned, and this is especially true for preference shares under the English law. However, the Italian prudential framework removed preferred stocks and preference shares from the share capital as early as December 31 2010, even though a 30-year transition period has been scheduled (Bancad'Italia, 2006, 5th update). Consequently, the Italian rules have preceded Basel III in implementing the measures necessary to continue to calculate preferred stocks and preference shares in the Core Capital; i.e., their conversion into common shares or, at least, changes in the articles of association aimed at removing the characteristics that are not in line with common share requirements, such as the accumulation of preference, the assignment of greater profit, and the priority right on dividends. This is what happened, for instance, at the end of April 2011 in Monte deiPaschi di Siena, when the Meeting modified the articles of associations in order to continue including non-common shares in the capital.

Finally, banks also complain that the framework – focusing on the model of joint stock companies – is unable to fully grasp the juridical and operating peculiarities of Cooperative Banks.

Their shares – which are calculated according to Circular 263/2006 (Bancad'Italia, 2006, 5th update, p. 12) – need to meet requirements aimed at ensuring full equivalence to common shares in terms of the absorption of losses, as well as provide a guarantee to confront stressful periods in the markets (BCBS, 2010b, note 12). Furthermore, provisions can be applied in order to gradually remove them (BCBS, 2010b, § 94 (g)) in the event that the requirements for inclusion are not met.

### 4.2. Impact Indicators

As far as the impact indicators are concerned, 52 percent of the respondents think that the variable most impactful on the Common Equity Tier 1 ratio is represented by the higher percentage, included in the questionnaire without taking into account the counter-cyclical buffer, therefore, equal to 7 percent (Common Equity plus Capital Conservation Buffer). The remaining respondents indicate, as the most impactful variable, either the stricter definition of capital (26 percent), or the probable increase in Risk Weighted Assets (23 percent). The stricter definition derives, above all, from the modified system of deductions (directly implemented in the Common Equity) and the aforementioned exclusion of preferred stocks and preference shares. On the other hand, the increase in RWA might originate especially from the trading book and counterparty risk.

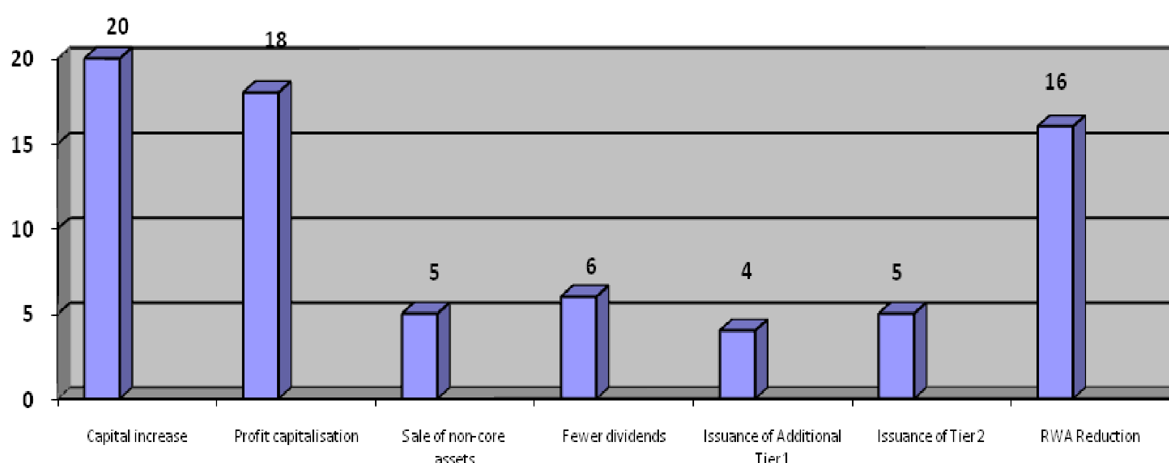
The "capital haemorrhage" caused by applying the new framework to financial statements has been examined with reference to the estimated impact arising from the new deductions from the Common Equity. In most cases, this was the lowest in the questionnaire, i.e., lower than 50 bps (61 percent of the sample). The shift from gross to net capital exceeds 50 bps among the other respondents which chose the higher options in an equal proportion (50-100 bps; 100-200 bps). The expected impacts were reduced – as some respondents wrote in their comments – thanks to the provisions in the agreement dated July 26 2010 (BCBS and BIS, 2010): the reference is to the partial inputting of significant investments in common shares issued by non-consolidated financial institutes and the deferred tax assets due to time lags (3). With reference to the Deferred Tax Assets, banks also mention the removal of the severe penalty imposed on them, thanks to the fact that deferred taxes can be used to hedge losses on an ongoing concern basis through the amendment to the 2011 "Milleproroghe" decree (Legislative Decree 225/2010, converted into Law 10/2011). The amendment provides for the transformation of DTAs into tax credits that can be transferred or offset with tax debts when an operating loss is recognised. This applies to deferred tax assets related to credit devaluations that have not yet been deduced from the taxable income, and those related to the value of goodwill and other intangible assets.

### 4.3. Behaviour Indicators

The first behaviour indicator concerns the propensity to assume an anticipatory attitude with respect to the dates indicated by the capital framework. The process aimed at aligning with stricter capital requirements was implemented by 84 percent of the surveyed banks within a timeframe corresponding, in most cases, to the end of 2011. The increases in capital carried out by several banks in 2011 (Intesa Sanpaolo, UBI Banca, Monte dei Paschi di Siena, Banca Popolare di Milano, Banco Popolare) confirms this strategy. The pressure encouraging an early alignment comes from several sources: urging from investors, invitations from supervisory authorities, competition between banks to excel in the ratios, the present scenario still being menaced by substantial losses on credits, as well as the alarming signals launched by international bodies with reference to the capital adequacy ratios of Italian banks (4) and the subsequent recommendation asking 4 Italian institutes (UniCredit, Monte deiPaschi di Siena, UBI Banca and BancoPopolare) to increase their Core Tier 1 ratio to 9 percent by June 30 2012 (EBA, 2011). Growth strategies, however, need to focus on a number of critical points: it is especially necessary to take into account the high quantity of maturing debts – nearly 35 percent of total debt for the years 2011-2012 (IMF, 2011, p. 9) – and the risk of failing to procure capital due to the low profitability of intermediaries.

Nearly all of the banks, intending to align before the deadlines, indicate the increase in capital as a method to improve the ratios. Other options, chosen in the same percentage, include the capitalisation of profits and the reduction of RWAs (Figure 1). Little propensity to issue non-Common Equity instruments is evident, and this perhaps is due to the relevant regulatory provisions which, as shown below, do not make such instruments attractive.

**Figure 1.** Options aimed at increasing capital ratios: number of reporting banks (multiple answers possible)




Other indicators concern the behaviour of banks with reference to non-Common Equity instruments, due to the uncertainty over the corresponding final regulatory provisions. This state of uncertainty has led some banks not to issue such instruments as they are waiting to see how the rules will develop (32 percent); other banks have issued them but have included provisions for possible refund/change rights in the contracts in the event that they prove to be non-compliant with the future rules (58 percent). Only a few banks chose the "not recalling the existing capital instruments" option (10 percent) and none chose the last option ("forcing banks to apply the call option on the first date available").

The trend reversal – with respect to the practice generally followed by banks of applying the call option on the first date available – is also shown by the percentage of intermediaries that have not reimbursed the instruments that could be recalled in the 2-year period 2010-2011: 65 percent of all banks with instruments that could be recalled in that 2-year period. Therefore, whereas refinancing at more favourable rates and progressive loss of the qualification of capital component upon approaching maturity have often led banks to exercise the call option, the high cost of newly issued instruments and, above all, the uncertainty concerning their computability in the capital were the main factors underlying the dilemma between replacing the shares and not meeting the expectations of their investors.

The fact that the instruments are maintained is also shown by the answers concerning the question regarding the recomposition of non-Common Equity elements: 65 percent of respondents did not follow that direction. If we consider that some banks do not feature Lower Tier 1 and Tier 2, and feature even less Tier 3, this figure indicates a widespread "play-for-time" approach due to the uncertain development of the rules.

Another behaviour indicator concerns the propensity to employ non-traditional instruments, such as contingent capital and capital insurance. As expected, the majority of respondents (68 percent) considers these too complex to be successfully placed in the market. In particular, banks point out that these instruments cannot target retail investors, are too expensive and unclear with respect to how they are going to be issued: for the contingent capital, this is exemplified by the problems associated with the definition of conversion and trigger event.

### 4.4. Cost, Profitability and Credit Indicators

The last category of indicators includes, first of all, the expectations concerning the cost of share capital and non-Common Equity instruments.

In the former case, the majority of respondents (81 percent) thinks that a higher cost is likely due to the increase in the risk premium against the uncertain prospects of the banks' performance negatively affected by sovereign risk; some respondents indicate that the cause of this is the "crowding" of capital increases followed by an inadequate reception on the part of investors. The remaining few intermediaries think that the effect on the risk premium might be compensated for by more stringent rules, with a subsequent expectation of reduced costs. Other factors mentioned in the comments also contribute to this: the long transition period, the good quality of Italian banks' capital, the prevailing orientation towards the traditional business model, and the widespread observance of the leverage ratio which should decrease the debt cost and risk premium.

In the second case, nearly all of the banks (90 percent) think that the more stringent requirements for Additional Tier 1 capital and Tier 2 capital will make such instruments more expensive. The references indicated more frequently – which rise significant doubts concerning the fact that their use can be successful – concern the full discretionary power of annulling payments and loss absorption, which might lead to the conversion into common shares upon reaching a given trigger point or, in the

same hypothesis, the activation of the write-down mechanism (BCBS, 2010b, § 55, points 7 and 11). These criteria are, moreover, reiterated with reference to all non-Common Tier 1 and Tier 2 instruments issued by banks operating internationally since January 1 2013; if dated previously, they will be gradually eliminated starting from the same date (BCBS, 2011). Further requirements indicated by the respondents as potentially impeding issuance concern the strict limits concerning the exercise of the call option and the prohibition of step-up and other incentives to reimburse.

The question concerning how the new provisions on capital will impact the bank's profitability met with a variety of answers: a little over half of the respondents (61 percent) foresee an essentially stable ROE; the other respondents indicate a reduction. The answers are born out of concern and hope: on one hand, higher funding charges are feared, as is the still remote economic recovery; on the other hand, hope is placed on anything that can provide drive and momentum to the recovery of profitability, including cost synergies, rate increases, and the sale of non-strategic assets.

The last questions deal with estimates concerning variables that have been the subject of many a study (see, as representative, Macroeconomic Assessment Group, 2010a and 2010b, BCBS, 2010a, Angelini and Gerali, 2012): lending spread and credit offer.

The expectations with regard to lending spread are different: some banks (58 percent) expect repercussions due to the higher funding charges, with a possible offset on the clientele due to the strong dependence on banking credit characterising Italian enterprises and, therefore, the poor incidence of alternative financing sources. This would result from the possible drive to increase the rates applied to the clientele aimed at reaching ROE levels that can attract investors by encouraging them to underwrite capital increases. Vice versa, the argument in favour of the opposite position is represented by the gradual nature of the adjustment, which should be able to minimise the impact.

Notwithstanding the fear of the limited development of lending activities expressed in several studies (see, for instance, Lusignani and Zicchino, 2011, and Cellino, 2011), most banks (81 percent) do not expect a reduction in the credit offer, even though some of them specify that there might be a remodulation in favour of loans that absorb less capital. In essence, banks do not think that loan trading will suffer a serious impact also thanks to the favourable treatment reserved for small-sized enterprises by Basel II. On the contrary, the trend to reserve preferential treatment for SMEs is becoming stronger (European Commission, 2012). The recent longer-term refinancing initiatives implemented by the ECB also aim at lessening the risk of a lower financing offer: the liquidity injection in favour of banks will certainly help them support the economy financially.

## 5. Conclusions

The rules concerning capital as provided by the new prudential regulations raise several questions that we have repeatedly highlighted in this paper.

Some of these questions are closely related to the architecture of capitalisation instruments, such as the complex design of Coco bonds. Others refer to the strong fears concerning economic recovery and the extent to which sovereign debt will continue to impact the capital procurement policies of banks. This state of uncertainty seems to continue to undermine the recovery of profitability with regard to Italian banks, essential to successful capital increases and to avoid higher costs applied to the financed clientele.

Italian banks follow a model oriented towards retail funding – with tendentially increasing costs – and loans to the real economy which is encountering difficulties in terms of development. Being mainly domestic banks – i.e., having no profits from operations in foreign markets – they are tied to the future of the national economy which is not recovering easily. Profitability, therefore, surfaces once again as the decisive lever to obtain greater bank solidity.

The adjustment to the new capital requirements implies action to be taken on several fronts: capital increase, distribution of fewer dividends, optimisation of RWAs. The new regulations both are impacting and will strongly impact the decisions made by banks and, consequently, their management equilibria and strategies.

Our aim was to reflect on the repercussions of the new capital regulations: at first in general terms, with a focus on the implications in management and strategy, and then through considerations based on the answers provided by the banks that participated in a survey.

This aim was only partially achieved as it was subject to limits that we will try to overcome through subsequent investigations. A prominent limit is represented by the sample of banks that participated in the survey: we will have to extend it in order to make the research more significant and representative. Our research might also cover a sample of foreign banks, so as to grasp similarities/differences in the adjustment to the regulations on the part of banks in different countries, and it might also examine the adjustment to the other rules of Basel III, so as to obtain a wider view and better understand the banks' decisions in all of the fields where they are requested to take action.

## Notes

(1) Even if the study reflects a common view, Franco Tutino mainly contributed to Sections 3 and 5; Giuliana Birindelli to Sections 1, 4.1 and 4.4; Paola Ferretti to Sections 2, 4.2 and 4.3.
(2) The survey draws on a previous study covering a more limited number of banks: 16 overall (Tutino et al., 2011, p. 283 ff.).
(3) Computability, which also concerns the rights related to mortgage services, occurs within 10 percent of Common Equity Tier 1. Starting from January 1 2013, it will also be necessary to deduct the amount corresponding to the sum of the three items exceeding 15 percent of the Common Equity, only gross of those same items and, therefore, excluding any other deduction (Also see BCBS, 2010b, §§ 87-89).
(4) The vulnerability indicator connected to the capital ratios of Italian banks is significant in the (IMF, 2011, p.12): in terms of assets, the proportion of banks in the sample featuring a Core Tier 1 ratio below 8 percent in 2010 exceeds 49 percent.

## References


1. Acharya, V.V., Gujral, I., Shin, H. S. (2009), *Dividends and Bank Capital in the Financial Crisis of 2007-2009*, March, Electronic copy available at: http://ssrn.com/abstract=1362299, pp. 1-36.
2. Angelini, P. and Gerali, A. (2012), *Bank's reactions to Basel –III*, Temi di Discussione – Bancad'Italia, N. 876, July.
3. Ayadi, R., Arback, E., De Groen, W. P. (with a contribution from Llewellyn D. T) (2012), *Regulation of European Banks and Business Models: Towards a new Paradigm?*, Centre for European Policy Studies, Brussels.
4. Banca d'Italia (2006), *Nuove disposizioni di vigilanza prudenziale per le banche*, Circolare n. 263 del 27 dicembre e successivi aggiornamenti.
5. Banca d'Italia (2010), *Rapporto sulla stabilità finanziaria*, n.1, dicembre.
6. Banca d'Italia (2012), *Relazione Annuale – Appendice*, Roma, 31 Maggio.
7. Basel Committee on Banking Supervision (BCBS) (2010a), *An assessment of the long-term economic impact of stronger capital and liquidity requirements*, August.
8. Basel Committee on Banking Supervision (BCBS) (2010b), *Basel III: A global regulatory framework for more resilient banks and banking systems*, December (rev June 2011).
9. Basel Committee on Banking Supervision (BCBS) (2011), *Basel Committee issues final elements of the reforms to raise the quality of regulatory capital*, Press release, 13 January.
10. Basel Committee on Banking Supervision (BCBS) and Bank for International Settlements (BIS) (2010), *The Group of Governors and Heads of Supervision reach broad agreement on Basel Committee capital and liquidity reform package*, Press release, 26 July.
11. Beltratti, A. and Stulz, R. (2009), *Why did Some Banks Perform Better during the Credit Crisis? A Cross-Country Study of the Impact of Governance and Regulation*, Finance Working Paper, N. 254, July, pp. 1-38.
12. Bhagat, S. and Bolton, B. (2011), *Bank Executive Compensation And Capital Requirements Reform*, November, Electronic copy available at: http://ssrn.com/abstract=1781318, pp. 1-68.
13. Brogi, M. (2010), "Capital Adequacy and Dividend Policy: Evidence from Italian Banks", in Bracchi, G. and Masciandaro, D. (edited by), *Le bancheitalianesonospeciali? Nuovi equilibri tra finanza, imprese e Stato*, Quindicesimo Rapporto sul Sistema Finanziario Italiano, Fondazione Rosselli, Bancaria Editrice, Roma, pp. 219-248.
14. Carlson, M., Shan, H., Warusawitharana,M. (2011), *Capital Ratios and Bank Lending: A Matched Bank Approach*, Electronic copy available at: http://ssrn.com/abstract=1898358, pp. 1-33.
15. Cellino, M. (2011), "Rischio credito crunch da 436 miliardi", *Il Sole 24 Ore*, 31 marzo.
16. Das, S. and Sy, A. N.R. (2012), *How Risky Are Banks' Risk Weighted Assets? Evidence from the Financial Crisis*, IMF Working Paper, January, pp. 1-38.
17. Demirgüç-Kunt, A., Detragiache, E., Merrouche, O. (2010), *Bank capital: lessons from the financial crisis*, Policy Research Working Paper Series 5473, The World Bank, pp. 1-36.
18. di Biase, P. and D'Apolito, E., (2011), *Capital Adequacy, Financial Leverage and Cost of Funding in the banking system: how they may affect credit price?*, Intervento al Convegno ADEIMF (Associazione Docenti Economia Intermediari Mercati Finanziari), Novara, 9-10 Settembre, pp. 1-37.
19. European Banking Authority (EBA) (2011), *EBA Recommendation on the creation and supervisory oversight of temporary capital buffers to restore market confidence* (EBA/REC/2011/1), London, 8 December.
20. European Commission (2012), *Report from the Commission to the European Parliament and the Council. Second Report on Effects of Directives 2006/48/EC and 2006/49/EC on the Economic Cycle*, {SWD(2012) 218 final}, Brussels, 17.7, COM(2012) 400 final.
21. Giuliani, F. (2011), *Optimal capital structure of a bank: the role of asymmetry of information and Equityzation of Debt*, July, Electronic copy available at: http://ssrn.com/abstract=1923824, pp. 1-39.
22. International Monetary Fund (IMF) (2011),*Global Financial Stability Report*, April.
23. Jiménez, G., Ongena, S., Peydró, J.L. (2012), *Macroprudential Policy, Countercyclical Bank Capital Buffers and Credi Supply: Evidence from the Spanish Dynamic Provisioning Experiments*, June, Electronic copy available at: http://ssrn.com/abstract=2049284, pp. 1-58.
24. Kato, R., Kobayashi, S., Saita, Y. (2010), *Calibrating the level of capital: The way we see it*, Bank of Japan Working Paper, N. 10-E-6, May, pp. 1-44.
25. Locarno, A. (2011), *The macroeconomic impact of Basel III on the Italian economy*, Questioni di Economia e Finanza (Occasional Papers), February.

26. Lusignani, G. and Zicchino, L. (2011), “Convergenza a Basilea 3: un tetto alla crescita del credito?”,*Bancaria*, n.3, pp. 2-10.
27. Macroeconomic Assessment Group established by the Financial Stability Board and the Basel Committee on Banking Supervision (2010a), *Interim Report. Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements*, August.
28. Macroeconomic Assessment Group established by the Financial Stability Board and the Basel Committee on Banking Supervision (2010b), *Final Report. Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements*, December.
29. Masera, R. (2010), “Le nuove regole di Basilea 3”, Intervento al Convegno ABI su *Basilea 3 dopo Seul. Le priorità per le banche*, Roma, 1° dicembre.
30. Mora, N. and Logan, A. (2010), *Shocks to bank capital: evidence from UK banks at home and away*, Bank of England, Working of Paper, N. 387, pp. 1-36.
31. Osborne, M., Fuertes, A.M., Milne, A. (2012), *In Good Times and in Bad: Bank Capital Ratios and Lending Rates*, Electronic copy available at: http://ssrn.com/abstract=1971324, pp. 1-44.
32. Santos, J. A C (2001), “Bank capital regulation in contemporary banking theory: A review of the literature”, *Financial Markets, Institutions & Instruments*, vol. 10 (2), pp. 41-84.
33. Tutino, F., Birindelli, G., Ferretti, P. (edited by) (2011), *Basilea 3. Gli impatti sulle banche*, Egea, Milano.

## Appendix
## Questionnaire on capital framework

**1. Company profile**

Bank group:

Total assets as of 31/12/2011:

Indicate your role/position within the Bank:

**2. Do you consider the ongoing revision of the capital rules within the Basel III framework as:**

☐ necessary also for Italian banks

☐not necessary for Italian banks. Adequate regulation is already in force

☐ not necessary since the new rules might prove ineffective to guarantee bank solvency in case of new future difficulties

☐ other (specify):

Comments:

**3. Do you consider the composition of Common Equity Tier 1 within the Basel III framework as:**

☐ adequate compared to the risk profile

☐ inadequate compared to the risk profile since it is still too lenient

☐penalising Italian banks (considering the treatment of preferred stocks and preference shares, Cooperative Bank shares, etc. )

☐ other (specify):

Comments:

**4. Which do you think will be the strongest reason for the impact of the Common Equity Tier 1 ratio on your Bank?**

☐the narrower definition

☐ the RWA likely increase

☐ the higher percentage (7% per Common Equity plus capital conservation buffer)

Comments:

**5. The impact of the new deductions from Common Equity Tier 1 should be equal to:**

☐<50 bps

☐ 50-100 bps

☐ 100-200 bps

□ 200-400 bps

□>400 bps

Comments:

**6. Do you think your Bank will align with the stricter capital requirements before the dates indicated by the Basel III framework?**

□ no

□ the Bank is already aligned with the new Basel III capital requirements

□ yes, by 2011

□ yes, by 2012

□yes, by (specify) ………..

Comments:

**7. According to your opinion, your Bank intends to increase the capital ratios through:**

□ capital increases

□ programme of capitalisation of profits

□ sale of non-core assets

□ less “generous” dividend policy

□ issue of instruments included in the Additional Tier 1 capital

□ issue of instruments included in the Tier 2 capital

□ decrease in RWA

□ other (specify):

Comments:

**8. Do you think that the uncertainty over the final regulatory provisions will lead to:**

□ failure to issue Additional Tier 1 capital and Tier 2 capital instruments

□ issue of said instruments with right to reimburse/modify contractual terms if they should not comply with future rules

□ failure to recall existing capital instruments

□ banks force to exercise call option upon the first date available

□ other (specify):

Comments:

**9. Has your Bank restructured the non-Common Equity instruments?**

□ yes, by replacing Tier 3 with Tier 2

□ yes, by reimbursing Lower Tier 1 and replacing it with instruments of the same quality

□ yes, by reimbursing Tier 2 and replacing it with instruments of the same quality

□ no

□ other (specify):

Comments:

**10. As far as instruments to be recalled in 2010 are concerned, your Bank:**

□ reimbursed them

□ did not recall them considering that the newly issued instruments are expensive

□ did not recall them due to the uncertainty over the regulatory capital composition

 did not recall them due to (specify):

Comments:

**11. Do you think that instruments such as contingent capital and capital insurance are too complex to be successfully placed in the market?**

 yes

 no

Comments:

**12. Do you think that in the upcoming years the use of share capital will be:**

 more expensive due to the higher risk premium required considering the uncertainty over bank profits and dividends

 more expensive due to (specify):

 less expensive since stricter rules will compensate uncertainty over bank performance

 less expensive due to (specify):

Comments:

**13. Do you think that said instruments will be more expensive due to the stricter requirements provided for by Additional Tier 1 capital and Tier 2 capital?**

 yes

 no

Comments:

**14. Do you think that the new capital provisions will affect your Bank profitability (ROE)?**

 no, profitability will substantially remain stable

 yes, profitability will decrease

Comments:

**15. Will the compliance with the new regulatory standards affect your Bank lending spread?**

 no, since it will be a progressive process

 yes, due to higher funding charges

 other (specify):

Comments:

**16. Do you think that the implementation of Basel III will reduce your Bank credit offer?**

 yes

 no

Comments: