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Ratings and Banking Regulation: a Shift from Productive (Basel II), to Contradictory (EBA-GL LOM and Supervisory Practices), to Dangerous (Basel 3+ and CRR3)

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Ratings and Banking Regulation: a Shift from Productive (Basel II), to Contradictory (EBA-GL LOM and Supervisory Practices), to Dangerous (Basel 3+ and CRR3)

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Abstract

External ratings (agency ratings) and internal ratings were already in use before Basel II, as powerful management tools. Basel II "adopts" them (the former in the Standard approach, the latter in the IRB approaches) in a productive way: internal ratings represent the final summary of the creditworthiness assessment of debtors/transactions, to be used both in lending/review processes and in those aimed at regulatory capital adequacy measures, to be developed with a medium to long-term target horizon, leaving banks with the discretion to choose the assignment methods, as long as all relevant information (including qualitative and forward-looking data) is included in the judgment.

Instead, in the EBA-GL LOM and supervisory practices, internal ratings are predominantly the result of statistical tools in which the role of behavioural information is much broader compared to that of qualitative, strategic, and prospective information; they target short-term forecasting horizons, approaching early warning systems used in ongoing monitoring; and they are often definitively approved by bank officers different from those who underwrite the loans.

Basel 3+ confirms the Basel II framework, ignores the contradictions in the EBA-GL LOM and supervisory practices, and generates the false perception that internal ratings are no longer essential. In addition, CRR3 emphasizes the use of external ratings also in the SMEs segment and encourages the creation of new rating agencies (including those linked to central banks), thus pushing toward a commodity-oriented logic in bank-SMEs relationships (in contrast with the EBA-GL LOM).

One may wonder whether the evolution of the role and content of ratings in regulations and supervisory practices is the result of a deliberate, conscious shift in approach or if it is simply the outcome of the occasional predominance of differing positions, without any central authority, even a "Czar of ratings."[1]

1. Credit Rating Before Basel II: A Powerful Tool for Bank Management and Competitiveness.

In markets where banks are price setters, the use of ratings allows differentiation in the economic conditions required, lowering rates for better clients and increasing them for worse clients. This way, financing is expanded to less risky debtors/transactions and is left room to other banks to finance borrowers/transactions that are too poorly remunerative relative to risk (and to the future credit losses that will impact financial statements and deplete the lender's capital). In markets where the bank is price taker and must apply the "market rate," ratings allow the evaluation of the adequacy of returns relative to risk, meaning risky loans above the average (whose returns do not adequately cover the risk) are rejected, and less risky loans (on which the "margin after losses" is wide) are accepted. Essentially, ratings are a powerful competitive tool that causes significant damage to banks that do not use them, due to the phenomenon of "adverse selection" outlined above.

For these reasons, external ratings have been developed (by many of the current international rating agencies) since the early 20th century for the benefit of all investors, and internal ratings have been developed by the most advanced banks since the mid-1990s. These institutions began passing on the damages from adverse selection to other banks. The link between price and credit risk has steadily strengthened (De Laurentis, Maino, Molteni, 2010, § 7.4).

2. The Productive Relationship Between Regulation and Ratings Established by Basel II.

The reasons why the relationship between Basel II regulation (BIS, 2004) and ratings is extremely productive are three, with some corollaries.

First reason: Incentives to improve bank risk management tools.

To prevent the regulation itself from inducing adverse selection (by requiring, as Basel I did, the same capital absorption for private debtors and businesses of any risk level), Basel II welcomes external ratings in the calculation of First Pillar capital requirements for "Standard Banks." Additionally, by providing lower capital requirements for "IRB Banks," the regulation strongly incentivized the development and use of internal ratings. Finally, an additional incentive comes from Basel II's Second Pillar, as banks that do not have an essential tool for modern credit management, such as internal ratings, can face additional capital requirements defined on a bank-by-bank basis by the competent supervisory authority.

Second reason: Internal ratings recognized as competitive management tools, the final synthesis of creditworthiness evaluations, and capable of incorporating all relevant information.

The second reason why the relationship between Basel II and ratings is extremely productive is that the regulation emphasizes the role of internal ratings, developed autonomously by individual banks, and differing from bank to bank. This creates a significant burden for supervisory authorities to validate each rating system individually but has the great advantage of recognizing these systems as competitive tools, which banks continuously seek to improve to make more timely and accurate credit decisions than their competitors, even for the same debtors. The fundamental philosophy of Basel II is, in fact, to ensure that the systems used for loans underwriting decisions are the same systems used to calculate the capital requirements resulting from those decisions. Ratings are seen as dual-use tools: this is why the "use test" is required to validate systems for IRB approaches (par. 444 of Basel II (BIS, 2004) [(1)].

Thus, Basel II rejected the alternative hypothesis of introducing a "regulatory rating system." This would have quickly led to a divergence between ratings developed for management purposes to "beat" other banks and regulatory ratings used to determine capital

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[1] A previous version of this article was published in Italian in issue no. 4 of 2025 of Bancaria, the journal of the Italian Banking Association.

requirements. Therefore, under Basel II, the rating is a competitive tool that allows banks that acquire more accurate, forward-looking client information and have more effective processes to synthesize it into ratings, to make better credit decisions.

A first corollary of all this is that the rating, in Basel II, represents the "final synthesis of creditworthiness assessment," on which the decision to assume a certain credit risk is based and to which the associated regulatory capital requirements are aligned. Therefore, the rating must include all the information considered in the lending decision regarding the debtor's/transaction's risk profile; evidently, this includes qualitative information and data related to the debtor's economic and financial prospects. Basel II specifically and explicitly confirms this corollary: in paragraph 417, regarding the possibility of using models for assigning ratings, it states: "However, there must be adequate evaluation and verification by those responsible to ensure that all relevant and pertinent information, including those outside the scope of the model, is considered and that it is used correctly." The Guide to Internal Models published by the ECB in October 2019, in par. 4.1.3 at point 64 letter a, confirms that "all relevant information should be included in the rating/grade/pool assignment process."

A second corollary is that banks must be free to choose how to assign ratings. In fact, Basel II is completely neutral regarding rating assignment methods; the regulation sets very stringent requirements only "downstream" of the "rating assignment processes" (risk differentiation), that is, for the "calibration processes" (risk quantification) of ratings.

Par. 417 of Basel II is particularly expressive: "The requirements set forth in this section apply to statistical models and other automatic methods for assigning ratings or estimating PD, LGD, and EAD. Credit scoring models and other automatic rating procedures generally use only a subset of available information. While they may sometimes avoid some of the errors typical of systems where subjective judgment plays an important role, the mechanical use of limited information is also a source of error. The models and procedures mentioned are permissible as a primary or partial basis for rating assignment and can contribute to estimating risk characteristics."

Thus, according to Basel II, models are not prohibited, but they are not mandatory either, nor is it obligatory to rely on them in a mechanistic way, limiting the role of overrides. Similarly, in European regulation (EU CRR, 2013, including Article 174).

Third reason: Internal ratings as Tools for Granting/review processes, not Ongoing monitoring processes.

The third reason why the relationship between Basel II and ratings is extremely productive concerns the exemplary clarity in the regulation regarding the role of ratings in credit processes.

The provision in paragraph 425 of Basel II "ratings must be updated at least annually" clearly indicates that ratings are considered tools to be used in granting/review processes, not in credit ongoing monitoring processes. Paragraph 414 of Basel II states: "Although the time horizon in the estimation of PD is one year, it is expected that banks use a longer time horizon when assigning ratings". Similarly, the ECB's Guide to Internal Models further specifies (ECB, 2019), in paragraph 4.1.3 "Grade assignment dynamics," at point 64 states: "Although the time horizon used in PD estimation is one year, it is the ECB's understanding that the rating/grade/pool assignment process should also adequately anticipate and reflect risk over a longer time horizon and take into account plausible changes in economic conditions. In order to achieve this objective: a) all relevant information should be included in the rating/grade/pool assignment process, giving an appropriate balance between drivers that are predictive only over a short time horizon and drivers that are predictive over a longer time horizon; b) a horizon of two to three years is considered to be appropriate for most portfolios."

It is clear that the time horizon to target when assigning ratings (and, thus, constructing statistical-based models if such methodologies are chosen) must be longer than one year, while the time horizon for calculating capital requirements to which the PD must refer (i.e., the probability of default associated with the ratings, once they have been assigned) is one year: this PD is the input to the risk-weighting functions that result in the RW (risk weight) of the bank's assets and determine, in turn, the regulatory capital required by regulation.

In essence, the regulation clearly distinguishes the time horizon to be used in the "quantification phase" of the ratings ("one year") from the time horizon to be targeted in the "assignment phase" of the ratings ("longer"). The latter meaning a) from the model development phase, when statistical-based rating models are built; b) in daily operations, when judgmental analyses are conducted by analysts to assign ratings.

Contradictions in Basel II Regulation, Leading to Future Problems.

Basel II does not lack contradictions regarding the construction methods and properties of ratings, particularly regarding the requirement that, on one hand, they should be forward-looking over non-short time horizons and stable over time (good risk differentiation), and, on the other hand, they should produce PD estimates that are close to actual default rates realized in specific future periods (good calibration, or quantification). These two properties of ratings can only be achieved with ratings of different natures.

The first is achieved with ratings defined as "Through the Cycle" (TTC), while the second is achieved with ratings called "Point in Time" (PIT). These two "rating philosophies" (as defined by the Basel Committee already in BIS, 2005; see also EBA, 2017, in the section titled "Rating philosophy") imply different rating system construction logics, both in the assignment and quantification processes, producing ratings with different characteristics. TTC ratings are stable over time because they assign judgments by looking at the debtor's prospects across an entire economic and sectoral cycle, particularly focusing on the debtor's reliability during the bottom of the cycle. Therefore, debtors tend not to change their rating class when the economy or sector improves or worsens. Moreover, PDs are associated with rating classes based on long-term historical default rate evidence. The consequence is that when comparing the PDs associated with a rating class to the actual default rates realized in subsequent periods for that class, it is discovered that the actual default rates are highly variable compared to the expectations incorporated into the estimated PD for that class. Thus, the rating has a very loose relationship with actual default rates. Every aspect is "reversed" in the PIT logic(2).

Regulation requires ratings to be assigned and quantified using TTC logic but also to exhibit the good calibration/quantification typical of PIT ratings(3). As we will see, this will lead to multiple problems.

3. The Contradictory Relationship Between the EBA-GL LOM and Supervisory Practices with Internal Ratings.

The Consistency of EBA-GL LOM with Basel II on the Topic of Ratings.

The EBA Guidelines on Loan Origination and Monitoring (EBA, 2020; EBA-GL LOM in short) are aligned in many respects with Basel II. The result of ongoing monitoring processes is the potential inclusion of the credit position in a watchlist, which means listing it for future 360-degree review(4); instead, the result of "periodic review" processes is to "review and update any internal ratings/credit scoring" (point 257 of the EBA-GL LOM).

In the EBA-GL LOM, "regular review" or "periodic review" (regular credit reviews of borrowers) is a thorough re-evaluation of borrowers, similar to the initial credit granting process. It aims to "identify any changes in their risk profile, financial position, or creditworthiness compared to the criteria and assessment made at the time of the loan granting, as well as review and update any internal ratings/credit scoring" (point 257 of the EBA-GL LOM). Furthermore, during periodic review, "in addition to monitoring credit and financial metrics, institutions should take into account information related to qualitative factors that may significantly influence the repayment of a loan. Such factors may include information on the quality of management, agreements/disagreements between owners, the structure and flexibility of costs, trends, the size and nature of investments and research and development expenses, as well as the distribution between debt holders and managers (servicers) within the group consolidation" (point 265).

Although the EWI (Early Warning Indicators) within ongoing monitoring require banks to consider a wide range of information(5), the goal of these processes is not to change the rating but rather to place the position on a watchlist. Only after a subsequent 360-degree evaluation can the rating be modified.

In the context of credit granting/periodic review processes, the EBA-GL LOM strongly instructs banks to analyse, both for small and micro enterprises as well as medium-sized and large enterprises, "the debtor's business model and strategy" (points 121 and 144 for the two sectors), "the realism and reasonableness of financial projections" (points 129 and 151), "the feasibility of the business plan and associated financial projections" (points 134 and 161), and the future profitability of the client (points 120 and 152), "under potentially adverse conditions" (points 131 and 156).

Therefore, the EBA-GL LOM requests a comprehensive business analysis in which financial and strategic profiles, both quantitative and qualitative, are integrated. The profitability of the business is the cornerstone of creditworthiness, the time horizon is long-term, and the assessment is made using sensitivity analysis under stress conditions. All this: a) aligns with the long-term orientation of ratings required by Basel II; b) allows for greater allocative efficiency in the banking sector, enabling banks to allocate resources to the most deserving medium-term entrepreneurial initiatives and accompany businesses in investment paths whose returns may not be observable in the short term; c) should be of interest to individual banks for a variety of technical and strategic reasons (a brief summary is in note(6)).

EBA-GL LOM and Ratings: Contradictions with Basel II.

In contrast to the clear and consistent framework outlined above, the EBA-GL LOM also contains significant contradictions with Basel II.

The first contradiction emerges in point 274 of the EBA-GL LOM and concerns the purpose of ratings: the internal rating becomes one of the 19 elements to be considered in ongoing monitoring! In fact, within the EWI of ongoing monitoring, banks are asked to consider, among the "indicators of deterioration of credit quality... an actual or expected downgrade of the internal credit rating/credit risk classification for the transaction or client" (point 274, letter q). Here, the internal rating becomes an early warning signal to be used in ongoing monitoring processes, with the goal of placing anomalous positions on the watchlist to later examine them in detail and possibly revise the internal rating. The contradiction is evident. It presupposes an autonomy of the internal ratings and a short-circuit between processes!(7)

A second contradiction arises concerning the scope of information included in the ratings within credit granting/review processes. In EBA, 2020, points 121 and 144 (identical but the former referring to small and micro enterprises and the latter to medium-sized and large enterprises), credit scoring/rating is one of five elements to consider: "In assessing creditworthiness, institutions should: a. analyse the client's financial position and credit risk, as outlined below; b. analyse the organizational structure, business model, and strategy of the client, as outlined below; c. determine and assess the client's credit scoring or internal rating, if applicable, in accordance with credit risk policies and procedures; d. consider all financial commitments of the client, including all credit lines, used and unused, with institutions, as well as credit exposures, repayment behaviour, and other obligations arising from taxes or other public authorities or social security funds; e. assess the structure of the transaction, including structural subordination risks and related terms and conditions, such as restrictive clauses, and, where applicable, third-party personal guarantees and the structure of the real guarantee."

These points suggest that the strategic and financial analysis of a company's business model and the evaluation of financial plans are separated from and additional to the rating. Therefore, the EBA-GL LOM also enshrines in regulation what had already been realized in supervisory practices (as we will see shortly): a) ratings no longer contain all the relevant information that the bank uses to assess debtors/transactions; b) ratings are no longer the final summary of the bank's creditworthiness assessment for credit decisions; c) the rating decision is separated from the loan underwriting decision, creating the split that Basel II had carefully sought to avoid.

The EBA-GL LOM, Credit Pricing, and Ratings: A Managerial Trap?

Chapter 6 of the EBA-GL LOM is dedicated to credit pricing. The reason why the EBA guidelines address a topic that might seem to fall within the bank's management autonomy is clear when considering the risk of adverse selection, which we introduced earlier in this article.

Such risk can undermine the stability of financial institutions, so it is of primary concern for supervisors to prevent banks from being exposed to it. Thus, differentiating credit prices according to risk is essential. The problem is: should credit risk be measured using debtors and transactions ratings, or can it be measured using more top-down approaches (such as average loss for product type)?

Key points from the LOM in this regard are as follows (EBA, 2020): "199. ... Institutions should also define their pricing approach based on the type of client and credit quality, and, if applicable, based on the client's risk (in the case of individual pricing determination) ...". "200. Institutions should consider differentiating pricing frameworks based on the type of loan and client. For consumers, micro-enterprises, and small enterprises, pricing should be based more on the portfolio and products, whereas for medium and large enterprises, it should be more closely related to the transaction and the loan." "202. Institutions should consider, and incorporate in loan pricing, all costs ... a. cost of capital (considering both regulatory and economic capital), which should result from capital allocation according to established divisions, such as by geography, business line, and product; ... d. credit risk costs calculated for different homogeneous risk groups, taking into account past loss recognition experience for credit risk, and if applicable, using models for expected loss."

It follows that the EBA's expectations are that for consumers, micro-enterprises, and small enterprises, pricing should be based on historical portfolio and product loss experiences rather than on individual debtor and transaction ratings. This is indeed how the market works, sometime constrained by legal requirements not to discriminate loan prices for different borrowers.

The problem is that when the market price is standardized, banks and financial companies suffer risk-adjusted economic losses when lending to higher-risk clients/transactions, and have an interest in seeking clients/transactions that generate superior risk-adjusted returns due to their lower-than-average risk (thus improving their profitability and stability over time). In other words, they should still try to use adequate rating/scoring systems to guide acceptance/rejection decisions. If they do so, risk-adjusted performance indicators (mentioned in the EBA-GL LOM at point 203: EVA, RORAC, RAROC, RORWA, ROTA) will be able to signal which clients/transactions to accept or reject.

Therefore, if an institution were to adopt the minimalist approach outlined by the EBA-GL LOM for consumer, micro-enterprise, and small business markets and assume that adequate rating/scoring systems are not essential competitive tools, it would expose itself to the risk of adverse selection.

Contradictions with Basel II in Supervisory Practices.

A first contradiction arises from the convergence of interests that has led to nearly identifying ratings with statistical-based assignment systems, thus diverging from what is outlined in the previously mentioned Basel II and CRR regulations. In fact, banks have seen advantages in this type of rating in terms of process standardization, cost reduction, and time savings, while supervisory authorities have considered them useful for preserving the integrity and objectivity of evaluations that determine the minimum capital requirements of banks using the Internal Rating Based approaches. Thus, the regulatory validation process of rating systems by the competent supervisory authority has, in fact, required that the rating systems to be validated (and used in management, because of the "use test" previously mentioned) be based on robust statistical models.

A second contradiction with Basel II arises from another convergence of interests between banks and the supervisory authorities in charge of validating the models (initially national supervisors in Europe, before the Single Supervisory Mechanism was operational). Authorities agreed to validate models that violated paragraph 414 of Basel II, discussed earlier, and used a one-year target horizon in the rating assignment phase (not only in the quantification phase). In constructing rating assignment models, the target forecast horizon determines the "observation period" of the dataset in which it is surveyed whether debtors have defaulted or not. The explanatory variables in the model can include all information available at the start of that observation period (usually called "time zero"): internal behavioural data of borrowers' credit lines from the day before, credit register data usually referred to a month and a half earlier, the last approved financial statement (for a small and medium enterprises, it could be referred to a year and a half ago, if time zero falls in the spring months, that is before the new financial statement approval), and qualitative information gathered up to time zero (via the "qualitative questionnaire" or other channels).

The "short" observation period (one year) allows banks to have more historical data to include in the model's estimation dataset, increasing the model's discriminatory power and, therefore, the chances of regulatory validation by national supervisory authorities who, interested in having major banks become IRB banks as soon as possible, chose not to consider paragraph 414 of Basel II.

However, this choice has serious implications on which variables are most predictive and are therefore included in the model (or on which "modules" play a predominant role in the final model, when this is constructed using specialized modules - partial models – for specific types of information). Ultimately, this decision has important consequences on the nature and fungibility of the model in the granting/review process or in ongoing monitoring.

In fact, when the target forecast period is limited to one year, the information that statistical procedures find relevant to optimize the model is essentially limited to internal behavioural data, while financial statement information plays a limited role, and strategic information becomes marginal (Cuneo De Laurentis Salis Salvucci, 2016, and more extensively, Aifirm, 2016)(8). The model thus becomes a substitute for early warning models used for ongoing monitoring; and it seemingly even improves their performance due to the fact that the presence of other variables, in addition to internal behavioural data, limits the excess of false alarms that such models typically suffer from. However, when the same tool is used both for credit granting/review processes and for the ongoing monitoring, open contradictions arise, because of the different objectives of the two processes (reiterated, as mentioned above, by the EBA-GL LOM) and because of the different range of information to be examined in the two processes (according to the same EBA LOM, Basel II, and the CRR).

The problem of the overly narrow scope of relevant information, which ultimately characterizes internal ratings predominantly used by banks, has been further exacerbated by the very restrictive attitude initially taken by supervisory authorities regarding the possibility of using overrides.

A third contradiction with Basel II, which adds to the previous two (concerning assignment methodologies of internal ratings and the range of information contained in them), relates to the nature of ratings as the final summary of the creditworthiness of debtors/transactions, to be used simultaneously in both credit granting/review processes and in regulatory capital adequacy calculations. Essentially, the legitimate concern to prevent the final assignment of ratings from being influenced by parties with interests that may conflict with ratings' robustness, in some jurisdictions has been pushed to the point of excluding even those who have underwriting powers in credit granting(9).

This has two implications: 1) it pushes banks to establish a separate Credit Risk Management function from the Credit department, and an office often referred to as the rating desk, responsible for the final rating decision; 2) it can create discrepancies between the borrowers' creditworthiness perception of underwriters and the rating assigned.

The informational content of the rating and everything that follows (primarily loan provisions and capital) may, at this point, not fully reflect the assessments that lead to granting loans. This changes the nature of the rating and frustrates one of the main objectives of Basel II: to base capital adequacy on the same internal ratings used by banks to make daily credit risk decisions.

4. The Dangerous Relationship Between Rating and Basel 3+ / CRR3

The new capital adequacy regulation (which we refer to here as Basel 3+)(10) confirms many of the Basel II provisions mentioned above (which, as we have noted, have later been ignored by other regulations, guidelines, and supervisory practices), leaving open all the contradictions previously highlighted(11).

Moreover, Basel 3+ seems to move towards a weakening of the role of internal ratings, due to the introduction of the Output floor for the overall result of internal models, set at 72.5% of the RWA calculated using the Standard method, as well as due to various other more specific provisions(12). However, the widespread perception that Basel 3+ reduces the role of internal ratings is incorrect. And it should be in the authorities' interest to stress this point.

First, with respect to internal ratings and from a regulatory standpoint: a) impact assessments (EBA, 2024, Table 4) reveal that portfolios treated with the IRB method result in additional Tier 1 Capital savings for all types of banks, and b) the non-use of internal ratings can have consequences on capital requirements under the Second Pillar of Basel regulations.

Second, the management profile of internal ratings remains crucial: a) they are essential to protect the bank from the risk of adverse selection (overall, Basel 3+ increases capital requirements for banks, and therefore increases the need to align interest rates on loans with the costs to be passed on to debtors), and b) internal ratings for private non-large-corporate debtors are much more productive competitive tools than external ratings for many reasons, the first of which is that the latter are simultaneously available to all credit suppliers and thus do not provide an informational advantage useful for making better decisions than competitors (essentially, they do not eliminate the risk of adverse selection compared to those who internally determine ratings with a more accurate and proprietary information spectrum).

Therefore, the perception held by many that Basel 3+ regulators are no longer pressing for banks to implement appropriate internal rating systems is incorrect. It is also dangerous, as it may lead to a relaxation in the development and use of this essential management tool, that protects from adverse selection risk and safeguards bank's stability.

Now, consider the position on external ratings (issued by recognized rating agencies, the External Credit Assessment Institutions - ECAI) as reflected in the European regulation for implementing Basel 3+: in point 13 of the EU CRR3, 2024, we find: "…institutions should be able to refer to credit assessments by nominated ECAIs to calculate the own funds requirements for a significant part of their corporate exposures… the 'European Supervisory Authorities'… should monitor the use of the transitional arrangement and should consider relevant developments and trends in the ECAI market, impediments to the availability of credit assessments by nominated ECAIs, in particular for corporates, and possible measures to address those impediments. The transitional period should be used to significantly expand the availability of ratings for Union corporates. To that end, rating solutions beyond the currently existing rating ecosystem should be developed to incentivize especially larger Union corporates, to become externally rated. In addition to the positive externalities generated by the rating process, a wider rating coverage will foster, inter alia, the capital markets union. … Member States… should assess whether a request for the recognition of their central bank as an ECAI… and the provision of corporate ratings by the central bank for the purposes of Regulation (EU) No 575/2013 might be desirable in order to increase the coverage of external ratings".

Thus, the emphasis is on the use of external ratings for the corporate market, suggesting that new rating agencies and even the central banks of member states could provide them. In this market, there are also small and medium-sized enterprises, and considering that large corporates are already rated by the major international agencies recognized as ECAIs in Europe, the CRR3 indication seems specifically aimed at increasing the availability of external ratings for SMEs.

This hypothesis seems to be in strong contradiction with the effort made by Basel II to encourage the use of internal ratings and poses further dangers. In fact, the risk/reward ratio of external ratings is largely positive when the object of evaluation is not SMEs, but presents many more disadvantages when the object of evaluation is this type of debtor.

The use of external ratings for SMEs can have advantages in terms of cost-effectiveness in debtor evaluation processes, greater attention to information gleaned from big data, and in terms of "discipline effect" on debtors, which can be of particular interest in some countries(13). However, the use of external ratings for SMEs has several important disadvantages: a) it tends to impoverish the informational base regarding clients' strategic fundamentals (acquired at reasonable costs only by those in continuous and territorial contact with the enterprise), leading conversely to an increased role for internal behavioural data and credit risk bureaus' data in the assignment of increasingly point-in-time ratings; b) it limits the role of credit analysts at banks and discourages the development of business analysis skills; c) it eliminates the informational synergies between credit evaluation activities and the bank's commercial activities, which are at the core of both an effective supply of financial and advisoring services, and an effective forward-looking evaluation of credit risk.

Ultimately, by promoting external ratings for SMEs, the bank-firm relationship shifts towards a transactional logic (where credit is viewed as a commodity to be produced and sold individually at the lowest possible price) rather than a relational logic (where credit is part of a long-term relationship between the enterprise and the bank). Apart from other macroeconomic implications of this shift, on the regulatory consistency side, it appears misaligned with the range of information to be considered in granting/reviewing processes foreseen by EBA-GL LOM. As we have noted, these guidelines are very much in line with relationship-oriented banking models, and much less with credit assignment processes of institutions oriented towards transactions, asset-based lending, and instant lending.

It should be noted that discouraging the ability to acquire soft information in relationship lending undermines one of the main reasons for the existence of banks, according to financial intermediation theory, and exposes banks even more to new non-bank competitors.

5. Conclusions

Despite some contradictions (preference for TTC ratings but request of a good calibration typical of PIT ratings), for the most part Basel II has a very clear and productive view of internal ratings: these are important tools for the adequate management of credit risk in banks and empower their competitiveness; they represent the final synthesis of the creditworthiness assessment on debtors/transactions, to be used both in credit granting/review processes and in regulatory capital adequacy calculations, to be assigned with a medium term target horizon, leaving banks the choice of assignment methods as long as all relevant information (including qualitative and forward-looking info) is included in the them.

Instead, in the EBA-GL LOM and in supervisory practices ratings have become expressions of only a part, sometimes a minority part, of the relevant information for loan underwriting; they are the result of statistical tools where the role of behavioural information is predominant over qualitative, strategic, and forward-looking information; they are often approved by parties other than those who underwrite loans; they target short-term forecast horizons, getting closer to, if not overlapping with, tools used in credit ongoing monitoring processes.

Basel 3+ confirms the Basel II approach, ignores the contradictions in EBA-GL LOM and the actual evolution of supervisory practices, and generates the false perception that internal ratings are no longer an essential tool for protecting banks against adverse selection risk and safeguarding their stability. In addition, CRR3 emphasizes the use of external ratings, encourages the creation of new rating agencies, and allows central banks of member states to become ECAIs, thus pushing towards a commodity-oriented logic at the expense of the relationship-oriented logic of the bank-enterprise relationship (which the EBA-GL LOM seem to deeply inspire).

"In conclusion, a key question arises: Is the evolution of the role and content of ratings in regulatory and supervisory practices the result of a deliberate, conscious change in approach by well-coordinated authorities (even if never explicitly stated)? Or is it the outcome of various positions that, at different times, dominate the drafting of rules, guidelines, and supervisory practices, without any central authority — even a 'Czar of ratings'— ensuring their coherence?"

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EU CRR3, 2024: Regulation (EU) 2024/1623 of the European Parliament and of the Council of 31 May 2024 amending Regulation (EU) No 575/2013 as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor

Notes

(1) Paragraph 444 of Basel II: "Internal ratings and default and loss estimates must play an essential role in the credit approval, risk management, internal capital allocations, and corporate governance functions of banks using the IRB approach." BdI, 2006, p.

71: "The rating system is not just a tool for calculating capital requirements, but must play an important managerial role... Banks may only be authorized to adopt the internal ratings-based approach for calculating capital requirements if the rating system plays a vital role in credit granting, risk management, internal capital allocation, and governance functions of the bank." EBA, 2017: "The concept of the use test was introduced in the IRB Approach to ensure the high quality of risk parameters, assuming that institutions would not use estimates of risk parameters for internal risk management unless they believed these estimates appropriately reflect the actual level of risk."

(2) In the PIT logic, the assignment of ratings and their quantification in terms of PD are focused on shorter time horizons, based on the current conditions of the debtor and the sector/economy. During a recession, ratings typically migrate en masse to worse rating classes; therefore, an increase in risk is reflected in a deterioration of the rating; conversely, when the economic or sectoral cycle improves. In addition, PDs are associated with rating classes based on averages of default rates from shorter periods, closer to the current economic situation; as a result, when comparing the PDs associated with a rating class with the actual default rates observed in subsequent periods for that class, the actual default rates are very close to the expected rates incorporated in the PD estimated for that class. Therefore, each rating class is strongly tied to a particular level of default rates (good calibration).

(3) The main articles of Basel II (BIS, 2004) that explicitly push towards the TTC approach are as follows: a) 414: "Although the time horizon used in PD estimation is one year (as described in paragraph 447), banks are expected to use a longer time horizon in assigning ratings." b) 415: "A borrower rating must represent the bank's assessment of the borrower's ability and willingness to perform contractually despite adverse economic conditions or unexpected events. For example, a bank may base rating assignments on specific, appropriate stress scenarios." c) 447: "PD estimates must be a long-run average of one-year default rates for borrowers in the grade." d) 461: "Banks must use information and techniques that appropriately account for long-run experience when estimating the average PD for each rating grade." e) 463: "Irrespective of whether a bank is using external, internal, or pooled data sources, or a combination of the three for its PD estimation, the length of the underlying historical observation period used must be at least five years for at least one source. If the available observation period spans a longer period for any source, and this data is relevant and material, this longer period must be used." This last point was further emphasized in EBA, 2016, p. 25: "It is desirable that PD estimates are relatively stable over time to avoid excessive cyclicality in own funds requirements. To achieve that, PD estimates should be based on the long-run average of yearly default rates. In addition, as own funds should help institutions survive in times of stress, risk estimates should account for the possible deterioration in economic conditions even in times of prosperity." Despite these repeated calls for ratings characterized by the TTC philosophy, Basel II then defines default by giving great emphasis to the debtor's illiquidity through the 90 days Past Due rule (452: "A default is considered to have occurred with regard to a particular obligor when either or both of the following events have occurred... The obligor is past due more than 90 days on any material credit obligation to the banking group"), which pushes the construction of models towards a PIT philosophy. Furthermore, Basel II requires that the actual default rates observed for each rating class in individual years do not deviate too much from the long-term historical average that identifies the PD (501: "Banks must regularly compare realized default rates with estimated PDs for each grade and demonstrate that the realized default rates are within the expected range for that grade"): this implies the good calibration typical of PIT ratings. This was further specified in WP No. 14 (BIS, 2005), which outlines calibration tests (binomial, chi-square, normal, and the traffic-light approach). For more details on these issues, see Cuneo, De Laurentis, Salis, Salvucci, 2016.

(4) For instance, in point 272 (EBA, 2020), it specifies: "On identifying a triggered EWI event at the level of an individual exposure, portfolio, sub-portfolio or borrower group, institutions should apply more frequent monitoring and, when necessary, consider placing them on a watch list".

(5) Among other things, it mentions: "negative macroeconomic events (including but not limited to economic development, changes in legislation and technological threats to an industry) affecting the future profitability of an industry, a geographical segment, a group of borrowers or an individual corporate borrower, as well as the increased risk of unemployment for groups of individuals…changes in the conditions of access to markets, a worsening in financing conditions or known reductions in financial support provided by third parties to the borrower" (point 274 of EBA-GL LOM).

(6) Firstly, banks also provide medium-to-long-term financing: risks of such financing cannot be adequately covered merely by acquiring real or personal guarantees. Secondly, even formally short-term bank financing, including revocable credit lines, are largely intended to meet the durable financial needs of ongoing businesses, as current assets are actually intended to produce the liquidity necessary to repay loans only if the business ceases operations (they are, in fact, largely permanent current assets). Thirdly, this highlights that even short-term credit lines are really short-term-based only on the assumption that the bank that revokes the credit lines is the first to do so within the broader group of financing banks. In this case, the company will be able to repay the loans to that bank using the available margins in credit lines provided by other banks. However, to achieve this, the bank must make the decision to abandon the customer first: this requires having a superior forward-looking analysis of the client compared to the other banks, meaning that the useful forecasting horizon of ratings is not the formal maturity of the credit lines, but the one capable of anticipating the actions of other banks. Fourthly, the main object of investigation is the client. Certain basic principles of corporate finance apply: "businesses are financed, not individual investments," "there is no direct connection between individual investments and individual corporate loans." In fact, in the case of corporate lending, repayment capacity never directly depends on individual asset items or on the outcome of specific investment operations, but always depends on the overall ability of the business to stay in the market and honour all its financial and non-financial obligations. For these reasons, the recommendation in point 156 of the EBA-GL LOM, which suggests limiting the evaluation horizon to the duration of the loan contract as if the bank had only one loan contract with the debtor, is inappropriate. In the case of revocable credit lines, the evaluation horizon should not be limited to the technical time required to revoke them. Finally, the main subject of creditworthiness assessments should be the client as a whole as, given the high level of competition in banking markets, it is essential to build a portfolio of quality clients who can survive economic cycles and continue to be a source of income for the bank over time. Pursuing a "good operations" policy, instead of focusing on "good clients over time", lays the foundation for the progressive impoverishment of the bank's customer base.

(7) There are no contradictions in the guidelines given by EBA-GL LOM in point 274, letters "p" and "g." In the first case, the reference is to migrations of "aggregates" of internal ratings (letter "p": " negative institution-internal credit grade/risk class migrations in the aggregate credit portfolio or in specific portfolios/segments") and in the second case, it refers to "external

ratings" assigned by agencies or "implied ratings" derived from markets (letter "g": " an actual or expected significant decrease in the main transaction's external credit rating, or in other external market indicators of credit risk for a particular transaction or similar transaction with the same expected life ").

(8) The situation described regarding short-term rating models, heavily centred on behavioural-based data, is confirmed by the survey contained in the Position Paper of AIFIRM (Italian Association of Risk Managers) on the validation of the calibration of rating models used in the corporate, SMEs, and retail segments. To provide a quantitative indication of the importance of explanatory variables related to behavioural data, credit registers data, financial statements, and others (including qualitative, strategic variables, etc.), banks were asked to express, for each category of data, the ratio between the Auroc of the module dedicated to them and the total Auroc of the final model. The role of data other than behavioural-based and credit registers data is limited, even in the corporate segment.

(9) For instance, BdI, 2006, Title II, Chapter 1, p. 68.

(10) BIS, 2017; without an explicit name from regulators, the reform is commonly referred to as the Finalized Basel 3+ post-crisis reforms, Basel 3+, Basel 3+.1, or Basel 3+ Endgame, sometimes called Basel 4. Its implementation in Europe mainly occurred through EU CRR3, 2024.

(11) For example, paragraph 414 of Basel II (BIS, 2004) we commented on is directly transposed in point 181 of Basel 3+ (BIS, 2017); paragraph 417 in point 185; paragraph 425 in point 193; and paragraph 444 in point 212.

(12) In EU CRR3, 2024, point 5 states: " The output floor represents one of the key measures of the Basel III reform. It aims to limit the unwarranted variability in the own funds requirements produced by internal models and the excessive reduction in capital that an institution using internal models can derive relative to an institution using the standardised approaches." Among other provisions that limit the role of internal ratings in Basel 3+, we can highlight: IRB methods are prohibited for exposures in capital instruments; for exposures to large companies, banks, and financial sector entities, the regulatory LGD of the FIRBA approach must be used (instead of LGD calculated by internal models, as in the AIRBA approach); the scope of application of internal estimates of CCF/EAD is reduced, new input floors are introduced for PD (from 0.03% to 0.05%), for LGD (differentiated by exposure and collateral), and for CCF/EAD (revolving exposures).

(13) External ratings, possibly produced by national supervisory authorities (as done by Banque de France) and that consider the level of financial leverage of companies, could stimulate their capitalization; similarly, giving due consideration to ratios between revenues or operating income and assets, or debt, or financial liabilities may encourage a reduction in tax evasion.