

PRACE NAUKOWE

Uniwersytetu Ekonomicznego we Wrocławiu

RESEARCH PAPERS

of Wrocław University of Economics

316

Current Problems of Banking Sector Functioning in Poland and in East European Countries



edited by

Andrzej Gospodarowicz

Dariusz Wawrzyniak



Publishing House of Wrocław University of Economics
Wrocław 2013

Copy-editing: Marcin Orszulak

Layout: Barbara Łopusiewicz

Proof-reading: Dorota Pitulec

Typesetting: Comp-rajt

Cover design: Beata Dębska

This publication is available at www.ibuk.pl, www.ebscohost.com,
Lower Silesian Digital Library www.dbc.wroc.pl,
and in The Central and Eastern European Online Library www.cceol.com
as well as in the annotated bibliography of economic issues of BazEkon
http://kangur.uek.krakow.pl/bazy_ae/bazekon/nowy/index.php

Information on submitting and reviewing papers is available on
the Publishing House's website
www.wydawnictwo.ue.wroc.pl

All rights reserved. No part of this book may be reproduced in any form
or in any means without the prior written permission of the Publisher

© Copyright by Wrocław University of Economics
Wrocław 2013

ISSN 1899-3192

ISBN 978-83-7695-331-1

The original version: printed

Printing: Printing House TOTEM

Contents

Preface	7
Magdalena Bywalec: Problem of real property valuation in the process of mortgage loan securitization in Poland	9
Witold Chmielarz: Comparative analysis of electronic banking services in selected banks in Poland in 2013	16
Dariusz Garczyński: Social media in the creation of a new bank–client relationship	30
Wojciech Grzegorzcyk: Marketing-mix strategies of banks in Poland	41
Janina Harasim: Interchange fee and the competition in the payment card market in Poland	55
Iwa Kuchciak: Banking inclusion as a component of the competition strategies of commercial banks	67
Zofia Łękawa: Cooperative banks as local financial counterparties of self-government entities	80
Ewa Łosiewicz-Dniestrzańska, Adam Nosowski: Identification of critical success factors in short-term lender companies in Poland – a business model analysis	90
Konrad Łuczak: Impact of customer bases on building relations between banks and universal service providers	103
Monika Marcinkowska: Bank evaluation from the stakeholder value creation perspective. An analysis of banks from selected CEE countries	117
Karolina Patora: Bank liquidity determinants in CEE countries	133
Irena Pyka, Joanna Cichorska: Changes in the ownership structure of the Polish banking sector from the perspective of “the exit strategy”	145
Justyna Zabawa: Interest margin ratio of socially responsible banks	157
Marika Ziemba, Krzysztof Świeszczak: Ethical issues in the context of banks as public trust organizations	169

Streszczenia

Magdalena Bywalec: Problem wyceny wartości nieruchomości w procesie sekurytyzacji kredytów hipotecznych	15
Witold Chmielarz: Analiza porównawcza wybranych systemów bankowości elektronicznej w Polsce w 2013 roku	29
Dariusz Garczyński: Rola mediów społecznościowych w tworzeniu nowej relacji bank–klient	40
Wojciech Grzegorzcyk: Strategie marketingu-mix banków w Polsce	54

Janina Harasim: Opłata <i>interchange</i> i konkurencja na rynku kart płatniczych w Polsce	66
Iwa Kuchciak: Inkluzja bankowa jako element strategii banków komercyjnych	79
Zofia Łękawa: Bank spółdzielczy lokalnym partnerem finansowym jednostek samorządu terytorialnego	89
Ewa Łosiewicz-Dniestrzańska, Adam Nosowski: Identyfikacja czynników sukcesu firm pożyczkowych w Polsce – analiza ich modelu biznesowego	102
Konrad Łuczak: Wpływ bazy klientów na budowanie relacji banków i dostawców usług masowych	116
Monika Marcinkowska: Ocena banku z perspektywy tworzenia wartości dla interesariuszy. Analiza banków z wybranych krajów Europy Środkowej i Wschodniej	131
Karolina Patora: Determinanty płynności finansowej banków z krajów Europy Środkowo-Wschodniej	142
Irena Pyka, Joanna Cichorska: Zmiany w strukturze własnościowej sektora bankowego w Polsce z punktu widzenia strategii wyjścia	156
Justyna Zabawa: Wskaźnik marży odsetkowej banków społecznie odpowiedzialnych	168
Marika Ziemia, Krzysztof Świeszczak: Wartości etyczne banku jako instytucji zaufania publicznego	180

Magdalena Bywalec

Wrocław University of Economics

PROBLEM OF REAL PROPERTY VALUATION IN THE PROCESS OF MORTGAGE LOAN SECURITIZATION IN POLAND

Summary: The article raised the problem of the lack of regular property valuations in the securitization of mortgage portfolios. The discussion in the article is an attempt to show that the regular valuation of real property as collateral for the mortgage loan securitization portfolio is crucial to the success of the process. Tracking changes in the value of mortgage collateral can help to minimize the risk of securitization and the increased interest of investors in mortgage-backed securities. Such behavior can contribute to the increased use of securitization on the financial markets.

Keywords: securitization, mortgage credits, property valuation, comparative approach, income approach, cost approach, mixed approach.

1. Introduction

Securitization is the process which has attracted considerable attention in recent years. This interest was sparked by the financial crisis with securitization being branded as its primary cause. However, is securitization really to blame for the crisis or is it rather improper credit procedures, lack of requisite security mechanisms or excessive “tampering” with financial instruments issued in the securitization process? These are only some of the questions raised after the analysis of the roots and implications of the last financial crisis. Accordingly, should we abandon securitization altogether or rather try to improve it and eliminate the errors which have been made? It seems justified to attempt to eliminate certain errors from the securitization process, thereby making it less risky for the parties involved.

The purpose of this article is to indicate and discuss one of the weak points of securitization, i.e. the process of revaluation of the asset underlying this process. The deliberations regarding the valuation of the collateral value of assets which are the basis of securitization presented in this article focus on mortgage loans.

The securitization of mortgage loans is the potential engine of the further development of the mortgage loans market. Accordingly, the issues related to the valuation of real property for the purposes of securitization are of paramount importance.

2. Securitization and real property value

Securitization is a very complex process which involves many stakeholders. Large number of participants, complex legal considerations as well as the frequent lack of comprehension of the essence of the process or simply the desire to attain impossible financial results are all among the main contributing factors to the notoriety of securitization. This opinion has been undoubtedly reinforced by the last financial crisis. However, is it justified? An exhaustive answer would require a fairly extensive analysis of the process itself as well as human behavior. The author of this study is of the opinion that the negative perception of securitization is not fully justified. It is true that it is a very complex process which, under certain conditions, may yield considerable benefits, but also, as demonstrated in the past, cause immense losses due to the overcomplication of procedures, complexity of legal and organizational solutions, as well as problems with assessing risk and the structuring of securities issued in the process. The foregoing arguments demonstrate, however, that the fault lies not with the process, but its preparation, execution and monitoring.

This article focuses only on one issue which undoubtedly plays a prominent role in the securitization of mortgage loans and which should be considered and scrutinized not only during the preparation of the process, but also throughout its duration, until completion. The issue in question is the changing value of the main collateral underlying the securitized mortgage loans portfolio, i.e. real property. The change of the value of real property over time is nothing more than a natural market behavior; however, if we do not take it into account and regularly analyze, it may pose specific issues in the case of such a process as securitization.

In examining the issue of the change of the value of real property over time from the point of view of the securitization process, we should consider its significance in the process. Where, at which stage and how strongly may property value or rather its change impact the securitization process?

To arrive at an answer to this question, we need first to analyze the definition of securitization and the subsequent stages of the process.

According to one of the definitions of securitization,¹ the securitization of banking assets is a process consisting in the proper selection of a pool of banking assets – creating a portfolio of assets where they are subsequently converted into

¹ M. Kalasińska, *Sekurytyzacja aktywów bankowych*, ZBP, Warszawa 2007, p. 10.

securities backed with cash streams generated by these assets and sold to investors as securities (e.g. MBS).

The securitization process features the following stages:² selection of assets portfolio, incorporation of SPV, assessment of investment risk and securities issue management.

Considering the above definition and the indicated process of securitization, we may identify several stages of the process where real property value is of major significance. The first one is undoubtedly the stage of creation of the portfolio to be securitized. This portfolio should, obviously, be properly diversified in terms of geographical distribution and borrowers; it should be large enough and homogenous as regards the type of debt. However, there are no restrictions regarding the value and type of collateralized real property even though, given default of the borrower, it is the real property that is used to satisfy the claims of the lender. If such a loan becomes a part of a securitized portfolio, the underlying real property will not guarantee the satisfaction of the claims of the lender, but will secure the securities issued based on the loan backed by this real property. From this point of view, the change of the value of real property while securities are still traded on the market is a significant issue.

Therefore, for the sake of the safety of the securitization process, it may be worthwhile to take into account, already at the stage of creating a mortgage portfolio for the purpose of securitization, the analysis of the primary collateral and its value. This may be the loan-to-value ratio which at present every bank analyzes. The analysis of the value of real property during the creation of the portfolio to be securitized would facilitate the creation of more homogenous mortgage portfolios or the isolation of pools of loans as part of one portfolio backed with e.g. buildings or apartments. Such an approach would undoubtedly also facilitate the analysis of the distribution of risk in such a portfolio from the point of view of the changing value of real property over time. This in turn would allow devising, already at the preliminary stage of securitization, potential investor protection strategies given adverse behaviors on the market, e.g. a strategy consisting in buying a hedging instrument (e.g. insurance) that would offset potential losses given a certain decrease of the value of real property. The proposed approach would most likely allow for a significant mitigation of not only potential losses in a crisis situation, but also the costs of any potential additional collateral. The risk of investment in the securities issued under such a securitization process would undoubtedly be lower. This would make securities more attractive to investors and the process itself could be perceived as safer thereby facilitating a better, fuller capitalization of the related benefits for the purposes of commercial practice.

The next stage of securitization where the proper valuation of real property is of high importance is the assessment of investment risk. At this stage of the process rating agencies play a crucial part. Rating is a significant element of securitization as it informs potential investors about the risk carried by issued securities, i.e. their

² *Ibidem*, p. 26.

attractiveness. Rating guarantees the success of securitization securities on the public financial market.

Rating involves not only the analysis and assessment of the structure of the process and the entities involved, but also the analysis of the collateral underlying the specific issue. Accordingly, in the case of mortgage portfolios, its quality is assessed in terms of credit risk posed by the full default of payment of the respective loans forming the portfolio or groups of loans. However, since the main collateral underlying such a loan is mortgage against real property, would it not be appropriate to analyze the change of the value of real property? The ratio of the change of the value of real property forming the collateral underlying a securitized mortgage loan portfolio will reflect tendencies and directions of the change in the value of the initial collateral which undoubtedly will impact the risk accompanying the entire portfolio. Please note that it is not only the type of securitized assets and the related cash flows, but also and even primarily, the risk generated by such a portfolio that impact the qualities of securities issued in a given securitization process. In this light, the analysis of the change of the value of real property in time seems indispensable.

The value of real property and its changes in time, particularly negative ones, are equally significant at the last stage of securitization, i.e. the issue and servicing of securities.

The lack of regular revaluation of the value of real property at the last stage of securitization, in the context of adverse, unexpected changes on the real property market which were completely unaccounted for in the process, may contribute to difficulties with the redemption of securitization from the market. These difficulties may be caused by the fact that in the event of default in the payment of a portion of the loans forming the securitization portfolio and the necessity of enforcing receivables from the principal collateral, the recovered amount will be considerably lower than expected and the process itself will not provide for a mechanism which would offset the difference between the expected and the actual value. This was the situation we dealt with during the last financial crisis. If we fail to analyze changes of the value of real property over time, we will not have information about the change of the value of the initial collateral and, consequently, we will be unaware of the potential considerable loss of the value of real property used as collateral.

Regular revaluation of real property value will be of no avail in the event of a collapse of the real property market. However, taking into account such analyses and, consequently, the potential risk of a considerable change of the value of real property in a given securitization process would undoubtedly help to mitigate losses. Losses could be mitigated by e.g. applying an adequate hedging instrument for the portion of a mortgage portfolio which is most exposed to the drop of real property values.

As the foregoing discussion indicates, in the context of potential issues evoked by an adverse change of the value of real property in the mortgage loan portfolio to be securitized, the issue of revaluation of real property is of substantial importance.

3. Approach to the valuation of real property securing credit obligations

Considering the issue of the valuation of real property in the mortgage portfolio to be securitized, it is important to realize that the obligations of the borrower may be backed, among others, by mortgage on land, construction property, apartments or cooperative limited property rights.

According to the current real property valuation standards,³ the valuation of real property or rights underlying the extended loans should be conducted by an expert appraiser based on the current use value (CUV). CUV, according to the Professional Standards of Expert Property Appraisers,⁴ is the most probable price of real property attainable on the market given the following assumptions:

- the parties to the agreement are independent and proceed rationally without particular motives,
- are intent on executing the agreement,
- are aware of the existing circumstances impacting the value of real property,
- are not acting under duress.

The additional condition that should be taken into account in determining CUV is the assumption that the current use of the real property will be retained.

CUV excludes the element of the expected value for alternative use and the potential increase of value is related to special investments. From the point of view of securitizing a mortgage portfolio which is characterized by a long timeframe, such an approach may impact the decrease of the estimated value of mortgage collateral due to the failure to take into account special investments that in most cases increase the value of real property. Accordingly, such an approach to the valuation of real property underlying the securitized loan may result in an inferior position of the securitized loan portfolio.

On the other hand, CUV takes into account changes of value related to the extension, alteration of buildings and development of undeveloped land, with the assumption that the works do not cause breaks in the use of the real property.

Given such a determination of CUV, the proposed manner of valuation seems pertinent in the initial stage of the securitization process, during the creation of the

³ *Standardy Zawodowe Rzeczoznawców Majątkowych*, Polska Federacja Stowarzyszeń Rzeczoznawców Majątkowych, Warszawa 2007, Standard V.1.

⁴ *Ibidem*, Standard III.1.

portfolio for securitization. At this stage, it seems justified to divide real property by type and investment perspective.

Moreover, the regulations in force indicate that one determines CUV assuming compliance with the local master plan. Standard III.1, item 3.3 stipulates that if the manner of use of the real property designated in the master plan is temporary, the expert appraiser should determine CUV and the market value (MV) taking into account the conditions set out in the master plan. In this case MV may vary from CUV.⁵

The valuation of real property upon loan extension at CUV is justified. However, from the point of view of the securitization process and its last stage, such an approach to the value of the primary collateral underlying a mortgage loan will not reflect the probable, attainable price for given real property.

From the point of view of the last stage of the securitization process, the value of real estate is the last enforceable collateral underlying mortgage-backed securities (MBS). This collateral is used when the customer has completely stopped making payments on the loan and credit obligations cannot be enforced otherwise. In this case, the following two factors are of key importance:

- the **time** required to enforce the given real property value, MBS investors have a specific redemption date regarding these instruments,
- the attainable **price** of the real property from the point of view of securitization, the maximum attainable price in a limited timeframe as investors expect a specific rate of return.

Such an approach renders the valuation at this stage of securitization in the current use value inadequate to the probable, attainable price for given real property. A more fitting solution in this case would be using the distress sale value valuation (DSV).

In evaluating the value of mortgage collateral at the last stage of securitization at DSV, in compliance with the applicable legal solutions, it is possible to make assumptions regarding time constraints, as well as other limitations that may impact the closing of a transaction (e.g. legal procedure related to the collection of bank receivables). Such an approach to real property value, in conjunction with regular revaluation, would undoubtedly make the value of mortgage collateral more realistic. The analysis of the changes of value in time would definitely facilitate a pre-emptive action that would mitigate the portfolio risk and losses that may arise e.g. as a result of a deepening crisis on the real estate market.

4. Conclusion

This brief investigation into the necessity of employing regular valuation of real property in the process of securitizing mortgage loans indicates that such measures would definitely contribute to increased security of the process of securitizing

⁵ Current use value.

mortgage assets. Increasing the security of the process in this manner would make it easier to convince investors to consider buying mortgage securities, such as MBSs. Consequently, it would be possible to increase the use of securitization in the banking sector which, in my opinion, would stimulate the mortgage loans market and allow offering, e.g. more favorable terms of financing for selected groups of real properties.

Proper, regular revaluation of the value of real property used as security for the mortgage loans underlying securitization, in my opinion, ensures not only increased security of the arranger and investors, but also – primarily – a safer process for all stakeholders and the potential to reduce the costs of any additional collateral.

The issue here is a limited pool of available solutions in the scope of real property valuation, which restricts the possibility to apply regular real property valuation in the securitization process. The analysis of approaches to real property valuation with respect to their applicability in the securitization process, identification of strengths and weaknesses and significance to securitization will be the subject of author's next study.

References

- Cymerman R., Hopfer A., *Wycena nieruchomości. Zasady i procedury*, Polska Federacja Stowarzyszeń Rzeczoznawców Majątkowych, Warszawa 2006.
- Kalasińska M., *Sekurytyzacja aktywów bankowych*, ZBP, Warszawa 2007.
- Standardy Zawodowe Rzeczoznawców Majątkowych*, Polska Federacja Stowarzyszeń Rzeczoznawców Majątkowych, Warszawa 2007.
- Warsztat rzeczoznawcy majątkowego – metody wyceny, *Nieruchomości*, C.H. Beck, http://www.nieruchomosci.beck.pl/index.php?mod=m_artykuly&cid=19&id=1554 [accessed: 25.02.2013].
- www.realexperts.pl.

PROBLEM WYCENY WARTOŚCI NIERUCHOMOŚCI W PROCESIE SEKURTYZACJI KREDYTÓW HIPOTECZNYCH

Streszczenie: W artykule poruszony został problem braku regularnej wyceny nieruchomości w procesie sekurytyzacji portfeli kredytów hipotecznych. Rozważania w artykule stanowią próbę wykazania, że regularne przeszacowanie wartości nieruchomości stanowiących zabezpieczenie dla kredytów hipotecznych w portfelu sekurytyzacyjnym ma istotne znaczenie dla powodzenia procesu. Śledzenie zmian wartości zabezpieczenia hipotecznego może także wpłynąć na ograniczenie ryzyka sekurytyzacji i zwiększenie zainteresowania inwestorów papierami wartościowymi zabezpieczonymi na kredytach hipotecznych. Takie zachowania mogą natomiast przyczynić się do szerszego zastosowania sekurytyzacji na rynkach finansowych.

Słowa kluczowe: sekurytyzacja, kredyt hipoteczny, wycena nieruchomości, podejście porównawcze, dochodowe, kosztowe, mieszane.