

Supervision over Records of Securities Kept by KDPW Participants – New Rules

Link Up Markets Platform

mySAP ERP

KDPW S.A. Clearing House News

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2009

Supervision over Records of Securities Kept by KDPW Participants – New Rules

According to amendments to the KDPW Rules which entered into force on 2 March 2009, KDPW will no longer determine detailed requirements for maintenance of records of financial instruments by KDPW Participants. The amendments also change the principles of KDPW's supervision over the records.

The amendments simplify the requirements in order to bring the KDPW practice close to that of other European securities markets. According to a review of the harmonisation of KDPW principles and practices with those applied by local central depositories in the depository systems of thirteen other European countries, the central depositories exercise control over their participants only to the extent of their compliance with regulatory requirements. The scope of control depends on the degree of specificity of the requirements and may include:

- checks of compliance with the

requirements for participation including financial requirements (minimum share capital), operational requirements (e.g., status of technical and communication infrastructure), formal and liquidity requirements (e.g., bank guarantees);

- evaluation of efficient operation of the participant in the system, in particular timely confirmation of terms of transactions and execution of settlements;
- evaluation of the financial standing of the participant on the basis of financial statements and the auditor's opinion;
- actions set out in rules and regulations, mainly including the right to request reports

(under mutually binding rules) and, in some cases, the right to conduct inspections in the offices of the participant in order to check, among others, IT systems, communication links and security solutions.

New Principles and Requirements for Keeping Securities Records

Considering the results of the review and the specificity of the Polish capital market, in particular dematerialisation of securities, KDPW has amended the requirements for securities records.

The goal of the amendment is to ensure flexibility of the scope and



mode of securities records kept by participants, depending on individual needs, in particular the level of detail of the records. This is a result of the elimination of KDPW's requirements for all participants managing securities accounts to follow uniform administration procedures imposed by KDPW; instead, participant records will be based on internal charts of registration accounts and administration procedures developed independently by the participants.

Requirements for the scope of administration of records are now limited to registration in securities accounts maintained in participants' systems. This simplifies the level of detail of the records, without prejudice to KDPW's supervision over the consistency between the size of issue and the number of securities in trading.

Registration requirements imposed on participants include the registration of holding balances and changes in holding balances of securities accounts ("individual accounts of holding balances" in the participant's system). This implies a require-

ment of recording KDPW excerpts in the system and the flexibility of using other registration documents.

In addition, KDPW no longer requires specific reports filed according to a pre-defined format, for instance operation journals or daily balances of securities. However, KDPW has retained the requirement of filing a list of holding balances of securities of entities for which securities accounts are managed as at the end of each trading month as well as reports on sale transactions executed without or in breach of the client's order as a legal basis.

Following the elimination of the requirement to follow specific principles of checking holding balances at the end of the financial day against the holding balances of depository accounts in KDPW, the participants may freely choose in their transaction systems a method of reconciliation of aggregate holding balances of securities accounts, provided that the system can supply necessary information on recorded holding balances of accounts at any time during

the financial day. Formal checks of balances at the end of each financial day are made ex-post by KDPW on the basis of reports of aggregate holding balances recorded in participants' systems submitted by the participants on the following financial day.

In addition to amendments which simplify the requirements concerning the scope of administration of records, the principles of keeping the records have also been modified. In particular, derogation from the principle of double-entry bookkeeping is allowed provided that the records entered during the financial day remain complete and chronological. As a result, securities records can be kept directly in transaction systems.

In addition, the KDPW regulations no longer specify detailed requirements of measures applied by participants to ensure the security of stored data and the continuity of operations. The only general requirement is to use such measures and procedures that prevent unauthorised access to data stored in the participant's securities records and enable continuity or immedi-



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LESŁAW A. PAGA FOUNDATION

The National Depository for Securities has supported the Lesław A. Paga Foundation over the past years. The projects of the Foundation, including the Capital Market Leaders Academy and competitions for business, economics, and finance projects, aim to promote the Polish capital market among the young generation.

ate recovery of the operational capacity to keep the records. Concerning data and document filing and storage (including monthly lists of clients' holding balances), reference is made to regulations implementing the Act on Trading in Financial Instruments, similar to regulatory norms of the capital adequacy of clearing members and the technical conditions of operation.

Entities which apply for participation in KDPW including management of securities accounts should submit an application for a participation agreement and the following accompanying documents:

- a document describing the applicant's rules and procedures for administration of securities records, including entering records in managed securities accounts, and presenting the applicant's internal chart of registration accounts;
- a document describing the participant's procedures for ensuring the continuity and security of operations related to administration of securities records, including entering records in managed securities accounts.

The amended provisions of the KDPW Rules concerning the required documents accompanying an application for participation also apply to those participants who continue operation on the date of entry into force of the amendments. Pursuant to these provisions, they are required to prepare and submit to KDPW by 2 March 2009 a document describing their rules and procedures for recording securities operations in their systems together with the internal chart of accounts and the list of used registration documents.

The amendments to the KDPW Rules do not extend the current requirements for participants' back-up documents other than the requirement of readiness to communicate with the KDPW IT system in the back-up location. It is considered sufficient fulfilment of the back-up document requirement if a participant submits to KDPW a written statement to the effect that the rules of continuity and security of operations submitted by the participant prior to the entry into force of the amendments to the KDPW Rules remain in force, together with the procedures of

communication with the KDPW back-up system attached to the statement.

Supervision over Administration of a Depository of Securities

Following the amendment of the requirements for keeping records of securities, the scope and procedures of KDPW's supervision over the records have changed accordingly. Supervision over administration of records of securities is now exercised to a much greater extent through analysis of data and information received from participants (reports of securities records are submitted on a daily basis).

Supervision exercised through inspections conducted in organisational units of a participant still applies, but it will be of a different nature. It will largely include ad-hoc inspections (interventions) following errors identified on the basis of received reports. The scope of planned inspections will be adjusted to the limited scope of requirements applicable to records of securities, and the frequency of planned inspections will be reduced to one inspection



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PROFESSORSHIP OF POLISH STUDIES AT COLUMBIA UNIVERSITY

The National Depository for Securities is one of the main donors of the Professorship of Polish Studies at Columbia University, New York. Opening in 2010, the Professorship will undertake research and teaching in social, political and cultural studies concerning Poland and Central and Eastern Europe. The curriculum will be addressed to students from around the world. The Professorship will also host conferences, meetings and seminars promoting knowledge of Poland.

per participant every year (excluding inspections carried out to verify the implementation of recommendations following earlier controls). This change implies that formal plans of controls will no longer be drawn up.

The main scope of supervision includes checks of compliance of the administration of a securities depository at the level of securities accounts managed in KDPW participants' systems with the Rules, the Resolutions of the KDPW Management Board, and the legislation applicable to depositories. These checks will be exercised mainly on the basis of daily reports of securities records received from Participants on a daily basis; holding balances presented in the reports will be checked against the balances of corresponding registration accounts of the participant

in KDPW. Where analysis of data in reports and information received from a participant reveals irregularities in the administration of records of securities by the participant, while the scale, the frequency and the duration of such irregularities may pose a threat to the security of administration of the securities depository, then inspections will be conducted in the offices of the participant. As has been mentioned above, such inspections will be ad-hoc checks conducted in order to clarify the reasons for the occurrence, the frequency or the duration of such irregularities.

Regular checks will also be carried out to verify compliance with the conditions of participation as well as the continuity and the security of operations related to security records entered in accounts in the systems,

in particular corporate events (operations on securities), exercise of entitlements, and settlement of transactions made without or in breach of the client's order. Such checks of each participant will be conducted at least on an annual basis and will also verify the participant's compliance with internal regulations in this regard.

In addition, checks performed during inspections in the offices of participants will verify the procedures and the form of storing documents generated in the course of settlement and execution of operations on securities, in particular generated electronic files, as well as the security of documents and data protecting them against loss and unauthorised access. ■

Ewa Usidus – Director,
Audit Department

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CEE FINANCIAL CENTER MEETING

The first CEE Financial Center Meeting was organised by WM Gruppe in February 2009. KDPW S.A. was represented by Management Board Member Radosław Ignatowicz who delivered the presentation "Clearing House Role in Settlement Risk Management."

SEG GENERAL MEETING

The National Depository for Securities was a partner of the debate "Impact of the Crisis on Listed Companies" held during the General Meeting of the Polish Association of Stock Exchange Issuers (SEG) in Warsaw on 25 March 2009.

PUBLICATION "SECURITIES SETTLEMENT SYSTEMS IN POLAND AND THE EUROPEAN UNION"

KDPW together with the Warsaw Stock Exchange and the National Bank of Poland has prepared the publication entitled "Securities Settlement Systems in Poland and the European Union." The publication aims to promote information about processes on the Polish capital market. It also describes the development of the major institutions of the Polish capital market infrastructure and the operation of international institutions including the International Securities Services Association (ISSA), the European Central Securities Depositories Association (ECSDA) and the Securities Market Practice Group (SMPG).

Link Up Markets Platform

Link Up Markets is a new initiative of European central securities depositories. Its purpose is to establish a single communication platform supporting efficient exchange of information to process cross-border operations in securities.

Link Up Markets is a joint venture by seven central securities depositories: Clearstream Banking AG Frankfurt (Germany), Hellenic Exchanges S.A. (Greece), Iberclear (Spain), Oesterreichische Kontrollbank AG (Austria), SIS SegalInterSettle AG (Switzerland), VP Securities Services (Denmark) and VPS (Norway), recently joined by the Cyprus Stock Exchange. These depositories represent a large part of the European depository-settlement services sector. They currently process around 50% of European securities transactions (191 million transactions in 2007) and provide depository services covering around 45% of assets in the sector (value of assets in custody at EUR 12 trillion in 2007).

The Link Up Markets platform will improve interoperability between the central depositories, supporting communication between different systems without an upgrade of the systems. The platform will “translate” information first from the standard of the sending central depository

into the intermediate standard of the platform and then from the platform’s standard into the standard of the receiving central depository. As a result, many central depositories, each using different communication standards and practices, may communicate without any need for system upgrades.

The Link Up Markets platform will support the processing of settlement and depository operations through effective exchange of settlement instructions and confirmations as well as information on corporate actions and general meetings. The system will also give access to up-to-date information about securities, corporate actions, counterparties, and procedures applicable in each market.

In the first phase of implementation, on 30 March 2009, four institutions joined the platform: Clearstream Banking Frankfurt, OeKB, SIX SIS (Switzerland), and VP Securities Services. Hellenic Exchanges and Iberclear will join in the second phase, scheduled for June 2009. The Cyprus Stock

Exchange and VPS will join in Q4 2009. In the early stage, Link Up Markets will support cross-border operations and exchange of information. Centralised databases and corporate actions will be available in 2010.

Each central depository wishing to join Link Up Markets should take an equity stake in Link-Up Capital Markets S.L., a joint-venture company based in Madrid. Each platform participant should be ready to open depository accounts for other participants. In addition, in order to use the full functionality of the platform, each participant should open depository accounts with the other platform participants in order to establish operational connections. KDPW has monitored the Link Up Markets project since its launch. KDPW has twice (in June 2008 and March 2009) organised Link Up Markets workshops for central securities depositories in Central and Eastern Europe. The workshops were mainly intended to disseminate information and open an active debate and exchange of views. ■

Leszek Kołakowski – Director

Renata Goszczyńska – International Relations and Harmonisation Department

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LINK UP MARKETS

The National Depository for Securities hosted the second edition of Link Up Markets workshops on 26 March 2009. The session was chaired by Project Managing Director Tomasz Kindler and attended by representatives of the central securities depositories in the Czech Republic, Hungary, Lithuania, Romania, Bulgaria, Slovenia, Croatia, and KDPW S.A. The workshop participants discussed the goals of the project, in particular how to improve efficiency and reduce costs of post-trade processing of securities transactions.

mySAP ERP

The implementation of KDPW's new ERP system became necessary in view of the limited potential of extension of existing applications and arising problems with their maintenance and utilisation. In addition, the technical solutions used in the new system were harmonised with the standards of KDPW's core IT infrastructure.

The implementation of an integrated ERP system in KDPW followed a focused preparation process including selection of the system supplier (software vendor), a detailed specification of requirements, definition of the project scope, and employee preparation for project structure.

Vendor Selection

Functionalities were the main criterion of ESP software vendor selection, together with the match of the system to KDPW S.A. resources (IT infrastructure) including the requirements of high system availability (under the KDPW business continuity

plan) and employee competences. Other selection criteria included system scalability, harmonisation with Polish HR legislation, including payroll calculation, and integration with the core business systems (the depository-settlement system, the electronic banking system Multicash, asset management systems). The system selection process included functionalities presentations of workshops for employees of the interested organisational units (the Personnel Department, the Economic & Financial Department, the Administrative Department) as the main business clients of the ERP system supported by employees of the IT Systems Department.

Defining System Requirements

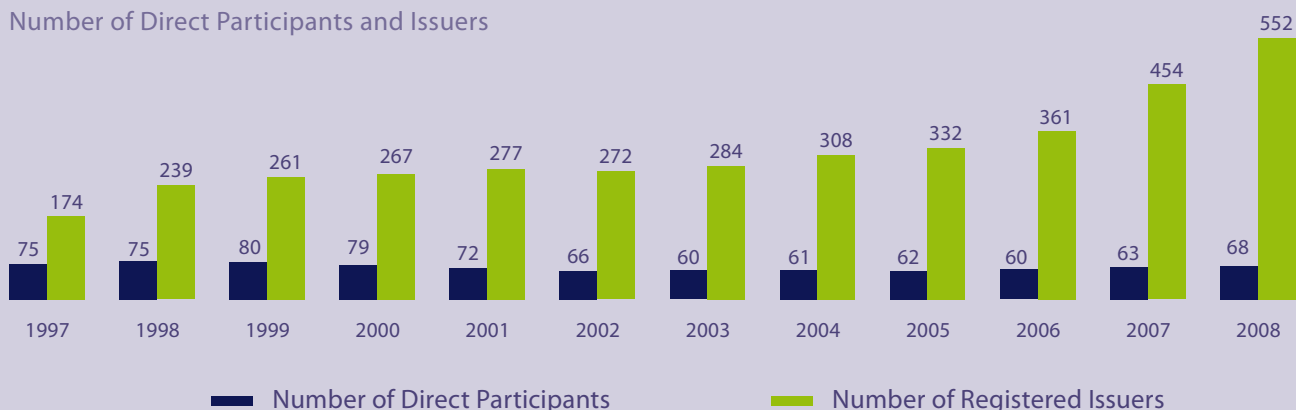
The detailed specification of requirements was developed in co-operation with an external consultant. The goal of the project was to define the specific needs of system functionalities and the scope of the project, as well as prepare employees of the involved organisational units for project structure. In co-operation with the consultant, the work built upon the experience of earlier ERP system implementations in other companies. Different to KDPW's depository-settlement system, ERP implementations of similar complexity had previously been completed in the sector.



KDPW IN FIGURES – Direct Participants and Issuers

The National Depository had 68 registered Direct Participants in 2008. There were 552 participants with the participation status type 'issuer' (including 517 domestic and 35 foreign issuers).

Number of Direct Participants and Issuers



The project scope, allocating the requirements of the specification to the functionalities of the mySAP ERP system, was defined in a workshop where employees could discover system functionalities. The co-operation with the consultant helped to plan and prepare subsequent stages of the implementation process, define the specification of requirements, acquire experience in collaboration with the external consultant, and organise and build up implementation teams.

mySAP Implementation Stages

The implementation of the mySAP ERP system selected in the preparatory stage started

after a contract was signed with SAP Polska Sp. z o.o. in March 2007. During negotiation of the terms of the contract, particular attention was paid to the selection of consultant teams representing contractors as a key project success factor. The core modules of the system started production in January 2008. New functionalities have since been added in subsequent stages of mySAP ERP implementation. The following modules have been implemented: financial accounting, fixed assets and equipment management, procurement management, HR and payroll management, management accounting, invoicing processes. Recently added functionalities include the data warehouse,

qualifications and career path management, and employee access including submission of holiday requests and viewing own calendar and payroll information.

The implementation process optimised and automated many processes including accounting processes of KDPW's core business and asset management, booking third-party invoices (marked with bar codes), invoicing KDPW fees, registration of fixed assets (marked with bar codes), procurement, controlling data input. The mySAP ERP system was integrated with the depository-settlement system and other business systems. Full integration of mySAP ERP and the new depository-settlement



KDPW IN FIGURES – Safekeeping of Securities

The number of share issues deposited with KDPW grew from 531 in 2007 to 601 in 2008. The capitalization of deposited shares decreased by ca. 49.07% from PLN 469.98 billion to PLN 239.38 billion.



system (NSDR), to much greater extent than with the previous system, is now approaching completion.

Like with any similar integrated system, the results of implementation will become apparent in the long term thanks to the developed knowledge and data base, although demand for new data may seem to increase in the early phase after implementation.

The implementation of the mySAP ERP system gives KDPW S.A. benefits of a new IT system based on a single technology platform and improves the organisation of work and the efficiency of processes. In addition, employees of the involved Departments participating in this large project acquired new expertise in the subject matter and in modelling and implementing business processes.

The good planning, preparation and implementation of the system by the dedicated and committed project participants ensured the achievement of all business and technological goals of the project within the expected deadline. ■

Agnieszka Kuczyńska
IT System Department

KDPW IN FIGURES – Safekeeping of Securities

The number of deposited issues of Treasury bonds grew from 164 to 172. Their capitalisation grew from PLN 357.13 billion to PLN 368.66 billion.

The number of deposited issues of non-Treasury bonds decreased from 48 to 37 in 2008. Their capitalisation was PLN 10.88 billion (PLN 11.51 billion in 2007).

Number and Capitalisation of Treasury Bond Issues and Non-Treasury Bond Issues Registered

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Number of Treasury bond issues	47	59	75	86	109	123	132	138	152	161	164	172
Capitalisation of Treasury bond issues* [PLN billion]*	29,0	45,1	71,1	95,9	129,4	161,4	191,8	235,6	286,9	324,25	357,13	368,66
Number of non-Treasury bond issues	2	4	9	10	12	18	53	69	59	54	48	37
Capitalisation of non-Treasury bond issues* [PLN billion]	0,12	0,13	13,14	13,16	13,7	14,8	12,8	12,2	11,1	11,25	11,51	10,88

*Capitalisation of debt securities stated at nominal value

KDPW S.A. Clearing House News

KDPW has introduced a new algorithm of calculating maintenance margins for instruments based on the WIG20 index. This commences the process of changes which will become effective upon the implementation of the New Depository-Settlement System.

Stock Volatility Risk Model

Sharp turbulences on the capital market since October 2008 require the use of a method of appropriate, early assessment of the risk of strong volatility of stock prices. The Risk Management Team headed by Paweł Popławski has explored and tested new algorithms that could fulfil the needs arising from the difficult situation on the stock market. The existing algorithms reacted to the sharp volatility of stock prices with a long time lag. As a result,

the margins were insufficient, forcing KDPW to require additional margins during trading sessions ("margin calls").

The search for and tests of new models identified EWMA (Exponentially Weighted Moving Average), first used by Risk Metrics, as the model best fit to the current situation.

EWMA is a volatility model based on exponentially weighted moving average. The model assumes that observations of daily

percentage price changes tend to age: more recent percentage price changes are assigned a bigger weight than earlier changes.

The pace of aging of information, and the speed at which the volatility measure will go down after a large daily change of price, is determined as a lambda (λ). Risk Metrics uses a lambda of 0.94 for daily data, i.e., it effectively uses a period of around 30 days.

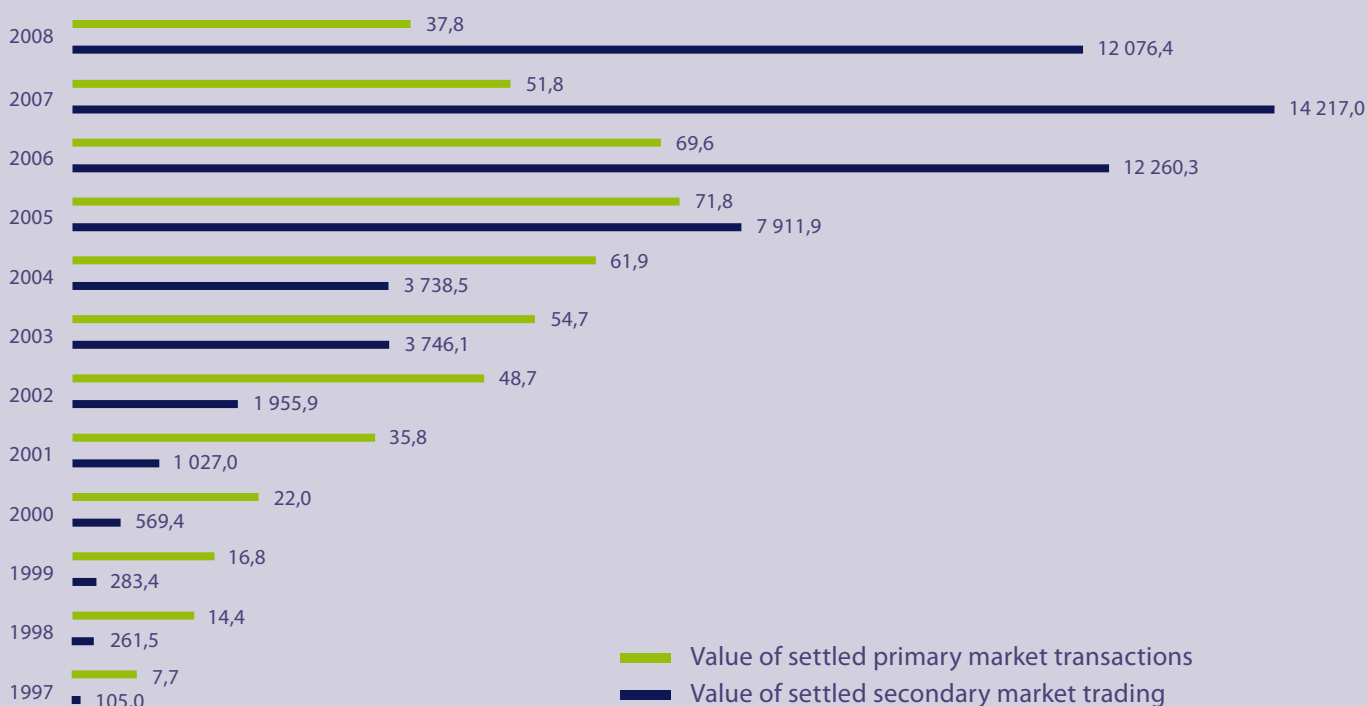
The new method of calculation of maintenance margins is forward-looking: it will increase



KDPW IN FIGURES – Settlements

In 2008, the National Depository settled primary market transactions at PLN 37.8 billion and secondary market trading at PLN 12,076.4 billion.

Value of settled transactions and trading [PLN billion]

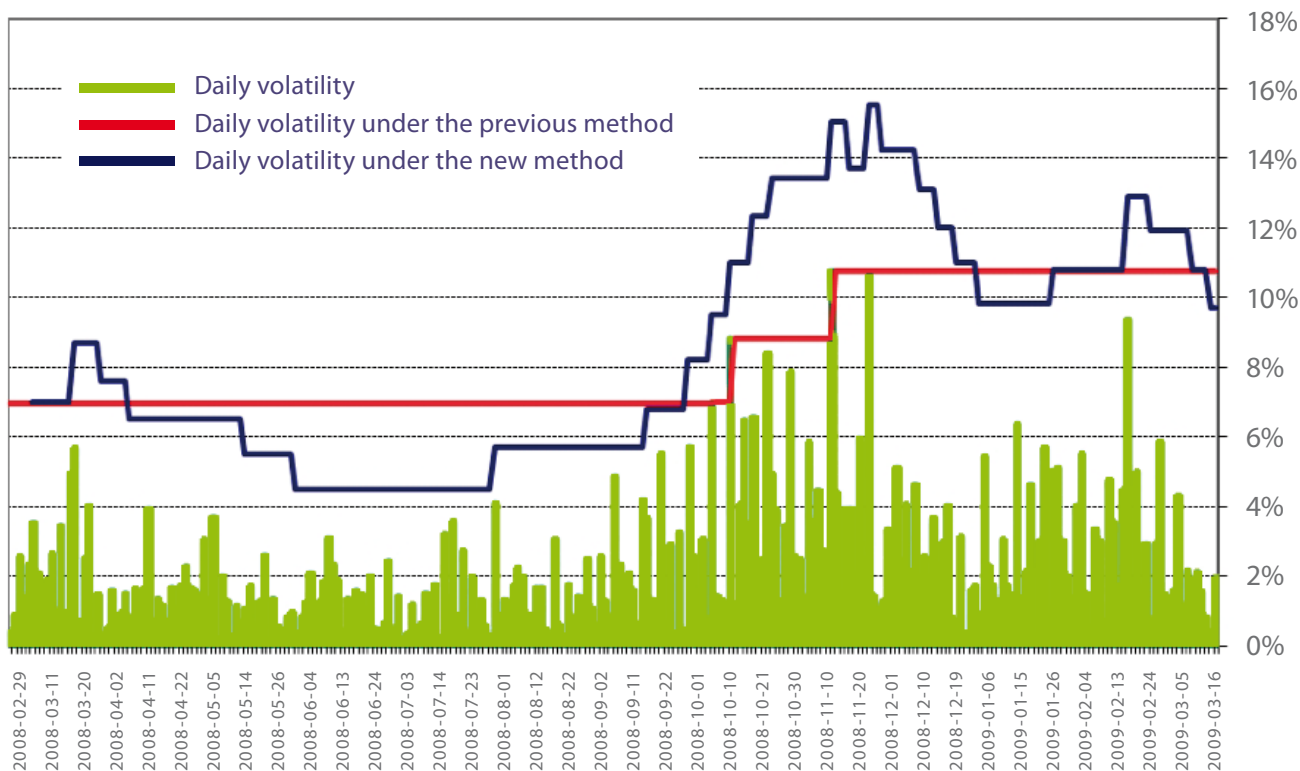


the required margins in periods of more volatility of stock prices and decrease the margins in periods of stabilisation and stagnation.

The chart below presents an example of calculation of maintenance margins. It shows clearly that the margins calculated under the previous method in October

and November lagged behind price volatility, while the new method was always at least one day ahead of volatility.

W20 Class Maintenance Margins: 256 Observations Maximum Method and Risk Metrics Method



New Functionalities of the New Depository-Settlement System

The algorithm of calculation of maintenance margins will be

modified upon the implementation of the New Depository-Settlement System. The change will introduce flexibility of the mechanism to bring it in line with the

actual risks of instruments settled by KDPW.

After several years of experience with margins for option transactions,



KDPW IN FIGURES – Settlements

In 2008, settlements of secondary market trading included spot market trading, down from PLN 13,542.4 billion to PLN 11,462.4 billion in 2007, and futures market trading, down from PLN 674.6 billion to PLN 613.98 billion.

Turnover cleared in the secondary market [PLN billion]

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
SPOT MARKET	260,9	277,1	510,8	928,4	1 878,5	3 630,4	3 612,9	7 673,7	11 869,6	13 542,4	11 462,4
– regulated market	81,6	101,6	185,7	92,2	78,1	108,9	139,6	209,1	352,9	488,8	344,0
– non-regulated market	179,3	175,5	325,1	836,2	1 800,4	3 521,0	3 473,3	7 464,6	11 516,8	13 053,6	11 118,4
FUTURES MARKET	0,6	6,4	58,6	98,6	77,4	116,3	125,6	238,2	390,7	674,6	613,98

we have concluded that the approach to risk assessment and option pricing should be modified. The previous model based on the Fisher Black and Myron Scholes pricing method ("The Pricing of Options and Corporate Liabilities", 1973) remains constant, but we propose a new approach to the parameters used in the model.

Option Pricing Method

One of the key parameters used in option pricing is the volatility of the price of the underlying

instrument. The current parameter, 'volatility of option class,' does not fulfil the requirements of risk management: a uniform parameter has to be applied regardless of the period remaining until expiration of the option and regardless of whether the option is in-the-money or out-of-the-money. As a result, some series of options are overpriced while other series are underpriced. The existing parameter, 'volatility of option class,' will now be replaced by a new parameter, 'volatility of option series.' The new parameter, 'volatility of option series,' will

enable a more flexible approach to management of risks generated by positions in options.

Maintenance Margins for Long Position Portfolios

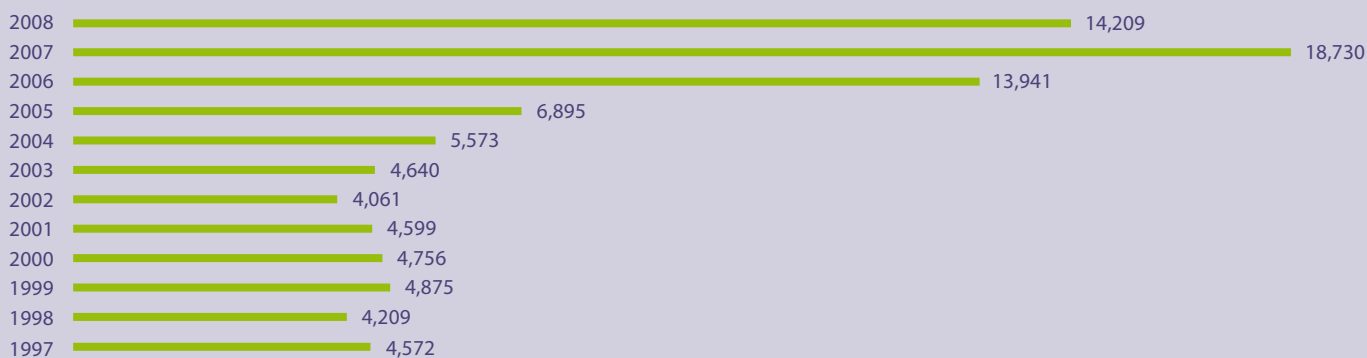
Another modification concerning options, however not directly related to pricing, applies to the calculation of maintenance margins for portfolios of long positions in options, which always represent a certain value, even if they are out-of-the-money options. This is because a long position in options generates



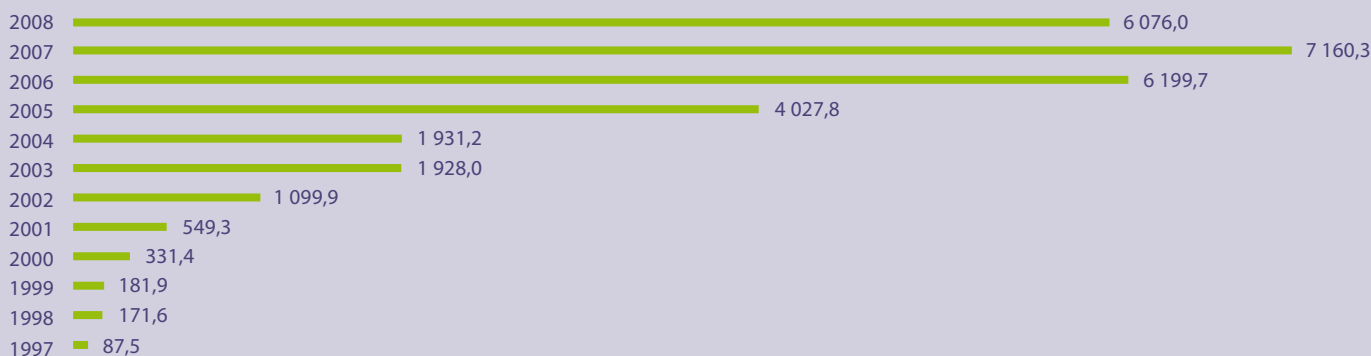
KDPW IN FIGURES – Spot Market Settlements

The number of transactions settled by the National Depository decreased from 18,730 million to 14,209 million in 2008. The value of settled transactions decreased from PLN 7,160.3 billion to PLN 6,076.0 billion.

Number of transactions cleared by KDPW (PLN million)



Turnover of transactions cleared by KDPW (PLN billion)



no risks. Once an option premium is paid, one may either gain or break even. Naturally, in-the-money options have greater value because the strike price is lower than the price of the underlying instrument (call options) or the strike price is higher than the price of the underlying instrument (put options). According to the previous method, only in-the-money options could be used as a maintenance margin for the portfolio. This has been rectified: all positions in options, regardless of their value, may be used as a margin in the New Depository-

-Settlement System. The new approach is consistent with the method used in other markets.

Stock Option Dividend

Another modification also follows a review of current methods. This is a modification of the approach to dividend value in the case of stock options where dividend is expected to be paid soon. The classical Black-Scholes model assumes that pricing of options applies to European options on the stock of a company which pays no dividend.

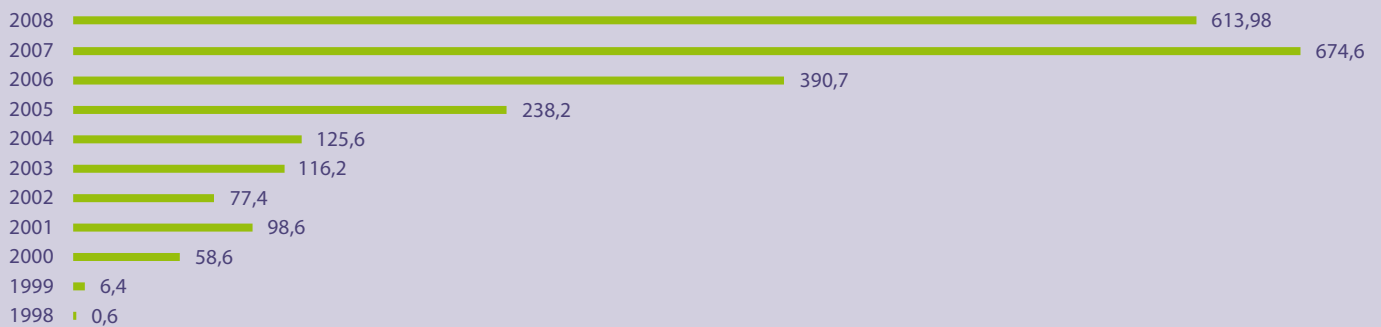
In practice, however, dividend is paid, affecting the stock price significantly; this should be extrapolated to option pricing and consequently the risk of options. This, the Black-Scholes model is now extended with the introduction of an additional parameter, 'dividend rate,' in the case of options on the stock of companies which pay dividend. As a result, stock option pricing is always adequate to generated risks. ■

Marcin Truchanowicz
Director, Derivatives Clearing House

KDPW IN FIGURES – Futures Market Settlements

The year 2008 brought new records of the volume of trading in WIG20 futures contracts at 11,599,720 contracts, up by 26% year on year. The volume of trading in mWIG40 index contracts was low compared to WIG20 contracts: 25,349 mWIG40 contracts, up by 51% year on year.

Turnover of cleared transactions in the derivatives market (PLN billion)



newsletter

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