Own Funds Requirements for Transactions cleared through ECAG

Overview on the exposure calculation and the applicable risk weights under the CRR

February 2022
The capital requirements regulation (Regulation (EU) No 575/2013 – “CRR”) includes certain privileges for the calculation of own funds requirement for CCP-cleared transactions

- Institutions falling under the scope of the CRR may benefit from the following privileges:
  - Exposure values from CCP-cleared transactions can be calculated on a net basis, if covered by an eligible netting agreement (Art 304(1), 305(1) and Art 306(3) in connection with Art 295 et seq. CRR)
  - Under further preconditions, reduced risk weights can be applied (i.e. 0%, 2%, 4%):
    - Clearing Members may apply for:
      - Trade exposure: 2% (Art 306(1)(a) CRR)
      - Trade exposure arising from client clearing and no-recourse: 0% (Art 306(1)(c) CRR)
      - Collateral and bankruptcy remoteness: 0% (Art 306(2) CRR)
    - Direct Clients may apply for:
      - Trade exposure under individual segregation models: 2% (Art 305(2) CRR)
      - Trade exposure under omnibus segregation models: 4% (Art 305(3) CRR)
When looking at own funds requirements for CCP-cleared transactions, the following exposures need to be distinguished:

- Exposure Client → CM
- Exposure CM/BCM → CCP
- Exposure CM → Client

Eurex Clearing AG ("ECAG") makes available legal opinions under English and German law, which address the exposure calculation and the application of the reduced risk weights in relation to each of its clearing models ("CRR-Opinions")

- This presentation provides an overview of the own funds requirements of CMs and their clients in relation to transactions cleared through ECAG.
## Calculation of Own Funds Requirements

### Own Funds Reduction for ECAG-cleared Transactions (1/7)

**Calculation on Net-Basis – ’Eligible Netting Arrangements‘**

<table>
<thead>
<tr>
<th>ECAG qualifies as Qualifying CCP</th>
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<tbody>
<tr>
<td>ECAG holds a licence pursuant to Art 14 European Market Infrastructure Regulation (Regulation (EU) 648/2012 – “EMIR”) and thus qualifies as a “Qualifying CCP” (Art 4 (88) CRR)</td>
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<tr>
<th>Eligible Netting Arrangements</th>
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<tr>
<td>According to Art 304(1) CRR (Exposure CM → Clients) and Art 305(1) CRR (Exposure Client → CM) and Art 306(3) CRR (Exposure CM → CCP), the own funds requirements for CCP-cleared transactions shall be calculated pursuant to Sections 1 to 8 of Part 3 Title II Chapter 6 CRR</td>
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<tr>
<td>This reference includes the provisions under Art 295 to 298 CRR which provide for the recognition of contractual netting arrangements leading to the calculation of the exposure value on a net basis</td>
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<td>Close-out netting arrangements under the Clearing Conditions comply with the requirements stipulated by Art 296, 297 CRR and qualify as eligible netting arrangements</td>
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<tr>
<td>o ECAG’s close-out netting arrangements also include any title transfer collateral</td>
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<td>o The collateral provider’s exposure for the return of collateral provided by way of full title transfer (covering both: Margin and Variation Margin) will be treated as individual transaction within the meaning of Art 296(1)(a) CRR</td>
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<tr>
<td>o Consequently, any “Redelivery Claim” established under ECAG’s Clearing Conditions forms part of the Difference Claim</td>
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Calculation of Own Funds Requirements

Own Funds Reduction for ECAG-cleared Transactions (2/7)
Reduced Risk Weights – Exposure CM/BCM \(\to\) ECAG

Art 306(1)(a) CRR foresees a general 2% risk weight for the CM’s/BCM’s trade exposure to ECAG

- The trade exposure is calculated on a net basis
- Cash margin:
  - ECAG’s close-out mechanism also considers any Cash Margin when calculating the Difference Claim
    - If consideration of cash results in or increases a negative balance (= ECAG has a Difference Claim against CM), the cash margin does not lead to any ‘exposure’ (question of applicable 0%, 2% or 4% risk weight becomes irrelevant)
    - If the consideration of cash results in or increases a positive balance (= CM has a Difference Claim against ECAG), the cash margin leads to an ‘exposure’ falling under the 2% risk weight (Art 306(1)(a) CRR)
  - Own funds reduction with respect to cash margin is not achieved via a 0% risk weight (pursuant to Art 306(2) CRR), but rather via a reduction of the ‘trade exposure’ through netting-effects (Art 306(1)(a) CRR)

Art 306(2) CRR provides option to apply a 0% risk weight for the exposure arising from the collateral provided to ECAG

- Cash Margin: title transfer collateral is considered in the close-out netting (see above)
- Securities Margin: as the pledged securities are ‘insolvency remote’, a CM can apply a 0% risk weight to any pledged securities; this option applies to the Elementary Clearing Model Provisions / Individual Segregated Account Provisions / Basic Clearing Member Provisions

Art 306(1)(c) CRR allows the application of a 0% risk weight in relation to exposures arising from client transactions provided that the CM is not obliged to reimburse its client in case of ECAG’s default
According to Art 304(1) CRR in connection with Art 295 et seq. CRR, CM’s exposure to client could be calculated on a net basis

- Clearing Conditions do not provide for close-out netting provisions in case of a client default
- CM and client are free to agree on such clauses in their client clearing documentations

Art 304 CRR does not provide for any reduced risk weights for CCP-cleared transactions
Calculation of Own Funds Requirements

Own Funds Reduction for ECAG-cleared Transactions (4/7)
Reduced Risk Weights – Exposure Client → CM under ISA (1/2)

Exposure
Client → CM

Applicable risk weights under the Individual Segregated Account Provisions (ISA):

- Risk weight for trade exposure
  - Under the requirements stipulated by Art 305(2) CRR, the client is entitled to calculate its own funds requirements with a **risk weight of 2%** (Art 306(1)(a) CRR)
  - The Individual Segregated Account Provisions comply with the requirements under **Art 305(2) CRR**:
    - Under the ISA clearing model, the client’s positions and assets are
      - individually segregated from the positions and assets of the CM and other clients of the CM and
      - bankruptcy remote in case of an insolvency
    - ECAG’s Clearing Conditions facilitate the transfer of the client’s positions and collateral to another CM in the event of the CM’s default or insolvency
    - ECAG provides an English law and German law legal opinion confirming that the client bears no losses on account of the insolvency of CM or of any of the CM’s other clients

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Calculation of Own Funds Requirements

Own Funds Reduction for ECAG-cleared Transactions (5/7)
Reduced Risk Weights – Exposure Client → CM under ISA (2/2)

- **Treatment of client collateral**
  - **Cash / Securities Margin provided via title transfer:**
    - ECAG’s close-out mechanism also considers any Cash Margin when calculating the Difference Claim
      - a) If consideration of cash/securities results in or increases a negative balance (= ECAG has a Difference Claim against CM), the cash/securities do not lead to any ‘exposure’ (question of applicable 0%, 2% or 4% risk weight becomes irrelevant)
      - b) If the consideration of cash/securities results in or increases a positive balance (= CM has a Difference Claim against ECAG), the cash margin leads to an ‘exposure’ falling under the 2% risk weight (Art 305(2), Art 306(1)(a) CRR)
    - Own funds reduction with respect to cash/securities margin is not achieved via a 0% risk weight (pursuant to Art 306(2) CRR), but rather via a reduction of the ‘trade exposure’ through netting-effects (Art 306(1)(a) CRR)
  - **Securities Margin provided by way of pledge:**
    - Pledged securities are not considered in the close-out netting arrangement
    - Pledged securities collateral should generally be eligible for a risk weight of 2% (Art 305(2), 306(1) CRR) or – depending on the bilateral arrangements between the Clearing Member and the client – a 0% risk weight (Art 305(2), 306(2) CRR)

- **Client Clearing Documentation**
  - To the extent not prescribed by ECAG, the Clearing Member and the client have to ensure their bilateral arrangements are appropriate with regard to the desired treatment of own funds under CRR
Applicable risk weights under the Elementary Clearing Model Provisions (GOSA-setup):

- **Risk weight for trade exposure**
  - Under the requirements stipulated by Art 305(3) CRR and under a GOSA-setup, a Disclosed Direct Client is entitled to calculate its own funds requirements with a **risk weight of 4%** (in connection with Art 306(1)(a) CRR)
  - The Elementary Clearing Model Provisions comply with the requirements under **Art 305(3) CRR**:
    - Under a GOSA-setup, the positions and assets of a Disclosed Direct Client are:
      - Gross omnibus segregated from the positions and assets of the CM and other clients of the CM and
      - Bankruptcy remote in case of an insolvency of the CM
      - Please note: due to the gross omnibus character, Disclosed Direct Clients may not necessarily be protected from losses arising from the relevant collateral pool to which several GOSA clients are allocated
    - ECAG’s Clearing Conditions facilitate the transfer of the client’s positions and collateral to another CM in the event of the CM’s default or insolvency
Calculation of Own Funds Requirements

Own Funds Reduction for ECAG-cleared Transactions (7/7)
Reduced Risk Weights – Exposure Client → CM under GOSA (2/2)

- **Treatment of client collateral**
  - **Cash provided via title transfer:**
    - ECAG's close-out mechanism also considers any Cash Margin when calculating the Difference Claim
      - a) If consideration of cash results in or increases a **negative balance** (= ECAG has a Difference Claim against CM), the cash/securities **do not lead to any 'exposure'** (question of applicable 0%, 2% or 4% risk weight becomes irrelevant)
      - b) If the consideration of cash results in or increases a **positive balance** (= CM has a Difference Claim against ECAG), the cash margin **leads to an 'exposure'** falling under the **2% risk weight (Art 305(3), Art 306(1)(a) CRR)**
    - Own funds reduction with respect to cash/securities margin is not achieved via a **0% risk weight** (pursuant to Art 306(2) CRR), but rather via a reduction of the ‘trade exposure’ through netting-effects (Art 306(1)(a) CRR)
  - **Securities Margin provided by way of pledge:**
    - Pledged securities are not considered in the close-out netting arrangement
    - Pledged securities collateral should generally be eligible for a **risk weight of 4%** (Art 305(3),306(1) CRR) or – depending on the bilateral arrangements between the Clearing Member and the client – a **0% risk weight** (Art 305(3), 306(2) CRR)

- **Client Clearing Documentation**
  - Clearing Member and the client have to ensure their bilateral arrangements are appropriate with regard to the desired treatment of own funds under CR
General Overview on Exposure Treatment under the CRR

1. Non-CRR eligible client segregation solution

- **Client exposure risk weight**: min 20% + CVA charge
- **CM exposure risk weight**: min 20% + CVA charge

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<thead>
<tr>
<th>Client</th>
<th>CM</th>
<th>CCP</th>
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**Risk weight**: 2%

- **CM exposure to Client**: risk weight min. 20% + CVA charge
- **CM exposure to CM**: risk weight 2% to 4%
- **CM exposure to CCP**: Risk weight: 2%
- **0% risk weight possible in case of “no-recourse”**
- **0% risk weight for pledged securities collateral**

2. CRR provides several options to apply reduced risk weights for segregated clients

- **CM exposures with qualified CCPs** will receive 2% risk weight
- **Non-CRR eligible client segregation solutions** will not translate into risk weight reductions

**CRR eligible client segregation solutions** will generally translate into risk weight reductions:

- 2% for individual segregation and
- 4% for gross omnibus segregation

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Options under the CRR to apply Reduced Risk Weights (1/4)

Summary

- **Difference claim exposure**
  - Pledged collateral: 2% Risk weight
  - Title transferred collateral: Considered in Difference Claim

- **Collateral exposure**
  - Pledged collateral: 0% Risk weight

Difference Claim exposure to ECAG will receive a risk weight of 2%

Pledged collateral is bankruptcy remote from ECAG, so 0% risk weight will apply (Art 306(2) CRR)

Title transferred collateral is considered in Difference Claim

- If collateral leads to negative balance: no exposure arises from such collateral = no own funds requirements with respect to such collateral
- If collateral leads to positive balance: an exposure arises from such collateral; 2% risk weight applies Art 306(1)(a) CRR
Options under the CRR to apply Reduced Risk Weights (1/4)

Summary

- **Difference claim exposure**
  - a) Recourse possible
  - b) “No-recourse” clause
- **Collateral exposure**
  - a) Pledged collateral
  - b) Title transferred collateral

- **CM**
- **Financial Intermediary Trade Exposure**
- **CCP**

<table>
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<th>Collateral exposure</th>
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<td>a) Recourse possible</td>
<td>a) Pledged collateral</td>
</tr>
<tr>
<td>b) “No-recourse” clause</td>
<td>b) Title transferred collateral</td>
</tr>
</tbody>
</table>

- CM’s Difference Claim exposures with ECAG arising from client-related transactions may receive a **0% risk weight**, if a “no-recourse” clause is included in the Client Clearing Documentation (Art. 306(1)(c) CRR)
- Pledged collateral is bankruptcy remote from ECAG, thus **0% risk weight** will apply
- Title transferred collateral is considered in Difference Claim
  - If collateral leads to negative balance: no exposure arises from such collateral = no own funds requirements with respect to such collateral
  - If collateral leads to positive balance: an exposure arises from such collateral; **2% risk weight** applies Art 306(1)(a) CRR; **0% risk weight**, if “no-recourse” clause is included in Client Clearing Documentation (Art. 306(1)(c) CRR)
Options under the CRR to apply reduced risk weights (3/4)

Summary

ISA (Individual Segregated Account Provisions)

- **Difference claim exposure**: 2% Risk weight
- **Collateral exposure**
  - a) Pledged collateral: 2% (or 0%) Risk weight
  - b) Title transferred collateral

The client’s Difference Claim exposure to its CM will receive a 2% risk weight.

- Pledged Securities Collateral is bankruptcy remote from ECAG and subject to bilateral arrangements with CM, either a 2% risk weight or even no capital charge will apply (Art 305(2), Art 306(1)(a) or Art 306(2) CRR).

- Title transferred collateral is considered in Difference Claim
  - If collateral leads to negative balance: no exposure arises from such collateral = no own funds requirements with respect to such collateral.
  - If collateral leads to positive balance: an exposure arises from such collateral; 2% risk weight applies Art 306(1)(a) CRR.

Client → ISA Trade Exposure → CM

- **Difference claim exposure**: 2% Risk weight
- **Collateral exposure**
  - a) Pledged collateral
  - b) Title transferred collateral

Considered in Difference Claim

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## Options under the CRR to apply reduced risk weights (3/4)

### Summary

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<tr>
<th>Client</th>
<th>ECM Trade Exposure</th>
<th>CM</th>
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</table>

### ECM (Elementary Clearing Model Provisions) – GOSA set-up

- **Difference claim exposure**
  - 4% Risk weight

- **Collateral exposure**
  - a) Pledged collateral
    - 4% (or 0%) Risk weight
    - Considered in Difference Claim
  - b) Title transferred collateral

- **Client's Difference Claim exposure to its CM** will receive a 4% risk weight.

- **Pledged Securities Collateral** is bankruptcy remote from ECAG and subject to bilateral arrangements with CM, either a 4% risk weight or even no capital charge will apply (Art 305(3), Art 306(1)(a) or Art 306(2) CRR).

- **Title transferred collateral** is considered in Difference Claim.
  - If collateral leads to negative balance: no exposure arises from such collateral = no own funds requirements with respect to such collateral.
  - If collateral leads to positive balance: an exposure arises from such collateral; 4% risk weight applies Art 306(1)(a) CRR.
Eurex Clearing’s CRR-Opinions are more comprehensive than opinions provided by other CCPs

Standard CCP opinions cover:
- Validity of choice of law
- Enforceability of security interests
- Enforceability of netting and porting

In addition to the above, the Eurex Clearing opinions cover:
- A complete CRR analysis (contractual netting agreement, single net sum, segregation and bankruptcy remoteness, no-recourse, default porting)
- Applicable for all clearing models
- In respect of CMs located in the UK or in Germany

Other CCP opinions are for their exclusive benefit only, hence their clients are not able to formally rely on them:
- Eurex Clearing’s CRR Opinions can expressly be relied upon for regulatory and accounting purposes also by our clients
Scope of Eurex Clearing’s CRR Opinions

CRR Opinions cover statements on:
- **Exposure CM/BCM → ECAG** (proprietary and for CMs also client business) under all clearing models
  - Covers requirements as to contractual netting agreement, single net sum, bankruptcy remoteness, no-recourse
  - German CRR opinion is applicable for all CMs regardless of their own place of incorporation
- **Exposure Disclosed Direct Clients → CM** under all clearing models
  - Covers requirements as to single net sum, segregation and bankruptcy remoteness, default porting
  - Applicable CRR opinion is determined by the CM’s jurisdiction regardless of the place of incorporation of the Disclosed Direct Client (e.g. English CRR opinion is applicable for all Disclosed Direct Clients using a UK CM)

CRR Opinion do not cover statements on:
- **Exposure CM → Disclosed Direct Client**
  - Clearing Conditions do generally not address any consequences of a default of the Disclosed Direct Client; in particular no close-out mechanism foreseen under Clearing Condition for such relationship
  - Close-out mechanism and collateral arrangements are subject to applicable client clearing documentation
  - Disclosed Direct Clients and CMs need to rely on available industry (or tailored) opinions

The Eurex Clearing CRR opinion is extensive and can be found in our member section under “Resources” / “Eurex Clearing” / “Client Asset Protection Legal Opinions”. In addition, a Q+A covering also questions and answers around available CRR opinions is available for download.
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