Excess Capital, Buybacks and Shareholder Remuneration

Illusion and Reality

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Abstract

Share buybacks are increasingly presented as a means of remunerating shareholders and creating value, often alongside dividend distributions. However, the financial and accounting effects of share repurchases do not necessarily translate into genuine economic value creation. This paper critically examines buybacks from an integrated economic, financial, accounting, managerial and regulatory perspective, focusing on listed companies and, in particular, the banking sector.

The analysis distinguishes between capital distribution and the generation of economic value, showing that mechanical increases in earnings per share (EPS), return on equity (ROE) and risk-adjusted performance indicators do not, in themselves, demonstrate improved underlying profitability or additional value creation.

Drawing on the Dividend Discount Model in its Excess Capital formulation, the paper examines the implications of share repurchases for bank valuation and capital management. It also proposes a distinction between conventional excess capital, assessed against regulatory and managerial benchmarks, and substantive excess capital, evaluated in a broader economic perspective that accounts for risks not fully captured by conventional measures of capital adequacy.

The analysis does not reject buybacks as such. Rather, it argues that their appropriateness must be assessed in relation to the company's financial position, strategic objectives, prudential requirements and alternative uses of available resources. Particular attention is given to the opportunity costs of repurchases, their potential effects on managerial incentives and market expectations, and the responsibilities of boards of directors in evaluating and communicating such transactions. Buybacks should therefore be understood primarily as a capital management instrument, not as an inherently remunerative mechanism or a guarantee of value creation. Their merits depend on the specific circumstances in which they are undertaken and on their contribution to the company's long-term economic and financial sustainability.

1. Introduction

Through a share buyback, a company buys its own shares in compliance with the relevant regulations. In Italy, the regulation of share buybacks is found primarily in Article 2357 and following of the Civil Code. In particular, Article 2357 (Purchase of Own Shares) establishes the following rules, which also apply when the buyback is conducted through fiduciary companies or intermediaries.

- The purchase can occur only within the limits of distributable profits and available reserves as reflected in the most recent approved financial statement.
- The purchase must be for fully paid-up shares, meaning shares for which the corresponding contribution has been fully made by the shareholders.
- The operation must be authorised by a shareholders' meeting, which determines the details, including the maximum number of shares to be bought, and/or the maximum amount to be paid, the duration of the authorisation (not exceeding 18 months) and the price range (minimum and maximum).
- For companies with shares listed on regulated markets or widely distributed to the public, the nominal value of the shares bought back cannot exceed 20% of the share capital (also considering for this calculation shares owned by controlled companies).[1]

These four limitations also apply to purchases of shares of the parent company by subsidiaries (Article 2359-bis of the Italian Civil Code).

In addition to the rules contained in the Civil Code, there are other specific regulations for buybacks involving listed shares or shares traded on an Italian multilateral trading system. In particular, Article 132 (Acquisition of own or parent company shares) of Legislative Decree 58/1998 establishes that purchases by companies with listed shares, including those made by a subsidiary, must be carried out in a way that ensures equal treatment of shareholders, according to the procedures specified by CONSOB in Article 144-bis of Regulation 11971/1999 (the 'Regolamento Emittenti').[2]

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[1] If the limits are not respected, the fourth paragraph of Article 2357 of the Civil Code states: 'Shares acquired in violation of the previous paragraphs must be sold in accordance with methods determined by the shareholders' meeting, within one year of their purchase. In the absence of such a sale, the shares must immediately be cancelled and the corresponding capital reduction must be carried out. If the shareholders' meeting does not take action, the Board members and Statutory auditors must request that the reduction be ordered by the court, following the procedure set out in the second paragraph of Article 2446.' It should also be noted that Article 2357-bis (Special Cases of Acquisition of Own Shares) provides for circumstances in which the limits of Article 2357 of the Civil Code do not apply, but these are not relevant to the present discussion.

It may be noted, as an incidental remark, that when a company's shares do not carry a nominal value, its share capital may—other conditions being equal—end up being higher than that of a company whose shares do have a nominal value, where share capital is calculated as nominal value multiplied by the number of shares in circulation. This follows from the greater flexibility enjoyed by the former in allocating amounts arising from extraordinary transactions either to share capital or to reserves. Consequently, the 20% threshold translates into a different absolute figure in the two scenarios. No further analysis of this issue is needed here.

[2] It may be useful to recall that, prior to 1982, issuer share repurchases in the United States operated under a pervasive risk of ex post characterization as market manipulation under Section 9(a)(2) of the Exchange Act and Rule 10b-5, which

It is also necessary to refer to Regulation (EU) No 596/2014 ('MAR – Market Abuse Regulation'), which provides, in Article 5 and subject to the conditions set out therein, exemptions from the prohibitions laid down in Articles 14 and 15 of the same Regulation, thereby establishing, including in the EU, a so-called 'safe-harbor' regime.[3]

Regarding the specific case of banks repurchasing their own shares, this is permitted only if preapproved by the relevant supervisory authority—the European Central Bank for significant banks and the Bank of Italy for less significant ones. In fact, Article 77 (Conditions for reducing own funds and eligible liabilities), Paragraph 1a of the Capital Requirement Regulation (Regulation [EU] No. 575/2013) establishes that an entity must obtain prior authorisation from the competent authority if it decides to 'reduce, redeem or repurchase Common Equity Tier 1 instruments issued by the institution in a manner that is permitted under applicable national law'. The competent authority will grant the authorisation if the entity replaces the repurchased or redeemed instruments with instruments of equal or higher quality under sustainable conditions for the entity's income capacity or if the entity demonstrates that its own funds and eligible liabilities exceed the capital requirements by a margin deemed necessary by the competent authority (Article 78 [Supervisory permission to reduce own funds], Paragraph 1 of Regulation No. 575/2013).[4]

Further important reference provisions are contained in Delegated Regulation 241/2014.[5] In particular, Article 30 (Content of the application to be submitted by the institution for the purposes of Article 77 of Regulation (EU) No 575/2013), paragraph 1, provides as follows, for the evident purpose of ensuring the bank's capital adequacy at both the individual and consolidated level:

1) The application referred to in Article 29 shall be accompanied by the following information:

(a) a well-founded explanation of the rationale for performing one of the actions referred to in paragraph 1 of Article 29;

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rendered such transactions effectively unavailable as a standard corporate tool. The adoption of SEC Rule 10b-18 in 1982 did not confer a substantive authorization to conduct buybacks, but rather established a procedural safe harbor: issuers adhering to specified constraints on timing, price, volume, and manner of purchase benefit from a rebuttable presumption of non-manipulative conduct. Outside this safe harbor, repurchases remain fully subject to the general anti-manipulation regime and to case-specific regulatory scrutiny.

[3] The topic, although relevant when designing a buyback transaction, falls outside the scope of this paper and is therefore mentioned only as a potential area for further investigation, essentially from a regulatory standpoint, should it be considered of interest.

[4] According to Article 78, Paragraph 1 of EU Regulation No. 575/2013, the competent authority may also grant the entity a general prior authorization to carry out redemption and buyback operations of Tier 1 capital instruments for a predetermined amount. This authorization is granted for a period not exceeding one year, with the possibility of renewal. The specific regulations for buybacks by banks highlight that such operations can be carried out provided they do not undermine the company's current and prospective financial and capital adequacy. Naturally, the principle — from the standpoint of economic-financial equilibrium — applies to companies in any sector.

[5] Commission Delegated Regulation (EU) No 241/2014 of 7 January 2014 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for Own Funds requirements for institutions.

(b) information on capital requirements and capital buffers, covering at least a three year period, including the level and composition of own funds before and after the performing of the action and the impact of the action on regulatory requirements;

(c) *omitted*

(d) an evaluation of the risks to which the institution is or might be exposed and whether the level of own funds ensures an appropriate coverage of such risks, including stress tests on main risks evidencing potential losses under different scenarios;

(e) any other information considered necessary by the competent authority for evaluating the appropriateness of granting a permission according to Article 78 of Regulation (EU) No 575/2013.

Having summarised the main regulations applicable in Italy, this paper further develops some considerations related specifically to buyback operations by listed companies, which are often also presented as a means to provide additional remuneration for shareholders.

Although the literature on share repurchases is extensive, it remains fragmented with respect to the various dimensions and effects of these transactions, and is typically aimed - especially in Anglo-Saxon markets - at assessing their impact on stock prices and returns through quantitative analyses (Ikenberry et al., 1995; Grullon & Michaely, 2004; Peyer & Vermaelen, 2009; Manconi et al., 2019). This paper contributes, at least in part, to filling this gap by examining their concrete and operational implications within a broader economic, managerial, accounting and fiscal perspective — an analytical angle that is largely absent from the existing literature on the subject.[6]

Specifically, it will be argued that such operations should not strictly be viewed as a form of shareholder remuneration; indeed, at least from a theoretical perspective (as will be further elaborated

[6] Extensive literature at international level has examined the effects of buybacks on share prices following the announcement and/or the execution of the operation, with mixed results. This is unsurprising, as post-buyback price dynamics, both in the short term and even more so over a multi-year horizon, reflect the multitude of macroeconomic, financial, market and idiosyncratic variables that influence prices under the specific conditions faced by the firm at that point in time — variables that, in practice, cannot be isolate. It should also be noted that the buybacks are undertaken within the maximum threshold authorized by the Shareholders' Meeting (or by the Board of Directors in some jurisdictions), both in percentage terms and in absolute value. Moreover, so as not to exert a material influence on the share price (for this reason, no repurchases are carried out on days or during periods of limited trading activity, such as for example in the month of August in Italy), they are executed through purchases distributed over time by an independent intermediary appointed for this purpose. And in line with the maximum time period authorized by that body (not exceeding the maximum period permitted under the applicable regulation) and at prices falling within a maximum–minimum range (e.g., ±5%) relative to the market price of the share, such as the previous day's closing price. It follows, for this reason as well and in addition to what has already been highlighted, that isolating the possible effects of share repurchases is virtually impossible, not even over the relatively short period during which the buyback transactions are announced and executed. Given the multitude of variables that influence market price dynamics, a buyback could be little more than a "whisper in a concert". It should also be noted that, under the MAR framework, share repurchases must be disclosed to the market (as well as notified to Consob in Italy), albeit necessarily ex post, typically on a weekly basis and, if the issuer so chooses, with a breakdown of the purchases executed on the various trading days. In particular, notification to Consob must likewise be made within the week following execution, as required by Article 2(3) of Commission Delegated Regulation (EU) 2016/1052.
These transactions are generally easily absorbed into the large volume of buy and sell orders that characterizes an active market, thus preventing any direct impact on the price.

and extensively discussed below), the value of shareholders' portfolios remains neutral, under certain stylized and simplifying assumptions, in the immediate aftermath of the transaction (Miller & Modigliani, 1961). Regardless of any potential market reactions—which may vary in magnitude and duration and are not necessarily positive following the announcement or execution of a buyback—such fluctuations in the share price over the observation period cannot be conclusively ascribed to the operation itself.

It can also be reasonably argued that, in an efficient equity market with substantial depth and liquidity, persistent mispricing—with reference to peers and to the market as a whole—is unlikely. Even when such a condition is believed to exist, a supposed mispricing can rarely be rationally justified by an unbiased and objective valuation. In any case, it is improbable that such a condition could be corrected—other than temporarily—through a buyback. Furthermore, even in the case of less liquid stocks, a buyback cannot structurally or durably alter the underlying dynamics of supply and demand.

A more detailed articulation of the paper can be outlined as follows, highlighting that the analysis will address, in general terms, share buyback transactions carried out by listed companies, while placing particular emphasis on buyback programs implemented by banks, given the distinctive managerial specificities that characterize them and the constraints arising from a detailed prudential regulatory framework.

The second paragraph emphasizes that long-term value is fundamentally driven by profitable operating performance relative to the risks undertaken. By contrast, capital management transactions alone might deliver a superficial appearance of value creation, occasionally amplified by targeted market communications.

The third paragraph focuses specifically on share buybacks, noting that reducing a company's equity does not inherently generate structural value, irrespective of short-term fluctuations in market prices or valuation metrics.

The fourth paragraph draws on the valuation criterion predominantly used for banks when estimating intrinsic (fundamental) value—namely, the Dividend Discount Model in its Excess Capital variant. The core argument is that if a buyback reduces excess capital and liquidity, the bank's aggregate intrinsic value consequently declines, *ceteris paribus*. As a result, the lower number of shares outstanding following a buyback executed at market prices is offset by this reduction in overall equity value, leaving the theoretical per-share value substantially unchanged.

The fifth paragraph turns again to the banking sector to examine the managerial and economic notion of excess capital, the quantification of which is neither straightforward nor mechanically derived from the metrics set out in the Risk Appetite Framework. This ambiguity not only affects the maximum amount of capital theoretically available for a buyback—within applicable regulatory limits—but also

challenges the assumption that the entirety of estimated excess capital, in the absence of potential acquisitions, significant investments, or other foreseeable requirements, constitutes a genuinely superfluous and unproductive resource that could be reduced without detrimental effects on sound and prudent management. The paragraph concludes by outlining specific conditions under which a buyback might be justified as a means of enhancing capital management from a managerial perspective.

The sixth paragraph examines Risk-Adjusted Performance Measurement (RAPM) indicators and the impact of buyback transactions on these metrics. It highlights the purely arithmetic effects that emerge in post-buyback assessments, which do not necessarily reflect any fundamental creation of value for the firm.

The seventh paragraph addresses a topic of considerable interest, focusing exclusively on the aspects most relevant to this analysis: Buybacks and Capital Management in Banking from a Managerial and Regulatory Perspective. Unsurprisingly, it emerges that no simple, univocal, or universally valid answer can be given. The analysis evaluates both the internal perspective of bank management and the viewpoint of the supervisory authority, which, contrary to common assumptions, may not necessarily view favorably banks that remain overcapitalized without a clear rationale consistent with their forward-looking business model and strategic planning, the latter being closely attentive to evolving macroeconomic and geopolitical scenarios.

A final paragraph provides a concise summary of the main findings of the critical analysis.

The discussion is complemented by three Appendices. The first sets out the simulations required to assess the prospective effects of the buyback on the bank's capital adequacy and financial risks, while the second describes in summary the accounting treatment of buybacks under IFRS. The third Appendix outlines the stated rationales for recent share buyback programs conducted by select listed Italian companies.

2. Capital Operations, Dividends and Shareholder Benefits

As is well known, financial markets are heavily influenced by announcements and expectations. In terms of economic substance, however, fundamental value is rarely driven by announcements or capital operations alone. Instead, the typically short-term effects these actions exert on stock prices primarily reflect shifting market expectations regarding the company's or its shareholders' prospects. In a friction-free theoretical framework, a capital operation cannot alter the aggregate value of shareholders' financial portfolios. A clear parallel can be drawn with capital increases—whether free, paid, or mixed—involving the issuance of new shares at prices lower than the current market price,

which result - all other things being equal - in an immediate dilution of the company's per-share value across a greater volume of shares outstanding.[7]

It is likewise well established that dividend distributions, in and of themselves, do not increase shareholders' immediate financial wealth; under equal conditions, investors will observe a mechanical decrease in the market price of the shares—the so-called 'dividend drop-off'—following the ex-dividend date (see Box 1, Example 1, next paragraph).[8] Therefore, it is primarily the market's interpretation of the distribution policy—whether to distribute, retain earnings, or alter the payout magnitude—that drives the share price up or down, depending on specific circumstances.

If generous dividends are expected and welcomed by shareholders, the reasons behind this preference are multifaceted and vary significantly depending on the investor profile. For example, consider a multi-utility company controlled by public shareholders—typically municipalities or local government entities—who rely on dividend inflows to finance their operating needs or capital programs. Through this mechanism, they seek to extract liquidity without diluting their ownership stake through share sales, while trusting that future market dynamics will eventually absorb the effect of the dividend detachment, thereby avoiding the need to record an impairment in the value of their holding. Similarly, retail investors and savers with portfolios of varying sizes often perceive dividend distributions as a reflection of the company's good health, assuming it capable of generating sufficient future profits to sustain such payouts without jeopardizing its liquidity or capitalization strength.

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[7] For example, for a listed company, in the case of capital increases with pre-emptive rights granted to existing shareholders and executed at an issue price below the prevailing market price, the Theoretical ex-right price (TERP) of the share decreases by an amount corresponding to the theoretical value of the subscription right. Accordingly, the shareholder who subscribes to the capital increase by exercising the pre-emptive right does not, in economic terms, benefit from the lower issue price. Conversely, the shareholder who chooses not to exercise the right may sell on the market— to other interested investors — the rights attached to the shares held in the portfolio, thereby offsetting the aforementioned decline in the ex-right market price of the share.

Naturally, such a transaction may give rise to a misleading impression regarding the supposed advantageenjoyed by subscribers to the capital increase. In fact, the capital increase typically results in a rise in the number of shares that is more than proportional to the cash inflow generated by subscriptions, which evidently leads to an instant dilution of the company's overall market value.

For the reasons set out above, historical share-price series must be adjusted whenever a listed company has carried out capital operations of this kind, so as to ensure comparability over time. In Italy, the Italian Association of Financial Analysts (AIAF) regularly publishes the corresponding adjustment coefficients.

[8] The distribution of dividends is, in reality, a distribution of capital as configured at the close of the previous financial year. Although this concept is fundamentally straightforward, it cannot be equated with the interest paid on debt securities. As is well known, shares are priced on a cum-dividend basis, meaning they are gross of the expected dividend currently accruing. At the moment of the ex-dividend date (or, more precisely, upon the shareholders' meeting resolution approving the distribution), the value of the dividend becomes deterministic. Obviously, the effect of the subsequent dividend drop-off may not always be precisely observable empirically. On the first ex-coupon trading day—particularly at the opening of the session—the price simultaneously reflects the supply and demand dynamics for that stock, which in turn depend on a wide range of market variables. Moreover, if the dividend is partially anticipated through an interim distribution before the end of the fiscal year, the impact on the share's market price is effectively spread across both distribution dates. Awareness of the dividend drop-off, although merely a technical effect arising from the quotation mechanics, is nevertheless essential for understanding why a buyback—just like a dividend distribution, which produces analogous theoretical and immediate effects for the shareholder—should not automatically be regarded as a form of shareholder remuneration. Failure to acknowledge this basic analytical fact can lead to unsubstantiated interpretations of the purported benefits of the transaction.

In any case, it should be emphasized that the operation itself exerts no direct effect on shareholders' financial wealth; however, it can—through targeted corporate communication—shape expectations and thus influence market behavior. The exact same theoretical principle applies to buyback operations, regardless of whether they involve the subsequent cancellation of shares, when such transactions are announced as a means to remunerate shareholders.[9]

Consider, for instance, open-market repurchases[10], whereby the company buys back its own shares on the secondary market using liquidity deemed and capital to be in excess. With the repurchase of shares, the company's equity value[11] and liquidity are instantaneously reduced, and this value is spread over a smaller number of shares, net of those repurchased.

It does not matter whether or not the market shows clear evidence of this impact: there are multiple determinants of stock price dynamics, making it almost impossible to isolate the effects of any particular variable in hindsight.[12] The analytical impact on the overall financial wealth of a shareholder who retains their shares is theoretically instantaneously equivalent to the effect of a dividend distribution for that same shareholder. See also Box n.1, Example 1, next paragraph. However, the widespread practice of equating buybacks with dividends as a form of capital distribution to shareholders may overlook significant conceptual differences between the two mechanisms. Dividends are periodically distributed to all shareholders, subject to corporate payout policies and provided that underlying economic and financial conditions allow for it. In turn, investors

[9] It is useful to recall at the outset that the purposes of a buyback may not necessarily include the cancellation of the repurchased shares and the subsequent reduction in the number of shares outstanding. Several motivations may underlie this choice, such as the creation of a pool of treasury shares to be used for employee share-based incentive plans or for future 'share-for-share' acquisitions. Alternatively, from a tactical and often unstated defensive perspective, repurchases can strengthen the company's position in the event of potential hostile takeovers. This is achieved by temporarily reducing the free float, increasing the relative weight of stable shareholders, and limiting—at least in the case of target companies operating in industrial sectors—the availability of excess liquidity that could otherwise make the institution a more attractive target. Conversely, a strategy aimed at future disposals to benefit from potential capital gains is rather unlikely: any positive differences arising from such sales would, in accordance with IFRS/IAS principles, be recognized directly in equity—thereby strengthening capital adequacy—rather than impacting the income statement.

[10] Share buyback programs by listed companies are commonly carried out in Italy and internationally through open-market repurchases. However, subject to applicable regulatory requirements, alternative methods may also be used, including self-tender offers, potentially structured as Dutch auctions, and certain privately negotiated transactions.

[11] Also from an accounting standpoint, book equity is reduced when a company repurchases its own shares, irrespective of any subsequent cancellation. In the case of banks, from a CRR-compliant prudential regulatory perspective, the negative impact on CET1 is reflected—for the entire authorized amount—upon the granting of the permission by the competent supervisory authority (the ECB, for institutions under its direct supervision). See: Commission Delegated Regulation (EU) No 241/2014, Article 28(2).

[12] The effects of a buyback on market prices are, moreover, distributed over the period during which the repurchases are carried out—up to the maximum amount authorized by the shareholders' meeting—by the financial intermediary appointed by the company for this purpose. Hence, it is virtually impossible to isolate these components of demand and identify their exact impact on prices. However, a buyback, once announced and underway, may influence the expectations of shareholders and investors more generally, potentially pushing prices upward, at least in the short term. This reaction does not stem from the buyback as a mechanism of remuneration, but rather from the signaling effect that markets may attribute to the issuer's decision.

frequently perceive these distributions as a genuine remuneration for their investment, all while maintaining their status as shareholders.

Share buybacks—often, though not necessarily, executed at prices pushed upward precisely by the repurchase operations—are not ordinary or periodic in nature. They inject liquidity into the market through a program of purchases spread over time by a financial intermediary appointed for this purpose—remunerated through customary execution fees[13]—in exchange for shares sold by investors who exit the company, obviously without any direct relationship between these sellers and the buyer. Shareholders who keep their shares in their portfolio do not receive any payment.

A terminological clarification is warranted at this point for the purposes of the present analysis and will not be repeated in the following sections.

In a dividend payment, cash is distributed to shareholders by virtue of their share ownership. In a buyback, by contrast, the company pays cash in exchange for shares acquired from shareholders who choose to sell them. Buybacks and dividends may therefore be grouped together under the broad heading of payout when the term is used solely and exclusively to describe corporate cash outflows in both cases. However, such a classification should not be taken to imply that the two transactions necessarily create additional economic value.

For the purposes of this paper, it is therefore essential to distinguish between a cash outflow associated with a share repurchase and the economic value potentially generated for shareholders. These are distinct concepts and should not be treated as interchangeable. Using the term payout without making this distinction risks conflating the mechanics of the transaction with its economic substance and may consequently lead to misleading conclusions about its nature and effects. Furthermore, any potential share-price reaction associated with a buyback announcement or execution could be attributed to a multiplicity of distinct idiosyncratic or market factors. Although a potential positive reaction might perhaps be attributable, at least in part and albeit inherently difficult to prove conclusively, to the buyback, it should not automatically be viewed as a form of remuneration by the company to its shareholders, nor should it, in itself, be taken as evidence that the transaction has created additional economic value.

Turning to how both dividend distributions and share buybacks reduce the company's equity position, it is reasonable to assume that an unplanned buyback of significant magnitude could lower investors' dividend payout expectations, regardless of the targets stated in the strategic plan previously approved and disclosed to the market. The market may therefore factor in compensating effects between the

[13] The intermediary is typically remunerated through execution fees, which in market practice tend to be minimal—generally in the range of 0.02% to 0.05% of the executed transaction value—and are expressed as a small percentage of the amounts actually repurchased.

buyback and the expected dividends, avoiding a duplication of the anticipated impact of these two different measures on capital, liquidity and, to the extent that buybacks are presented and perceived as a form of shareholder remuneration, the benefits accruing to shareholders.

3. Buybacks and Shareholder Remuneration

Buyback operations are frequent and widespread across companies in various sectors and are justified in different ways by boards of directors when submitting proposals to general meetings, as evidenced by the disclosures contained in corporate press releases. Among these, the explicit goal of shareholder remuneration is sometimes featured.[14]

In practice, however, it is highly unlikely that management would openly admit to proposing a capital reduction merely to distribute liquidity that is truly in excess of ongoing and pipeline projects. Such a candid disclosure could undermine investors' confidence in the company's long-term growth prospects; consequently, this underlying rationale is frequently concealed behind alternate justifications that are more appealing to investors.

It is true that, given investment opportunities, capital has a 'cost' that may be higher than the return on capital—a cost that is implicit, of course, not observable in the company's accounts, nor directly observable in the market, and whose estimation is, moreover, far from being methodologically uncontroversial. However, because formally admitting that returns fall below the cost of capital would severely damage their professional reputation, this framework does not realistically constitute an argument that managers would openly deploy to justify a reduction of capital in the ordinary course of business. [15] Furthermore, it is highly questionable whether management possesses full and accurate awareness of the aggregate return on capital across its diverse business units relative to an overall cost of capital. Attempting to benchmark these two metrics is conceptually flawed, as establishing a

[14] The buyback is often regarded as part of a company's overall payout policy approved by boards of directors, insofar as it is considered a form of shareholder remuneration. Even though a buyback cannot be directly equated to a dividend distribution—given the heterogeneity of such transactions—it can nevertheless be argued that, from a strict wealth-creation perspective, neither mechanism inherently constitutes shareholder remuneration, but distribution of capital, which is precisely what they truly have in common. For shareholders, what ultimately matters is their total return, namely the sum of dividends and the change—whether positive or negative—in the stock price.

[15] One might argue that a buyback should be undertaken when management is unable to deliver a return to shareholders in excess of the cost of equity (Required Return on Equity). However, aside from the fact that the cost of equity is a largely theoretical construct—one that cannot be measured in a robust manner unless an explicit and highly unlikely target return for shareholders is assumed—it is reasonable to consider the following: a) it is difficult to envisage a shareholders' meeting approving a buyback with the explicit aim of reducing its own exposure to the company's business, given that shareholders can achieve a better outcome simply by selling shares on the market and investing elsewhere; b) it is equally unlikely that the board would propose a buyback on the grounds of its inability to generate an adequate return on the capital entrusted by shareholders; c) given that the company's periodic profitability may reflect cyclical trends driven even by purely exogenous factors, it is implausible to execute buybacks during weaker phases and then resort to capital increases during expansionary periods when economic conditions are more favorable.

methodologically homogeneous comparison between them is practically impossible. Consequently, such a comparison remains a frequent, albeit purely theoretical and unrealistic, exercise.

However, the supposed benefit of a buyback for shareholders who keep their shares in their portfolio cannot be defined as a true form of remuneration. Moreover, it should be emphasized that the potential price effect specifically caused by the transaction—driven by a possible positive market reaction upon the announcement[16]—lacks an underlying economic justification related to an increase in the intrinsic value of the equity; consequently, such an appreciation, provided it occurs, may reasonably be deemed fundamentally ungrounded over the long term.[17]

One might argue that, *ceteris paribus*, earnings per share (EPS) will increase after a buyback because of the reduced denominator[18], potentially driving the share price higher under the assumption of a substantially stable price-to-earnings (P/E) ratio. However, the expectation that the P/E ratio will remain materially unchanged after a buyback is unfounded, as any mechanical increase in earnings per share could be offset by a corresponding reduction in the company's P/E ratio, provided that investors are aware that the EPS change is purely arithmetic and the company's risk-return profile has not changed, if not deteriorated.

The argument would therefore hold true only if the market were inefficient enough to misinterpret this mechanical effect. Any well-informed investor would thus adjust their valuation of the stock to account for the company's reduction in cash post-share buyback. It follows, then, that the mechanical increase in EPS is not, on its own, evidence of value creation and does not justify the assumption of a stable multiple. (Dobbs, R., & Rehm, W., 2005; Ezekoye, O., Koller, T., & Mittal, A., 2016).

Price dynamics, which may go in either direction, depend primarily on how market participants interpret the nature and objectives of the transaction within the context of the company's prospective earnings, as well as its financial and capital positions[19]. Again, market expectations regarding the effects of the repurchase come into play, given that the transaction is neutral with respect to the immediate theoretical value of financial portfolios post-buyback. Consequently, share buybacks

[16] Not all announced buybacks are actually carried out to the full extent authorized by the general meeting of shareholders. In such cases, any potential effects on the share price prove to be, a fortiori, purely speculative in a broad sense. In any event, disposals of the issuer's shares by members of senior management subsequent to the announcement of the buyback should be subject to rigorous supervisory scrutiny, as such transactions may infringe the applicable market abuse framework.

[17] Any incidental advantage realized by shareholders who sell during the buyback is irrelevant to the narrative that presents the transaction as a form of shareholder remuneration. These sellers exit the company and cannot logically be the intended beneficiaries of such a policy. The supposed beneficiaries are instead those who retain their shares—precisely the group that, in economic terms, receives no remuneration and remains exposed to a perceived benefit that does not materialize.

[18] Given the initial EPS before the buyback, the repurchase of x% of the shares outstanding results in a new ratio equal to EPS / (1 - x%). However, the long-term trend of EPS should be evaluated primarily in relation to the performance of the numerator, which solely reflects management's ability to produce economic results by running the company effectively.

[19] Furthermore, an increase in EPS would mechanically lead to a decrease in the P/E ratio if the share price remains constant or appreciates at a lower rate than EPS.

derive their true significance not from their automated arithmetic impact on EPS, but rather from the signaling messages they convey to the marketplace (Vermaelen, 1981; Dann, 1981), which are, evidently, subject to the prevailing scrutiny and diverse interpretations of analysts and investors.

Moreover, according to a widespread narrative, in the event that the capital gains tax is lower than the taxation on dividends, in consideration of the applicable regulation, buybacks are said to be fiscally advantageous compared with dividends, as a purported alternative form of shareholder remuneration (Jacob & Jacob, 2013). However, even in such an event, the issue should be addressed avoiding superficial simplifications. Dividends unquestionably constitute taxable income for the shareholders who receive them—subject to the different tax rates levied on to the various categories of shareholders, such as individuals or corporations— and are taxable either in the year in which they are collected, where applicable, by means of a withholding tax for individuals, depending on the jurisdiction, or as a component of the overall taxable income for corporations in the fiscal year to which they pertain.

As for buybacks, they produce no direct tax consequences for the company that executes the repurchase—save for the application of the financial transaction tax (the so-called Tobin Tax), where the relevant conditions are met[20]—or for shareholders who retain the shares in their portfolio, since the latter do not realize taxable income as a result of the transaction. The only exception arises if a shareholder disposes of their shares shortly thereafter and realizes a taxable gain stemming from an increase in the market price, should such an appreciation occur and provided that the tax basis of the shares held in their portfolio is lower than the sale price.

It is therefore evident that it is not the buyback transaction that directly generates taxable income for the shareholder who retain the shares, but rather any capital gain that might be recognized in accordance with the current accounting and tax rules for corporations, or realized at the moment the shares are sold in the case of individuals, which may potentially occur even long afterward. Consequently, any resulting capital gain merely reflects the overall demand and supply conditions in the market, if and when it emerges as a taxable income component. As such, it does not inherently reflect the previous buyback transaction, mirroring instead future market expectations and speculative dynamics.[21]

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[20] As a general matter, the repurchase of treasury shares and their subsequent cancellation do not give rise to taxable income for the issuing company, insofar as the transaction does not result in the realization of any taxable gain and is legally classified as a capital transaction, which remains neutral for corporate income tax purposes. Under Italian law, share buyback transactions fall within the scope of the domestic financial transaction tax (the so-called Tobin Tax), introduced by Law No. 228 of December 24, 2012 (Article 1, paragraphs 491–500). The applicable rate is 0.1% for transactions executed on regulated markets and 0.2% for over-the-counter transactions. The tax does not apply to the issuance or cancellation of shares, which are expressly excluded from the scope of taxable events.

[21] For completeness, it should be noted that in certain jurisdictions—most notably the United States, Canada, and France—share buyback transactions are subject to a specific tax borne by the company carrying out the repurchase. In France, an 8% non-deductible tax applies where the buyback is carried out for the purpose of cancelling the shares. In the United

Therefore, it is true that underlying tax effects of dividend and share repurchases differ, but only within the terms of a proper comparison, as clarified above.

Given the objectives of this paper, a detailed examination of the tax implications under Italian law—let alone in comparison with those of other major jurisdictions—is not deemed necessary. The aim here is simply to clarify, from this perspective, the differences between dividend distributions and buybacks from the shareholder's standpoint, a comparison that may at times overlook important conceptual distinctions.

Box 1. Dividends, Buybacks and the Immediate Theoretical Neutrality on Share Value

1. *Baseline scenario: Dividend distribution and the drop-off effect*

The company has 1 billion shares outstanding. The market price is €3.00, resulting in a market capitalization of €3 billion. The total dividend is €50 million, which equates to a dividend per share of €0.05. All else being equal, the dividend drop-off results in a theoretical price reduction of €0.05, meaning that the share price drops to €2.95. The shareholder receives €0.05 per share, which combined with the ex-dividend price of €2.95, totals €3.00 (before dividend tax).
The theoretical value of the company, immediately after the dividend detachment, is €2.95 billion, calculated as 1 billion shares multiplied by €2.95 per share.
With 10,000 shares, the shareholder receives €500 in cash. Consequently, the investor holds shares worth €29,500 and €500 in cash, for a total value of €30,000.

2. *Comparative scenario: Share buyback of equivalent magnitude*

The company buys back its own shares for a total cash outflow of €50 million; therefore, at a market price of €3.00, it repurchases 16,666,667 shares. The number of shares outstanding after the buyback is 983,333,333. The theoretical value of the company after the buyback becomes €2.95 billion, exactly as in the case of a dividend distribution. This reflects the economic equivalence between the two mechanisms.
The theoretical value of the shares, immediately post-buyback, is: €2,950,000,000 / 983,333,333 = €3.00.[22] The shareholder who kept their shares in portfolio derives no benefit from the buyback itself.[23] It cannot be stated that the general meeting decided upon a form of

States and Canada, the rates are 1% and 2%, respectively, irrespective of the purpose of the repurchase. In all three jurisdictions, the primary objective of introducing a levy on share buybacks appears to have been the generation of additional fiscal revenue, coupled with an implicit disincentive effect—particularly in France—on the use of such transactions. In Italy, a specific levy on buybacks was discussed relatively recently (in 2025, as a potential revenue-raising measure), but these proposals have, to date, not been pursued further.

[22] A necessary clarification is in order. While dividend detachment constitutes an immediate distribution of capital that instantaneously affects the market price of the share (the dividend drop-off), the repurchase of treasury shares is typically executed over an extended horizon rather than through a single transaction, as presented in the simplified example. Therefore, since repurchases are not subject to immediate public disclosure upon execution, their effects cannot be isolated from the normal dynamics of the share price. It follows that when repurchases are subsequently disclosed by the company—as required under the applicable regulatory framework or pursuant to internal transparency policies—what emerges is a possible, though by no means assured, positive impact on EPS. This frequently contributes to the illusion of shareholder benefits and potential upward pressure on the share price, obscuring the underlying reduction in the company's equity.

[23] It should also be noted that the number of shares subject to the buyback, relative to the total number of shares outstanding, is proportionally identical to the theoretical reduction in the economic value of equity compared with the pre-buyback level—namely, approximately 1.67%. The shareholder who retains their shares in portfolio, as illustrated in our simple example, receives no benefit from the transaction, and the repurchase price remains irrelevant from this

remuneration in the form of a share buyback. No capital gain results directly from the transaction, so no tax effect occurs where applicable.
If a shareholder holding 10,000 shares wished to partially monetize the investment in order to obtain €500 in cash—the same amount that would have been received under a hypothetical dividend distribution—they would need to sell 167 shares (rounded) at a price of €3.00 per share. In that case, the number of shares remaining in the portfolio would be 10,000 - 167 = 9,833. The shareholder would therefore hold shares worth approximately €29,500 (rounded) and €500 in cash, for a total value of €30,000.

3. Combined scenario: Post-buyback dividend distribution

Taking Example 2, the theoretical value of the shares immediately post-buyback is €2,950,000,000 / 983,333,333 = €3.00. If another €50 million in dividends is distributed, the dividend per share is €50,000,000 / 983,333,333 ≈ €0.0508. All else being equal, the dividend drop-off results in a theoretical immediate price reduction of €0.0508, meaning that the share price theoretically drops to €2.9492. The shareholder receives €0.0508 and the ex-dividend price is €2.9492, which combined total €3.00 (before dividend tax).

Note: The numerical examples—necessarily simplified and stylized—demonstrate the immediate theoretical neutrality under the stated assumptions in a situation where the buyback acts as an instantaneous alternative to dividend distribution, there are no material differential taxes or costs, expectations regarding future cash flows are unaffected by the method of distribution to shareholders, and all other things being equal. These conditions serve to isolate the effects of the operations under review from the manifold factors that, in practice, could interfere with the condition of perfect neutrality. The economic significance of the buyback, and its purported objective of shareholder remuneration, are the subject of more extensive considerations discussed in greater detail in the subsequent sections of this paper.

Furthermore, one might still argue that, with the same total dividend amount, the shareholder will receive an increased dividend because of the reduced number of shares in circulation. This argument, however, overlooks the fact that the detachment of the increased dividend per share reduces the price of the share by an equivalent amount—the already noted and incontrovertible dividend drop-off effect (see Box 1, Scenario 3). Therefore, the immediate theoretical value of the overall portfolio, comprising both cash and the value of the shares, remains constant. The only way to create real value for shareholders is through profitable management decisions.

It is also frequently argued that, through share buybacks, a shareholder who retains their shares increases their proportional ownership in the company, a dynamic that is invariably presented as a benefit. However, this overlooks the fact that the shareholder ends up with an immediate larger percentage stake in a concurrently diminished equity base, measured in terms of intrinsic fundamental worth and isolated from the market's contingent and possibly transitory reactions. Naturally, the

perspective. From an accounting standpoint, however, the purchase price becomes relevant for the company executing the transaction when compared with the book value of the shares. This comparison dictates the magnitude of the impact on corporate equity, as a repurchase carried out at a price above book value results in a greater reduction of accounting equity, whereas a repurchase below book value mitigates that effect.

perspective of majority shareholders may differ, as an increase in their percentage of control can constitute a specific objective, such as defending against unsolicited takeover attempts.

The repurchase and cancellation of its own shares impact the company's net worth. This impact depends on the relationship between the repurchase (market) price (P) and the Book Value per Share (BV_{PS}). If $P/BV_{PS} > 1$ (for example, 1.5), net worth will decrease in proportion to that multiple; the opposite effect obviously occurs when $P/BV_{PS} < 1$.

Many believe that the price paid for a share repurchase should be regarded as a critical value driver in assessing the overall attractiveness of the transaction from the shareholders' perspective (Brockman & Chung, 2001; Cook et al., 2004; Dittmar & Field, 2015). Such an assessment should therefore be based on a comparison between the repurchase price ('P') and the intrinsic value per share ('W_{PS}') estimated through the chosen valuation methodology (as a rule, based on Discounted Cash Flow or Dividend Discount Model). When the condition P < WPS is met, the transaction is typically considered value-accretive for remaining shareholders from an economic standpoint (that is, once growth projects are funded and balance sheet strength is preserved). Obviously, this reasoning holds only provided that an intrinsic value exceeding the stock price, increased by transaction costs and the fees to be paid to the appointed intermediary, can be convincingly and reliably estimated.

According to Warren Buffett's widely quoted statements: "*When companies with outstanding businesses and comfortable financial positions find their shares selling far below intrinsic value in the marketplace, no alternative action can benefit shareholders as surely as repurchases*." (Buffett, W. E., 1985), and *"What is smart at one price is stupid at another"* (Buffet W.E., 2017). Self-evident and, in principle, undeniable assertions, assuming they are applicable.

In reality, however, such a condition is far from guaranteed. This is particularly true considering that share repurchases in the open market—typically not executed as a one-off transaction but implemented over an extended horizon[24] by intermediaries mandated by the company—are carried out at prevailing market prices, sometimes characterized by high volatility, without any specific, and indeed unlikely, verification being performed prior to each purchase by the intermediary to ensure that the above condition is actually satisfied. Furthermore, for the purposes under discussion, the valuation could be particularly complex in translating the firm's total intrinsic value (the equity value) into the unit value of the individual listed shares targeted by the proposed buyback; this is because

[24] The obvious objective of staggered repurchases is to avoid causing significant discontinuities in the dynamics of the share price. Nevertheless, the benefits accruing to shareholders who sell their shares during the buyback execution period have also been emphasised. As Warren Buffett observed: "*From the standpoint of exiting shareholders, repurchases are always a plus. Though the day-to-day impact of these purchases is usually minuscule, it's always better for a seller to have an additional buyer in the market*." (Buffett, W.E., 2017). This is, in principle, once again an undeniable and self-evident statement. At the same time, it is worth emphasising that a buyback is not intended to generate benefits for exiting shareholders, although it should not, in itself, put them at a disadvantage.

the per-share value does not necessarily coincide with the arithmetic fraction of the firm's intrinsic value.

In any case, even if it were truly possible to repurchase shares at prices below their intrinsic value, this would not result in authentic value creation at the firm level, but rather in a mere value transfer from one group of stockholders to another. Obviously, in this case, the remaining shareholders would benefit, due to a decrease in the number of shares outstanding that is more than proportional to the instantaneous decrease in the equity value.

Furthermore, behavioral biases may impair executive decision-making in this domain. Overconfidence could lead management to accelerate buybacks at peak market prices, while an excess of caution could restrain them from purchasing when prices are at their cyclical lowest. Under these circumstances, it is highly probable that the aforementioned transfer of value will fail to benefit long-term investors, instead enriching the stockholders who choose to sell their shares back, doing so at the direct expense of the remaining shareholders.[25]

In conclusion, it is highly unlikely that firms can consistently succeed in timing the market to buy back their shares at advantageous prices[26]; hence, they should avoid such opportunistic strategies altogether (Jiang, B. & Koller, T., 2011).

Based on the considerations set forth above, in our view this alone constitutes a very weak argument in support of buybacks.

Contrary to what occurs with dividend distributions, it is often claimed that a share buyback increases the Return on Equity (ROE). However, such an increase is purely mechanical, arising solely from a reduction in the equity base, and does not reflect any improvement in the firm's underlying profitability. Can such an outcome nevertheless be interpreted as a positive effect for shareholders? Our analysis suggests otherwise.[27] It should first be noted that any supposed increase in ROE implicitly assumes that earnings remain at least stable post-buyback; all else being equal, net income should instead decrease, as a result of either reduced investment (Almeida et al., 2016) or higher interest expenses.[28] Moreover, ROE is an accounting metric—characterized by well-known limitations—that does not represent a proxy for the shareholder's Total Return for the period, which

[25] From an accounting point of view, it should be noted incidentally that, whatever the repurchase price of a company's own shares, the IFRS approach treats buybacks as equity transactions: they alter the structure and amount of shareholders' equity on the company's balance sheet, but never affect the income statement.

[26] According to a famous aphorism widely ascribed to Niels Bohr (Nobel Laureate in Physics in 1922): 'Prediction is very difficult, especially if it is about the future'.

[27] Similarly, following a paid-in capital increase, the ROE declines. However, this is driven by a purely arithmetic denominator expansion, which should not prompt a superficial or hasty negative assessment of the company's underlying profitability.

[28] From this standpoint, there is no substantive difference from dividend distributions, which similarly require financing through either a reduction in assets or an increase in leverage; however, in the latter case, the number of shares outstanding in the denominator remains unchanged.

is instead determined by the combination of dividend distributions and changes in the share price, whether realized or unrealized. Accordingly, the purely arithmetic impact on ROE—even though it may fall within management's objectives and be highlighted in targeted disclosures to the market—does not inherently constitute a value-enhancing outcome for shareholders in the context of a buyback. This position, however, should not be misunderstood. Given a certain level of equity, an increase in ROE driven by a rise in the numerator (current or expected net earnings) is certainly good news for both management and shareholders, as it reflects genuine organic growth in value—regardless of the timing and form of any distributions to shareholders. However, the multi-year evolution of ROE must be assessed with due care[29] through a critical examination of the dynamics of both the numerator and the denominator (and their respective composition), rather than by observing the accounting indicator in an uncritical manner and through a point-in-time lens rather than a through-the-cycle perspective. This is a basic principle of ratio-based financial statement analysis.

4. Buyback and Bank evaluation with DDM in the Excess Capital variant

The primary methodology for valuing a bank's equity[30]—particularly in the context of M&A transactions—is the Dividend Discount Model, applied in its Excess Capital (EC) formulation. Under a two-stage structure, the model is typically expressed as follows, consistent with standard practice and specialized financial literature:

Requires urgent recapitalization or derisking

analytical forecasting

annual Excess capital

perpetual income (growth «g»)

$$W = +Excess\ (-Deficit)\ Capital_0 + \sum_{t=1}^{n} \frac{DIV(dist)_t}{(1+K_{e,hg})^t} + \frac{DIV(dist)_{n+1}}{(K_{e,st}-g_n)(1+k_{e,hg})^n}$$

theoretically it could be returned to shareholders

Any excess capital[31] is therefore explicitly estimated within the model and treated as a separate component from the present value of distributable dividends. It follows that a share repurchase

[29] The buyback creates a discontinuity in the time series of the metric; consequently, subsequent comparisons must be made against the post-buyback ROE rather than its pre-buyback level.

[30] This framework applies directly to banks and other financial intermediaries subject to prudential regulation that imposes minimum equity ratio requirements. It is worth recalling that bank valuation is consistently carried out on the basis of equity value, as opposed to enterprise value. This does not mean that such a criterion is fully convincing—its widespread adoption stems largely from established market convention. It is indeed evident how unrealistic it is, within the DDM framework, to assume a perpetually rising dividend stream; however, a broader critique of this methodology falls outside the scope of this paper.

[31] In a subsequent section, the notion of 'excess capital'—a concept that cannot be unambiguously quantified from an economic-financial standpoint—is examined both in relation to bank valuation and to its potential role in supporting the rationale for a buyback. It is worth noting here, incidentally, that the hypothesis of returning excess capital to shareholders is entirely abstract; it is arguably preferable to ascribe value to excess capital in light of its capacity to support future value

reduces the bank's liquidity and equity value, also due to a potential impact on the market's perceived risk, and consequently on the cost of capital**.** Moreover, it either lowers the interest income that would otherwise be generated by the liquidity employed in the buyback[32], or increases interest expenses if the repurchase is funded through additional leverage, with potential consequences for future distributable dividends in the case of repurchases involving relatively material amounts**.** From this perspective as well, a buyback cannot be unequivocally described as a source of value creation for the bank or its investors that could be announced as the immediate objective, or one of the objectives, of the transaction. Nor do we believe that the conclusion would differ for non-financial firms, where the EC version of the DDM is generally not applied. Indeed, even in such cases, equity value remains the ultimate focus of the valuation—including within an enterprise value framework—and a more highly capitalized company, *ceteris paribus*, will inherently reflect such a condition in its intrinsic value.

Clearly, for banking institutions, it is essential to consider the impact of a buyback on capital adequacy conditions —encompassing both regulatory capital ratios and the Pillar 2 economic perspective—as well as on the institution's overall financial balance. Specifically, this involves accounting for the effects on CET1, leverage ratios, and the Minimum Requirement for Own Funds and Eligible Liabilities (MREL). This point will be revisited in the subsequent section to refine the notion of 'excess capital' from an economic-financial perspective, as an alternative to the prudentially-driven view, and in relation to the metrics embedded within the Board-approved Risk Appetite Framework (RAF). Even in the case of non-financial companies, however, the impact on the firm's financial and capital structure should still be assessed.

5. Conventional and Substantive 'Excess Capital' in the Banking Sector

Further general considerations[33] can be made with specific reference to the banking sector. It is sometimes argued that maintaining a capital level significantly and persistently above regulatory minima (Berger et al., 2008)—and, in particular, above the risk appetite threshold set out in the Board-approved Risk Appetite Framework—is, as a general rule, cautious yet inefficient. This view rests on the mistaken assumption that capital not absorbed by risks as measured under the prudential, regulatory, or internal framework is, by definition, unproductive or unnecessary.

creation through potential strategic initiatives that are not yet embedded in the business plan. This approach becomes particularly sustainable and persuasive when valuing a bank from the perspective of a potential acquisition.

[32] It is indeed unrealistic to assume that such liquidity was non-interest-bearing.

[33] General considerations on this matter can also be extended to non-financial corporations, which are, of course, not subject to regulatory capital adequacy constraints.

The analytical flaw lies precisely here. Banks measure risks in terms of capital absorption both from a regulatory perspective (Pillar 1 risks) and from an economic perspective (Pillar 1 and Pillar 2 risks), the latter allowing for a reassessment of Pillar 1 risks through internal models that are not eligible for regulatory purposes. In both cases, the estimation of risk-weighted assets—and therefore of required capital[34]—is based on inherently conventional rules, whether regulatory or internal. These rules may be revised to explicitly address, or reinforce the coverage of, risks already identified—such as cybersecurity and climate risks, with the latter evaluated in terms of their multiple forms and potential impacts—or to incorporate newly emerging risks deemed relevant for individual institutions or for the banking sector as a whole. This is evidenced, for example, by the growing prominence of geopolitical risks, which are not yet taken into account in prudential regulation, nor explicitly embedded in the internal capital estimation carried out from an economic perspective[35]. Nor can entirely unforeseeable risks be disregarded; one need only consider the severe disruptions caused by the COVID-19 pandemic, particularly on banks' credit risk. This does not, of course, imply that capital buffers should be calibrated so as to cover any type of catastrophe—theoretically possible but highly improbable—yet it does serve as a reminder of the need to assess a bank's capital requirements with appropriate prudence from an internal capital management perspective.

Against this backdrop, the so-called 'excess capital'—if present and identified as such— cannot be unequivocally deemed genuinely unnecessary or unproductive. Rather, it is often, in whole or in part, substantially absorbed—although this remains invisible under current estimation procedures—within bank operations to cover existing risks that remain unquantified or are measured only within the limits imposed by prevailing regulatory or internal methodological conventions.[36]

A reduction of share capital through buyback transactions cannot therefore be justified by the purported—and often insufficiently substantiated—existence of 'excess capital' relative to the target ratios approved by the Board of Directors within the Risk Appetite Framework (RAF). It is, indeed, a notion that is difficult to define in absolute and truly unambiguous economic-financial terms. Nor can a buyback be justified on the grounds that such capital is inherently surplus. Rather, buybacks

[34] From an internal economic perspective, the capital resources available to cover Pillar 1 and Pillar 2 risks constitute what is commonly referred to as Economic Capital, Available Financial Resources (AFR), or Available Internal Capital—which is then compared with the capital absorbed by those risks, typically referred to as Internal Capital or Absorbed Internal Capital. From a regulatory perspective, the bank's own funds, measured in accordance with prudential requirements, are intended to cover Pillar 1 risks, estimated on the basis of standardized algorithms or internal models authorized by the supervisory authority for that purpose.

[35] In reality, geopolitical risk is best understood not as a distinct, standalone risk category; rather, it requires a comprehensive reassessment of the exposures already included in the bank's materiality map. Geopolitical developments should therefore be factored in as structural risk amplifiers, taking into account their foreseeable or potential compounding effects on traditional risk dimensions.

[36] Concurrently, the continuous refinement of internal risk measurement methodologies may lead to capital savings by delivering a more accurate assessment of the institution's overall risk profile.

may be justified, if at all, solely by management's legitimate objective of steering the bank's financial structure in light of shareholders' expectations and prevailing market conditions—an inherently discretionary and subjective assessment validated by the general meeting of shareholders.

What appears to be 'excess capital' is, in large part, merely capital exceeding perceived needs under a contingent regulatory and managerial framework, based on incomplete models and partially captured risks. Capital deemed excessive today may prove necessary tomorrow, should non-modeled existing risks materialize or supervisory requirements evolve.[37] Obviously, although part of the excess capital identified may be regarded as covering latent risks, it nonetheless holds that capital above certain thresholds may indeed be perceived as excessive—constituting what we have defined as 'substantive excess capital'—from the perspective of management, shareholders, the market, and even the supervisory authority. On this point, reference is made to Section 7 (The Optimal Capital Structure: Buybacks and Capital Management in Banking from a Managerial and Regulatory Perspective).

BOX 2. Further Insights into the Assessment and Interpretation of 'Excess Capital' in Banks

It may be useful to further clarify how 'excess capital' is identified on the basis of regulatory metrics and the Risk Appetite Framework (RAF). Prudential regulation sets uniform minimum capital ratios that apply to all institutions, which translate into minimum capital requirements when applied to risk-weighted assets (RWA) estimated using approved methodologies (standardized or internal models) and reflecting exclusively Pillar 1 risks. The coverage of Pillar 2 risks is ensured, from a regulatory standpoint, through an additional, bank-specific percentage requirement (Pillar 2 Requirement, or P2R), again applied with reference to Pillar 1 RWA. This creates an apparent inconsistency, as the regulatory coverage is aimed at risks (Pillar 2 risks) that are not fundamentally aligned with their reference base (Pillar 1 RWA).

In reality, utilizing Pillar 1 RWA as the calculation base for Pillar 2 risk coverage is necessary to ensure system-wide standardization in the application of the requirement. Through the Supervisory Review and Evaluation Process (SREP), supervisors are expected to be fully aware of the relevance of Pillar 2 risks and calibrate the P2R percentage accordingly, even if it is applied to a base that is not perfectly aligned with the underlying risk profile.

A similar logic applies to the prudential buffers that complement minimum regulatory requirements: the Capital Conservation Buffer, the Countercyclical Capital Buffer, the buffers for

[37] For illustrative purposes, one may consider the Credit Spread Risk in the Banking Book (CSRBB), as defined by the EBA Guidelines that took effect on December 31, 2023. These guidelines require institutions to explicitly identify, measure, and monitor this exposure, distinguishing it from Interest Rate Risk in the Banking Book (IRRBB). Furthermore, banks update their materiality map at least annually, identifying within the broader risk inventory those risks deemed material—both in the current environment and on a forward-looking basis—taking into account the applicable materiality thresholds as assessed by management. Only these material risks, which are relevant for managerial oversight and measurement purposes, are then subject to quantification. It follows that the remaining risks within the inventory, although duly recorded, are not measured unless and until they cross the materiality threshold at a later stage. Consequently, the notion of 'excess capital' is inherently bank-specific, as it depends strictly on the perimeter of material risks covered by the internal capital assessment, and is subject to change over time—including as a result of M&A transactions.

Global and Other Systemically Important Institutions (G-SIIs and O-SIIs), and the Systemic Risk Buffer. The same holds for the Pillar 2 Guidance (P2G)—a non-binding but strongly supervisory-driven expectation, expressed as an additional percentage-based add-on. Superimposed on the grid of regulatory minimum requirements are the capital adequacy thresholds defined by management and approved by the Board within the Risk Appetite Framework (RAF): Risk Capacity, Risk Tolerance, Early Warning, and Risk Appetite (the target ratio).[38] These thresholds are calibrated annually, or whenever needed, in light of past and expected risk dynamics and the bank's overall, and inherently variable, risk appetite.

This framework confirms that 'excess capital'—typically measured as the difference between the actual CET1 ratio (the risk profile) and the Risk Appetite target ratio set in the RAF—reflects the combined effect of regulatory and managerial conventions. These conventions determine, first, the regulatory minima and, subsequently, the managerial thresholds proposed by management and approved by the Board. 'Excess capital' is therefore a largely estimated quantity and is likely to be understated, in line with the considerations set out above. This should be taken into account whenever such a measure is deemed relevant for decisions outside ordinary business operations that require consideration of the capital deemed to exceed the institution's needs.
A final remark. The considerations developed here are not intended to highlight any inadequacy in the regulatory framework, nor in the internal policies and processes used to estimate the risks that determine the absorbed internal capital at the various reporting dates. Rather, they suggest caution toward measurements that may be interpreted as precise results, rather than as necessary approximations arising from the conventional perimeter of the risks formally captured and from the estimates generated by internal models.

This point should be taken into account when referring to the existence of 'excess capital' in the context of M&A transactions, valuations, or share buybacks.

How, then, should the potential existence of substantive 'excess capital'—understood in economic rather than merely conventional terms—be quantified for the specific purpose of potentially justifying a buyback intended to eliminate or reduce such surplus, based on management's assessment, an exercise that obviously cannot yield a mathematically precise measure and that is necessarily grounded in discretionary, forward-looking judgment?

[38] It should be recalled that the Risk Capacity, Risk Tolerance, and Early Warning thresholds are designed to safeguard regulatory minima, whereas the Risk Appetite thresholds reflect planning assumptions and market expectations. Crucially, supervisory authorities do not expect institutions merely to meet these regulatory minima, even on a forward-looking basis or under stressed conditions. On top of the amounts required by regulators and supervisors, banks are expected to determine for themselves the level of capital needed to sustainably pursue their business models. From this perspective, it becomes important for banks to also monitor the level and evolution of the so-called economic capital (or available internal capital), thereby maintaining a current and forward-looking safety buffer over their required internal capital. The indicator used for this purpose can be defined, as observed in institutional practice, as the Available Financial Resources (AFR) Ratio, calculated simply as the ratio between available internal capital and required internal capital. This ratio must, of course, remain above one—at a level consistent with the thresholds set for Risk Tolerance, Early Warning, and Risk Appetite, and closely aligned with the business strategy. From this standpoint, regulatory capital and economic capital—together with their related risk absorptions—must be jointly and consistently subject to active management within a capital-efficiency and optimization perspective, appropriately addressing situations in which the two approaches may provide potentially conflicting signals. Further insights on this topic are provided in Section 7.

In the case of a company exhibiting substantial organic capital generation as a result of strong and sustained profitability, it becomes evident that the equity-to-debt ratio cannot expand indefinitely without a deliberate managerial assessment of whether such a trajectory remains compatible with an efficient capital structure. A level of own funds that could point to the presence of substantive excess capital and potentially justify a buyback may be inferred from the following indicative elements, to be considered individually and jointly from a managerial perspective, weighing the various profiles under the specific conditions characterizing the bank:

- Capital and liquidity targets: levels standing above the short- to medium-term targets, themselves set at an adequate distance from current and expected regulatory or internal thresholds, including bank-specific SREP requirements; [39]
- Medium-term perspective: excess capital identified through a broader, medium-term perspective of sound and prudent management, rather than merely against regulatory or RAF thresholds;
- Supervisory findings: the total absence of supervisory findings regarding capital and liquidity adequacy, both in quantitative terms and with respect to their composition;
- Stress testing: solid and resilient results in the latest regulatory as well as internal stress tests;[40]
- Peer benchmarking: capital and liquidity levels consistently above relevant peer benchmarks;
- Sub-standard return on capital: a return on capital significantly below benchmark levels, where such underperformance is negatively perceived by analysts, the market, and shareholders—particularly majority owners;
- External credit assessment: favorable assessments by equity analysts and credit rating agencies;
- Strategic continuity: no structural or strategic discontinuity relative to the established business model;
- M&A pipeline: the complete absence of opportunities for extraordinary acquisition transactions within a reasonable planning horizon.

Accordingly, the assessment should not be driven by the pursuit of a theoretical, optimal financial structure, nor merely by compliance with regulatory minima. Rather, it should stem from a combination of favorable factors based on a necessarily subjective, current, and forward-looking

[39] These metrics encompass regulatory ratios for capital (CET1, Tier 1, and Total Capital), liquidity (Liquidity Coverage Ratio—LCR, and Net Stable Funding Ratio—NSFR), leverage, and the Minimum Requirement for Own Funds and Eligible Liabilities (MREL), as well as the Maximum Distributable Amount (MDA) threshold.

[40] This demonstrates resilience in adverse scenarios and the bank's capacity to preserve adequate safety margins even under macro-financial or credit shocks.

evaluation of capital efficiency from management's perspective, while ensuring an appropriate balance between the prudential view and the strategic need for efficient capital employment.

6. Buybacks and Risk-Adjusted Performance Measures, with Additional Remarks on Capital Configuration for Planning and Control Purposes in Banks

The most commonly used risk-adjusted performance indicators are considered here, namely RORAC (Return on Risk-Adjusted Capital), EVA (Economic Value Added), and RARORAC (Risk-Adjusted Return on Risk-Adjusted Capital). With specific reference to the banking sector:

- RORAC = Adjusted Net Income / Equity Capital, where the numerator is net of extraordinary items and the denominator represents the internal equity capital available to cover risks from a Risk Management perspective (or, ex-post, the absorbed capital).
- EVA = Adjusted Net Income - (Cost of Equity x Equity Capital) or, equivalently:
  EVA = (Adjusted Net Income / Equity Capital - Cost of Equity %) x Equity Capital, that is:
  (RORAC - Cost of Equity %) x Equity Capital.
- RARORAC = EVA / Equity Capital = RORAC - Cost of Equity

This is not the appropriate context for an in-depth examination of these indicators and their signaling properties. However, it is immediately evident that, all other things being equal with respect to Adjusted Net Income and the cost of capital, and assuming a negligible return on the liquidity deployed, a buyback funded through a reduction in the bank's liquidity, which in turn reduces its capital base, leads to an increase in the values of RORAC, EVA and RARORAC. This creates a discontinuity in the evolution of these metrics, which should be taken into account when interpreting their variations before and after the transaction.

We do not believe that the indicators calculated after the buyback should be regarded as ‘distorted’ by the effects of the transaction. Rather, as with all synthetic indicators—whether accounting-based or risk-adjusted—it is essential that users of the information be made aware of the effects of the buyback, by disclosing—at least initially—the impact of the resulting discontinuity.

Building on the foregoing remarks concerning the effects of a buyback on risk-adjusted performance indicators, further general considerations can be made with specific reference to the estimation of such metrics by banks, particularly regarding which capital configuration should preferably be utilized.

It is generally preferable to refer to the broader capital configuration represented by Available Internal Capital (Available Financial Resources) to cover the full range of risks considered relevant and material for a given bank or banking group (Pillar 1 and Pillar 2 risks). Since these are management-

oriented measures, the narrower scope of risks considered from a Pillar 1 regulatory perspective may be inappropriate.

Naturally, particularly when these indicators are used internally for periodic segment reporting, this holds only insofar as such risks are demonstrably and directly attributable to the business area under consideration through the aforementioned risk-adjusted metrics.

In planning and control processes, RORAC therefore aims to monitor accounting profitability in relation to a risk-adjusted capital, but it does not measure net value creation. It expresses only—in percentage terms—the earning capacity per unit of capital absorbed (or allocated, in the *ex-ante* perspective of economic-financial planning). This is because the calculation does not incorporate the minimum expected return on that capital (hurdle rate); net of such expectations, the operational activity being measured may reveal either value creation or value destruction, based on the accounting and managerial parameters adopted in deriving the estimate of the indicator.

In other words, in the absence of a benchmark parameter, even a significantly positive RORAC does not necessarily allow, *ex-post*, a positive assessment—from a net value creation perspective—of the results achieved by the unit under monitoring, or by the bank or group as a whole. Nonetheless, it remains a widely used indicator, also useful for comparisons over time and, where possible, with competitors, provided that the indicators are calculated according to a sufficiently homogeneous methodology—which is by no means guaranteed—and that users are fully aware of the actual nature of the information it conveys.

Finally, it should be noted that the economic capital planning and monitoring process must include not only an *ex-post* verification of absorbed capital, but also *ex-ante* criteria for allocating capital to the various business segments or organisational units. In this way, implicit or explicit risk-return targets are assigned to the respective managers, who are expected to conduct their operations so as to achieve the budgeted results, with direct implications for the Risk-Weighted Assets (RWAs) within their perimeter and, consequently, for the capital actually absorbed relative to the allocated capital. It follows that any *ex-post* evidence of capital under-absorption may be explained by internal or external market circumstances that are neither controllable nor foreseeable, but may also reflect managerial underperformance relative to agreed or expected targets. In such cases, *ex-post* managerial control may usefully highlight an adjusted RORAC, for example by placing allocated capital—rather than absorbed capital—at the denominator, thereby showing the profitability (Adjusted Net Income) achieved relative to the capital resources made available to management. Analogous general considerations apply to the EVA and RARORAC indicators as well.

In interpreting the indicators under consideration estimated for the bank as a whole, account must be taken of the discontinuity arising from the potential execution of a buyback transaction, the

discontinuities that may stem from changes in the capital configuration used to estimate those indicators, and any modification of the accounting criteria applied to the calculation of Adjusted Net Income. [41]

Finally, it is worth mentioning that the Bank of Italy has regulated aspects concerning the structure of remuneration and incentive systems, requiring that the variable component must be indexed to performance indicators measured net of risk and consistent with the metrics used for managerial purposes by the risk management function (so-called *ex-ante risk adjustment*) (Circular 285/2013 and subsequent amendments). By way of example, it has identified RORAC, RARORAC, and EVA as suitable parameters.[42] Any significant buyback operations could therefore mechanically increase these indicators, potentially affecting the determination of the variable remuneration of the relevant beneficiaries.

7. The Optimal Capital Structure: Buybacks and Capital Management in Banking from a Managerial and Regulatory Perspective

If buyback operations are carried out as a non-recurring and extraordinary capital management tool, rather than as a frequent, ostensible form of additional shareholder remuneration, it becomes particularly relevant to ask what should be understood by capital optimization in banking.

It should be emphasized at the outset that this is not a strategic or tactical management objective that can be pursued through any mechanistic optimization formula.[43] Banks exhibit multiple dimensions of heterogeneity across several relevant aspects, including their business model, their geographical and sectoral markets, and the structure of their liabilities in relation to the composition of funding sources and assets—both on- and off-balance sheet. Furthermore, a wide range of additional bank-specific characteristics—such as organizational features and elements of the internal control system—distinctly define each individual bank and its respective banking group.

Naturally, capital management is subject to the fundamental constraint of the regulatory framework governing capital requirements, imposed on banks in various forms and through various instruments.

[41] It cannot, however, be overlooked that EVA—and consequently RARORAC— depend on the difference between Adjusted Net Income (an accounting-based metric determined under prevailing financial reporting standards) and the cost of equity, a financial parameter largely inferred from market variables. Leaving aside the multiplicity of methodologies for estimating the cost of equity—which renders this parameter inherently debatable—this calculation juxtaposes elements that are conceptually distinct and methodologically incomparable. However, a comprehensive examination of this critical methodological issue falls outside the scope of this paper.

[42] The aforementioned Bank of Italy Circular also refers to ROROC (Risk-Adjusted Return on Capital), an indicator which appears to be less frequently utilized within management control, and for which the risk adjustment is located in the numerator, rather than the denominator.

[43] The term ‘optimization’ does not appear to be appropriate in an economic-managerial analysis, particularly when the variables guiding the preferred choices are numerous and frequently characterized by trade-offs that necessitate a judgment-based approach.

The related capital needs can be managed, to some extent, by refining internal methods for estimating risks and consequently risk-weighted assets, or, over a longer-term horizon, through strategic choices that prioritize business areas characterized by lower capital absorption, such as the widespread banking focus on assets under management.

Assuming that the bank has already acted along the lines mentioned above, and that the level of risk appetite with regard to capital adequacy—once regulatory requirements and bank-specific prudential buffers have been met—is consistent, as it must be, with the business plan approved by the Board of Directors, the question is straightforward (though the answer is not): to what extent any capital surplus above the appetite level (which should be considered a minimum threshold, being a reflection of the business plan) may be appropriately reduced or eliminated—net of any considerations relating to 'substantive excess capital', if adopted—through dividend distributions or share buybacks, and above all, for what reason such action should be undertaken.

Since the bank's creditors, in their various subjective and objective conditions, consider themselves—as they should—sufficiently protected by the safeguards provided by highly intrusive supervisory controls, by internal control systems that are themselves subject to supervisory scrutiny, and by the protections in place for the various categories of creditors, the analytical perspective becomes that of the shareholders, the holders of so-called risk capital. In particular, for our purposes, this concerns shareholders with an investment horizon that is not strictly related to trading or, in any case, not of a short-term nature.

Under the premise that the risk of default remains remote over a time horizon within which it is realistically possible to project forecasts and hypotheses regarding internal and external scenarios, the expectations of all shareholders[44] relate, even in comparative terms[45], to a satisfactory total return on the investment, measured jointly through dividends and share price appreciation. It follows that the various prospective, even if partial, measures of equity profitability, whether accounting-based or risk-adjusted, become relevant in confirming these expectations.

In this context, a buyback—provided that favorable conditions exist with regard to the bank's capital, leverage, and liquidity position—may represent an extraordinary measure aimed at strengthening the prospective Return on Equity (ROE), thereby consolidating expectations in terms of total return, with reference both to dividend distribution and to share price appreciation. 'Prospective' means that the immediate and punctual effect on such economic indicators (as well as on EPS) is not relevant.

[44] This analysis does not take into account the specific objectives of controlling shareholders, who generally do not focus solely on financial performance, but evaluate with equal, and perhaps greater, emphasis the strategic relevance of the investment.

[45] The cost of capital is ultimately a construct of analytical convenience—albeit, in our view, fundamentally unreliable—rather than a robust operational metric.

Rather, what matters is the expected impact on those indicators in light of the development and growth strategies—hopefully successful in achieving the projected economic outcomes—implemented by senior management in view of the scenarios identifiable over the planning horizon.

Consequently, we have only partially answered the aforementioned question; however, in addition to the considerations already set out, we do not believe that there is a generally valid response that can be summarized in a theoretical principle applicable under all conditions. In practice, when positioning and assessing the capital levels of an individual bank, attention is also paid to sector benchmarks, variously referring to banks—including European ones—with characteristics deemed similar. While these may provide a reference point for more in-depth analysis, we consider that the differences among institutions—particularly when the comparison extends across countries—are so substantial, and along so many dimensions, that benchmarks cannot constitute, as such, a meaningful and consistently reliable indication for capital management, however convenient and closely monitored they may be by analysts and investors.

The following considerations refer to the possible perspective of the supervisory authority regarding the adequacy of a bank's capital, clearly not with reference to the regulatory minima supplemented by the appropriate prudential buffers. The question, rather, is whether, from the regulator's standpoint, excessively high capital levels may be regarded, under specific circumstances, as inefficient—an assessment that appears counterintuitive given the authority's mission to safeguard the stability of the bank and of the financial system as a whole.

An over-capitalized bank, in the absence of specific justifications—such as a planned acquisition, technology or other investments not yet fully quantified, or latent risks for which the bank wishes to remain prepared under a highly prudential approach—may be perceived as an institution with limited strategic vision, insufficient project development, and a low propensity to support the real economy through lending or through the expansion of activities consistent with its operating model. In such cases, the criticism—even if not formally expressed as such in an official SREP letter or in an inspection report—does not concern capital adequacy per se, but rather the coherence and credibility of the business model.

A persistent excess of capital also tends to translate into low structural profitability on equity, that is, net of extraordinary items, non-recurring effects, and occasional capital gains. This condition can affect the market valuation of the bank's shares, penalizing shareholders, both in terms of an inadequate dividend payout relative to the level of capital and in terms of stock performance (total return). At the same time, an over-capitalized bank may struggle to ensure a return on equity that is consistently above the cost of capital. Although the two indicators differ conceptually and

methodologically to an extent that renders the comparison highly imperfect, it nevertheless represents a reference point closely monitored by analysts and investors.

An excessively high leverage ratio (equity over debt), well above the regulatory minimum, may also indicate an inefficient use of financial leverage. This further depresses the return on equity.

In conclusion, although the topic would merit more extensive analysis, an excess of capital may be interpreted by the supervisory authority as a sign of weak economic vitality, strategic fragility, lack of vision and project development, inadequacy of the management and supervisory bodies in fulfilling their institutional responsibilities, insufficient support to the real economy, and limited attention to shareholder expectations.

A potentially unfavorable supervisory assessment of an over-capitalized bank should therefore not appear counterintuitive: the authority evaluates two distinct yet relevant dimensions. On the one hand, the most critical one, capital adequacy; on the other, the consistency of the business model—namely, possible supervisory considerations under a model increasingly oriented toward a holistic assessment of the conditions of economic, financial, and capital equilibrium, as well as the adequacy of the intermediary's governance.

In this context, the issue of share buybacks also acquires strategic significance: the repurchase of own shares may reflect an awareness of the need to address the weaknesses outlined above, realigning economic-financial parameters with strategic and managerial perspectives. Alternatively, supervisory observations may at times act as an incentive toward more efficient capital management.

8. Conclusions

It is important to consider which categories of investors may be most influenced by the perception that a buyback represents an additional form of shareholder remuneration or a significant source of value creation. Retail investors and small savers may be particularly susceptible to such interpretations; however, these perceptions may also extend to the broader marketplace, including professional investors and equity analysts.

The discussion shows that, despite a substantial body of research on buybacks, the literature has not yet articulated a unified treatment of their effects, nor a systematic comparison with dividends as inherently non-equivalent forms of distribution. By addressing these dimensions jointly, the paper clarifies why buybacks are not inherently a source of value creation nor a remunerative mechanism, and why their evaluation, in a concrete analytical setting, must instead be embedded in a comprehensive economic-financial and managerial framework.

Contrary to what has long been observed internationally, and by now also in Italy, a buyback is a transaction that, in the life of a company, should be truly extraordinary[46]—in the same manner as paid-in capital increases—motivated with the necessary transparency, and structurally divorced from any explicit or implicit intention to provide a form of shareholder remuneration. [47]

In conclusion, it is appropriate to outline certain potential considerations that might emerge under specific circumstances:

- Price support effects: A buyback may at times contribute to higher share prices, at least in the short term, through demand generated by the issuer's repurchase activity rather than by independent investor demand.[48] Concurrently, broader macroeconomic headwinds or geopolitical disruptions frequently exert downward pressure on stock performance, thereby neutralizing the potential stimulative impact of these corporate actions on market quotations.
- Free float reduction and scarcity**:** If the buyback involves a significant number of shares, even within the quantitative limits set by applicable regulations, the free float diminishes. This dynamic may create, at least in the short term, under specific market conditions and when the free float is already modest, a degree of share scarcity that may influence the share price through a reduction in the available supply of shares.
- Leverage and financial flexibility: A buyback may weaken the financial position and worsen the debt-to-equity ratio, particularly when the outflow is financed with additional debt. Consequently, it may adversely impact the company's ability to access financing markets, its credit rating, and its interest coverage ratio. Furthermore, it can be argued that this issue predominantly concerns non-financial enterprises.

[46] In reality, the execution of an initial buyback frequently fosters market-wide expectations of continued reliance on this capital management instrument whenever the relevant conditions are met. Consequently, failing to undertake such expected transactions could adversely impact share price dynamics. Once again, market expectations may temporarily overshadow the firm's underlying economic fundamentals.

[47] Although share repurchases cannot be qualified as a genuine instrument of shareholder remuneration and do not generate any increase in the intrinsic or fundamental value of the shares, individual and collective asset management schemes may nonetheless derive indirect advantages when they hold material exposures to the securities in question. In such instances, the potential upward adjustment of portfolio valuations—*ceteris paribus*—results in an improvement in the performance indicators of these investment vehicles. This dynamics produces a largely illusory perception of long-term value creation for investors while, conversely, delivering an immediate and concrete benefit for portfolio managers whose compensation structures are contractually tied to such performance metrics.

[48] It is worth noting that support for the share price should in no way be explicitly framed as an objective of a buyback; indeed, such an objective—assuming it exists—should not be declared, as it could amount to market manipulation in violation of prevailing securities regulations. Instead, boards often state, in a more nuanced manner, that the aim is to convey a signal of confidence to shareholders and to the market—a distinct formulation intended to communicate essentially the same underlying message. However, if the general meeting of shareholders convened to authorize the buyback genuinely believes that the company's shares are materially and durably undervalued, it is unclear why the shareholders themselves would not increase their own holdings, thereby benefiting from the appreciation that the market should ultimately and duly recognize. Conversely, if they refrain from doing so, one might reasonably infer that they are not truly convinced of the alleged undervaluation.

- Capital diversion: It could potentially divert financial resources that could otherwise be used productively in ordinary operations or new investment projects, fostering long-term development and profitability.[49] More generally, it could be argued that the decision to repurchase shares should always be evaluated by management in the best interest of shareholders—both controlling shareholders and other categories of investors—relative to the realistically available alternatives; a balancing act, moreover, that is not always easy.
- Managerial incentives and agency alignment: Share buybacks may enhance EPS—at times even in a strategically instrumental manner—thereby producing a more favorable portrayal of corporate performance (Brav et al., 2005; Almeida et al., 2016). Such effects may, in turn, influence managerial remuneration structures—including bonus schemes and stock option plans—within the boundaries and subject to the constraints imposed by the applicable prudential regulatory framework. Given that managers holding stock options do not participate in dividend distributions, they may consequently benefit from any upward adjustment in the share price and EPS, to the extent provided for under the applicable long-term incentive plans.
- Prudential constraints and risk coverage: The repurchase of a company's own shares entails a reduction in equity and can therefore be carried out only in the presence of 'excess capital'. In this regard, and with particular reference to banks, it has been clarified that 'excess capital' should be estimated by taking into account the need to cover risks currently not addressed by prudential regulation, as well as those not captured for the purposes of capital adequacy under the institution's internal economic perspective—risks that are deemed to exist in the management of the specific entity.
- Conventional versus substantive capital surplus: Although this distinction is extremely difficult to quantify[50], it has nonetheless been proposed to distinguish between what we define as 'conventional excess capital' and 'substantive excess capital' from an economic and comprehensive risk-coverage standpoint. The latter is realistically lower than the former, also in light of model risk and the necessary approximations involved in the estimates. This distinction is highly relevant for any assessment where capital configuration matters, such as

[49] Furthermore, it could be argued that the implicit message senior management conveys to shareholders through a buyback is that the company has exhausted its internal growth options. By returning capital, the executives inadvertently signal that profitable investment opportunities are better pursued elsewhere.

[50] It is not realistically possible to propose a methodology that is universally valid for quantifying 'substantive', as opposed to 'conventional', excess capital. It remains the responsibility of an attentive and informed management team to formulate—within the specific context of each institution and with rigorous justification—a reasonable order of magnitude.

M&A transactions requiring the valuation of other financial intermediaries or in the context of buybacks.

- Capital efficiency and the leverage effect: Although a buyback may not, in itself, generate an increase in shareholder value, it may nevertheless, from a medium- to long-term perspective, contribute to a more efficient management of the firm's capital structure through the prudent use of financial leverage. Such benefits are inherently context-dependent and cannot be defined in universally applicable terms. Under these circumstances, improvements in Return on Equity (ROE) may reflect substantive changes in capital structure and financing efficiency, rather than solely the mechanical and short-term effects associated with a reduction in shareholders' equity. This obviously presupposes that the company will be able, on a forward-looking basis, to generate a return on assets structurally exceeding the cost of debt capital (the leverage effect, understood not as the outcome of a mathematical formula, but in a broader economic-financial perspective aimed at profitable management). Furthermore, this holds provided that no increase in risk arises as a consequence, with potential implications for both the amount and the prospective economic terms of the company's wholesale market funding.
- Dividend constraints versus buyback flexibility: Since shareholders generally expect a relatively stable dividend payout in the absence of specific critical circumstances—an expectation that effectively operates as a constraint on management—buybacks, although they too may generate analogous expectations once this capital management tool becomes established, do not constitute a recurring operation with fixed timing. They are therefore inherently more flexible. However, buybacks may not constitute a genuine alternative to dividend distributions from the shareholder's perspective, even though they are frequently presented as such and are often perceived accordingly by market participants.
- Managerial motives and market conformity: In certain instances, repurchases might be influenced by specific managerial considerations—such as a desire to signal confidence or to align with current market trends—rather than being strictly dictated by alternative value-enhancement strategies in the interest of shareholders.
- Capital adequacy and supervisory scrutiny: Finally, the critical issue of determining the level of capital adequacy that allows for an assessment of capital efficiency cannot, in practice, be resolved through an algorithm, nor through generalized considerations applicable across different institutions. In the context of buybacks in the banking sector, this topic must be examined both from management's perspective and from that of the supervisory authority, which—as might initially seem counterintuitive—does not necessarily look favorably upon banks that are excessively over-capitalized without a clear strategic rationale.

Buybacks are proposed by senior executives and Chief Executive Officers (CEOs) to the Boards of Directors, and subsequently submitted to the general meeting of shareholders. In the event of non-ordinary transactions involving technical-financial, capital management, and legal implications, a potential knowledge gap may arise between executive management and non-executive directors, who might occasionally approve such operations without necessarily having fully parsed every nuance or completely assessed their long-term consequences. In such scenarios, the advisory contribution of an internal committee, such as the Control and Risks Committee—assisted, where appropriate, by independent external consultants to complement the necessary expertise—can serve as a helpful safeguard in supporting these decision-making processes.[51]

The Board retains the fiduciary duty and responsibility to foster an informed, constructive, and dynamic boardroom dialogue, while ensuring the clarity and transparency of the information provided to shareholders and the broader market.

Among the many objectives of economic policy, there has long been (in Italy for a long time) a structural push to increase the number of companies opening their capital to outside investors through a listing on a regulated market, thereby fostering a greater inflow of domestic savings into equity instruments. Despite the higher costs businesses incur to comply with the regulatory framework governing publicly listed companies, and accounting for the constraints associated with minority shareholders, the strategic benefits remain substantial. These include, among others, a strengthened financial structure, the acquisition of additional resources to fund investment projects, enhanced relationships with banking institutions and the wider financial market, and increased attractiveness for highly professional, experienced executives.

The relationship with the shareholders of a company listed on a regulated market should be governed by heightened transparency standards regarding transactions that directly affect their ownership position, including capital restructurings and dividend payouts.

Ultimately, share buybacks should be conceptualized as a capital management tool and evaluated through the lens of opportunity cost against alternative uses of deployable liquidity: increased dividend distributions, debt reduction, the maintenance of a robust liquidity buffer, or reinvestment in organic growth opportunities. Furthermore, repurchases may be appropriate under specific,

[51] This statement requires no specific demonstration. For years, supervisory authorities—particularly banking supervisors such as the European Central Bank and the Bank of Italy—have worked to elevate the qualitative standards of corporate bodies, both generally and with respect to emerging issues and risks. The 'Fit and Proper' regulatory framework has marked a significant step forward in aligning board members' profiles with their responsibilities, complemented by supervisory moral suasion that is less visible but no less stringent. Evidently, not all members of the Board of Directors can possess deep expertise in every area of relevance to the strategic oversight mandated by applicable regulations. What is required, rather, is that the Board encompasses diverse and complementary professional backgrounds, ensuring that the body, as a whole, is collectively fit and proper. In short: competence, genuine independence, and strength of character are indispensable requirements; without them, a Board of Directors risks becoming a merely formal body.

delimited circumstances—such as fulfilling obligations under share-based management incentive plans, offsetting the dilution arising from stock compensation, facilitating 'shares-for-shares' M&A transactions, or adjusting the capital structure as deemed necessary by senior management. This tactical assessment must simultaneously account for current and expected regulatory requirements, market benchmarks, and the divergent expectations of key stakeholders, including rating agencies, analysts, creditors, and long-term investors.

Crucially, buybacks remain conceptually distinct from the operating activities that generate authentic corporate value through core business performance. It is therefore important that both the Board of Directors and the general meeting of shareholders carefully assess such initiatives, ensuring that: (i) they do not result in unintended increases in executive compensation, particularly where remuneration is linked, in whole or in part, to EPS-based metrics or share-price performance; (ii) the share repurchase program is not structured in a manner that could unduly influence market pricing; and (iii) they do not foster expectations among shareholders and investors that may not be fully supported by the company's underlying economic fundamentals.

In conclusion, it is crucial to emphasize, with even greater clarity to avoid any unintended misunderstanding, that this study does not, as a matter of principle, intend to express a negative judgment on share buyback operations as such, however they may be implemented. Rather, the analysis is directed at the widespread misconceptions that often accompany these operations when they are presented—alongside other, more convincing objectives—as a form of shareholder remuneration additional to the distribution of dividends, and conceptually framed as capable of ensuring an authentic creation of value for the company and its shareholders.

Aligned with this perspective, this analysis corroborates the enduring doctrine of the Modigliani-Miller theorem (Modigliani & Miller, 1958; Miller & Modigliani, 1961), underscoring that—in perfect capital markets—shareholder value is exclusively determined by the enterprise's underlying capacity to generate earnings through strategic investments, whereas the subsequent method of distribution remains conceptually irrelevant. Obviously, the hypothesis of perfect markets constitutes a useful simplification to exclude the interference of factors that, in the reality of financial markets, lead to a deviation from the assumptions underlying the theory, such as taxes, transaction costs, regulatory frameworks, managerial attitudes, shareholder preferences, and so on. Markets are not "perfect" and, while MM's conceptual framework remains illuminating—and the considerations made here sound substantially consistent with it—in practice, appropriate managerial guidance regarding distribution policies in favor of shareholders could prove functional to specific objectives, even in the interest of the shareholders themselves, thus becoming, in a broad sense, a source of value creation, to be assessed across different contexts and scenarios.

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Appendix n.1

The Need to Simulate Buyback Effects on Banks' Capital Adequacy and Financial Risks

In view of the impact of the transaction on the bank's current and prospective capital adequacy position, it is necessary to carry out a simulation—typically over a three-year horizon—of the effects on the capital adequacy indicators, assessed both from a regulatory perspective and from the bank's internal economic perspective, and compared with their projected development under the assumption that the buyback is not executed. The simulation must be carried out under both a baseline scenario and an adverse and stressed scenario, and must confirm that the indicators will remain above the thresholds approved by the Board of Directors within the Risk Appetite Framework (RAF), and therefore, a fortiori, above the minimum regulatory requirements established for the bank by the competent authorities (the European Central Bank or the Bank of Italy).

The simulation therefore covers, for the regulatory (or Pillar I) perspective:

- the CET1 ratio, Tier 1 ratio and Total Capital ratio;
- MREL TREA and MREL TREA Subordination;
- MREL LRE, MREL LRE Subordination and the Leverage Ratio;
- MDA (Maximum Distributable Amount)[52];

and, for the internal economic (or Pillar II) perspective, at least the so-called Available Financial Resources Ratio.[53]

Tier 1 ratio (CET1 + Additional Tier 1) and Total Capital ratio (Tier 1 + Tier 2)
MREL TREA = (Eligible Liabilities + Total Capital) / RWA
MREL TREA Subordination = (Subordinated Liabilities + Total Capital) / RWA
MREL LRE = (Eligible Liabilities + Total Capital) / LRE
MREL LRE Subordination = (Subordinated Liabilities + Total Capital) / LRE
Leverage ratio = Tier 1 / LRE

[52] In summary, MDA represents the maximum amount available for variable payments of a bank i.e., dividend payments, AT1 coupon distributions or variable remunerations, and comes into force whenever the applicable requirements are not met.

[53] It is the ratio—less widely known but relevant for ICAAP purposes—between the capital resources measured from the bank's internal economic perspective (the so-called "economic capital", or "available internal capital") and the "(absorbed) internal capital", namely the capital absorption associated with the risks deemed material for the bank, including those not captured under the regulatory perspective and, where applicable, measured using internal models different from those employed for regulatory purposes. Evidently, the indicator must remain well above one in order to help ensure a prudent level of capital adequacy, including from a forward-looking perspective and under stressed conditions.

MREL: Minimum Requirement for Own Funds and Eligible Liabilities

Eligible liabilities: CDP loans, certificates, senior preferred and senior non-preferred instruments

Subordinated liabilities: senior non-preferred instruments

TREA: Total Risk Exposure Amount or RWA

RWA: Risk-weighted assets

LRE: Leverage Ratio Exposure measure; leverage exposure (broadly comparable to total assets)

Similarly, a simulation of the expected impact of the buyback transaction on financial risks is also required.

With regard to liquidity risk, the simulation covers, from a regulatory perspective:

- the Liquidity Coverage Ratio (LCR), a short-term liquidity indicator;[54]
- the Net Stable Funding Ratio (NSFR), a structural liquidity indicator.[55]

Even though the impact of the buyback on interest rate risk in the banking book is less pronounced than its effects on capital adequacy and liquidity, the adjustment to the bank's financial structure may require a simulation of the prospective impacts at least on the following risk indicators:

- Sensitivity of Net Interest Income (NII) [56];
- Sensitivity of Net Interest Income (NII) (Supervisory Outlier Test - SOT NII)[57];
- Sensitivity of Economic Value of Equity (EVE) [58];
- Sensitivity of Economic Value of Equity (EVE) (Supervisory Outlier Test - SOT EVE)[59].

[54] This core indicator is defined as the ratio between the stock of high-quality liquid assets and net cash outflows, under stress assumptions, over the 30 calendar days following the reporting date, where net cash outflows are calculated on the basis of regulatory parameters rather than management-specific projections, so as to ensure a consistent approach to the estimation of the indicator across the banking system. Prospectively, the indicator naturally reflects the decrease in liquidity resulting from the resources employed in the share buyback.

[55] This core indicator is defined as the ratio between the amount of Available Stable Funding (ASF) and the amount of Required Stable Funding (RSF). The buyback leads to a reduction in available stable funding (ASF) due to a decrease in CET1 equal to the amount of the buyback. For this indicator as well, the amount of RSF is estimated on the basis of regulatory parameters rather than management-specific projections. The simulation of the impacts on other liquidity risk indicators of an economic, rather than regulatory, nature (Asset Encumbrance, Gap Ratio and Time to Survival) may be deemed unnecessary for the specific purposes at hand.

[56] Risk-specific indicator defined as the potential change in net interest income, expressed in percentage terms, under a parallel interest-rate shock of ±100 bps, measured against expected net interest income.

[57] Regulatory indicator calculated as the change in net interest income, expressed in percentage terms, under the interest-rate shock scenarios required by the regulatory framework, measured against Tier 1.

[58] Risk-specific indicator defined as the potential change in the economic value of equity (EVE), expressed in percentage terms, under a parallel interest-rate shock of ±200 bps, measured against own funds.

[59] Regulatory indicator calculated as the change in the economic value of equity, expressed in percentage terms, under the interest-rate shock scenarios required by the regulatory framework, measured against Tier 1.

Appendix n.2

A short note on the accounting treatment of treasury share buybacks under IAS 32/IFRS

When a listed company repurchases its own shares, IAS 32 requires that those shares be classified as *treasury shares* and accounted for as a direct deduction from equity. They cannot be recognised as a financial asset, because an entity cannot hold a claim on itself. As a result, the repurchase reduces equity by the amount of the consideration paid, including any directly attributable transaction costs. A negative reserve is recorded in connection with the purchase of treasury shares.

Treasury shares are not subject to periodic remeasurement; they are carried at cost until their possible cancellation or resale on the market (in which case, naturally, at market prices). In any case, they do not give rise to gains or losses in the income statement. Neither the repurchase nor any subsequent resale affects profit or loss: all related effects are recorded directly in equity.

Treasury shares also carry no economic rights. They are counted for the purposes of determining the quorum for the valid constitution of the shareholders' meeting, but the shares so acquired are not taken into account for the purposes of determining the voting quorum.

They are excluded from the calculation of earnings per share (EPS), because they are not considered outstanding for IFRS purposes. Dividends theoretically attributable to treasury shares do not participate in the distribution and remain within the entity; such amounts may be allocated to a non-distributable reserve or, depending on how the shareholders' meeting determines the amount of profits to be distributed, may result in an increase in the per-share dividend payable to shareholders.

Should the bank decide to cancel the shares, the cancellation reduces the number of shares outstanding. The negative reserve recorded for the purchase of treasury shares is offset against equity.

In essence, the IFRS approach treats buybacks as equity transactions: they modify the structure and amount of shareholders' equity but never affect the income statement.

Appendix n.3

Overview of the stated rationales for recent share buyback programs conducted by select listed Italian companies

The review covered 56 listed companies—namely the 40 constituents of the FTSE MIB and 16 additional issuers that executed share repurchases in 2025. For each company, the documentation submitted to shareholders' meetings held between 2023 and 2025 was examined, focusing on the agenda items concerning authorisations to purchase treasury shares. The analysis is concentrated on the sections explicitly outlining the motivations for the proposed buyback programs.

Across the sample, several recurring rationales emerged. Many companies framed buybacks as a tool for shareholder remuneration, often presented as an additional or alternative distribution to dividends. Others emphasised the creation of shareholder value, either directly or through the improvement of financial structure. A number of issuers explicitly linked buybacks to the increase in Earnings Per Share (EPS) resulting from the cancellation of repurchased shares. Several companies also justified buybacks as being in the best interest of the company and its stakeholders, particularly in specific market conditions.

We do not believe we need to add any comments to the survey conducted, beyond what has already been highlighted in the paper.

<u>Shareholder remuneration</u>

- Enel: buybacks used 'to grant Shareholders an additional remuneration compared with the distribution of dividends' (2025).
- Enel: buybacks 'is aimed at providing Shareholders a remuneration in addition to the distribution of dividends, as a result of the cancellation of treasury shares purchased for this purpose' (2026).
- Eni: authorisation aimed 'to grant Shareholders an additional remuneration compared with dividends' (2023–2025).
- Nexi: buyback considered 'a more effective solution for shareholder remuneration than a dividend' in current market conditions (2024–2025).
- UniCredit: buybacks repeatedly framed as part of the shareholder remuneration policy under the *UniCredit Unlocked* strategic plan (2023–2025).
- Basicnet / CIR: buybacks intended 'to remunerate shareholders in particular market conditions' (2023–2025).

<u>Creation of shareholder value / best interest of the company</u>

- Hera: buybacks among the tools 'to increase value creation for shareholders' (2023–2025).

- Snam: objective to ‘increase shareholder value also through the improvement of the Company’s financial structure’ (2023–2025).
- STMicroelectronics: repurchases authorised ‘when in the best interest of shareholders and other stakeholders for creating long-term value’ (2023–2025).
- Stellantis: buybacks permitted when ‘in the best interest of the Company and its stakeholders’ (2023–2025).

Increase in Earnings Per Share (EPS)

- Ferrari: buybacks allowed when they ‘would increase earnings per share’ (2023–2025).
- Mediobanca: buybacks intended ‘to support the growth of earnings per share through the cancellation of the shares purchased’ (2023–2024).
- Brembo: motivations include ‘increasing earnings per share’ (2025).
- OVS: cancellation of treasury shares aimed at ‘increasing the value of shares outstanding’ (2025).
- BPER: enhancing the efficiency of invested capital while improving key indicators such as earnings per share and return on equity, without altering BPER’s business model or prudential profile; (b) implementing shareholder remuneration strategies; and (c) providing BPER with a portfolio of treasury shares to be used in the context of any future one-off transactions (Press Release, 11 March 2026).