*Bankarski rizik 45*UBLAŽAVANJE
IZLOŽENOSTI -
PRISTUPI I PRIZNATI
INSTRUMENTI (6)

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Razvoj funkcije upravljanja rizicima u bankama, kao i alata kojima se banka služi u tom procesu, imao je snažnu podršku i oslonac u međunarodnim standardima koji su ne samo preporučili pristupe za kalkulaciju ekonomskog kapitala, već su dali i kvalitativno novi tretman instrumentima za ublažavanje izloženosti rizicima (Bazelski Sporazum II). Lepeza podobnih instrumenata za ublažavanje izloženosti u okviru preporučenih pristupa za njihov tretman, postaje bitan element kalkulacije ekonomskog kapitala, kako u odnosu na pojedine vrste rizika, tako i u odnosu na agregatnu izloženost.

Ključne reči: ublažavanje izloženosti, kreditni rizik, Pristup bazirani na internim rejtinzima (Internal Ratings Based Approach-IRB Approach), podobni instrumenti, drugi kolaterali, herkat

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Banking Risk 45

RISK EXPOSURE MITIGATION - APPROACHES AND RECOGNISED INSTRUMENTS (6)

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The risk management function development in banks, along with the development of tools that banks can use throughout this process, has had the strong support in international standards, not only in the recommended approaches for calculating economic capital requirements, but also in the qualitatively new treatment of risk exposure mitigation instruments (Basel Accord II). The array of eligible instruments for exposure mitigation under the recommended approaches for their treatment becomes the essential element of economic capital requirements calculation, both in relation to certain types of risk, and in relation to aggregate exposure.

Key words: risk exposure mitigation, credit risk, Internal Ratings Based Approach (IRB Approach), eligible instruments, other collaterals, hair-cut

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Ublažavanje izloženosti kreditnom riziku - podobni instrumenti priznati u pristupima baziranim na internim rejtinzima - drugi kolaterali

U prethodnom broju Bankarstva objašnjen je način na koji *banke koje primenjuju Osnovni pristup zasnovan na internim rejtinzima (Foundation Internal Rating Based Approach-IRB)* izračunavaju efekte podobnih finansijskih kolaterala na *Veličinu gubitka pri neizvršenju* od strane korporacija. *Veličina gubitka pri neizvršenju (Loss given default - LGD)* je druga komponenta kreditnog rizika koja se, iako prepoznaje tip dužnika, pre svega procenjuje u odnosu na vrstu poslovne transakcije. Važan korektivni faktor kod procene veličine gubitka pri neizvršenju su podobni kolaterali priznati u okviru IRB pristupa, pod kojima Bazelski sporazum II podrazumeva finansijske, ali i druge podobne kolaterale.

U ovom broju govorimo o načinu na koji banke mogu izračunavati efekte drugih podobnih kolaterala priznatih u okviru koji je definisao Bazelski komitet za *Pristup zasnovan na internim rejtinzima banke - osnovni pristup*, na veličinu gubitka pri neizvršenju.

U grupi *drugih podobnih kolaterala* nalaze se potraživanja, komercijalna i rezidencijalna nekretnina i druga fizička aktiva koju je banka stekla u naplati dospelih potraživanja.

Podobna potraživanja su potraživanja sa prvobitno ugovorenim dospećem do jedne godine, gde će se naplata odvijati kroz komercijalne i finansijske tokove u odnosu na osnovnu imovinu zajmoprimca.

Operativni zahtevi za podobna potraživanja uglavnom se odnose na zakonsku sigurnost (zakonski osnov po kome je koateral dat mora biti robustan i siguran da zajmoprimac ima jasna prava u postupanju u odnosu na kolateral), kao i na upravljanje rizikom (banka mora imati dobre procese za određivanje kreditnog rizika u potraživanjima).

Podobna komercijalna i rezidencijalna nekretnina kao kolateral za izloženosti prema korporacijama, suverenima i bankama je takav kolateral kod koga rizik zajmodavca nije materijalno zavistan od performansi osnovne imovine ili projekta dužnika, ali zavisi od osnovne sposobnosti dužnika da otplaćuje dug

iz drugih izvora. Dodatno, vrednost založenog kolaterala ne sme biti materijalno zavisna od radnog učinka zajmoprimca.

Operativni zahtevi za podobnu komercijalnu / rezidencijalnu nekretninu po Bazelu II su sledeći:

- svako potraživanje po osnovu uzetog kolaterala mora biti primenljivo (enforceable) u svim relevantnim jurisdikcijama (zakonska primenljivost),
- mora biti vrednovano na nivou ili najmanje po sadašnjoj fer vrednosti, po kojoj bi se nepokretnost mogla prodati na dan procene vrednosti (objektivna tržišna vrednost kolaterala),
- od banke se očekuje da češće prati vrednost kolaterala, najmanje jednom godišnje,
- i drugi uslovi.

Drugi podobni kolateral, uz saglasnost supervizora, može biti drugi fizički kolateral, koji ispunjava sledeće standarde:

- postojanje likvidnog tržišta za prodaju kolaterala na ekspeditivan i finansijski efikasan način,
- postojanje dobro uspostavljenog, javno raspoloživog tržišta cena za kolaterale.

Metodologija za određivanje efektivnog LGD u okviru Osnovnog pristupa zasnovanog na internim rejtinzima u slučajevima kada je banka primila podoban IRB kolateral na ime obezbeđenja svojih izloženosti prema korporacijama je sledeća:

- Na izloženosti gde je minimum zahteva ispunjen, ali je ratio sadašnje vrednosti primljenog kolaterala (C), u odnosu na sadašnju vrednost izloženosti (E), ispod praga C* (npr. zahtevani minimum nivoa kolateralizacije za izloženost), primenjuje se odgovarajući LGD za neobezbeđene izloženosti ili izloženosti obezbeđene kolateralom koji nije podoban finansijski kolateral ili podoban IRB kolateral.
- Kod izloženosti gde ratio C u odnosu na E prelazi drugi, viši nivo praga C** (npr. zahtevani nivo kolateralizacije iznad izloženosti za puno priznavanje LGD) trebalo bi proceniti LGD prema sledećoj tabeli, koja pokazuje primenljivi LGD i zahtevane nivoe kolateralizacije iznad izloženosti, za obezbeđene delove starijih potraživanja:

Credit risk exposure mitigation - eligible instruments recognised under internal ratings based approach - other collaterals

The way of calculating the effects of eligible financial collateral on the value of *Loss given default* in the banks that are implementing *The Foundation Internal Rating Based Approach*, was explained in the previous issue of *Bankarstvo*. *Loss given default - LGD* is the second credit risk component which is estimated relating to the type of business transaction, although it recognizes the type of the borrower, too. The important corrective factor for the Loss Given Default value are eligible collaterals, recognized under the Basel Accord II IRB approaches, as eligible financial collaterals, but also as other eligible collaterals.

In this issue of *Bankarstvo* we are talking about calculating the effects of other eligible collaterals recognized under the Basel Committee Foundation Internal Rating Based Approach to the value of Loss Given Default.

The group of other eligible collaterals consists of residential and commercial real estate (CRE/RRE), receivables and other physical assets, under defined conditions, etc.

Eligible financial receivables are claims with an original maturity of less than or equal to one year where repayment will occur through commercial or financial flows relating to the underlying assets of the borrower.

The operational requirements for eligible receivables are mostly related to legal certainty (legal requirement that collateral must be robust and ensure that the lender has clear rights over the proceeds from the collateral), as well as to the risk management (the bank must have the sound process for determining the credit risk in the receivables).

Eligible CRE/RRE as a collateral for the exposures relating to the corporates, sovereigns and banks is the collateral where the risk of the borrower is not materially dependent upon the performance of borrower, underlying property or project, but rather on the underlying capacity of the borrower to repay the debt from other funds. Additionally, the value of the collateral

pledged must not be materially dependent on the performance of the borrower.

Operational requirements for CRE/RRE under the Basel II are as follows:

- Any claim on a collateral taken must be legally enforceable in all relevant jurisdictions (Legal enforceability);
- The collateral must be valued at or less than the current fair value under which the property could be sold on the date of validation (Objective market value of the collateral);
- The bank is expected to monitor the value of the collateral on a frequent basis, at a minimum once every year (Frequent revaluation);
- And other requirements.

Other eligible collateral can be other physical collateral, if it is allowed by supervisors, and if it meets the following two standards:

- Existence of liquid markets for disposal of collateral in an expeditious and economically efficient manner;
- Existence of well established, publicly available market prices for the collateral.

The methodology for determining the effective LGD under the Foundation Approach for cases where banks have taken eligible IRB collateral to secure a corporate exposure is as follows:

- Exposures where the minimum eligibility requirements are met, but the ratio of the current value of the collateral received (C) to the current value of the exposure (E) is below a threshold level of C^* (i. e. the required minimum collateralization level for the exposure) would receive the appropriate LGD for unsecured exposures or those secured by collateral which is not eligible financial collateral or eligible IRB collateral.
- Exposures where the ratio of C to E exceeds a second, higher threshold level of C^{**} (i. e. the required level of over-collateralization for full LGD recognition) would be assigned an LGD according to the following table, which displays the applicable LGD and required over-collateralization levels for the secured parts of senior exposures:

Minimalni LGD za obezbeđene delove starijih izloženosti

	Minimalni LGD	Zahtevani minimum kolateralizovanog nivoa izloženosti (C*)	Zahtevani nivo kolateralizacije iznad izloženosti za puno priznavanje LGD (C**)
Podobni finansijski kolateral	0%	0%	n.d.
Potraživanja	35%	0%	125%
Komercijalne/rezidencijalne nekretnine	35%	30%	140%
Drugi kolateral	40%	30%	140%

- Starija potraživanja bi trebalo podeliti na delove koji su potpuno obezbeđeni i delove koji nisu obezbeđeni.
- Na deo izloženosti za koji se smatra da je potpuno obezbeđen, C/C** primenjuje se LDG kolaterala.

- Na preostali deo izloženosti koji se smatra kao neobezbeđen, primenjuje se LGD od 45%.

Supervizori mogu dozvoliti banakama koje primenjuju *viši IRB pristup* kalkulaciji ekonomskog kapitala da koriste sopstvenu procenu LGD za izloženosti prema korporacijama, suverenima i bankama. LGD mora da se izmeri kao procenat gubitka od ukupne izloženosti pri neizvršenju (EAD). Banke podobne za viši IRB pristup koje nisu u mogućnosti da ispune ovaj dodatni minimum zahteva,

moraju da primene pristup koji važi za LGD u osnovnom IRB pristupu.

Efekat ublažavanja kreditne izloženosti u odnosu na fizička lica, banke podobne za IRB pristupe (osnovni i viši) kalkulišu same, ali ove izloženosti posmatraju i mere na nivou pulova.

Literatura / References

1. Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards, A revised Framework, Comprehensive Version*, Bank for international Settlements, June 2006, www.bis.org

Minimum LGD for secured portion of senior exposures

	Minimum LGD	Required minimum collateralisation level of the exposure (C*)	Required level of over-collateralisation for full LGD recognition (C**)
Eligible financial collateral	0%	0%	n.d.
Receivables	35%	0%	125%
CRE/RRE	35%	30%	140%
Other collateral	40%	30%	140%

- Senior exposures are to be divided into fully collateralized and uncollateralized portions.
- The part of the exposure considered to be fully collateralized, C**, receives the LGD associated with the type of collateral.
- The remaining part of the exposure is regarded as unsecured and receives an LGD of 45%.

Banks that implement *advanced IRB approach* for economic capital charges calculation, may be permitted to use their own internal estimates of LGD for corporates, sovereigns and bank exposures. LGD must be measured as the loss given default as a percentage of the EAD. Banks eligible for the advanced IRB approach that are unable to meet these additional minimum requirements must utilize the foundation LGD treatment described above.

The credit risk mitigation effects regarding the retail banking operations, is calculated by banks eligible for IRB approaches (foundation and advanced) on their own, but these exposures should be observed and measured at the level of pools.