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For publication

UniCredit reply to the EBA discussion paper on "Future of the IRB Approach"

UniCredit is a major international financial institution with strong roots in 17 European countries, active in approximately 50 markets, with over 7,500 branches and over 130,000 employees. UniCredit is among the top market players in Italy, Austria, Poland, CEE and Germany.

Main Highlights

Internal models for risk calculation are at the moment exposed to a rigorous scrutiny by global and European authorities. The observed lack of comparability and the high variability of the risk-weighted assets (RWA) calculated by the banks through Internal Ratings Based (IRB) approaches have involved global and European regulatory Bodies in an international debate, which questions their validity and reliability.

Being skeptical about the effectiveness of IRB models, the Basel Committee on Banking Supervision (BCBS) has consequently embarked on a RWA variability agenda, which includes the revision of the standardized approach for credit, market and operational risk and the introduction of permanent capital floors, based on revised standardized model outcomes. Likewise, the European Banking Authority (EBA) started a range of discussions aimed at detecting and dealing with the causes of the divergences of model outputs across banks: in this regard, on March 4th, the discussion paper "Future of the IRB Approach" was issued, which UniCredit is pleased to reply to.

UniCredit is concerned that the proposed revision by the Basel Committee could lead to the unintended consequences of even dismantling the IRB models, rather than to their revision. For this reason, overall, UniCredit welcomes the EBA's discussion paper, which aims at solving the abovementioned issues without compromising the use of IRB models, which have proven to be the most effective approach for the assessment of risk-sensitive capital requirements.

Moreover, UniCredit appreciates the rationale underlying these discussions: IRB models should not be "destroyed", because they incentivize banks to implement, maintain and progressively fine-tune sound risk management practices, fundamental for the acknowledgement of the real level of risk intrinsic in their assets.

However, as largely discussed by the EBA, this approach does not imply an uncritical apologia of IRB models: given that they have often resulted in incomparable outcomes and the acknowledged divergences are not always justifiable, UniCredit agrees on the need for the detailed clarification of the methodology and of the elements underlying the definition of IRB approaches. The EBA addresses this issue from two different, but complementary, perspectives: the identification and adjustment of the inconsistences of the internal factors of the IRB models (e.g. different definition of defaults, parameters calibration, treatment of low defaults portfolios) and the convergence of the supervisory practices and methodologies applied by the competent authorities throughout Europe.

Regarding modelling inconsistences, UniCredit agrees that IRB models, being internally developed by definition, have been tailored by banks based on national specificities, bank risk profiles and internal methodologies and this customization may be one of the main causes for models discrepancies. Therefore, UniCredit is overall in favour of addressing those differences, properly taking into account the high operational costs and an adequate timeline of the review. Moreover, a certain level of diversity should be



tolerated to properly take into consideration jurisdictional peculiarities.

In particular, with reference to geographical differences, UniCredit would like to stress that any change in the regulatory framework should be implemented properly taking into account the impact on cross-border banking groups, like UniCredit, which encompasses also banks not belonging to the European Union and/or to the Euro zone (namely being not all covered by the CRR and/or by the Single Supervisory Mechanism framework).

As correctly recognized by the EBA, the second main source of divergences among IRB calculated RWA across banks is the lack of convergence among supervisory practices and methodologies. Both the validation process and the monitoring of the IRB models can be affected by non-homogenous practices applied by local supervisors. UniCredit is indeed aware of this issue and is promoting an increasing convergence of supervisory practices. From this perspective, UniCredit is strongly in favour of the establishment of the Single Supervisory Mechanism (SSM), being the harmonization of the supervisory practices across Europe one of its main targets.

In conclusion, UniCredit shares the EBA's points of attention and endorses that it is crucial to promptly address the two identified macro-sources of variance in RWA (i.e. internal model factors and discrepant supervisory practices). However, UniCredit is concerned that the commitments of the regulatory authorities involved in the revision of the RWA might be not adequately and sufficiently coordinated, driving to inconsistencies and/or duplication of efforts over time.

From this perspective, given the scheduled revision of the standardized approach for credit, market and operational risks and the introduction of capital floors by Basel Committee, UniCredit underlines the importance that the review of the IRB models as per this discussion paper, as well as other consultations issued by the EBA, takes duly into account, and somehow factor-in, the debates promoted also by other regulatory bodies, such as the Basel Committee.

European banks have significantly invested in the IRB models over the last years and see the merit in improving their internal models by reducing unjustified RWA divergences. It is important however that any regulatory intervention, at EU and global level, is well coordinated in order to avoid a quick succession of material changes to internal models, even not necessarily driven by the same assumptions.

Answers to specific questions

1.The proposed prioritisation of regulatory products is based on the grouping of such elements that in the EBA's view can be implemented in a sequential manner. Do you agree with the proposed grouping? If not, what alternative grouping would you suggest?

UniCredit agrees with the proposed grouping of regulatory products. However, given possible impacts of a CRM revision on LGD, the guidelines on the former should be issued before the guidelines on LGD, in order to take in proper consideration the final CRM criteria. The possible impact of CRM on LGD estimation has anyway been recognised in the paper as well (at page 17 paragraph 29 lays down that "*Phase 4 is focused on the mandates related to CRM framework. As the regulatory developments in this area may also impact to some extent the estimation of risk parameters, in particular LGD, a 1-year implementation period for institutions is envisaged in order to align the time of final implementation of the changes with the deadline for the modification of rating systems and risk parameters").*

Besides, since the grouped elements are highly interconnected and influence each other, the priorities should be assessed having a clear picture of all those aspects discussed in the paper (e.g. the treatment of low default portfolios, the harmonisation of asset classes between Standardised and IRB approach and maximum coverage of PPU), in order to allow institutions to define a precise time-schedule and to prevent the need for subsequent refinements to recently reviewed models.

2.What would you consider the areas of priorities?



From a general perspective and as mentioned in the Main Highlights, UniCredit believes that it is fundamental that the EBA endorses the retention of a risk-sensitive framework, such as the IRB approach. Moreover, it is important that the EBA and other relevant European authorities fully pursue the coordination at legislative level with the Basel Committee, fostering comparability and harmonisation also at global level. If these standards were adopted only at European level, the wider goal of reducing RWA variance across the financial system would be indeed jeopardised and only partially achieved.

Although all the issues discussed in the Discussion Paper are crucial, in UniCredit's understanding, the "areas of priority", intended as those which have the highest expected impact on IRB models, are: the **Definition of Default**, since it materially affects the estimation of all the credit risk parameters; **Downturn LGD** and **Treatment of defaulted assets** are noteworthy topics as they are linked to IFRS9 that will come into force at the beginning of 2018.

In addition, with regard to the issues directly dealt with in the Discussion Paper (DP) and grouped in four phases, UniCredit disagrees with the prioritization assigned by EBA and would differently sort the areas, **putting CRM before the Regulatory Technical Standard/Guidelines for parameters estimation**. Although in the paper it is clearly stated that EBA does not intend to radically change the CRM framework, any refinement might anyway have an impact on LGD, hence jeopardising the efficiency of the efforts made for the revision of parameters modelling within the IRB framework.

3.Do you consider the proposed timeframe reasonable? In particular do you consider reasonable the proposed timeline for the implementation of the changes in the area of:

- a. definition of default;
- b. LGD and conversion factor estimation;
- c. PD estimation;
- d. treatment of defaulted assets;
- e. CRM?

Looking at the proposal of timeline for **Priorities** and their **Implementation**, in UniCredit's view the prioritisation plan should be set up by taking into duly account the fact that the requested adjustments mutually affect all the perimeters (and roll-out plans).

The overall **timeline** proposed by the EBA seems to be overly ambitious and barely feasible. The intervention areas that the EBA intends to cover in the future releases of technical standards are likely to take longer than predicted, also in light of the potential material impacts on implementation phase, processes and modelling. In particular, the revision of the default definition will likely lead to the subsequent need for a complete review of all models, whose impact will depend on the materiality of changes to the population of defaulted customers after the implementation of the revised threshold and of the updated definition of the forborne exposures. Moreover, the guidelines that will be issued with the purpose of setting new and common standards could diverge from approaches and methodologies currently adopted by institutions: depending on these divergences, banks may have to refine or even to completely re-develop their models. In light of these points, compared to the timeline proposed by the EBA, it is UniCredit opinion that **a minimum of five years will be needed**.

4.Are there any other aspects related with the application of the definition of default that should be clarified in the GL?

UniCredit's main concern is the treatment of **Technical Past Due**. Bank of Italy requires to consider such positions as performing for modelling purposes, while for Regulatory Reporting and Accounting they are reported as defaulted exposures. This requirement, not directly disciplined by European regulation, determines **a structural misalignment between Modelling**, **Regulatory Reporting and Accounting Figures**, with a material impact in terms of credit risk parameters estimate and regulatory capital and RWA quantification.

The application of **Technical Past Due** rules leads to **a lower estimated PD** and to **a higher LGD** on performing portfolio, with significant effects on the measure of risk weighted assets, as well as of the



expected loss on past due exposures. Consequently UniCredit strongly recommends to define a homogeneous set of rules within the **Guidelines on Application of the Definition of Default,** providing a clear and straightforward set of information about all the aspects (**return to non-defaulted status** and **multiple defaults events**) regarding technical defaults.

Then, it should be specified how to deal with local legislative contexts in case of misalignment.

Furthermore, with reference to paragraph 33 of the DP, different application of the qualitative indications of default can be allowed given the particular market or legal conditions in the national jurisdiction. This is the case of Italy where there is a different treatment of a debtor belonging to 'Public Sector', 'Central Governments' or 'Central Banks'. When these debtors (classified Past Due >90dd) make a payment for at least one of their overdue credit lines, or in case of specific legislative measures aimed at temporarily interrupting the collection of receivables, they cease to be classified as Past Due.

With reference to paragraph 34 of the DP, UniCredit agrees with the alignment of the "Forborne Non Performing" exposures, since in some jurisdictions, can be considered as Performing for local regulatory purposes.

5.Do you have experience with adjustments of historical data? What are the methods that you used to adjust historical data, including both internal and external data?

Within UniCredit, adjustments of historical data have been already experienced.

In Italy, in 2012 UniCredit performed backward reconstruction of past due on historical data, which, in addition, was subject to a modification of the number of days, from the transitory 180 days to target 90 days.

Moreover in Croatia, adjustments of historical data were performed due to the change of default definition within the period underlying the long run default rate used for calibration purposes. In detail, the Development Function decided to adjust default rates calculated according to the old definition in order to ensure their alignment in terms of detected riskiness with the newly defined ones. For the comparison of previous and current default definition, a period when both default books were available was used. Hence, for the period subject to analysis the average percentage variation observed between old and new definition has been calculated, and the resulting correction factor has been applied to the default rates as per the old definition.

6.To what extent is it possible to adjust your historical data to the proposed concept of materiality threshold for the purpose of calibration of risk estimates?

UniCredit's expectation is that the backward reconstruction of the new definition of default, set out by the EBA, could be onerous, especially with reference to the implementation. Furthermore, the burden of the reconstruction activity will depend on the Guidelines on Application of the Definition of Default that will be issued by mid-2016.

Moreover, other criticalities could arise with regard to the refinement of LGD with the aim at including the reconstructed default definition, because of the misalignment between the backward-simulated event and the collection process actually performed in the past on non-performing exposures.

7.What is the expected materiality of the changes in your IRB models that will result from the proposed clarifications as described in section 4.3.2?

The expected changes are material mainly with regard to the treatment of **multiple default**, as it could affect cure rate for **LGD calibration** and **PD estimation**. However, only when the EBA Guidelines on all the topics mentioned in section 4.3.2 are available, it will be possible to have an increased awareness of the materiality of change.

8.Do you consider the direction of the proposed changes adequate to address the weaknesses and divergences in the models across institutions?

UniCredit agrees that the proposals reported in section 4.3.2 allow to address models weaknesses and divergences across institutions. However, UniCredit suggests to include topics related to process design



within the future GL, given the highly material impacts that processes can have on the overall internal risk measurement approaches.

Some general standards on internal processes (e.g. origination, underwriting, monitoring, soft collection, restructuring and workout) should be provided, in order to grant a better use and quantification of the internal parameters. These topics are not fully addressed within the current IRB framework.

9.Are there any other aspects related with the estimation of risk parameters that should be clarified in the EBA guidelines?

UniCredit deems important to underline the need to have straightforward and clear guidelines, describing in detail modelling, processes and IT architectural aspects, in order to ensure a really homogenous and consistent implementation of IRB approaches amongst different jurisdictions.

Moreover, based on its experience, UniCredit believes that the EBA should provide particularly detailed instructions about the following topics: quantification and application of the margins of conservatism, treatment of disposed distressed exposures within LGD quantification, as well as the inclusion of cash inflows coming from collateral or guarantee within the observed LGD defined as target for estimation purposes.

10.Do you have dedicated LGD models for exposures in default that fulfil the requirements specified in section 4.3.4.(ii)?

Overall, UniCredit agrees with the inclusion of vintage and previous proceeds for defaulted assets LGD estimation. In this regard, within UniCredit internal experience, these drivers are evaluated and their inclusion will be, among other factors, considered within the future new development standards foreseen by the methodological stream of internal Risk Governance Project.

11.Do you consider the direction of the proposed changes adequate to address the weaknesses and divergences in the treatment of defaulted assets across institutions?

UniCredit agrees that the proposals reported in section 4.3.3 will allow to manage the weaknesses and divergences in the IRB models across institutions.

12.What else should be covered by the GL on the treatment of defaulted assets?

From UniCredit's point of view, there are no further topics to be mentioned into the DP.

13. What are the impacts for the institutions that should be considered when specifying the conditions for PPU and roll-out?

As regards the permanent or temporary use of the Standardized Approach, UniCredit deems appropriate to renew the same assumptions and the general considerations made for the Consultation EBA/CP/2014/10¹. UniCredit believes that, before introducing additional and more stringent regulation on PPU, the following aspect should be addressed by Regulators in order to guarantee a level playing field:

a) PPU Threshold and IRB coverage requirements: the threshold should be flexible, in order to properly take into consideration the efforts needed to develop and maintain additional rating systems in each specific situation. This is particularly important for banking groups complex and geographically diversified like UniCredit, with many subsidiaries and portfolios to cover. Moreover, in UniCredit's opinion, a fixed threshold could give unintended importance to non-core portfolios – in case their contribute is needed in order to meet the requested coverage – leading the bank to develop models even despite objective limitations or, in extreme cases, even to take strategic decisions on asset disposals. For the reasons above, UniCredit deems appropriate the use of

¹ Consultation Paper for the Draft regulatory technical standards on the sequential implementation of the IRB Approach and permanent partial use under the Standardized Approach under Articles 148(6), 150(3) and 152(5) of Regulation (EU) No 575/2013 (Capital Requirements Regulation– CRR)



flexible limits, leaving to the Competent Authorities the discretion to apply different thresholds in order to take into proper consideration the specificities and the complexities of each institution and to prevent the development of model on minor portfolios aiming at the mere meeting of minimum coverage.

b) Geographic footprint: UniCredit subsidiaries are located in different jurisdictions, also including countries outside the European Union (as Turkey, Russia and Serbia), which do not apply the EU regulation (CRR/CRD) and whose IRB Regulatory frameworks, if present, are not always aligned with EU ones, in terms of contents and timing. Therefore, a clear guidance is needed in order to clarify how PPU and roll-out plan requirements have to be applied within banking group with a widespread geographical presence.

14.Do you expect that your organisational structure and/or allocation of responsibilities will have to be changed as a result of the rules described in section 4.3.5?

The expected impacts of the updates under discussion are the assignment of the Pillar 1 stress test tasks (as well as the relevant control) within the organisational chart of the Bank. Moreover, as already mentioned in the EBA consultation paper on IRB assessment methodology (i.e. EBA/CP/2014/36), it should be clarified what is meant for 'Institution' – namely, either the whole Banking Group or the single Legal Entity - in order to evaluate the independence of validation function.

15.Do you agree that CRM is a low priority area as regards the regulatory developments?

As clearly stated in the DP, the EBA considers CRM as a relatively low priority area, since the authority does not aim at radically changing the existing framework.

Having said that, UniCredit would like to stress that, overall, CRM is definitively a high priority area with regards to the regulatory developments as, in addition to the internal collateral management process, it heavily affects LGD modelling. Consequently, providing clearer rules on CRM represents a further necessary step in order to overcome the issue of unjustified RWA divergences.

16.Are there any other significant intra-EU or global discrepancies?

As abovementioned, a cross-border group like UniCredit is particularly susceptible to regulatory intra-EU or global discrepancies, since they might create misalignments even inside the Group itself that would prove to be complicated to manage in the daily practice. UniCredit encompasses also financial institutions not located within the Euro area (hence not subject to SSM) and others which are out of European Union (and which are not subject even to CRR and the EBA's standards and guidelines). For this reason, UniCredit would like to attract the EBA's attention on the potential complexity of any change in the internal models for cross-jurisdictional banking groups.

17.Do you agree that the area of disclosures needs to be strengthened, in particular with regard to disclosures related with the benchmarking exercise, for instance by publishing them on the EBA website?

UniCredit is strongly supportive of a better disclosure as a fundamental tool to address the issue of RWA comparability and consistency because it clarifies and substantiates differences in RWA among peer banks. The review of **Pillar 3 disclosure** obligations initiated in June 2014 suggests that the BCBS and the Industry have a common belief that the current framework can be improved. UniCredit believes that progress undergoing in Pillar 3 disclosure requirements are in the right direction:

- uniform templates across all banks for Pillar 3 disclosure;
- clear and uniform criteria for commenting disclosed data;
- common guidelines for timing and publication of Pillar 3 reports.

For what concerns the **benchmarking** exercise, despite supporting its regular performance, UniCredit has some concerns about the idea of making the outcomes publicly available, and would rather have the Regulator as their single and only addressee. The benchmarking exercise is indeed built on a hypothetical



portfolio that is not necessarily representative of the actual Bank business. The publication of the outcomes might lead to an inaccurate comparison among banks with different business models and portfolio mix. Moreover, the outcome of the benchmarking exercise is very detailed and requires strong technical skills to be fully understood by third parties, still contributing to spread confused and misleading information for professionals with limited credit risk background. Furthermore, in UniCredit's opinion, this excess of information could even jeopardise the trust in the outcomes of banks internal model, due to the lack of a direct and easy comparison with Pillar 3 figures.

Lastly, UniCredit would like to take this opportunity to stress that it firmly disagrees with the BCBS's proposal to disclose, in addition to IRB-based calculation, also the ones determined according to standardized approach. This requirement may generate negative consequences as the market would likely end up looking primarily at capital ratios calculated according to the standardized approach, which is easier to understand and compare. In this regard, a simpler approach would prevail to the detriment of risk accuracy with unforeseen consequences on market behaviour, not to mention the additional costs, including those related to the infrastructure investments needed for the reporting.

18.Would you support EBA Guidelines targeted at disclosure requirements related with the IRB Approach and taking into consideration the proposals of the Basel Committee on those requirements? Which current disclosure requirements should be given the priority? What should be the timetable for such Guidelines?

UniCredit looks favourably upon a wide disclosure to market participants, encouraging a higher degree of transparency through a clear and harmonised taxonomy. However, in order to reduce the operational burden of a review of the disclosure framework, it would be helpful to base new requirements on existing figures. In light of this, UniCredit believes that the new disclosure scheme should rely on existing COREP/FINREP (or on other equivalent existing data sources).

19.Would you like to see any modification of the reporting framework implemented in terms of IRB exposures?

Only when the EBA Guidelines on all the topics mentioned in section 4.3 are finalized, it will be possible to have higher awareness about the need of potential amendments to the supervisory reporting (COREP) framework. In this regard, the EBA itself acknowledges that the amendments to the supervisory reporting framework will be likely introduced at the end of the process, once specific regulatory deliverables, as described in Section 4.3, are finalized.

20.What would you consider an appropriate solution with regard to the definition and treatment (modelling restrictions) of the low default portfolios?

With regard to the **identification** of low default portfolios (LDP), UniCredit deems that a common methodology should be defined, basing on qualitative and quantitative evidences (mainly number of defaults and portfolio size, since these figures determine the possibility of developing robust statistical analyses and models), regardless the asset class, as stated in §163. In particular, UniCredit strongly disagrees with the concept reported in §161 "[...] *as a general rule also those corporate that do not classify as SME should be considered LDP*". Empirical evidences highlight that a material share of Corporate Asset Class (above a turnover of 50 \in /Mio., which represents the threshold between Corporate and SME Corporate) is actually a high default portfolio. In this regard it should be noted that also the EBA Benchmarking pursuant to Art. 78 of the CRD IV foresees a higher threshold (200 \in /Mio.) for the differentiation between Corporate and Large Corporate, implying the classification of the first segment as high default portfolio.

Concerning **modelling restrictions**, even recognizing the intrinsic challenge of estimating statistical models on low default portfolio, the adoption of internal models (both for PD and LGD) is to be supported due to the following considerations. Firstly, models contribute to internally develop structured and reasoned expertise in different functions/processes of a bank (i.e. model development and validation,



rating assignment, credit underwriting, monitoring and reporting). Focusing on rating assignment and underwriting processes, it is our belief that models would guide the analysts by tracking the assessment steps and figures, and by avoiding an "automatic pilot" approach via external ratings.

Secondly, internal models limit the reliance of a bank internal risk processes on external inputs. For instance, internal models allow for prompt adjustment of internal ratings, based on internal monitoring process outcomes, independently from the actions taken by external rating agencies. As evident, this may have broad effects on risk related internal processes apart from regulatory reporting, such as risk appetite, risk based pricing, provisioning, credit portfolio models and economic capital.

Finally, with specific regard to Sovereign internal rating, it has to be highlighted that it generally represents an input for other internal rating models (e.g. banks, financial institutions, large corporates) and this makes preferable to have an internal parameter built with a homogeneous methodology instead of external ratings (based on different methodologies).

Therefore we are definitively **not in favour of the adoption of Standardized Approach for LDP**, as well as of the adoption of exogenous regulatory PD and LGD models, which could potentially trigger "herd behaviour".

In this regard UniCredit deems that it would be useful to set up a banking system pooled database, in order to allow banks to benefit from wider availability of data.

21. How would you ensure appropriate use of the IRB Approach in a harmonised manner without excessive concerns of the so called 'cherry picking'?

Concerning the authorization to use the PPU, UniCredit suggests to outline qualitative criteria that do not enable to select some exposures in order to allocate them into asset classes only to reach the gains based on convenient treatment. Therefore these criteria should be established on the characteristic of the facility considering, for example, the transaction juridical features or the contract aims (like exposures in expiring Business unit). Further, these aspects should be valid in every Legal Entity and for every Approach, independently from the geographic/economic/industry related aspects, so that the IRB Approach could be applied in a harmonized way across different institutions in the same Group and all over the banking system.

22.Do you see merit in moving towards the harmonisation of the exposure classes for the purpose of the IRB and the Standardised Approach?

UniCredit welcomes the proposed approach, which has the merit to clearly define the threshold proposed in the Consultation Paper EBA/CP/2014/10 and to avoid possible arbitrages in the treatment of exposures between the two different approaches: this intervention could also lead to define clear qualitative criteria for the application of PPU treatment, as suggested in Q21.

23.Would the requirement to use TTC approach in the rating systems lead to significant divergences with the internal risk management practices?

UniCredit agrees on the adoption of TTC IRB System for RWA quantification, ensuring stability of the capital requirement. This being said, UniCredit points out that for some managerial uses (e.g. IFRS9, satellite models for stress testing, RAF and other managerial aspects) the PIT framework is required. Therefore strict constraints in using a TTC approach could lead to some divergences in risk management practices.

24.Do you agree that the possibility to grant permission for the data waiver should be removed from the CRR?

Generally speaking, UniCredit does not agree with the removal of the grant permission for the data waiver from the CRR, especially for smaller banks in which the implementation of proper data warehouse is rather recent.

25.Are there any other aspects of the IRB Approach not discussed in this document that should be



reviewed in order to enhance comparability of the risk estimates and capital requirements?

UniCredit does not have any further specific points.

Other comments

- **§13 (page 10)** The importance of a fixed schedule for the proposed updates should be underlined in order to allow institutions to define promptly an action plan. The sooner the schedule will be available, the better will be.
- **§27** As already pointed out within the answer to question 20, as well as on the occasion of the Consultation on the RTS on IRB Assessment, it should be clarified if "institutions" shall be intended at single Legal Entity or Group Level.
- § 169 Actually the situation described in this Paragraph could occur for High Default Portfolio (HDP) as well. For instance, cases of portfolios object of run-off where no sufficient information is available for modelling purposes and whose recovery would be "unduly burdensome" in light of the run-off strategy in place.



CONTACT PEOPLE (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 alongside the UniCredit Group, but are not listed below.

COORDINATION TEAM

GROUP INSTITUTIONAL & REGULATORY AFFAIRS

Ms Costanza Bufalini – Head of European & Regulatory Affairs Ms Micol Levi – Head of Regulatory Affairs Mr Francesco Manenti – Group Institutional & Regulatory Affairs Mr Andrea Mantovani – Regulatory Affairs Ms Alessandra Maria Martini – Regulatory Affairs

CONTRIBUTORS

Group Risks Modelling & Governance - Group Risk Management (Key Contributor)

Ms Giovanna Compagnoni – Head of Group Risks Modelling & Governance Mr Matteo Crippa – Head of Group Wide Rating Modelling & Governance Mr Paolo Vitali – Head of Group Basel Program Management Mr Davide Boselli – Rating Governance and Advisory (GRM dept. coordinator and contributor) Ms Giada Di Anna d' Anchise – Rating Governance and Advisory Ms Silvia Tanzini – Rating Governance and Advisory

Group Internal Validation - Group Risk Management (Key Contributor)

Ms Lucia Ghezzi – Head of Group Internal Validation Ms Chiara Francesca Capelli – Head of Local Credit Risk Validation Mr Vincenzo Mole' – Head of Group Wide Credit Risk & Architecture Validation Mr David Latini – Western Corporate Validation Mr Tommaso Magenta – Western Retail Validation

Capital Management - CFO

Mr Maurizio Cravero – Head of Capital Management Mr Francesco Montanari – Head of Capital Optimization Ms Antonietta Volgarino –Capital Optimization