

New Clearing Guarantee System

PRESS RELEASE

The National Depository has transferred to KDPW_CCP all functions related to the clearing of transactions executed on the regulated market and in the alternative trading system and the operation of the clearing guarantee system as of 1 July 2011. KDPW remains responsible for transaction settlement and central securities depository functions. The process implements world-class standards at KDPW and enhances the competitiveness of the Polish capital market. The spin-off of the clearing house from KDPW's structure derives from the National Depository Strategy 2010-2013 adopted in late 2009 and consistently pursued among others to develop a new business model of KDPW.

The launch of KDPW_CCP operation will be concurrent with the implementation of a new clearing guarantee system based on two main tiers: individual margins with a mark-to-market mechanism and a solidary clearing fund. The model will be complemented by the capital of the KDPW_CCP clearing house.

The change of the structure of contributions to the clearing guarantee fund, effective to the clearing members from its effective date, involves in particular a shift of the main burden from solidary funds to individual margins, which will not be used in case of another member's default. The main benefit of the change, available from the effective date of the new model, is that the margins will be protected.

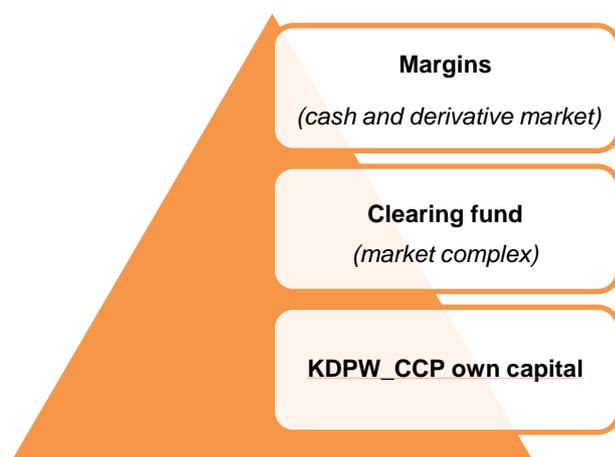
Another difference compared to the existing solution is the introduction of margins for cash transactions. Previously, margins were only used for derivative transactions. The profile of the clearing fund will also change.

The existing model based on individual margins for the derivative market and a solidary clearing fund for the regulated cash and derivative market will be replaced by a model based on **individual margins** on both markets while the solidary clearing fund for the regulated market will be supplemented with **additional margins** required from members whose uncovered risk is greater than available resources in the clearing fund.

In addition, the rules of guaranteeing the clearing of transactions executed on the regulated markets and in the alternative trading system have been harmonised. The change involves the use of identical tools supporting the clearing of transactions executed on the regulated market and in the alternative trading system including:

- ❖ access to automatic lending;
- ❖ automatic buy-back of securities concerned by a transaction if their clearing is suspended;
- ❖ identical use of subsequent tiers of the guarantee system in case of shortage of resources necessary to settle all transactions executed on the regulated market and in the alternative trading system.

Fig. 1. Main components of KDPW_CCP's new clearing guarantee system



Source: KDPW study

Cash market margins

In the new model, the main burden of guaranteeing the clearing of transactions executed both on the cash and the derivative market will shift to **margins contributed by individual clearing members**, which can only be used in the event of the contributing member's default. The main benefit of the change is that **each member's margins will be protected**.

The function of margins is to secure risks within a certain time horizon under normal market conditions.

The existing solution did not include individual margins to secure cash transactions; in the event of a member's default, this generated the risk of using the resources of the clearing fund made up of contributions of all KDPW clearing members. The **mark-to-market** mechanism supports cash market margins as it reduces the risk to a one-day time horizon.

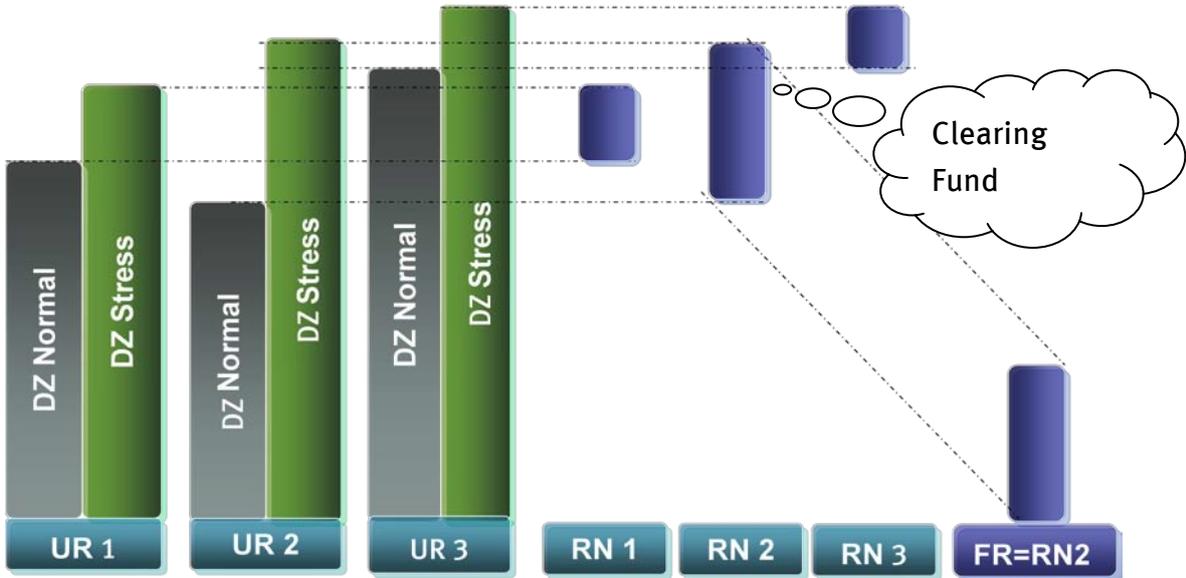
New role of the clearing fund

The introduction of margin requirements for the cash market will change the role of the clearing fund. Until now, in the absence of cash market margins, the clearing fund provided the first resources to be used on a **solidary** basis in case of a clearing member's default.

In case of stress market developments which are extreme yet possible, the amount of resources contributed as margins may prove insufficient. This additional risk known as **uncovered risk** will be secured with the resources of the **clearing fund**. Together with other components of the guarantee system (margins, mark-to-market), the clearing fund should provide sufficient resources necessary to ensure safety of clearing even in case of default of the **biggest clearing member** defined as the clearing member with the highest uncovered risk under stress market conditions. Stress conditions are unlikely but not impossible.

Uncovered risk is measured as the difference between margins required under stress conditions (understood as a material change of prices of financial instruments) and margins under standard market conditions.

Fig. 2. Clearing fund calculation mechanism based on the uncovered risk concept



UR – clearing member
RN – uncovered risk
FR – clearing fund
DZ – margin
FR=RN2 Clearing fund resources equal the highest uncovered risk generated by a clearing member calculated as the difference between stress parameter margins and normal parameter margins

Source: KDPW study

KDPW_CCP capital

The capital of the clearing house can be used in the clearing guarantee system as an additional component improving the safety of clearing on the Polish capital market. The

KDPW_CCP clearing house is equipped with **EUR 25 million** (PLN 100 million) of capital to be gradually increased in the coming years. The capital of KDPW_CCP is the last resort in case of default of one or several members after the margins have been used and the clearing fund and all other financial resources have been exhausted. If KDPW_CCP decides to allocate a part of its capital to additional resources which can be used for risk management purposes, this part can only be a surplus over the capital required in order to provide services and perform the on-going business of KDPW_CCP.

Table 1. Comparison of the clearing guarantee system structure

Status quo	After KDPW_CCP go-live
Cash market	
❖ One-tier system based on a mutual guarantee fund	❖ Two-tier system based on individual margins and a mutual guarantee fund for a market complex
❖ Non-standard risk measurement methodology	❖ Risk measurement according to SPAN®Liquidation Risk methodology
Derivative market	
❖ Two-tier system based on margins and a mutual guarantee fund	❖ Two-tier system based on individual margins and a mutual guarantee fund for a market complex
❖ Non-standard risk measurement methodology	❖ Risk measurement according to SPAN®Liquidation Risk methodology
Clearing Fund	
❖ Separate fund for each market	❖ Fund for a market complex
❖ Guaranteed with the capital of the clearing house	❖ Uncovered risk methodology
	❖ Guaranteed with the capital of the clearing house

Source: KDPW study

Analysing the size and needs of the clearing guarantee system

The completed simulations of contributions to the new clearing guarantee system based on application of the SPAN® risk measurement methodology in the calculation of margins and the uncovered risk concept in the calculation of contributions to the clearing fund define the change in the size and structure of members’ required contributions to the guarantee system.

The change of the structure mainly results from shifting the main burden from the clearing fund to margins contributed by members in order to secure individual obligations. **This change is a part of the harmonisation of the system with future regulatory requirements due to the implementation of EMIR and CRD as well as existing recommendations (CPSS/IOSCO recommendations and ESCB/CESR recommendations).**

The results of the simulations should be considered in the context of the requirements which will apply once the KDPW_CCP clearing house goes live, gradually aiming to reach the target solutions securing risks at the optimal level.

The simulations suggest that risk parameters comparable to those used by the biggest foreign CCPs would result in a one-off dramatic increase of required margins and clearing fund contributions. Instead, the planned solution is to gradually adjust the parameters and consequently the structure of collateral which constitutes the resources of the clearing guarantee system.

The staged process introducing the optimal level of collateral will give clearing members more time to face the higher required guarantee system contributions and will create no major obstacles to market growth, which could happen if the requirements increased sharply.

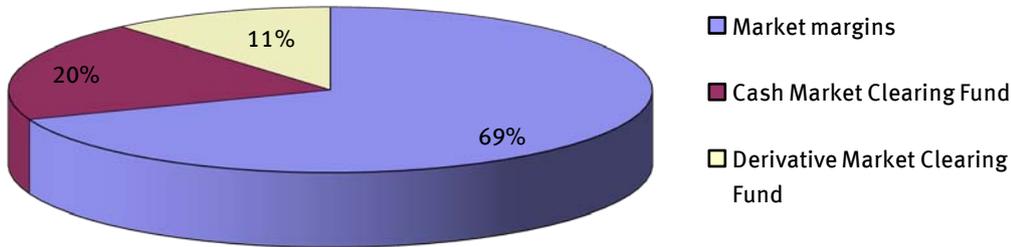
The simulations were based on current market data (March 2011).

Status quo

Under the existing structure of the clearing guarantee system, based on current market data, the members' total required contributions to the clearing guarantee system are:

- ❖ margins – 69%
- ❖ Cash Market Clearing Fund – 20%
- ❖ Derivative Market Clearing Fund – 11%

Fig. 3. Existing clearing guarantee system structure: members' contributions



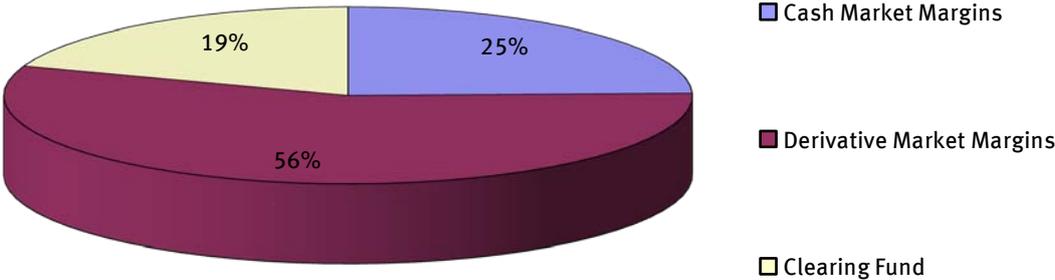
The capital of KDPW_CCP as clearing guarantor amounting to **EUR 15 million** (PLN 60 million) constitutes additional resources available in the system. In addition, in extreme cases, it is possible to require members to pay additional contributions into the fund, which

are capped at 110% of basic contributions. According to the likely provisions of EMIR, additional contributions should not be included in the calculation of the system resources required to adequately protect CCP against members' default. They may also be costly to members due to planned capital requirement regulations.

Early phase (as soon as KDPW_CCP goes live)

The simulation assumes that the clearing fund resources should at least secure the risk of default of one member with the highest exposure to KDPW based on risk parameters set below the status quo parameters but still tolerable. Under these parameters, contributions to the clearing guarantee system resources required from each member will remain close to the current level.

Fig. 4. Clearing guarantee system structure in KDPW_CCP phase 1: members' contributions



The difference between the status quo and the situation once KDPW_CCP goes live mainly results from the **new risk measurement methodology**, which will modestly **reduce derivative risk contributions** mainly owing to a more precise risk description of option positions while **cash risk contributions will increase** due to a new risk collateral model and risk measurement at entity account level (currently at member account level).

Target situation

The risk parameters to be used in the early phase (as soon as KDPW_CCP goes live) will be gradually increased concurrent with an increase of KDPW_CCP capital. As a target, the stress-test parameters to apply as of mid-2014 will allow to close default positions of the two members with the highest exposure assuming stress market price changes possible under extreme but probable market conditions.

Fig. 5. Target clearing guarantee system structure: members' contributions

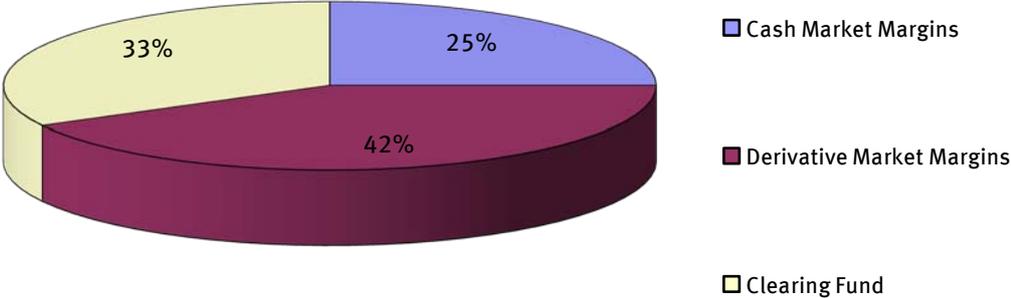


Fig. 6. Target clearing guarantee system structure (including KDPW_CCP capital)

