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BENEFITS OF A CENTRAL COUNTERPARTY IN UKRAINE

Central Counterparty Programme

The paper presents the benefits of a NewCo Central Counterparty (CCP) in Ukraine. Date: April 2021

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Disclaimer

This paper discusses the general practice of establishing a Central Counterparty in various countries. In particular it reflects the following steps of creating a CCP specifically in Ukraine, such as set-up, functionality, testing, launching. The report takes into account Ukrainian context. It is based on a variety of assumptions outlined below. It reflects the steps and pre-conditions to those steps as experienced in other countries. Furthermore, such staged approach of creating a CCP is fully compliant with international standards – PFMI IOSCO. The actual expediency of building a CCP in Ukraine will be determined by other studies, market participants and various other stakeholders. Main business processes and functions of a CCP, described in this report, will lie in the foundation of an assessment study of NEXT-UA, which will also outline cost-benefit analysis and potential financials of a CCP in Ukraine.

Introduction

Central Counterparties (CCPs) contribute significantly to the efficiency of financial markets and in doing so ***cut the average costs of trading and increase the profitability of their users***.
CCPs also provide a critical risk mitigation and in doing so, ***increase the capital efficiency of their users.***
These benefits in terms of efficiency and risk mitigation have been particularly important in recent times given the global turmoil in financial markets.
Central clearing via a CCP, according to international standards[1], is a prerequisite for the development of the local capital markets. Regulators across the world have responded to the 2008-09 financial crisis by expanding the role of central clearing in capital markets in order to de-risk the financial system. EMIR[2] has established a harmonized set of requirements for CCPs across member states. The result is that all major exchange-traded markets in the EU rely on CCPs for central clearing.
International investors have come to expect central clearing in these markets, especially in countries where assessing the credit worthiness of local counterparties is not straightforward. In the appropriate environment, with the appropriate legal and regulatory infrastructure, a CCP will foster the growth, deepening and diversification of local capital markets through four mechanisms:

- Increased trading, liquidity and secure settlement for domestic participants, with increased STP
- Increased investor trust and flow of international investment
- Enhanced efficiency of market intermediation for established brokerages by reducing the risk cost, increasing liquidity
- Improved solidity and resilience of the financial system due to the risk mitigation effect of the CCP

Today, bilateral settlement exists, with limited guarantees of settlement and resulting risks ever present – payment failure, settlement breaks and resultant debt.

Why is a CCP Important

According to European legislation, a CCP is an entity that becomes a buyer for every seller and seller to every buyer, usually through either novation or open offer. In addition, a CCP performs clearing, which is the process of establishing positions, including the calculation of net obligations, and ensuring that financial instruments, cash, non-cash or both, are available to secure the exposures arising from those positions[3].

In essence, CCP acts as a risk buffer: it concentrates and manages risks and resolves default, if one occurs. A CCP's regulatory requirements must be designed to ensure stability for the entire financial system, and are very high. Increased safety and availability of capital allows market participants to increase liquidity and depth in the market through increased confidence and trading limits.

CCPs perform two primary functions as the intermediary in a transaction:

[1] http://www.bis.org/publ/cpss101a.pdf.
[2] The European Market Infrastructure Regulation is an EU regulation for the regulation of over-the-counter derivatives, central counterparties and trade repositories. It was originally adopted by the EU legislature on July 4, 2012 and came into force on August 16, 2012.
[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012R0648

Clearing & Settlement - as counterparties to the buyers and the sellers, CCPs guarantee the terms of a trade - even if one party defaults on the agreement. CCPs bear the lion's share of the buyers' and sellers' credit risk when clearing and settling market transactions.

CCPs shield the associated traders' identities from one another. CCPs also protect trading firms against default from buyers and sellers who are matched by an electronic order book and whose creditworthiness is unknown. Furthermore, CCPs reduce the number of transactions that are being settled by netting obligations. This helps smooth operations while reducing the value of the obligations, which helps money move more efficiently among traders.

CCPs significantly reduce systemic risk and their amplifying factors in financial markets in several ways: CCPs serve the financial system in a unique way as transparent independent risk manager.

They prevent the build-up of excessive risk – a centrally cleared market structure reduces interconnectedness of market participants. Because CCPs' multiple lines of defense are available to serve as loss absorbers, they mitigate defaults and protect the market against shocks that would otherwise have devastating effects in an uncleared market with insufficient collateralization.

Given their role, there are a number of pre-requisites for CCPs to perform their important function and set out by legislation. CCPs must adhere to the highest quality standards, these include governance and incentive structures, prudent risk management standards, high quality operational capabilities and liquidity arrangements.

CCPs must serve as trusted, stable counterparties by providing transparency to their users and stakeholders.

To ensure that CCPs can respond appropriately if confronted with unprecedented and unforeseen events, mechanisms and tools need to be in place that enable the recovery of viable CCPs and the resolution of unviable ones. These recovery and resolution plans ensure that in market shock scenarios, CCPs are a mechanism to manage the impact and mitigate uncertainty.

CCPs have proven their capabilities in the past financial crisis, and the extension of their use for previously lightly regulated and undercollateralized markets has forged ahead. CCPs have been refined and improved through various international regulations to enshrine their best features and establish robust back-stop measures.

In summary, the use of a well-designed CCP creates a resilient financial market structure, suited to enhance and develop the market, whilst being designed to handle crises in a controlled and effective manner.

Multilateral Netting

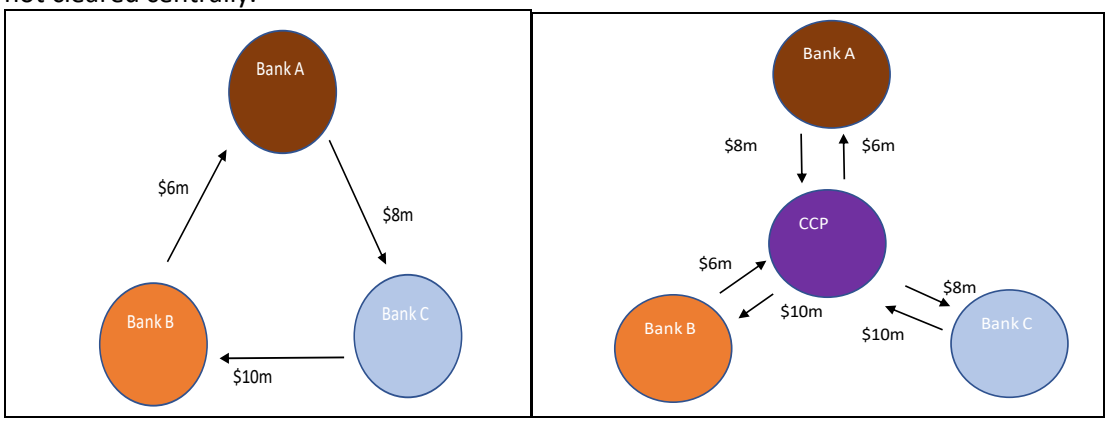
CCPs reduce counterparty credit risk by netting exposures across their Clearing Members: that is, offsetting an amount due from a member on one transaction against an amount owed to that member on another, to reach a single, smaller net exposure.

When trades are centrally cleared, the original counterparties' contracts with one another are replaced or 'novated' — with a pair of equal and opposite contracts with a CCP. Hence the CCP becomes the buyer to the original seller, and the seller to the original buyer.

Multilateral Netting Illustration

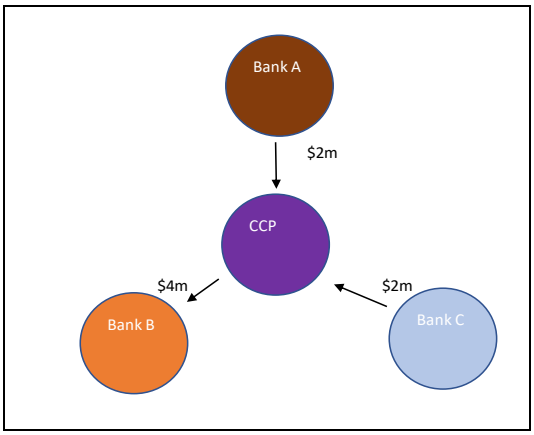
Bank A enters into a contract that requires it to pay $8 million to Bank C; Bank C has a contract requiring a payment of $10 million to Bank B; and Bank B has a contract with Bank A where it must pay Bank A $6 million.

The arrows in the top panel represent the gross exposures on these bilateral trades when these are not cleared centrally.



Following novation of trades, the CCP sits between the buyer and seller of each bilateral transaction (Chart 2).

This allows gross exposures to be 'netted', reducing exposures, liquidity requirements and payment values and in the event of a default, limiting the market impact (Chart 3).



For example, Bank B is exposed to potential losses of $10 million if trades are not cleared, but clearing means it has a single net exposure of $4 million to the CCP.

A CCP also holds collateral, 'initial margin', to mitigate against the risk of default. The netting of the payment obligations can also reduce the liquidity needs of members arising from those contractual obligations. Whether payment obligations arise only on a single settlement date or over the life of a contract, the CCP can calculate a single, net amount due from (or to) each member.
Using the example above, Bank A is obligated to make a gross payment of $8 million and receive a payment of $6 million if trades are not cleared. But with central clearing and net settlement, this is reduced to a single net payment obligation of $2 million. For some financial products, members' net payment obligations to or from the CCP are settled on a daily basis (or more frequently if there are large movements during the course of the day) to prevent the build-up of large exposures. Payments that become due because of changes in financial market prices are known as 'variation margin' payments.

The result of the credit standards and margining systems employed by CCPs is twofold.
Firstly, credit risk is homogenized; and secondly, credit risk monitoring is delegated. Both of these effects reduce the costs to market participants.

- Credit risk is homogenized through standardized margining and member capital requirements.

- In addition, the CCP's risk-management mechanisms are supplemented by mutualization or loss sharing. Since every Clearing Member's counterparty is the CCP, it does not matter which member a market participant enters into a trade with.

CCPs and the Reduction of Systemic Risk

CCPs reduce systemic risk in three ways:

- A CCP as independent risk manager does not take on proprietary risk and reflects the risk exposure by neutral valuation and prudent collateralization. Prudent levels of collateralization in turn align market participants' risk-related incentives up front, preventing excessive risk taking.
- Interconnectedness in the market is reduced by both the structure of centrally cleared markets, i.e., novation/open offer by the CCP, and by multilateral netting.
- A CCP is better able to absorb shocks by its multiple lines of defense and its default management process. These advantages decrease the uncertainty in financial markets and thus mitigate domino effects and spill-overs to the whole market.

These advantages of CCPs lead to greater safety and integrity in the financial system. The explicit and transparent rule sets for losses in defaults create positive incentives to manage various concentration risks. Systemic events become less likely and their impact can be mitigated more effectively. In other words, CCPs serve as shock absorbers for the market and act as systemic risk managers.

To sustainably and effectively fulfill their role as systemic risk managers, it needs to be ensured that CCPs themselves are resilient. Therefore, CCPs need to comply with high standards regarding their governance and incentives, risk management, liquidity management, and operations. EMIR sets out some of the highest standards globally.

Mitigation of Systemic Risk by a CCP

CCPs reduce systemic risks substantially compared to non-centrally cleared markets. They effectively address some of the major root causes of the financial crisis by preventing excessive risk taking, reducing interconnectedness, absorbing losses and related shocks in the financial system, and facilitating central decision making based on predefined rules. By mitigating systemic risk, CCPs have demonstrated their ability to prevent costs for the public comparable to the financial crisis of the past.

In summary, the reduction (through netting and collateralization), the mutualization and the orderly distribution of losses are the key differences between trades that are centrally cleared compared to non-cleared transactions. The netting benefits reduce the size of exposures at default, and also the liquidity demands on traders during what could be stressed market conditions. Losses in excess of collateral provided by the defaulters are mutualized and allocated in a transparent and orderly fashion, reducing some of the uncertainty that would otherwise arise in the event of a firm's failure.

Benefits of a Central Counterparty

CCPs improve the efficacy of financial markets, lowering the average cost of trading by making trade processing more efficient because they:

1. Standardize and automate trade capture and post-trade processing, remove the need for bilateral, potentially manual reconciliations, reduce processing errors and operational risk, and provide straight-through-processing (STP) to back-office systems.

2. Provide a "golden record" of each trade, its status, and payments relating to it – including such events as coupons and corporate actions – thus reducing processing errors and disputes and operational risk.
3. Provide, in the form of their rulebooks, a standard set of conditions of business, minimizing legal risk.
4. Provide, or interface with, robust payment systems.
5. Sustain, where the trade execution process itself is anonymous, full post-trade anonymity.
6. Perform, or enable CSDs to perform, netting of payments and settlements, reducing settlement obligations and systemic and liquidity risks.
7. Provide, where necessary, efficient portfolio management mechanisms (e.g., transfers, close-outs, tear-ups etc.).
8. Provide systems and procedures, and centralized investment, which ensure high capacity, low latency and low operational risk in trade processing.

A CCP benefits its participants – including their profitability – and the wider marketplace because it can[4]:
1. Mitigate against counterparty credit risk and facilitate multilateral netting of exposures through the legal or technical substitution of one high quality counterparty (the CCP) for many, potentially lower quality, bilateral counterparties; this also has the effect of reducing the need for credit analysis.
2. Reduce risk by netting exposures to that single (central) counterparty, thus reducing the market-wide requirements for collateralization (when compared to a bilateral market).
3. Increase certainty by:
a. acting as central counterparty through to contract expiry and, where relevant, even to contract delivery;
b. providing participants with information on its role and the risks associated therewith; and,
c. being itself subject to transparent and effective regulation and oversight.
4. Where such techniques are applied, improve the management of replacement cost risk within a market through the marking-to-market of unsettled trades and the use of margin; such centralized mark-to-market and collateralization disciplines also reduce back office and legal effort and costs.
5. Reduce the potential systemic impact of a default by undertaking to maintain adequate combinations of margin, liquidity, capital or other financial resources to deal with such an event without impacting other participants.
6. Reduce uncertainty around a default event – and the need for bilateral action by participants – by having procedures for dealing with such an event which are clearly defined, transparent and, where possible, protected by insolvency law.
7. Reduce balance sheet usage by reducing exposures on the asset side of the balance sheet and by reducing the allocation of capital to support trading on the liability side.
8. By reducing the allocation of capital, give participants the opportunity to improve their own credit standing by retaining the capital and thus reducing funding costs and increasing their attractiveness to clients; an improved capital position can also assist in maintaining or enhancing credit ratings.
9. Increase the effective capacity, volume, liquidity and product innovation of the marketplace through netting exposures and reducing the capital required and balance sheet used to support participants' trading activity.
10. Reduce spreads since anonymity reduces the market impact of position unwinds, while reduced balanced sheet, capital and credit line usage will also be reflected in execution.
11. Increase return on capital and risk-adjusted return on capital by reducing operational costs and potential credit losses and by lowering capital allocated.
12. Help regulators to instill capital adequacy and operational best practice through requirements on its participants, thus ensuring that risk is allocated to a wider constituency that is able to bear it.

[4] CCP12_Value_of_CCPs.doc

13. Assist participants in managing their own risk through the setting of market minimum margin rates and collateral acceptability standards as well as other risk management disciplines such as intraday calls and stress testing.

Managing Risk

A CCP bears a counterparty risk both with the purchaser and with the seller of all the positions it clears. To cover this risk, the CCP has lines of defense geared exclusively to covering losses owing to the failure of one or more clearing members to meet their obligations.

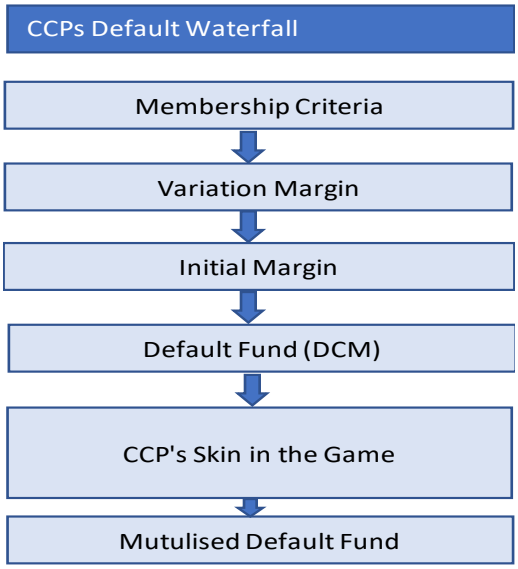
Initial and Variation Margin

CCPs require to their clearing members to post collateral to cover the future potential exposure of their position: the initial margin (IM). IM is calculated to cover the losses that might arise during the period between a member failure to the time that the CCP manages to close or transfer the position. The IM is updated daily (and on an intraday basis).

In addition to the IM, CCPs raise and post the variation margin (VM) daily (and on an intraday basis). This margin is tantamount to a daily settlement of gains and losses in the position of each of the clearing members, caused by the daily movements in the value of the derivatives or assets held. Given that the CCP has a zero net position, the daily net balance of the VM for the CCP is also zero. The VM generally has to be contributed in cash. Like the IM, the VM is calculated on the basis of positions in a specific market segment.

Default Fund and CCP Skin in the Game

In addition to margins, the CCP requires its clearing members to contribute to a fund to cover losses in the event of default that go beyond the initial margin posted by the member or members defaulting. This fund, known as the default fund, means that all members are exposed to the losses generated by any other member. This entails a mutualization of risk. The international framework, CPSS-IOSCO recommends that, at a minimum, the fund should be enough to cover the losses that might be generated, in extreme but plausible market conditions, by the clearing member with the highest exposure. In Europe, clearing members contribute to the default fund in proportion to the size of their exposure.



Besides the contributions made by clearing members, CCPs allocate a portion of their own capital to covering the losses generated by the members. This buffer, known as “skin in the game” (SIG), encourages the clearing house to set in place prudent risk management.

Clearing Member Opportunities

Clearing Members can help bank and broker clients to optimize their liquidity and reduce costs in a number of ways.

Clearing Members can enable their clients to achieve meaningful counterparty risk reduction and cost and capital savings. A clearing member can absorb the fixed costs and handle the complexity around market infrastructure connectivity and technology development, enabling clients to focus on their core activities.

A Clearing Member can optimize clients' funding requirements, optimizing their liquidity through monitoring intraday client positions and risk, providing single netting at the CCP and a centralized margin call process.

Clearing Members can provide different value propositions, often unique to individual clients enabling clients to finance their daily CCP margin calls in the most efficient way possible and according to their individual needs and subject to the Clearing Member client proposition.

A number of opportunities are available to a Clearing Member to service market participants:

Energy/Derivatives/Commodities Clearing:

- CCP Clearing: supporting multiple account structures offered by the CCP

- Collateral Management: including pre-funding and intra-day and overnight margin calls to minimize daily operational burden and reduce clients' cash liquidity constraints

- Regulatory Reporting: cleared trades reported to a Trade Repository ……

Securities Clearing:

- As custodian and settlement agent for clients……

Financing:

- Optimized capital utilization by providing correlation offsets

- Access to liquidity for securities borrowing

- Financing services ranging from Margin Financing, Cash Financing, Securities Financing …..

CCPs contribute significantly to the efficiency of financial markets and in doing so cut the average costs of trading and increase the profitability of their users. Market participants can take advantage of improved risk management, certainty and standardization and play an active role in developing the capital and commodities market where CCPs provide the opportunity to increase trading, liquidity and investor trust and foster the growth, deepening and diversification of local capital markets.