

ALLEN & OVERY



Capital Requirements Directive IV Framework *Operational Risk*

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CRD IV Framework: *Operational Risk*

This briefing paper is part of a series of briefings on the implementation of Basel III in Europe via the Capital Requirements Directive IV¹ (**CRD IV**) and the Capital Requirements Regulation² (**CRR**), replacing the Banking Consolidation Directive³ and the Capital Adequacy Directive.⁴ The legislation is highly complex: these briefings are intended to provide a high-level overview of the architecture of the regulatory capital and liquidity framework and to draw attention to the legal issues likely to be

relevant to the in-house lawyer. This briefing is for general guidance only and does not constitute definitive advice.

NOTE: In relation to the topics discussed in this briefing, the CRR contains a number of discretions for member states in relation to national implementation. The regime may therefore differ across member states in a number of respects.

This briefing paper is based on information available as of 17 January 2014.

¹ 2013/36/EU.

² Regulation 575/2013.

³ 2006/48/EU.

⁴ 2006/49/EU.

Background and scope

Basel II introduced a requirement for credit institutions and investment firms to hold capital specifically to cover operational risk losses. Operational risk (defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk) had not historically been subject to capital adequacy requirements. In Basel I, operational risk was implicitly covered through the treatment of credit and market risk.

Pillar One of Basel II established hard capital requirements for operational risk – the operational risk capital requirement (**ORCR**). There are three approaches that may be taken to the measurement of operational risk capital:

- Basic indicator approach;
- Standardised approach (or the alternative standardised approach); or
- An advanced measurement approach (**AMA**).

Sources

CRD IV (*Directive 2013/36/EU*): Article 85.

CRR (*Regulation 575/2013*): Article 20, Article 95, Title III (Articles 312-324), Article 446, Article 454, Article 500, Recital (52).

European Banking Authority (**EBA**)'s Guidelines on the Advanced Measurement Approach (AMA) – Extensions and Changes (January 2012).

Committee of European Banking Supervisors (**CEBS**)' Guidelines on the management of operational risk in market-related activities (October 2010).

CEBS' Guidelines on operational risk mitigation techniques (December 2009).

[UK Financial Conduct Authority \(FCA\) Policy Statement \(PS13/10\) CRD IV for Investment Firms \(December 2013\).](#)

Background and scope (continued)

The basic indicator and standardised approaches use percentages of net income associated with the relevant business as a proxy for operational risk. AMA uses more sophisticated means of establishing the operational risk requirement, and requires significant resources, and robust systems and controls, to implement and maintain. AMA falls within the definition of “internal approaches” for the purposes of CRD IV.

The operational risk provisions of Basel II were implemented in the EEA via the Banking Consolidation Directive and Capital Adequacy Directive (together, the **CRD**) and in the UK through the SYSC⁵ and BIPRU⁶ modules of the FSA⁷ Handbook.

Basel III does not involve substantive change to operational risk provisions but the way in which they are implemented in the European Union (the **EU**) has changed as they are now included in the directly applicable CRR. This has implications for the scope for and method of providing flexibility at national level (see “National discretions and UK implementation” below).

Sources (continued)

[UK Prudential Regulation Authority \(PRA\) Policy Statement \(PS7/13\) Strengthening capital standards: implementing CRD IV, feedback and final rules \(December 2013\).](#)

[PRA Supervisory Statement \(SS14/13\) Operational risk \(December 2013\)](#) (the **PRA Supervisory Statement in respect of Operational Risk**).

[PRA Supervisory Statement \(SS8/13\) The Basel I floor \(December 2013\)](#) (the **PRA Supervisory Statement in respect of the Basel I Floor**).

⁵ Senior Management Arrangements, Systems and Controls.

⁶ Prudential sourcebook for Banks, Building Societies and Investment Firms.

⁷ UK Financial Services Authority.

Application

The ORCR applies to credit institutions and full scope investment firms.

The following limited scope investment firms are not subject to the ORCR:

- (i) an investment firm that is not authorised to deal on own account or provide the investment services of underwriting or placing financial instruments on a firm commitment basis; and
- (ii) an investment firm which is authorised to provide the investment services of client order

execution and portfolio management and which may carry out the activities of reception/transmission of orders and/or investment advice but which does not carry out the activities of dealing on own account, underwriting, placing financial instruments, operation of multilateral trading facilities (**MTFs**) or safekeeping and administration of financial instruments for the account of clients and which is not permitted to hold client money or securities.

Basic indicator approach

The simplest method of calculating the ORCR is the basic indicator approach. A firm must use this approach if it does not, or is not permitted to, use another approach. The ORCR under the basic indicator approach is equal to 15% of the average over three years of the “relevant indicator”. The relevant indicator is the sum of a firm’s net interest income and its net non-interest income. Income from a participation held in an undertaking by the firm or a subsidiary undertaking of the firm should not be included in the relevant indicator calculations, to ensure that intra-group dividends and other intra-group income flows are not double counted.

The following elements must not be used in the calculation of the relevant indicator:

- (i) realised profits/losses from the sale of non-trading book items;
- (ii) income from extraordinary or irregular items; and
- (iii) income derived from insurance.

The relevant indicator for the basic indicator approach must be calculated before the deduction of any provisions and operating expenses. Fees paid for outsourcing can be deducted from the relevant indicator when the outsourcing is to a third party which is a parent or subsidiary of the firm whose process, service or activity is being outsourced (or a

subsidiary of a parent which is also the parent of the credit institution/investment firm); or which is subject to rules under, or equivalent to, the CRR. Fees paid for outsourcing must be included in operating expenses (and so not deducted from the relevant indicator) when the conditions above are not met.

A firm that does not have sufficient income data to meet the three-year requirement (eg a start-up) may use its forecasted gross income projections for all or part of the three year time period when calculating its relevant indicator.

If a firm can prove to its regulator that, due to a merger, an acquisition or a disposal of entities or activities, using a three year average to calculate the relevant indicator would lead to a biased estimation of its ORCR, the regulator may permit it to amend the calculation to take account of such events. The regulator must inform the EBA of its decision. The regulator may also, on its own initiative, require a firm to amend its calculation in such circumstances.

A firm calculating its ORCR using the basic indicator approach is required to meet the general risk management standards in CRD IV. These require a firm to have robust governance arrangements, effective risk management processes and adequate internal control mechanisms appropriate to its size, nature, scale and complexity.

Standardised approach

Under the standardised approach, a firm must divide its activities into a number of business lines and calculate a capital requirement for operational risk for each business line as a specified percentage of a relevant indicator. The ORCR under the standardised approach is the average over three years of the risk weighted relevant indicators calculated each year across the business lines. This is a three stage process – first, the firm must map its previous three years of net interest income and net non-interest income to the eight business lines set out below; second, individual business line ORCRs are calculated by multiplying the firm’s three year average net interest income and net non-interest income in each business line by the percentage (beta factor) assigned to that business line; and finally, the total ORCR is calculated as the sum of the individual business line ORCRs.

A firm must develop and document specific policies and criteria for mapping the relevant indicator for current business lines and activities into the framework for the standardised approach. The mapping process must meet a number of principles including senior management responsibility for the mapping policy and independent review.

The business lines identified in the CRR and the percentages applying to the income indicator are set out below. The CRR also gives an indicative list of activities allocated to each business line.

BUSINESS LINE	PERCENTAGES APPLYING TO THE INCOME INDICATOR
Corporate finance	18%
Trading and sales	18%
Retail brokerage	12%
Commercial banking	15%
Retail banking	12%
Payment and settlement	18%
Agency services	15%
Asset management	12%

To be eligible for the standardised approach, in addition to the general risk management standards in CRD IV, a firm must have:

- a well-documented assessment and management system for operational risk with clear responsibilities for the system assigned within the firm. The system must identify the firm’s exposures to operational risk and track relevant operational risk data, including material loss data;
- an operational risk assessment and management system subject to regular independent review;
- an operational risk assessment system closely integrated into the firm’s risk management processes. Its output must be an integral part of the process of monitoring and controlling the firm’s operational risk profile; and
- a system of management reporting that provides operational risk reports to relevant functions within the firm. A firm must have procedures in place for taking appropriate action in response to the information contained in such reports.

A firm must notify its regulator prior to using the standardised approach.

As with the basic indicator approach, if a firm can prove to its regulator that, due to a merger, an acquisition or a disposal of entities or activities, using a three year average to calculate the relevant indicator would lead to a biased estimation of its ORCR, the regulator may permit it to amend the calculation to take account of such events. The regulator must inform the EBA of its decision. The regulator may also, on its own initiative, require a firm to amend its calculation in such circumstances.

A firm that calculates its ORCR using the standardised approach must not change to calculating its ORCR using the basic indicator approach without meeting certain prescribed conditions and obtaining the permission of its regulator (see “Combining and changing approaches” below).

Alternative standardised approach

The CRR provides for a version of the standardised approach under which a firm uses different indicators for the retail banking and commercial banking business lines – the alternative standardised approach. To use this approach a firm must meet a number of conditions:

- (i) retail and/or commercial banking activities must account for at least 90% of its income;
- (ii) a significant proportion of its retail and/or commercial banking activities must comprise loans associated with a high probability of default (**PD**); and
- (iii) the alternative standardised approach must provide an appropriate basis for calculating its ORCR.

For retail and commercial banking business lines, the relevant indicator under the alternative standardised approach is not based on income but is calculated as the product of a three year average of the total nominal amount of loans and advances for each business line multiplied by 0.035, and the appropriate percentage applying to the respective business lines as set out above.

AMA

A firm may apply to its regulator for permission to use its own AMA based on its own operational risk measurement systems for the calculation of its ORCR if it meets the general risk management standards in CRD IV and specified qualitative and quantitative standards set out in the CRR.

Qualitative standards

The qualitative standards include:

- an internal operational risk measurement system closely integrated into the firm’s day-to-day risk management processes;
- an independent risk management function for operational risk;
- regular reporting of operational risk exposures and loss experience (and procedures for taking appropriate corrective action);
- good documentation of the risk management system and a routine for ensuring compliance and policies for the treatment of non-compliance;
- regular reviews performed by internal and/or external auditors of operational risk management processes and measurement systems;
- internal validation processes in respect of an operational risk measurement system operating in a sound and effective manner; and
- transparent and accessible data flows and processes associated with the risk measurement system.

The requirement for a firm to use its AMA in the running of its business (the “use test”) reflects similar requirements in credit risk for the internal ratings based approach (**IRB Approach**) (see Client Briefing 4 (*Internal Ratings Based Approach to Credit Risk in the Banking Book*)).

Quantitative standards

The quantitative standards in relation to the process include:

- calculation of the capital requirement as comprising both expected loss and unexpected loss, unless the firm can demonstrate that expected loss is adequately captured in its internal business practices;
- the operational risk measure capturing potentially severe tail events, achieving a soundness standard comparable to a 99.9% confidence interval over a one year period;
- the operational risk measurement system comprising certain key elements to meet the soundness standard including the use of internal data, external data, scenario analysis and factors reflecting the business environment and internal control systems;
- a well documented approach for weighting the use of the four elements set out above in the overall risk measurement system;
- capturing the major drivers of risk affecting the shape of the tail of the loss estimates;
- only recognising correlations in operational risk losses across individual operational risk estimates where the systems for measuring correlations are sound, implemented with integrity and take into account the uncertainty surrounding such estimates and validating correlation assumptions using appropriate quantitative and qualitative techniques; and
- internal consistency and avoiding multiple counting of qualitative assessments or risk mitigants recognised in other areas of the CRR.

Quantitative standards must also be met in relation to:

- internal data – including a requirement for a firm’s internally generated operational risk measures to be based on a minimum historical observation period of five years and an ability to map its historical internal loss data into the business lines set out above and into the event type categories set out below, and to provide this data to the regulator upon request. In exceptional circumstances, a firm may allocate loss events which affect the entire firm to an additional business line “corporate items”;
- external data – including a requirement for a systematic process for determining the situations for which external data should be used and the methodologies used to incorporate the data in the measurement system; and requirements to document the conditions and practices for external data and subject them to periodic independent review;

- scenario analysis – a firm must use scenario analysis of expert opinion in conjunction with external data to evaluate its exposure to high severity events; and
- business environment and internal control factors – including (i) a firm-wide risk assessment methodology which captures key business environment and internal control factors that can change a firm’s operational risk profile; (ii) the sensitivity of risk estimates to changes in factors and the relative weighting of the various factors must be able to be justified to regulators; (iii) in addition to capturing changes in risk due to improvements in risk controls, the risk measurement framework must also capture potential increases in risk due to greater complexity of activities or increased business volume, and must be documented, subject to independent review within the firm and by regulators.

The event-type categories into which losses are to be mapped are as follows.

EVENT-TYPE CATEGORY	DEFINITION
Internal fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversity/discrimination events, which involve at least one internal party.
External fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent the law, by a third party.
Employee practices and workplace safety	Losses arising from acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, or from diversity/discrimination events.
Clients, products and business practices	Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements), or from the nature or design of a product.
Damage to physical assets	Losses arising from loss or damage to physical assets from natural disaster or other events.
Business disruption and system failures	Losses arising from disruption of business or system failures.
Execution, delivery and process management	Losses from failed transaction processing or process management, from relations with trade counterparties and vendors.

Impact of insurance and other risk transfer mechanisms

A firm may recognise the impact of insurance for the purposes of its operational risk measurement system subject to the provider being authorised to provide insurance or re-insurance and having a minimum claims paying ability rating by an eligible credit assessment institution (**ECAI**) which has been determined by the EBA to be associated with credit quality step (**CQS**) 3 or above under the rules for the risk weighting of exposures to firms under the standardised approach to credit risk (the **Standardised Approach**) (see Client Briefing 3 (*Standardised Approach to Credit Risk in the Banking Book*)). In addition, a firm must ensure that its insurance and its insurance framework meet a number of conditions relating to the term of the insurance policy (no less than one year); the notice period for cancellation (minimum of 90 days); the absence of exclusions or limitations based upon supervisory actions; risk mitigation calculations; provision by a third party entity and discounts or haircuts in the amount of insurance recognition (eg to reflect mismatches in coverage). The capital alleviation arising from the recognition of insurance must not exceed 20% of the capital requirement before the recognition of risk mitigation techniques.

A firm may be permitted to recognise a risk transfer mechanism other than insurance where it can demonstrate that a noticeable risk mitigating effect is achieved.

A firm using AMA for the calculation of its ORCR must disclose a description of the use of insurance and other risk transfer mechanisms for the purpose of mitigation of operational risk.

Combining and changing approaches

A firm may be permitted by its regulator to use AMA in combination with one of the less sophisticated approaches subject to meeting certain conditions.

The basic and standardised approaches may only be combined in exceptional circumstances, eg the recent acquisition of a new business which may require a transition period for the application of the standardised approach. Permission must be obtained from the firm's regulator and a time schedule for applying the standardised approach approved by it.

A firm may not revert from using a more sophisticated approach to a less sophisticated approach without meeting prescribed conditions including the permission of its regulator.

AMA on group wide basis

Where an EU parent institution and its subsidiaries, the subsidiaries of an EU parent financial holding company or an EU parent mixed financial holding company use an AMA on a unified basis, the qualifying criteria may be met by the parent and its subsidiaries considered together in a way that is consistent with the structure of the group and its risk management systems, processes and methodologies. Application must be made to the consolidating regulator and include a description of the methodology for allocating operational risk capital between different group entities. All the relevant regulators are required to work together with a view to reaching a joint decision on the application within six months. The CRR includes provisions to address the failure to reach a joint decision and the EBA is to develop implementing technical standards to specify the joint decision process.

Disclosure

A firm is required to disclose (i) the approaches for the assessment of ORCR that it qualifies for, (ii) a description of its AMA methodology (if it uses this approach, including a discussion of relevant internal and external factors considered in its AMA), and (iii) in the case of partial use of approaches, the scope and coverage of the different methodologies used.

Ongoing review by regulators of AMA

Regulators must review on a regular basis, and at least every three years, firms' compliance with the conditions for using AMA having particular regard

to changes in a firm's business. If material deficiencies are identified in the risk capture by the firm's AMA, the regulator must ensure they are rectified or take appropriate action to mitigate their consequences, including by imposing capital add-ons.

Transitional provisions

Until 31 December 2017, the CRR requires firms using an AMA approach for operational risk capital requirements to calculate their requirements in line with a floor against Basel I standards, in addition to the provisions of the CRR capital requirements

(the **Basel I floor**). Regulators may give permission to apply a floor based on non-modelled CRR approaches in specified circumstances or, after consulting with the EBA, waive the application of the Basel I floor.

EBA technical standards and guidelines

The CRR mandates that various technical standards and guidelines shall be produced. In connection with operational risk, the following standards and guidelines shall be produced:

CRR SOURCE	TECHNICAL STANDARDS/ GUIDELINES REQUIRED	DEADLINE FOR SUBMISSION TO THE EUROPEAN COMMISSION	EBA PUBLICATIONS
Article 20 (<i>Joint decisions on prudential requirements</i>)	Draft implementing technical standards to specify the joint decision making process in relation to application to use AMA on group basis.	31 December 2014.	None to date.
Article 312(4)(a) (<i>Permission and notification</i>)	Draft regulatory technical standards to specify the AMA assessment methodology.	31 December 2014.	Consultation on the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for credit, market and operational risk (March 2013) (EBA/CP/2013/02). Final draft regulatory technical standards on the conditions for assessing the materiality of
Article 312(4)(b) (<i>Permission and notification</i>)	Draft regulatory technical standards to specify the conditions for assessing the materiality of extensions and changes to AMA for operational risk.	31 December 2014.	

CRR SOURCE	TECHNICAL STANDARDS/ GUIDELINES REQUIRED	DEADLINE FOR SUBMISSION TO THE EUROPEAN COMMISSION	EBA PUBLICATIONS
			extensions and changes of internal approaches when calculating own funds requirements for credit and operational risk (December 2013) (EBA/RTS/2013/06).
Article 312(4)(c) (<i>Permission and notification</i>)	Draft regulatory technical standards to specify the notifications to regulators of changes to firms' AMA models.	31 December 2014.	None to date.
Article 314(5) (<i>Combined use of different approaches</i>)	Draft regulatory technical standards to specify the conditions for combined use of different approaches.	31 December 2016.	None to date.
Article 316(3) (<i>Relevant indicator</i>)	Draft regulatory technical standards to determine the methodology for the relevant indicator in relation to firms not applying accounting standards established by Directive 86/635/EEC (annual accounts and consolidated accounts of banks and other financial institutions).	31 December 2017.	None to date.
Article 318(3) (<i>Principles for business line mapping</i>)	Draft implementing technical standards to determine the conditions of application of the principles of business line mapping.	31 December 2017.	None to date.

The EBA is to analyse internal approaches (which include the operational risk AMA) across firms with a view to promoting consistent soundness across the EU. It is to develop guidelines which contain

benchmarks based on that analysis. Regulators must take that analysis and those benchmarks into account when reviewing permissions granted to firms to use internal approaches.

National discretions and UK implementation

The CRR provides competent authorities with certain discretions:

CRR SOURCE	NATURE OF DISCRETION	FCA/PRA APPROACH
Article 312(2) (<i>Permission and notification</i>)	A competent authority may give a direction to a firm to allow it to use the AMA for operational risk when certain conditions are met.	In respect of FCA authorised firms, the FCA has indicated that it intends to exercise this discretion (see Annex 3 (List of national discretions and FCA's approach to their application) to CP 13/6 CRD IV for Investment Firms (July 2013)). In respect of PRA authorised firms, the PRA has indicated that it will grant permission to firms currently benefitting from a waiver of the equivalent requirement.
Article 313 (<i>Reverting to the use of less sophisticated approaches</i>)	Firms will not be able to revert back to using a less sophisticated approach to calculating their operational risk capital requirement unless they meet prescribed conditions and receive permission from a competent authority.	In respect of FCA authorised firms, the FCA has indicated that it intends to exercise this discretion (see Annex 3 (List of national discretions and FCA's approach to their application) to CP 13/6 CRD IV for Investment Firms (July 2013)). In respect of PRA authorised firms, the PRA has indicated that it will grant permission to firms currently benefitting from a waiver of the equivalent requirement.
Article 314(2) and (3) (<i>Combined use of different approaches</i>)	Institutions are able to use a combination of approaches to calculating their operational risk capital requirement as long as they meet the prescribed conditions and receive prior permission from a competent authority.	In respect of FCA authorised firms, the FCA has indicated that it intends to exercise this discretion (see Annex 3 (List of national discretions and FCA's approach to their application) to CP 13/6 CRD IV for Investment Firms (July 2013)).
Article 314(4) (<i>Combined use of different approaches</i>)		In respect of PRA authorised firms, the PRA has indicated that it will grant permission to firms currently benefitting from a waiver of the equivalent requirement. The PRA's expectations in relation to AMA for the purposes of permission to combine approaches in accordance with Article 314(3) are set out in the PRA Supervisory Statement in respect of Operational Risk. This also includes a significant influence function (SIF) attestation of the AMA approval process.
Article 315 (<i>Own funds requirement</i>)	This discretion relates to the calculation of the Basic Indicator Approach for operational risk. A firm may request to adjust its operational risk calculation due to a merger, an acquisition or a disposal of entities or activities, a simple three year average of the relevant indicator is not an	In respect of FCA authorised firms, the FCA has indicated that it intends to exercise this discretion (see Annex 3 (List of national discretions and FCA's approach to their application) to CP 13/6 CRD IV for Investment Firms (July 2013)). In respect of PRA authorised firms, the PRA has indicated that it will grant permission to firms currently benefitting from a waiver of the equivalent requirement.

CRR SOURCE	NATURE OF DISCRETION	FCA/PRA APPROACH
	unbiased calculation. A competent authority must consider such a request, and if approved, inform the EBA of this decision. Further, a competent authority is able to require the firm to modify its calculation in such circumstances.	
Article 317(4) (<i>Own funds requirement</i>)	This discretion relates to the calculation of the Standardised Approach for operational risk. A firm may request to adjust its operational risk calculation due to a merger, an acquisition or a disposal of entities or activities, a simple three year average of the relevant indicator is not an unbiased calculation. A competent authority must consider such a request, and if approved, inform the EBA of this decision. Further, a competent authority is able to require the firm to modify its calculation in such circumstances.	<p>In respect of FCA authorised firms, the FCA has indicated that it intends to exercise this discretion (see Annex 3 (List of national discretions and FCA's approach to their application) to CP 13/6 CRD IV for Investment Firms (July 2013)).</p> <p>In respect of PRA authorised firms, the PRA has indicated that it will grant permission to firms currently benefitting from a waiver of the equivalent requirement.</p>
Article 500(2) (<i>Transitional provisions – Basel I floor</i>)	Permission to apply floor based on non-modelled CRR approaches.	<p>In respect of FCA authorised firms, the FCA has indicated that it does not expect that it will waive the application of the Basel I floor as contemplated in Article 500(2).</p> <p>In respect of PRA authorised firms, the PRA has indicated that it will grant permission to apply a floor based on non-modelled CRR approaches where specified conditions are met. These are set out in the PRA Supervisory Statement in respect of the Basel I floor.</p>
Article 500(5) (<i>Transitional provisions – Basel I floor</i>)	Permission to waive the application of the Basel I floor.	In respect of PRA authorised firms, the PRA has indicated that it does not expect that it will waive the application of the Basel I floor in accordance with Article 500(5).

Further reading

Client Briefing 1 (*Introduction to Regulatory Capital and Liquidity*)

Client Briefing 3 (*Standardised Approach to Credit Risk in the Banking Book*)

Client Briefing 4 (*Internal Ratings Based Approach to Credit Risk in the Banking Book*)

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