Just in Time

Guidelines on CRM for Banks Applying the A-IRB

EBA/GL/2020/05

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At a Glance

01

Introduction

Introduction 1/3

- It is of paramount importance to support a **clear and consistent** implementation of the **legislation** across institutions and jurisdictions in the EU. Given the need to secure a **level playing field** and a **risk management-sensitive approach** for financial institutions, avoiding regulatory arbitrage and **fostering comparability of capital requirements** become crucial.

- Therefore, increased clarity of the **credit risk mitigation (CRM) framework is considered an integral part and last phase of the IRB review** outlined by the EBA work program. This program consists of:
  - reviewing supervisory practices;
  - harmonizing the definition of default;
  - providing more clarity on modelling approaches (PD, LGD and defaulted exposures, downturn LGD) to be used;
  - reviewing the CRM framework.

- **These EBA guidelines aim to clarify the CRM framework in the context of A-IRB approach**. They thereby complement the report on the credit risk mitigation framework, which was focused on the Standardised Approach (SA) and the F-IRB approach (EBA Report on the Credit Risk Mitigation - CRM - Framework, 19 March 2018). For exposures to which an institution applies the A-IRB approach, **the institution may use CRM in accordance with Part Three, Title II, Chapter 3 of the CRR** (Regulation (EU) No 575/2013).

- **These guidelines apply from 1 January 2022**. Institutions should incorporate the requirements of these guidelines in their rating systems by that time, but competent authorities may accelerate the timeline of this transition at their discretion.

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- The CRR, in Article 4(57), defines CRM as a "technique used by an institution to reduce the credit risk associated with an exposure or exposures which that institution continues to hold". **Typically, the effect of CRM results in either the reduction of the risk weight or the reduction of the exposure value associated with the exposure**.

- **CRM methods are also employed** for the determination of **large exposures** under the large exposures' framework.

- Institutions are required to disclose information on CRM under **Pillar 3**.

- Institutions are required to manage the **residual risk and concentration risk** arising from the use of CRM techniques under the ICAAP, which will be assessed by competent authorities as part of the SREP, i.e. Pillar 2.

- **The CRR classifies CRM techniques as funded credit protection (FCP) and unfunded credit protection (UFCP). The fundamental difference between the two types of protection lies in the type of risk the protection receiver is exposed to**. In the case of FCP, the lending institution bears the risk that the collateral received deteriorates in value, resulting in lower protection, while in the case of UFCP, the lending institution bears the risk that the protection provider is not able to pay upon default of the obligor.

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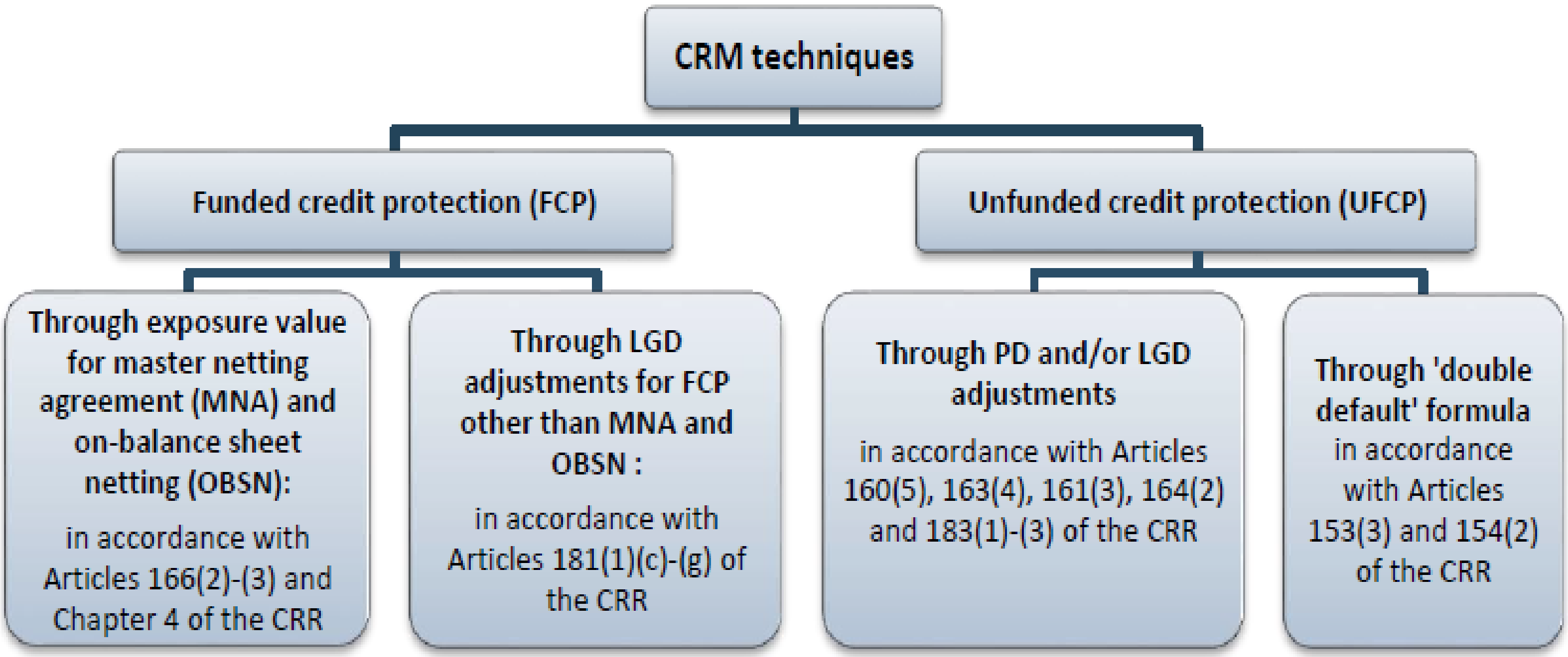
Here following is **a mapping of the articles in Chapter 3 of the CRR** detailing the provisions for the eligibility and methods of CRM at institutions' disposal for exposures under the A-IRB approach.



Source: EBA/GL/2020/05

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Funded Credit Protection

Eligibility and Effects of Credit Risk Mitigation

FCP - Eligibility and Effects of Credit Risk Mitigation 1/4

Eligibility requirements for FCP

- Eligibility criteria for A-IRB institutions are less restrictive than those established under the SA or F-IRB approach*. A broader eligibility of CRM techniques is allowed provided that institutions can adequately reflect their effects in the LGD estimates.

- The general eligibility principles regarding the legal certainty and collateral valuation are to be apply to all types of collaterals used for the LGD estimation:
  - the collateral agreement must be **legally effective** and **enforceable** (i.e. ensuring the power of the creditor to enforce the realization of the collateral);
  - the rules regarding the **revaluation of the collateral** must be consistent for each type of FCP and specified in the internal policies of the bank;
  - **more frequent monitoring** should be carried out where the market is subject to significant changes in conditions.

* *Considering the requirements provided by «EBA Report on the Credit Risk Mitigation (CRM) Framework» - EBA 19 March 2018*

FCP - Eligibility and Effects of Credit Risk Mitigation 2/4

Legal certainty requirements

- Internal requirements for the legal certainty and the assessment of credit protection should be consistent with the CRR principles expected for the relative types of collateral*.
- Institutions should provide a legal opinion confirming the legal effectiveness and enforceability of the FCP in all relevant jurisdictions.
- This should be:
  - provided in a **written form** by a legal counsel independent of the credit process;
  - provided at least **for each type of collateral arrangement or any substantive variation of this** (it can be valid for several agreements if it concerns to the same applicable law and the same type of obligors);
  - provided **for all the jurisdictions where it is most likely that the realization of the collateral would be carried out** (it is possible to have a single legal opinion in the presence of international regulations).

** for more details regarding the requirement for the different types of collateral please see Regulation (EU) No 575/2013 of the European Parliament (articles from 207 to 212).*

FCP - Eligibility and Effects of Credit Risk Mitigation 3/4

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Effects of Funded Credit Protection (FCP)

1 Through exposure value for master netting agreement (MNA) and on-balance sheet netting (OBSN)

The effects of MNA and OBSN should be **recognized directly in the exposure value (E*)**, in accordance with Regulation (EU) No 575/2013;
MNA: article 220 (3) or article 221(6)
OBSN: article 223 (5)

2 Through LGD adjustments for FCP other than MNA and OBSN

The effects of FCP other than MNA and OBSN may be **recognized in the institutions' LGD estimates**. in accordance with article 181 (1) (letters from "c" to "g") of Regulation (EU) No 575/2013 and the Guidelines on PD and LGD estimation

LGD realised* = **ECONOMIC LOSS** (E* - recoveries) / **E*** (included any amount of principal, interest or fee realized and no cash flows from netting)

** Formula provided by: "Guidelines on PD estimation, LGD estimation and the treatment of defaulted exposures" - EBA/GL/2017/16*

FCP - Eligibility and Effects of Credit Risk Mitigation 4/4

Just in Time

Criteria on the **adjustment of LGD estimates** (in accordance with Article 181(1) of Regulation (EU) No 575/2013):

- a reduction in the LGD estimate is not expected when the collateral is a liability of the obligor who is in a lower (or equal) rank than the obligation that the obligor has towards the institution;
- for credits other than first degree, the rank of subordination of the collateral is considered;
- for other physical collateral, the likely location of the collateral during the lifetime of the loan and the influence it may have on the potential inability of institutions to quickly obtain the control and the following liquidation are taken in consideration.

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Unfunded Credit Protection

Eligibility and Effects of Credit Risk Mitigation

UFCP - Eligibility and Effects of Credit Risk Mitigation 1/8

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Institutions using the A-IRB approach can recognize UFCP through:

- **Adjustments to their own PD and LGD estimates** (art. 183(1)(3) CRR);
    - Subject to a Risk floor: a risk weight cannot be lower than the weight the institution would assign to a comparable direct exposure to the guarantor (arts. 161(3) 164(2) CRR).
    - Three possible applications:
        - Modeling approach (considered by EBA to be the option that allows maximum risk sensitivity).
        - Substitution of IRB risk parameters.
        - Override.
- **"Double Default" treatment** (art. 153(3) CRR);
- **SA substitution of risk parameters** (art 183(4)) – Not covered by these Guidelines.

- Institutions should have clear policies in place to ensure that the choice between UFCP approaches is clear and consistent.
- The substitution of risk parameters approach can only be applied when it is assumed that the recovery of the guarantees is the first and main source of credit recovery.
- Recoveries from ineligible UFCP should be considered as if they were received without the use of UFCP, that is, as if they were unsecured. They should not be recognised using any of the three methods for recognising UFCP.

UFCP - Eligibility and Effects of Credit Risk Mitigation 2/8

UFCP Eligibility

- For institutions to utilize CRM techniques for UFCP, they should obtain a legal opinion confirming **legal effectiveness and enforceability** in all relevant jurisdictions.
- The written **legal opinion** should be carried out at least for each type of UFCP and should be **written by a counselor who is independent of the credit decision process** responsible for originating or renewing the exposure.
- Institutions can **use a single legal opinion for multiple UFCP arrangements** that relate to the same applicable law.

UFCP - Eligibility and Effects of Credit Risk Mitigation 3/8

Adjustment to own PD and LGD – Modeling Approach

- **Institutions can include the effects of UFCP in either the estimation of the PD and LGD of the obligor or in the estimation of the LGD alone:**
  - Observations from past realizations of UFCP should be included in the estimation of the LGD, not PD;
  - The EBA clarifies that adjusting the PD of the obligor alone would not reflect the full effect of the UFCP.

- **LGD estimation** should not be based purely on judgmental considerations but **should** instead **be performed based on historical experience and data.**

- Human judgment plays an important role in the choice of the models and underlying assumptions.

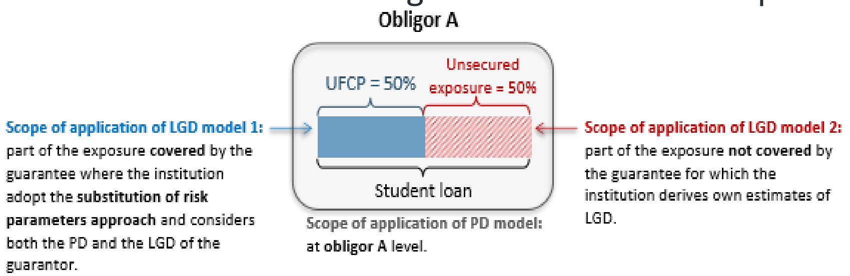
- Institutions implementing the modeling approach should consider, among other things:
  - **Potential currency mismatches between the exposure and the UFCP;**
  - **The ability and willingness of the guarantor to perform under its obligation;**
  - **The obligor's ability to repay;**
  - **The reduced ability to repay of a defaulted guarantor.**

UFCP - Eligibility and Effects of Credit Risk Mitigation 4/8

Adjustment to own PD and LGD - Substitution of Risk Parameters

- **Subject to non-defaulted status of the guarantor and negligibility of UFCP implementation costs**:
  - The non-defaulted status of the guarantor becomes necessary as the risk weight of a defaulted guarantor is not considered appropriate for an exposure to a non-defaulted obligor.
- Main idea: the institution substitutes the risk parameters of the obligor with those of a comparable direct exposure to the guarantor.

- **When identifying such comparable direct exposures to the guarantor, institutions should**:
  - substitute the PD and LGD of the obligor with the PD and LGD that they would assign to comparable direct exposures to the guarantor using the A-IRB or F-IRB approach;
  - avoid any maturity mismatch: the maturity of the comparable direct exposure to the guarantor should be the same as the exposure to the obligor;
  - recognize relevant differences in indirect vs direct exposures to a guarantor. In particular, they should consider differences in the efficiency of collection practices.
- **Partially UFCP-covered exposures should be treated as follows**:
  - The PD and LGD of the guarantor are substituted in for the guaranteed portion of the exposure;
  - For the non-guaranteed portion, the institution should use an LGD estimated only on that portion, as if it were a separate exposure;
    - For the non-guaranteed portion, the institution should use a PD estimated on the whole exposure. However, this PD estimate is used only for the calculation of the risk weights of the unsecured portion of the exposure.



Source: EBA/GL/2020/05

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Risk-Weight Floor Calculation (1/2)

- **The risk-weight of a comparable exposure to a guarantor is used as the risk-weight floor**.

- **The application of the floor should not yield a risk weight that is higher than the weight that would apply if the institution did not use the UFCP.**

- **In case of residual UFCPs** that only cover amounts remaining after collecting from the obligor, **the value of the UFCP should be estimated based on past experiences (i.e. historical data) in a conservative manner**.

  - When information is not sufficient to perform such estimation, the value of the UFCP should be assumed to be zero, unless the type of guarantee meets certain criteria, in which case the value might be the maximum amount the guarantor has undertaken to pay.

UFCP - Eligibility and Effects of Credit Risk Mitigation 6/8

Risk-Weight Floor Calculation (2/2)

- In case of partial UFCP, the risk floor should be a weighted average of the risk weight of a comparable exposure to the guarantor, weighted by the amount covered by the UFCP, and the risk weight of an exposure to the obligor, weighted by the value of the unsecured portion of the exposure.

Loan A (example 1)		Loan B (example 2)		
Portion X (secured) = €700	Portion Z(Secured) =€300	Portion X (secured) = €500	Portion Y (Secured) =€300	Portion Z (Unsecured) =€200

Example 1 : a personal loan has a total exposure of €1000, of which €700 (*Portion X*) is secured by a UFCP, whereas the remaining €300 (*Portion Z*) is not secured.

- Portion X has a comparable direct exposure with risk weight 10%
- Portion Z has a risk weight of 40% (based on estimated PD, LGD)
- Exposure A has a risk weight floor calculated as:

$$\frac{10\% * €700 + 40\% * €300}{€1000} = 19\%$$

Example 2 : a personal loan has a total exposure of €1000, of which €500 (*Portion X*) is secured by a UFCP, €300 (*Portion Y*) is secure by second UFCP and the remaining €200 (*Portion Z*) is not secured.

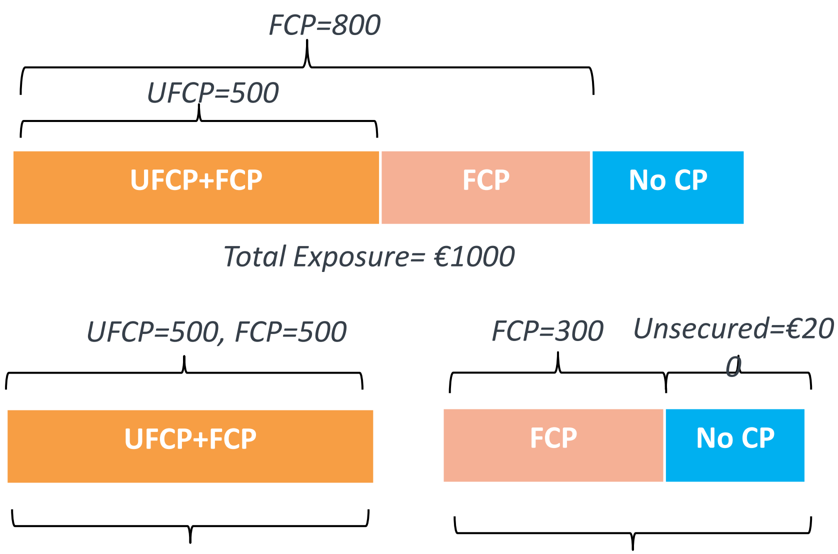
- Portion X has a comparable direct exposure with risk weight 15%
- Portion Y has a comparable direct exposure with risk weight 10%
- Portion Z has a risk weight of 30% (based on estimated PD, LGD)
- Exposure A has a risk weight floor calculated as:

$$\frac{15\% * €500 + 10\% * 300 + 30\% * €200}{€1000} = 16{,}5\%$$

UFCP - Eligibility and Effects of Credit Risk Mitigation 7/8

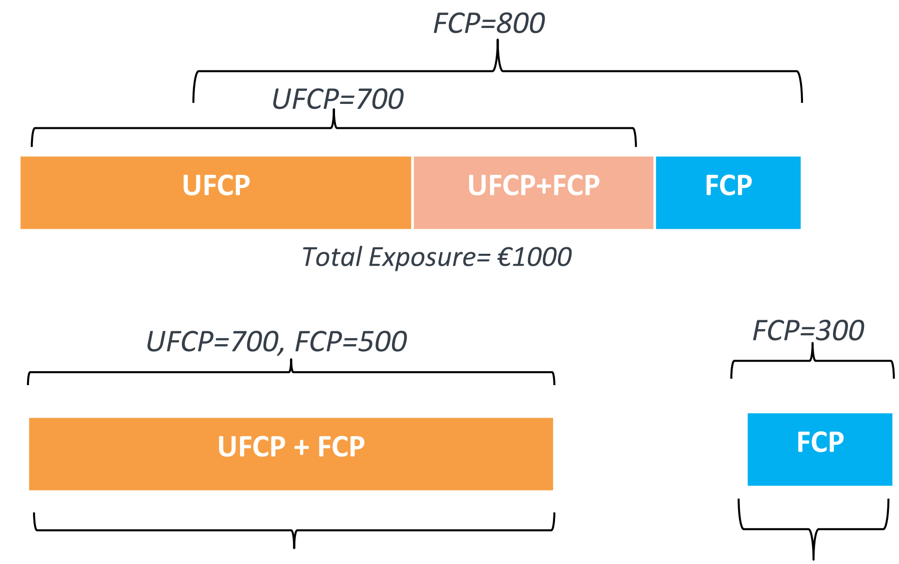
Treatment of exposures benefitting from different forms of protection (1/2)

- Institutions should have clear and consistent policies to allocate a FCP to different part of an exposure which is also partially covered by a UFCP.
- Factoring in additional protection incentivizes institutions to take on additional collaterals or guarantees.
- If multiple UFCPs cover the same part of the exposures, the institution should establish clear criteria for the choice of which UFCP they are basing the substitution of risk parameter on.
- Institutions should never recognize the effects of CRM techniques more than once.
- Institutions should not split the UFCP into two parts and apply different methodologies (e.g. substitution of risk parameters and modeling) to the two parts. They should instead operate as in the examples below.



Apply the substitution of risk parameters approach **on the full UFCP**, considering the effects of the FCP on the estimation of comparable, direct exposures to the guarantor

Model the effects of the remaining FCP on the LGD of residual €500 of partially unsecured exposure



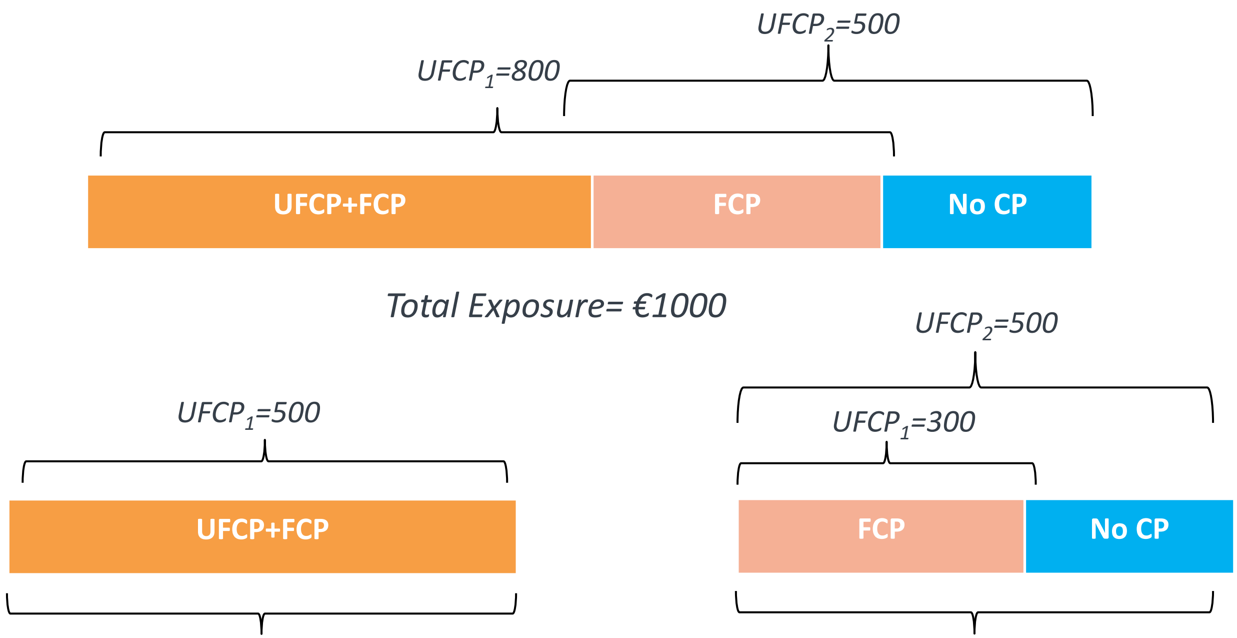
Apply the substitution of risk parameters approach **on the full UFCP**, considering the effects of the FCP on the estimation of comparable, direct exposures to the guarantor

Model the effects of the remaining FCP on the residual €300 of exposure

UFCP - Eligibility and Effects of Credit Risk Mitigation 8/8

Treatment of exposures benefitting from different forms of protection (2/2)

- Only in case of overlapping UFCP are institutions allowed to split a UFCP and implement the substitution of risk parameters approach only to one part of the UFCP, while considering the effects of the other part of the first UFCP in the application of the substitution of risk parameters approach to the second UFCP.



Split the UFCP and apply the substitution of risk parameters approach to $UFCP_1$, using a comparable exposure to the guarantor

Apply the substitution of risk parameters approach by considering the effects of $UFCP_1$ on the LGD of a comparable exposure to the guarantor of $UFCP_2$

04

Final Remarks

Final Remarks

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The application of these guidelines will affect how banks will determine their risk-weighted assets (RWAs) for exposures covered by FCP or UFCP and hence the amount of capital banks will need to hold.

To best exploit these EBA Guidelines**, A-IRB banks urgently need to:**

- **Revamp** CRM use in determination of **Large Exposure, Residual risk/Concentration risk** for ICAAP/SREP and in the disclosure in **Pillar 3**;
- **Implement** a very **data management strong framework (data availability and data quality)** in order to get an indication on the necessary changes (gap analysis) and their impact on the bank's processes and procedures;
- **Implement policies that establish the estimates must be based on material risk drivers and empirical evidence observed** rather than on judgmental considerations alone;
- **Review** the **eligibility criteria for FCP and UFCP** and ensure that they are well-documented in specific policies;
- **Have policies in place to evaluate the impact of human judgement** on different model choices and assumptions (any theoretical assumptions used should be adequately calibrated and back-tested);
- **Have policies in place to ensure** that the choice between **UFCP approaches is clear and consistent**.

Company Profile

Iason is an international firm that consults Financial Institutions on Risk Management. Iason integrates deep industry knowledge with specialised expertise in Market, Liquidity, Funding, Credit and Counterparty Risk, in Organisational Set-Up and in Strategic Planning

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This document was prepared in collaboration with Simone Manca, who at the time were working for Iason Consulting.

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