

31 January 2014

**UniCredit reply to Basel Committee second consultation on  
“Fundamental review of the trading book”**

UniCredit is a major international financial institution with strong roots in 17 European countries, active in approximately 50 markets, with more than 9.000 branches and circa 150.000 employees. UniCredit is among the top market players in Italy, Austria, Poland, CEE and Germany. UniCredit operates a large international banking network outside Italy with around 4,800 branches.

**Executive Summary**

UniCredit appreciates the Committee's efforts to improve transparency and comparability of the overall risk weighted assets (RWAs) structure, which implies also a more consistent framework for trading book risk.

UniCredit is in general supportive of the revisions to the capital framework set out in the “Fundamental review of the trading book” (FRTB) proposal, and especially those aiming at:

- eliminating potential areas for double counting introduced by Basel 2.5 rules;
- achieving consistent and comparable levels of capital for the trading book across different jurisdictions.

Indeed, the BCBS's 2012 hypothetical test portfolio exercise for market risk<sup>1</sup> proved, beyond any reasonable doubt, that different modelling choices as well as different supervisory practices with regard to model approvals are compromising the level playing field for regulatory capital requirements.

At the same time, the main operational implications of the FRTB proposal, to the best of our understanding, mark a significant departure from at least two fundamental principles of the Basel Framework, at the very core of UniCredit's market risk management framework. Indeed, after the implementation of the new FRTB standards, regulatory capital for the trading book will not be any more based on the same risk measure / model:

- embedded into the trading strategy and risk management processes of the bank;
- subject to back testing and validation.

In general, it is our belief that reducing the scope of model based views of risks may result in a reduced standard for risk management and thus will definitely be a step backwards, calling into question the business case for institutions keeping on investing in the expertise and infrastructure required for internal modelling.

Indeed, many years of investments in human resources, research and technologies also driven by the evolving regulation were key in significantly improving banks' risk management systems and beneficial not only to the banks but also to the whole financial system.

In this respect, the proposed aggregation methodology of modellable risks is perceived as the most controversial aspect of the proposed set-up, at least from UniCredit standpoint. Indeed, UniCredit made significant efforts in order to properly capture all sources of risk by moving to full valuation re-pricing, based upon a common pricing infrastructure between front office and Risk systems and

---

<sup>1</sup> Basel Committee on Banking Supervision, Regulatory consistency assessment programme (RCAP) – Analysis of risk-weighted assets for market risk, January 2013



covering all the relevant pricing parameters affecting the valuation of the portfolio by means of specific risk factors. Banks, like UniCredit, that already made these type of investments should be allowed to preserve the related value, by applying a higher  $\rho$  (i.e. relative weight assigned to a bank's internal model).

UniCredit agrees that disclosure under Pillar III, in its current form, does not adequately meet the need of RWAs comparability by the financial community, but it does not consider appropriate the proposal to regularly disclose the results of banks' standardised calculations as a way to provide an alternative benchmark against which modelled outcomes could be compared. This proposal may likely further knock market confidence in banks' internal models and ultimately lead the market to end up looking primarily at capital ratios calculated according to the standardized formula, which is easier to be understood and compared, at the expense of model based-risk sensitive information, which provides the right incentives and tools for effective risk management.

In order to enforce greater consistency and comparability of capital levels across different jurisdictions, UniCredit is rather in favour of disclosing, on a regular basis, model results on a set of standardized hypothetical portfolios, in conjunction with further harmonization of supervisory approval practices across the various jurisdictions

Finally, of particular concern to UniCredit is the planned timeline proposed by BCBS for the QIS which we deem not to be sufficient given the fundamental changes proposed by the new framework and which would require major construction work within firms before a meaningful QIS can be conducted.

The rest of the outline is organized in the form of separate sections reflecting the main topics covered by the consultative document and providing UniCredit comments.

### ***Specific Comments***

#### ***The trading book/banking book boundary***

UniCredit is in general in favour of the proposed definition of a boundary between trading book and banking book, since it is perceived to be more enforceable and effective in reducing incentives for regulatory arbitrage, while at the same time retaining consistency with banks' core trading business model and risk management/ control processes.

Nonetheless, we highlight that as a result of the revisions to the market risk capital framework, introduced as part of the Basel 2.5 rules, from a regulatory capital perspective arbitrage problems identified with the existing boundary are in most of the cases causing the banking book to be cheaper than the trading book, , rather than the other way around.

At the same time, we genuinely believe some enhancements to the current proposal based upon a presumptive trading book designation for certain instruments would be beneficial in order to further align with prevailing risk management practices in the industry. In more details, the trading / banking book boundary should exempt from the trading book presumption:

- instruments in the trading book that are hedges to banking book exposures, potentially including those not qualifying for hedge accounting treatment, as well as internal hedges between the two regulatory books;
- instruments in the trading book that are hedges to CVA sensitivity to market risk factors. In general, the lack of full integration of CVA into the trading risk framework is likely going to penalize in RWA terms banks proactively managing such risks.

Indeed, the proposal to make the boundary between the trading book and the banking book impermeable can pose some issues, since it would only be possible to move positions from the trading book to the banking book and vice versa under very strict and rare circumstances, as defined by the Basel Committee and subject to supervisory approval.

In general, if the bank's business model and/or its risk management practice substantially change,

then it should be possible to change categorization and in such cases no capital surcharge for switching the designation should be calculated.

Also, the request for Supervisor approval for each and every classification change will result in an excess of bureaucracy and operational complexity both for banks and competent authorities. However we think that these objective can still be pursued without imposing a formal Supervisor approval process for every single classification change. As an alternative, we would suggest that Supervisors could express their view on proper classification of assets between trading book and banking book during the regular Supervisory Review Process.

#### Treatment of credit

UniCredit is in favour of a more integrated market and credit risk modelling approach. Indeed, such an approach is deemed helpful to decrease the overlap between the various measures of the Basel 2.5 framework, and in particular by allowing treating the default loss as the loss over and above that implied by the spread movement.

At the same time, we are hesitant in supporting some of the newly proposed requirements for such a model, since these would prevent banks to leverage the investments made (and the skill set acquired) in implementing and running the IRC model, under Basel 2.5.

Indeed, while we sympathize with the regulators' demand for consistency and comparability in the level of capital requirements attracted by similar risks across different regulatory portfolios (i.e. trading vs. banking) and jurisdictions, we have reservations about the way in which this is actually proposed to be pursued.

In our considered opinion, such legitimate objective would be achieved in a more straightforward and effective way by means of an Incremental Default Risk Charge (IDRC) calculation based upon an IRB-like one factor model, with buy and hold investing strategy over the time horizon (the assumption that banks are able to shed their risk at the end of the liquidity horizon is preferable to any other rebalancing assumption). In addition, in order to circumvent possible instabilities from a statistical estimation of the correlation across obligors, we would prefer an option to utilize the formula for the R2 used in the IRB context.

Indeed, the above mentioned objectives pursued by the regulators are somehow at odds with some of the proposed policy responses, in particular when considering:

- a two-factor IDRC model correlation (i.e. a global factor and an industry/sector factor, other than the idiosyncratic risk component) is a completely new model representing an important deviation from Basel II one factor model. At the same time, it allows only a limited increase in the explanatory power, while resulting in potentially lower pairwise correlations and increased risks of collinearity in the estimation of correlation;
- default correlations based on listed equity prices are not deemed to be suitable for sovereigns and quasi-sovereign issuers;
- inclusion of equity positions raises conceptual difficulties and further inconsistencies across different regulatory portfolios, because of the one-year horizon set for the calculation of the IDR charge and the three months applied to equity positions assigned to the banking book.

Furthermore, several questions arise from deviating statements in between the actual review body and the proposed accord text:

- on p. 11 the IDRC scope is defined as follows: "This charge would apply to all instruments that are subject to issuer default risk (including equities)". On the other hand the accord draft 186(c) reads "All positions subject to the market risk framework, with the exception of those positions subject to standardised charges or whose valuations depend solely on commodity prices or foreign exchange rates are subject to the default risk model." While the first definition only encompasses the instruments for which a

nonzero result would be expected, the accord proposal would amount to including a large number of instruments where a vanishing contribution to IDRC is a priori evident.

- equally, on p. 11 it is stated that "Default correlations must be based on listed equity prices and must be estimated over a one-year time horizon (based on a period of stress) using a [250] day liquidity horizon." while the accord draft 186(b) states "Correlations must be based on a period of stress (as defined in paragraph 181(d)), estimated over a 10-year time horizon and be based on a [one]-year liquidity horizon." It should be clarified whether the one- or ten-year period should be used. In addition, it may be beneficial to eliminate possible room for interpretation between the [1y] and [250d] business day requirements.

### Factoring in market liquidity

In principle, UniCredit is supportive of a higher capital allocation to illiquid risk. At the same time, the incorporation of the risk of market illiquidity in banks' regulatory capital requirements for trading portfolios is conducive to considerable costs and efforts for implementation (and maintenance) and therefore, in this respect, many practical points need to be thoroughly evaluated.

In particular, we expect the following aspects to receive considerable attention:

- hedging and diversification issues, for instruments mapping into different risk factor classes (e.g. corporate bond). Such cases would require the application of potentially different liquidity horizons for each and every risk factor, potentially altering the regulatory representation of involved hedging strategies. In general, banks should be allowed to adopt a common liquidity bucketing for hedges and hedged positions;
- inconsistencies between regulatory liquidity horizons and risk horizons defined by the traders, in risk managing their books, based upon market outlook and size of the exposures;
- the proposed use of overlapping returns over long horizon seems to lack proper modelling and statistical ground. It appears especially problematic when it comes to the estimation of correlations from overlapping returns at different time horizons, to the extent that it does not seem suited to explain the day-to-day risk-factors co-movements reflected in the actual P&L volatility.
- attempts to calibrate models so as to preserve correlation among risk-factor simulated over different time horizons is likely to lead to the undesirable elimination of several observations for risk-factors characterised by shorter horizons

All in all, the complexity introduced by varying liquidity horizons for different asset classes seems to outweigh any additional gain in risk measurement precision, especially when considering that a number of provisions contained in other sections of the FRTB proposal are already devised as a penalty for exposures on illiquid asset classes by means of:

- trading book / banking book boundary disallowing less liquid products from internal model treatment (e.g. securitizations);
- identification of modellable risk factors based upon their liquidity;
- calculation of the relevant risk measure based upon a calibration to stressed conditions.

Last, it should be recognized that there is also a valuation aspect relating to market risk liquidity. It is important to take into account that there is already a portion of risk of market illiquidity that is captured via bid-offer, market price uncertainty and concentrated positions valuation adjustments. All in all, we expect potential implications of the FRTB proposal on market liquidity assessment and capitalization to be reflected accordingly in the prudent valuation framework, in order to avoid potential double counting.

### Choice of market risk metric and calibration to stress conditions

UniCredit is conceptually comfortable with the proposed revisions of the market risk metric by means of merging normal and stressed VaR into Stressed ES and the usage of 97.5% confidence level.

At the same time, by delivering a stressed calibration that relies on a reduced set of risk factors, banks and regulators may end up assessing the relevance of the risk factors based upon the availability of long enough time series, rather than on the actual portfolio composition and the resulting risk profile.

Indeed, through the scaling-up of the stressed ES (by the ratio of the current ES using the full set of risk factors and the one obtained using the reduced set) the regulatory capital could potentially be driven by risk measures that are not really representing the risk characteristics of the portfolio.

Indeed, the implications of the requirement to have a reduced set of risk factors used for stressed calibration with a minimum observation history of 10 years seems again to outweigh any additional gain in precision, while possibly leading to the unintended consequence of neglecting recent financial crisis simply because risk factors affected do not feature long enough time series (e.g. interest rate tenor basis).

All in all, we would rather prefer relaxing such requirements for a minimum observation history for modellable risk factors while at the same time requiring greater alignment with the complete set of current relevant risk factors also for stressed calibration purposes. We deem that setting the beginning of the calibration window to the first outburst of the subprime crisis in Summer 2007 would allow to base the calibration itself on a richer risk factors set, without any loss in term of capability of predicting potential large losses.

In general, we are concerned that too many risk factors could be considered non-modellable based on rigid requirements. On this respect, uniform risk factors classification across the various jurisdictions must be ensured to prevent level playing field issues.

In addition, it is unclear to which extent “proxying” would be allowed under the new framework. Indeed, proxy mapping is key in order for banks to conservatively assess the risk arising from less liquid positions under realistic market scenarios.

Last, the proposed aggregation methodology of modellable risks is perceived as the most controversial aspect of the proposed set-up, at least from UniCredit standpoint. Indeed, UniCredit made significant efforts in order to properly capture hedging and diversification effects by moving to full valuation re-pricing, based upon a common pricing infrastructure between F/O and Risk systems and covering all the relevant risk factors affecting the valuation of the portfolio by means of specific risk factors. Banks that already made these type of investments should be allowed to preserve the related value, by applying a higher  $\rho$  (i.e. relative weight assigned to a bank’s internal model).

### Model approval process

In general, the use of a model independent assessment tool for desks follows a general theme of back stopping models-based capital. In addition, we caution the use of a flat threshold on a quantity similar to the Basel III leverage ratio for the purpose of evaluating the robustness of a model of desk-level market risk.

Indeed, by using desks’ consolidated assets as exposure measure to be contrasted to the desk-level regulatory capital introduces a large dependence on the determination of such asset amount, as identified in the cited RCAP exercise. To our knowledge, no simple asset amount can provide a relation to the assets riskiness – not even within a single trading desk.

In addition, because of the way the model independent assessment tool has been designed, it could potentially penalize, by applying conservative capital add-ons, trading desks for which the model performance is deemed satisfactory. In fact, there could be the case that a model

performance is deemed satisfactory based upon P&L attribution and back testing analysis, however it could nevertheless result in breaches of the defined threshold just because the trading desks are engaged in trading strategies / asset classes not particularly affected by the stressed calibration window selected at the overall portfolio level and driving the regulatory capital calculation.

On the same note, the methodology for the back-testing and P&L attribution needs further clarifications, in particular it should be clarified whether back testing exceptions should be measured against actual or theoretical P&L. Indeed, in the comparison between risk-theoretical and actual P&L, several factors affecting market prices (especially during financial distress - e.g. liquidity drains) could influence the performances of the tests, but not necessarily signal any specific modelling issues.

In addition, the second consultation paper omits the remediation period for desks not fulfilling back-testing and P&L attribution requirements. This should be added again.

#### Relationship between the standardized and internal model-based approaches

In general, requiring mandatory calculation of the standardised approach by all banks implies considerable implementation and maintenance costs and efforts to build a parallel system that it would have no other use or benefit than regulatory capital calculation.

In general, because of the way in which the FRTB has been conceived, internal models, benefiting of several years of use-testing, validation and scrutiny, will be simply replaced by one off models that would not be subject to the same daily controls and level of scrutiny.

Concerning the proposal to disclose through Pillar 3 both internal model and standardized figures, it is our view that the public disclosure of the two measures would in the end lead the analysts and the overall financial community to look only at capital ratios calculated according to the standardized approach because they are deemed easier to be understood and compared across bank. In the end, this will cause a drop of attention of the overall financial community towards internal risk measures, discouraging new investments/developments in this area. To avoid this and to reach the objective of higher RWA transparency, an improved Pillar 3 disclosure standard should be pursued to allow for a better understanding of internal risk measures. As stated in the Executive Summary, in order to enforce greater consistency and comparability of capital levels across different jurisdictions, UniCredit is in favour of disclosing, on a regular basis, model results on a set of standardized hypothetical portfolios.

#### Revised internal model-based approach

The proposed accord text does not clearly set an aggregation rule for capital charges.

Paragraph 192 defines the "aggregate capital charge for those desks eligible for the internal models approach" as simply the sum of "aggregate capital charge for modellable risk factors (CA,M)", "capital requirements for non-modellable risk factors (CA,U)" and the "charge for incremental default risk".

In contrast, paragraph 189 defines the "aggregated charge associated with approved desks" as

$$C_A = \max\{IMCC_{t-1} + SES_{t-1}, m_c \cdot (IMCC_{avg} + SES_{avg})\}$$

as one input for the "aggregate capital charge for market risk" defined as

$$ACC = C_A + IDR + C_U$$

in paragraph 194. Both statements are in contrast with respect to the application of a maximum function (last AOD vs. average) on the sum of CA,M and CA,U (IMCC and SES, respectively) and the attribution of the IDR charge to the approved desk capital charge or as a standalone part of the aggregated capital charge for market risk.

**Contact people** ([name.surname@UniCredit.eu](mailto:name.surname@UniCredit.eu))

Please find below the list of the key people involved in this work, whose contribution made possible to coordinate and provide UniCredit answers to this Consultation. Some other experts have been involved in UniCredit, but are not listed below.

**Coordination Team and Reviewer****European and Regulatory Affairs / Public Affairs**

Costanza Bufalini – Head of European & Regulatory Affairs

Micol Levi – Head of Regulatory Affairs

Andrea Mantovani – Regulatory Affairs

**Contributors****Group Risk Management (Key Contributor)**

Maurizio Francescatti – Head of Group Financial Risks

Andrea Cesaroni (\*) – Head of Group Risk Methodologies & Architecture

Lorenzo Liesch – Head of Risk Methodologies

**CIB**

John Spillane – Head of Risk Development and Analysis Markets

Cengiz Altuntas – Risk Development and Analysis Markets

Robert Schulze – Risk Model design

**Capital Management**

Maurizio Cravero – Head of Capital Management

Giuseppe Rapisarda – Head of Capital Optimization

Antonietta Volgarino – Capital Optimization

**International Institutional Relations / Public Affairs**

Serena Massimi – Head of International Institutional Relations

Pietro Berte' – Head of Relations with Multilateral Organizations

Emma Caracciolo – Relations with Multilateral Organizations

(\*) Main contributor and coordinator in Group Risk Management