



European Securities and
Markets Authority

Regulation of CCPs and CSDs in the EU

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Systemic derivative market risks - mitigated by CCPs

G 20 policy goal

In response to the 2008 global financial crisis policy makers said:

- All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms and cleared through central counterparties.

OTC derivative risk

- The risk that one party to a bilateral transaction will default before the contract matures, leaving the other party to absorb the loss
- Given the multiyear maturity of many OTC contracts, the counterparty risk in OTC markets is high, and the risk of contagion is also very high

CCP risk mitigation

- CCPs utilize financial resources and default protocols that wind-down positions in the event of a default. A CCP can absorb and mitigate losses arising in a default
- At the same time, CCPs increase efficiency, enabling trading counterparties to net their obligations and minimize their collateral requirements
- CCPs have the ancillary benefit of giving prudential regulators a look-through at the net positions and exposures of key firms

EMIR obligations

- Secure central clearing for OTC products
- Application of risk mitigation techniques for non-centrally cleared OTC derivatives
- Application of organisational, conduct of business and prudential requirements for CCPs
- Reporting to trade repositories

“ CCP, better than AAA ”

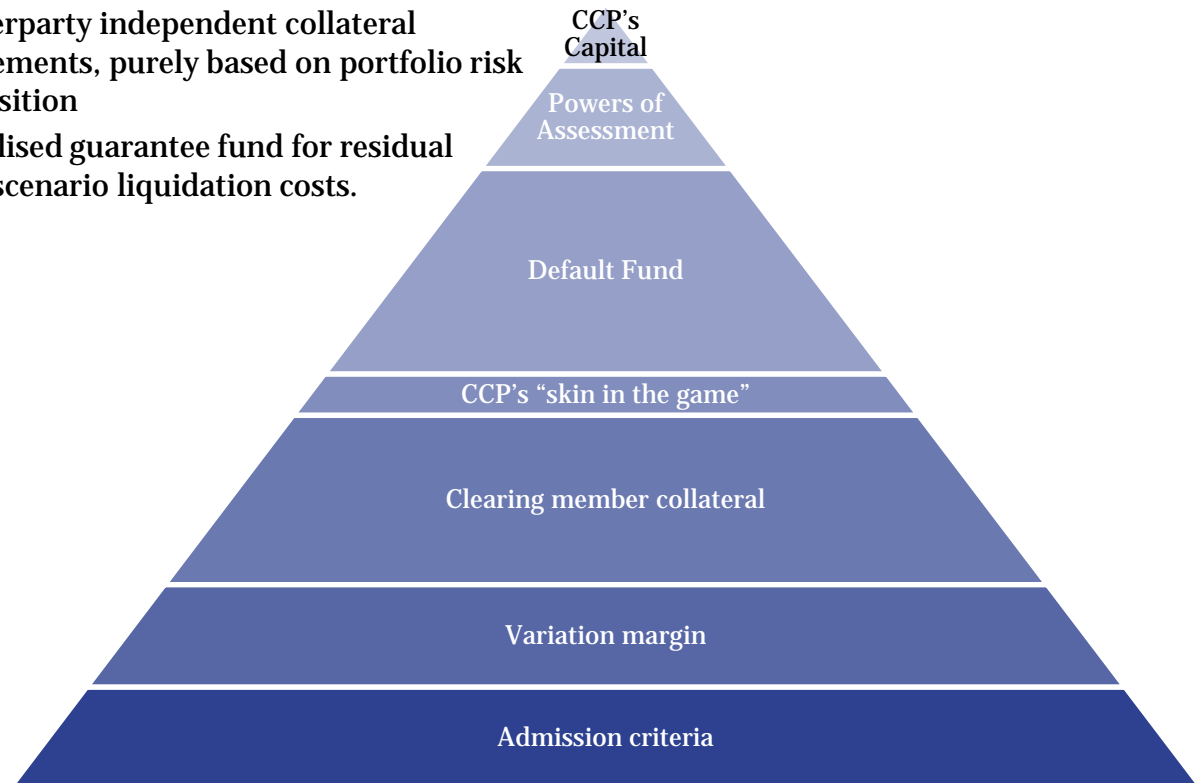
liquid collateral instead of counterparty credit

CCP's core function Risk Management

- A CCP acts as a central counterparty. It becomes the buyer to every seller and the seller to every buyer
- The main element of a CCP's risk management is that exposures are collateralized with highly liquid financial instruments or cash with minimal credit risks at all times.

Lines of Defence

- Counterparty independent collateral requirements, purely based on portfolio risk composition
- Mutualised guarantee fund for residual stress scenario liquidation costs.





EMIR regulations - ensuring a prudent CCP risk management

EMIR provisions

In July 2012, the final text of EMIR (648/2012) was published in the Official Journal of the EU. EMIR requires ESMA to describe Regulatory Technical Standards (RTS) to detail and implement the provisions of EMIR. Published Q&As support a consistent supervision¹.

- General requirements (N°153/2013) and capital requirements for CCPs (N°152/2013)
- Requirements for OTC contracts not CCP-cleared (N°149/2013)
- Colleges for CCPs (N°876/2013)
- Bank exposures to CCP (N°575/2013)
- Capital for CCPs (N°152/2013)
- Guideline 3rd country-CCP
- ESMA: EMIR Q&A
- EC: EMIR FAQ

ESMA's role

- **Standard setting:**
Prudential requirements for CCPs
Common supervisory culture
Consistent supervisory practices
Peer review of supervisory activities
Issue recommendations
- **Coordination:**
CCP colleges coordination
Mediation role
- **Financial Stability:**
Identify emerging issues and monitor risks
Coordinate EU wide assessments of resilience of CCPs to adverse events

EMIR - European Market Infrastructures	ESMA Regulatory Technical Standards
Regulation (EU) 648/2012	Com. Delegated 153/2013
Exposure management (§ 40) Margin (§ 41) Default fund (§42) Other financial resource (§ 43) Liquidity risk controls (§ 44) Default waterfall (§ 45) Collateral requirements (§ 46) Investment policy (§ 47) Default procedures (§48) Models, stress test, back testing (§ 49)	Definitions Recognition of Third Country CCPs Record Keeping Transaction records Business Continuity Margins Default Fund Liquidity Risk Controls Default Waterfall Collateral Investment Policy Review of Models, testing
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:201:0001:0059:EN:PDF	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:052:0041:0074:EN:PDF

¹ a supporting list of internet links can be found in the Annex.



CCP risk identification – supported by EU wide consistent regulation

Market Risk

- Position and portfolio risks, by risk factor
- Liquidity risks
- Concentration risks
- Correlation risks
- Collateral price risks
- Investment portfolio price risks
- FX and currency risks
- Pricing uncertainty
- Leverage risks
- Model risks

Credit Risk

- Collateral credit risks
- Investment portfolio credit risks
- Credit risk service providers
- Wrong-way risks
- Procyclicality

Ops-Risk

- Operational risks
- Business continuity
- Disaster recovery
- Governance
- Organisation

Business Risk

- Winding down costs
- Legal risks

CCP Prudential Risk Requirements	
EMIR Header 648/20012	RTS Header 153/2013
Exposure management (§ 40)	Exposure management (§ 40)
Margin (§ 41)	Percentage (§ 24)
	Time Horizon (§ 25)
	Procyclicality (§ 28)
	Time horizon liquidation (§ 26)
	Portfolio margining (§ 27)
Default fund (§ 42)	Framework (§ 29, 31)
	Default fund credit risk
Default waterfall (§ 45)	Contribution to Default fund (§ 35)
Other financial resource (§ 43)	Other financial resource (§ 43)
Liquidity risk controls (§ 44)	Liquidity risk (§ 32)
	Concentration Risk (§ 34)
Collateral requirements (§ 46)	General (§ 37,40)
	cash (§ 38)
	Financial instruments (§ 39)
	Collateral: Valuation (§ 40)
	Haircuts (§ 41)
	Concentration Limits (§ 42)
Investment policy (§ 47)	Highly liquid (§ Annex II)
	Concentration limits (§ 45)
Default procedures (§ 48)	Default procedures (§ 48)
Review of models, stress testing, back testing (§ 49)	Validation (§ 47)
	Backtesting (§ 49)
	Sensitivity testing s (§ 50)
	Stress testing: procedure (§ 51)
	Reverse stress tests (§ 57)
Capital (16 EMIR)	Winding down cost (§ 16)
	Capital for all risk types (§ 16)
Governance (Ch. 1 EMIR)	Risk Control (§ 7)
	Compliance (§ 5,6)
	Orga (§ 7,8)
	IT (§ 9)
	Audit (§ 11)
Business Continuity (34 EMIR)	Strategy (§ 17)
	Disaster Recovery (§ 19)

CCP Systemic risk mitigation - absorb losses from a counterparty default

CCPs risk manager tool set

- Immediate novation of trades no bilateral credit exposure
- Trade acceptance and exposure limits
- Strict criteria for the admission of clearing members

Credit & Counterparty risks

Current <-> Future exposures

- Daily revaluations mark-to-market or mark-to-model
- Daily variation margins must be covered with cash
- No accumulation of losses (daily settlements)
- Intraday valuation and margin call process

Historic Events <-> Hypothetical risks

99% or 99,5% risks <-> Stress risks

- Secure confidence level estimate including fat tail modelling
- Combination of historical event and hypothetical risks calculations
- Testing triangle including: Backtesting, Reverse Stress testing, Sensitivity

- Counterparty independent collateral coverage for standard market risks
- Mutualised "paid" collateral pool for stress event risks covering extreme but plausible events
- Identification of risk factors including concentration and liquidity risks

CCPs organization risk tools

- Operational and governance
 - CCP's Skin in the game and restriction to CCP business model
 - Straight through processing and geo-redundant IT operation centres
 - Detailed requirements for independent validations and model reviews
- Collateral and Investment portfolio
 - Daily (and intraday) updated collateral requirements
 - Ensuring an absolute safe collateral value after haircut
 - To cover liquidation costs in case of default for margin and guarantee fund
 - No additional CCP risks from maturity transformations or investments



CCP's stress testing ESMA mandate

ESMA mandate for EU wide Stress tests				
Task	Process	Scope	Frequency	Tools
Assessments using stress tests	Initiate and coordinate	Resilience of CCPs to adverse market developments	annual	- RTS 153/2013
Identification and Measurement	Develop criteria	Systemic Risk	one off and ongoing	- in consultation with the ESRB - strengthened supervision - apply recovery/resolution process (RTS to be developed) - take into account international approaches (incl. FSB, IMF BIS)
Development and evaluation	Initiate and coordinate	Potential for systemic risk increase posed by financial market participants/players in situations of stress	one off and ongoing	- in consultation with the ESRB - address a recommendation to the competent authority to correct issues identified in the stress test
Assessment & Ensuring a consistent methodology	Initiate and coordinate	Resilience of key financial market participants to adverse market developments	ongoing	- address a recommendation to the competent authority to correct issues identified in the stress test
Methodologies	Development for application by NCA	Common methodologies for assessing the effect of economic scenarios on an institution's financial position	annual	- in cooperation with the ESRB
Approaches	Development for application by NCA	Common approaches to communication on the outcomes of these assessments of resilience of financial institutions	annual	- in cooperation with the ESRB
Methodologies	Development for application by NCA	Common methodologies for assessing the effect of particular products or distribution processes on an: - institution's financial position - depositors information - investors information - customer information	annual	- in cooperation with the ESRB

Still work in progress – preliminary stages.

7 March 2012: the Commission adopted a proposal for a Regulation on improving securities settlement in the European Union and on central securities depositories (CSDs)

Key topics:

- an obligation of dematerialisation for most securities;
- harmonised settlement periods for most transactions in such securities;
- settlement discipline measures; and
- common rules for central securities depositories (CSDs).

ESMA is developing 31 technical standards under CSDR.

These ESMA technical standards cover issues around:

- CSD registration;
- Requirements for CSDs; and
- Settlement Discipline.



CSD risks and CSDR

Key risks for CSDs

Credit Risk

Liquidity Risk

Custody and Investment Risk

Operational risk

General business risk

CSD Authorisation, Review and Evaluation	<ul style="list-style-type: none"> a) Article 17 – CSD authorisation b) Article 22 – Review and evaluation c) <u>Article 26 – Organisational requirements (monitoring tools)</u> d) <u>Article 45 – Operational risks</u> e) Article 55 – Banking type of ancillary services
Data Reporting	<ul style="list-style-type: none"> a) Article 7 - Settlement fails monitoring b) Article 9 – Settlement internalisers c) Article 29 – Recordkeeping
Prudential requirements and investment policy [limiting CSD shareholdings/investments if risky]	<ul style="list-style-type: none"> a) Article 18 – CSD participations b) Article 46 - Investment policy
Links & Access [ability to deny access to a CSD on risk grounds]	<ul style="list-style-type: none"> a) Article 33 – Participants (refusal of access) b) Article 37 – Integrity of the issue (reconciliation) c) <u>Article 48 – CSD links and risk</u> d) <u>Article 49 – Issuers access and risk</u> e) <u>Article 52 – Links between CSDs and risk</u> f) <u>Article 53 – Access by other infrastructures and risk</u>
Settlement Discipline	<ul style="list-style-type: none"> a) Article 6 - Measures to prevent settlement fails b) Article 7 - Measures to address settlement fails

Quick Links on CCP regulation

- **EMIR 648/2012**
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32012R0648:EN:NOT>
- **General EMIR RTS 153/2013**
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:052:0041:0074:EN:PDF>
- **Capital requirements RTS 152/2012**
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:052:0037:0040:EN:PDF>
- **OTC contracts not CCP cleared RTS 149/2013**
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:052:0011:0024:EN:PDF>
- **Colleges for CCPS RTS 876/2013**
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:244:0019:0022:EN:PDF>
- **ESMA EMIR Q&A**
http://www.esma.europa.eu/system/files/2013-1527_emir_questions_and_answers_2013_m10_d22.pdf
- **EC EMIR FAQ**
http://ec.europa.eu/internal_market/financial-markets/docs/derivatives/emir-faqs_en.pdf
- **ESMA guideline on Interoperability**
http://www.esma.europa.eu/system/files/2013-323_annex_1_esma_final_report_on_guidelines_on_interoperability.pdf
- **3rd country CCP**
http://www.esma.europa.eu/system/files/2013_m09_d17_tc-ccp_applications.pdf
- **Bank exposure to CCP**
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0001:0337:EN:PDF>

Quick Links on CSDR

- **EC proposal and documentation on CSDR**
http://ec.europa.eu/internal_market/financial-markets/central_securities_depositories/index_en.htm
- **CSDR webpage in ESMA's website**
<http://www.esma.europa.eu/page/Post-tradingSettlement-SFD-CSDR-T2S>