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FINANCIAL SECTOR ASSESSMENT PROGRAM

POLAND

HOUSING FINANCE

TECHNICAL NOTE

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THE WORLD BANK

FINANCIAL AND PRIVATE SECTOR DEVELOPMENT VICE PRESIDENCY
EUROPE AND CENTRAL ASIA REGIONAL VICE PRESIDENCY

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Abbreviations

ABS	Asset Backed Securities
AHML	Agency for Home Mortgage Lending
ARM	Adjustable Rate Mortgage
BCBS	Basel Committee on Banking Supervision
CBS	Commission for Banking Supervision
CFS	Commission for Financial Supervision
CHF	Swiss Franc
CIRS	Cross-currency interest rate swaps
CRD	Capital Requirements Directive
CRDIV	Capital Requirements Directive IV
CRDIV	1 1
	Capital Requirements Regulation Central Statistical Office
CSO	
D-SIFI	Domestic Systemically Important Financial Institution
DTI	Debt-to-income ratio
EBA	European Banking Authority
ECA	Europe and Central Asia
ECB	European Central Bank
ECBC	European Covered Bond Council
ESCB	European System of Central Banks
ESRB	European Systemic Risk Board
EU	European Union
EUR	Euro
FNMA	Federal National Mortgage Association
FRM	Fixed Rate Mortgage
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSC	Financial Stability Committee
FSOC	Financial Stability Oversight Council
FX	Foreign exchange
GDP	Gross domestic product
HPA	House Price Appreciation
IFRS	International Financial Reporting Standards
IT	Information Technology
KNF	Polish Financial Supervision Commission
LCR	Liquidity Coverage Ratio
LTV	Loan To Value – ratio of mortgage loan principal amount to the value of the real estate collateral
MCB	Mortgage Covered Bond
MGIC	Mortgage Guaranty Insurance Corporation
MoF	Ministry of Finance
MSA	Metropolitan Statistical Area
NBP	National Bank of Poland
NPL	Non-Performing Loan
OECD	Organization for Economic Cooperation and Development
p.a.	Per annum
PBA	Polish Bankers Association
PLN	Polish zloty
TLIN	

QRM	Qualified Residential Mortgage
RMBS	Residential Mortgage Backed Securities
UCITS	Undertakings of Collective Investment in Transferable Securities (EU Directive 2009/65)
USD	U.S. dollar
WSE	Warsaw Stock Exchange

Introduction

A World Bank - IMF mission visited Warsaw February 19 – March 5, 2013, to undertake an update of the Financial Sector Assessment Program (FSAP) conducted in 2006. This Note is prepared as follow-on to the Section V (B) - *Development and Market Structure (Covered Bonds)* of the Aide Memoire produced as part of that mission. The primary focus of this Note is on the development of the capital market access mechanisms for the mortgage industry. The comprehensive approach that is suggested to the authorities includes areas of improvements in the mortgage assets per se, legal and regulatory framework of the mortgage loan liquidity and, finally, in the Mortgage Covered Bond (MCB) and securitization environment.

The topic of establishing a modern MCB framework in Poland has been the focus of a number of World Bank reports, notes and related consultations with the Polish counterparts over the last 7 years. The material herein builds on the World Bank Technical Note "*Reform of Polish Covered Bonds*" produced in 2009 (with the associated memorandum of 2010), as well as on a broader World Bank Polish Housing Finance Policy Note of 2006. For avoidance of repetition, messages from those documents are used in this Note directly, as appropriate.

At the same time, the discussions with and the commentary from the Polish authorities during and after the Mission showed that certain aspects of the MCB framework and broader housing finance market seem to merit additional clarification. Therefore, several key concepts are addressed with more detail, e.g. asset encumbrance, prudent mortgage underwriting policy and practice, MCB issuer models, and comparison of MCB to Residential Mortgage Backed Securities (RMBS).

The Polish authorities by virtue of proximity to a number of relatively advanced jurisdictions have access to the wealth of mortgage finance information; they are encouraged to take advantage of this and consider consultations with the EU and CIS market stakeholders, including regulators and trade groups. As the policy and practice dialogue on the mortgage principles and practices, including micro and macro regulation has been very active in recent years, direct and ongoing contact may be valuable in crystallizing the development and stability agenda for Poland.

This Note primarily addresses the mortgage market development objectives, although the regulator is encouraged to consider the use of the macro prudential tools at its disposal for institutional and systemic stability of the mortgage sector as the current portfolio outstanding is large and risky and thus presents a negative performance outlook. The rest of the material is structured as follows. Firstly, brief background information on recent Polish mortgage sector evolution provides context. Secondly, details of certain regulatory initiatives are discussed with the view on potential strengthening. Thirdly, suggestions for modernization of certain features of the current capital market funding framework are provided; specifically on expanding the issuance of MCBs to the universal banks as well as bringing the framework in line with the latest global best practices.

¹ The team was led by Luc Everaert (IMF) and Brett Coleman (World Bank) and included Karl Driessen, Nancy Rawlings, Yinqiu Lu, Jorge Chan-Lau, Rishi Ramchand (all IMF), Katia D'Hulster, Heinz Rudolph, Andrey Milyutin, John Pollner, Ignacio Tirado (all World Bank), as well as external experts David Walker (Canadian Deposit Insurance Corporation), Monnie Biety (independent consultant), and Fernando Montes-Negret (former World Bank and IMF). This Note is prepared by Andrey Milyutin (World Bank, FCMNB).

Executive Summary

Poland's financial system broadly, and the mortgage market in particular, have so far demonstrated resilience to the ongoing global financial crisis and the Euro Area turmoil. Vulnerabilities lie in the exposure to foreign exchange (FX) risk and foreign investors, which in turn may pressure bank funding, especially in the background of absent long-term domestic funding sources, negative cyclical outlook and declining residential real estate prices. Asset quality has become a higher priority on the supervisory agenda to address persistent non-performing loans and cyclical deterioration in credit quality. This has a particular importance for the large and risky mortgage portfolio outstanding; furthermore, a recent loosening of underwriting standards could contribute to rising mortgage NPLs and thus to institutional and systemic risks.

Establishing a robust capital market funding framework including MCBs and RMBSs can address the funding needs and mitigate the FX and asset quality risks facing the banking system. A number of recent regulatory initiatives strive to remedy the situation, focusing on improved asset quality, loan transferability, and reviving the specialized mortgage banks. A new large-scale housing subsidy program is designed to improve targeting and efficiency while potentially mitigating fiscal risks.

The Polish regulators are advised to adopt a comprehensive approach towards further development and stability of the mortgage sector. Firstly, the risks of the current portfolio may need to be aggressively addressed in close cooperation with the lender community. The combination of multiple risk factors, e.g., FX and adjustable rate mortgages (ARMs), inefficient loan transfer and foreclosure procedures, a 20 % PLN portfolio share of subsidized loans, low PLN loan seasoning add to the risk profile of the mortgage portfolio. In the context of high and rising unemployment and prospects of an economic slowdown, this presents a negative portfolio performance outlook.

Secondly, strengthening the mortgage lending regulatory framework is also advised, primarily in the area of prudent underwriting and servicing. As the development of the proper capital market system is likely a lengthy process, alignment of the Recommendation S with the current best global practices may be necessary to avoid the repeat of the risky practices of the past and to support sustainable growth of the mortgage portfolio.

Third, on a forward-looking basis, the Polish regulators are advised to consider that the high risk profile of the current portfolio may in large part be due to the absent capital market funding channels. Thus, the development of a modern framework of the MCB and RMBS instruments may contribute to systemic and institutional development and stability. In this regard, congruence with the current global legal, regulatory and policy trends is advised.

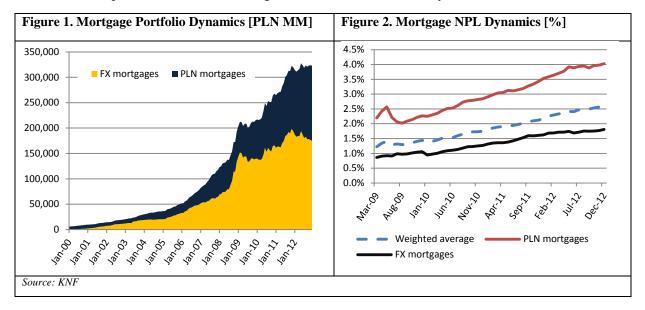
Lastly, the Polish market stakeholders are encouraged to actively seek information exchange and cooperation with their regional counterparts, particularly in the countries where the mortgage markets have experienced significant negative events in the context of the ongoing financial crisis.

Key Recommendations

Recommendation	Notes	
SHORT TERM Address the risks of the mortgage	KNF and NBP, in close coordination with the lenders, are advised to adopt an aggressive proactive approach to the credit risks of the mortgage loan stock. Specifically:	
portfolio outstanding	1. Conduct a fact-finding exercise to obtain granular loan-level mortgage portfolio data to identify the components of the portfolio (both per lender and macro) where the risks are the most apparent –based on past experience and on plausible economic scenarios;	
	2. Design appropriate watchlist procedures which would apply either on a per-lender basis or per portfolio component. Certain prudential adjustments may be needed, as appropriate;	
	3. Incentivize the lenders to conduct loan modification programs, if such are found necessary and feasible. Address the public awareness concerns and ensure appropriate consumer protection.	
SHORT TERM Strengthen	KNF are advised to consider fine tuning the current draft of Recommendation S. Specifically:	
regulatory environment for	1. Risk factors should not be allowed to stack, e.g., for a given loan, maximum values of both DTI and LTV should not be allowed;	
mortgage lending	2. The decision to exclude DTI limits from the Recommendation should be reconsidered;	
	3. The use of credit risk insurance in connection with LTV limits needs to be clarified and stringent conditions applied to such insurance vis-à-vis related party transactions, pricing, and other regulatory treatment (e.g., capital adequacy ratio or provisioning rules applicable to such insurance).	
MEDIUM TERM Establish a modern and robust capital	Market stakeholders are advised to adopt a comprehensive approach to developing a modern capital market funding channel for mortgage finance. Specifically:	
market funding environment as regards to mortgage finance.	1. Modernize the enabling environment to eliminate the legal and tax obstacles of mortgage rights transfer;	
	2. Modernize the MCB framework to allow the universal banks, along with the specialized banks, to issue MCBs, and include the latest features on prudent and efficient treatment of such challenges as asset encumbrance, potential fiscal liabilities, prudent loan eligibility criteria, robust cover asset monitor functionality, issuer licensing, and MCB integration in the bank insolvency framework;	
	3. Establish a modern securitization framework. The draft securitization law will benefit from congruence with the ongoing EU and US regulatory initiatives aimed at strengthening the quality of mortgage loans and the securitization instruments (e.g., FSB guidance, Dodd-Frank Law and QRM, similar EU initiatives).	

Mortgage Market Context

- The Polish mortgage market has so far been spared the negative effects of the global financial crisis, yet significant risk factors and inefficiencies prevail. The portfolio outstanding is just over EUR 80 Billion (approximately 1.6 million loans), representing 32 percent of the banking loan book. The portfolio is the largest in Europe and Central Asia (ECA) both in absolute terms and in the share of the banking book which is double the regional average and on par with CEE-5 (Czech Rep., Poland, Hungary, Slovakia, and Slovenia). The market is significantly larger than in neighboring countries – Russia (EUR 40B), Hungary (EUR 23B), Czech Republic (EUR 20B), Slovakia (EUR 12B). In the broader EU context the market size is comparable to Austria (EUR 83B), Finland (EUR 81B) and Greece (EUR 78B).²
- 2. More than half of the portfolio is in FX (primarily CHF), although FX originations have been negligible since 2010 (Figure 1). In the absence of long-term domestic financing options, mortgages are funded by deposits or interbank loans (mainly intragroup loans from foreign banks to Polish subsidiaries). Mortgages typically have adjustable interest rates which reset every 1 to 6 months (set as the interbank rate plus a margin fixed for the lifetime of the loan) and tenor of up to 30 years. This mortgage product profile is typical for many ECA countries, where in the early 2000s the large EU banking groups established significant presence in the sector and thus promulgated EUR or CHF ARM products. At the same time Polish market stakeholders have been attentive to the FX risks in the aftermath of the acute financial crisis phase in 2009, and FX originations have been drastically reduced since.



3. The average portfolio loan-to-value ratio (LTV) is over 80% (95% for FX loans), the share of mortgages with LTV > 100% is high at 27% by volume, over 38% of the volume of FX loans have LTV over 100%, 19% of FX loans have LTV over 130% and 10% of FX loans have LTV over 150%. FX loans constitute 56% of the aggregate portfolio. These are conservative data as LTVs were captured at origination and the housing prices have significantly declined since 2007-2009 when a large share of the FX loans was originated. Thus the LTVs may need to be actualized in order to present accurate

² Source – *Hypostat*, 2012 figures,

³ Source – KNF, 2013 for portfolio and 2012 for LTV composition.

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information both to the lenders and the regulators. The intersections of the risk factors present particular concerns, e.g., 27% of the portfolio with LTV>100% and FX ARM mortgages. Significant further analysis of the granular data is required, as discussed below.

- 4. While weighted average NPLs are relatively low at 2.6 % (4 % for PLN loans), there is a clear upward trend (Figure 2). In the global context the current Polish NPL levels can be seen as rather benign, especially when compared to the countries that are experiencing significant negative effects of the global financial crisis, e.g., Hungary, Ireland, Spain, US, etc. ⁴ However, the combination of multiple risk factors (e.g., high LTV, FX and ARMs, inefficient loan transfer and foreclosure procedures, a 20% share of the PLN portfolio of subsidized loans and low seasoning) add to the portfolio risk profile. In the context of high and rising unemployment and prospects of an economic slowdown, this presents a negative performance outlook.
- 5. Domestic long-term funding sources are absent; the system of the specialized mortgage banks has become irrelevant. The two remaining specialized mortgage banks have almost entirely switched to the commercial mortgage sector. Universal banks do not have access either to the MCB or the securitization funding channels and instead rely on short-term deposit liquidity for mortgage lending. In addition to creating maturity gaps in the banking system, the absence of a modern mortgage financing mechanism has contributed to the mortgage portfolio risks. Since the terms and conditions of mortgages from the universal banks can be more flexible, mortgage banks have little chance of sizeable origination. The transfer of mortgage rights between creditors is inefficient due to issues in taxation, re-registration, nontransferability of the Banking Execution Title, and the requirement to obtain borrower consent to the transfer. The mortgage banks thus do not have the sufficient volumes of the conservative MCB-compliant mortgages due to challenges in origination or purchasing and therefore cannot issue large and predictable volumes of covered bonds. The universal banks have no incentive to originate MCB-compliant loans (since they cannot issue MCBs and the transfer of mortgage loans is inefficient) and thus have the flexibility to relax their underwriting criteria.
- 6. There is an active policy and regulation dialogue among market stakeholders, and a number of recent regulatory initiatives are aimed at strengthening the sector. The authorities seem to continue to expect the existing system of mortgage banks to succeed notwithstanding long domestic experience to the contrary and the evident global and regional trend of modernization. Three working groups have produced legal and regulatory drafts aimed in large part at preserving the current system of specialized mortgage banks, e.g., a scheme to allow universal lenders to use the balance sheet of their mortgage subsidiaries and thus to avoid the re-registration costs. However, further revisions in several areas are suggested.
- 7. The draft Recommendation S is a step forward with the introduction of explicit LTV limits and the requirement to match the currency of the borrower's income with the currency of the mortgage.⁵ Certain taxation inefficiencies of loan sales to the mortgage banks have been recently resolved, and the electronic centralized re-registration mechanism is expected to be available in 2013.

⁴ NPLs in US - 6.8%, Serbia - 7.35%, Ireland -11.9%, Russia – 2.1%, Turkey – 2%, Hungary-15%. Sources – MBAA, respective Central Banks, AHML. Latest available data used (12/2012)

⁵ Subsequent to the mission, the FSAP team was informed that the amended Recommendation S was published in June 2013.

8. Large-scale housing subsidy programs have been recently redesigned to improve efficiency. The 2005-2012 *Rodzina na Swoim* scheme was large with 182,000 loans (PLN 35B) extended (estimated 20% of the total and 30% of PLN originations by number of loans or 20% of the current PLN portfolio outstanding). However, its 8 year 50% interest rate subsidy for ARM loans has created an uncertain future fiscal liability. The yet to become official next subsidy program (*MDM*) seems to be an improvement with strengthened key features – subsidy towards the downpayment instead of the interest rate, better real estate price targeting, and focus on young families. The expected volume of MDM is estimated at 115,000 loans but may have a significant impact on the market as the overall originations decline. The authorities may wish to consider establishing prudent origination and servicing practices for MDM-eligible loans for market development and stability reasons.

Addressing the Risks of the Current Mortgage Portfolio

9. In analyzing the existing mortgage portfolio, it appears that a significant share was originated under relaxed underwriting policies and practices, which was made possible in part due to availability of funds from the parent EU banking groups or retail deposits and the banks' race for the market share as well as to the bottom of the quality. In the context of large individual and aggregate mortgage portfolio

Mortgage Portfolio – Key Ratios, December 2012

Average portfolio LTV	80%
FX portfolio average LTV	95%
Share of portfolio with LTV > 100%	27%
Share of FX loans with LTV > 130%	19%
PLN delinquencies	4%
FX delinquencies	1.8%

with risky characteristics of high LTV, FX, tracker ARMs – overlaid with declining property prices and rising unemployment - the market stakeholders are advised to consider robust and aggressive portfolio management activities.

10. The authorities and the banks together should consider a proactive, forward looking approach to dealing with delinquent mortgage loans (both stock and future originations) up to and including foreclosure and borrower eviction. The special servicing policies and practices⁶ need to be addressed from the market stability and further development

perspectives.

11. The important balance to strike is between predictability of the special servicing process – both under normal, as well as emergency circumstances – and the strength of the collateralization of the real estate which is the cornerstone of mortgage lending. This balance has both institutional and macro policy

What is 1% of NPLs?

In the Polish context 1% increase in mortgage NPLs means that around 15,000 families are in default and are facing eviction.

In certain circumstances, e.g. spatial and institutional concentration, this can present a significant social and institutional stability concerns.

implications, as at stress times imprudent foreclosure actions by a number of individual institutions quickly spread among the industry and impact the housing markets. Note the examples of Atlanta, GA when

⁶ Special servicing in the context of mortgage finance denotes policies and procedures that lenders or their agents follow when dealing with delinquent and defaulted loans. Specifically, such practices include contact with the delinquent borrowers, loan modifications, legal proceedings, property sales, conversion to rental, etc. The canonical objective of special servicing is maximization on the NPV basis returns to the lenders (minimization of losses).

in 2010 over 66% of the housing supply was in foreclosed properties put for sale by the lenders, or of the robo-signing scandal in the US among virtually all major mortgage lenders and servicers.⁷

- 12. As mentioned before, Poland has a large EUR 80B stock of mortgages, many of which likely were underwritten to poor risk management practices and policies. This notion is supported even by the limited available aggregate data stratified only by LTV and currency. Even if significant NPLs have not materialized yet, the regulators are well advised to proactively approach the issue of the risks of such portfolio and not to wait until the industry shows high and unsustainable delinquencies as is the case in, for example, Kazakhstan, Hungary, Ireland or Ukraine.
- 13. Additionally, the authorities are encouraged to consider the current unfavorable NPL trend and composition. Specifically, PLN delinquencies are high at 4%, which is a significantly elevated level per se, but especially so in the context of the unseasoned⁸ portfolio with a 20% share of subsidized loans. The NPL share of this portfolio was growing almost linearly since 2009 at the speed of 0.1% per month, which is troublesome given the large increase in PLN originations since 2010, which under normal circumstances would have arithmetically reduced the reported delinquencies.
- 14. A suggested approach would be to scale the micro portfolio management and watchlist practices to the macro, country level and codify some of the better techniques into policy. Note that watchlist procedures apply to the loans that are current, but due to a combination of the present or expected borrower and loan characteristics may present an elevated risk profile. Specifically, the actions to take are:
 - a. Conduct ex ante facto portfolio analysis. The regulator should request appropriately stratified mortgage portfolio data from all of the significant lenders [80-90% of the aggregate portfolio] with a particular focus on the lenders with the largest relative exposures. The grouping should clearly show components of the portfolio with high potential risks, especially in the layering of risk factors, e.g. FX, LTV in excess of 100%, properties located in economically depressed areas or in areas with significant House Price Appreciation (HPA) declines, borrowers from the industry sectors that have or are likely to experience significant unemployment increases, etc. Additionally, lenders should be consulted on their risk management and analytical observations as regards to credit risk drivers. In the Polish context, actualization of the LTVs and DTIs may be warranted for certain portfolio strata. A formal Basel 2 compliance expected loss model should optimally be constructed.
 - b. *Design of the appropriate risk management measures*. Depending on the findings of the previous step volumes, locations, number of lenders and borrowers affected, etc. the regulator and the lender community may consider jointly designing an appropriate loan modification action plan. This plan could include standardized modification programs and the required regulatory amendments likely temporary.

⁷ See for example www.housingwire.com/news/2010/10/08/robo-signer-effect-housing-market-reaching-critical-mass and www.housingwire.com/news/2010/10/08/robo-signer-effect-housing-market-reaching-critical-mass and www.housingwire.com/news/2010/10/19/will-bankers-go-to-jail-for-foreclosure-gate/?xid=rss-topstories

⁸ In mortgage terminology a loan is considered "seasoned" after 12 months. A frequently used rule of thumb is that mortgage defaults rise during first 3-5 years of loan life and plateau thereafter.

- c. Conversion of the loan (modification) to less risky and more prudent mortgage product may take a number of formats. For example, in the current environment of low interest rates, the lenders may be encouraged to extend the ARM reset periods from one month or to implement smoothed mechanisms of the interest rate calculation. Another example would be conversion from FX to PLN or from ARM to FRM. A typical loan modification measure is lengthening of the loan term and re-actualization of the LTV via property appraisal. In any case, modification measures may have options appropriate to different borrower strata and should not result in an absolute increase in the mortgage payment.
- d. However, regulatory requirements, for example, to lengthen the ARM reset terms, may in part serve the same purpose. A significant ex-ante impact analysis should be done, and measures should be taken to ensure gradual availability of PLN funding sources. Note that the measures may be institutionally specific, e.g., if a particular lender is found to have a large share of particularly risky mortgages with spatial concentration. They may also be systemic, e.g., a large share of the aggregate portfolio across many lenders is found to have risky characteristics. In the latter case the regulator may consider providing for appropriately beneficial treatment (likely temporary) of the modified loans in terms of capital charges, provisioning or liquidity ratios.
- e. *Implementation*. If the findings of the previous steps warrant a relatively universal modification program likely voluntary for borrowers the selected procedures need to be made public with an appropriate consumer awareness campaign; frequently the regulator's participation in such activities raises the perceived level of trustworthiness in the eyes of the public and thus may increase effectiveness. Additionally, regulatory oversight is essential to prevent prohibitively high lender fees and charges.
- f. Care should be observed to avoid in appearance or substance any measures that would lead to the mortgage portfolios being nationalized, as borrowers may fall under the impression, frequently justified, that the State would not foreclose and evict in cases of defaults. Additionally, banking policies and regulation as regards to such a program should be clear and transparent to avoid potential moral hazard and adverse selection, i.e., eligibility criteria verification, transparent procedures, defined volumes and timetable, seasoning of the loans, etc.
- 15. At the very least, even if the data show that no universal program is appropriate and thus no policy measures are required, the authorities would gain a critically important understanding of the stratified composition and performance of the national portfolio. Besides maintaining this awareness on an ongoing basis by periodically [optimally monthly, likely quarterly initially] collecting the loan level data, the regulator is encouraged to analyze it in the context of the Polish economic performance, e.g., overlaying it with the location-specific HPA data to understand true LTV situation both systemically and institutionally.

⁹ Examples of such programs are in Hungary, Ireland, Russia, and US where they were either codified by regulation/law or industry-driven.

¹⁰ Re-calculation of the LTV in the current environment of lower property prices compared to 2007-2008 may be beneficial for lenders in case the regulator adopts capital allocation requirements in relation to the quality of the mortgage loans similar to the ones discussed in paragraph #27.

16. From the policy and regulatory perspective, it is possible to incentivize the lenders to pursue robust watchlist and modification practices by certain capital allocation and provisioning measures, consumer protection and disclosure requirements, and aggressive compliance measures. It is critical for the regulator to maintain detailed and complete HPA awareness as well – overlaid with the aggregate mortgage portfolio evolutions to be in a position to assess the situation and react with targeted policy measures as appropriate.

Why do NPL levels fall?

The Polish regulators are encouraged to monitor the NPL situation beyond the aggregate headline number and remember that delinquency ratio evolutions may be in large part due to the simple arithmetic "tricks" related to the changes in origination dynamics. Only granular stratified ongoing portfolio surveillance allows for appropriate design of the focused and determined lender activities in loan modification and workout, which ultimately may bring about improvements in the portfolio risk profile.

Strengthening the Mortgage Regulatory Environment

18. The Polish regulators are encouraged to consider that the risky portfolio outstanding was made possible in part by the absence of a viable capital market funding channel, which led to the situation where regulatory guidance on prudent mortgage lending and servicing was the only mechanism to ensure quality underwriting. Globally, however, such reliance on regulation has proven to be insufficient, as even the largest mortgage markets have discovered the influence of often perverse and asymmetric lender incentives, which led to product aberrations, such as extreme cases of "Alt-A" in the US or exotic FX (including JPY) ARM mortgages in ECA.

... ensure that lenders consider more conservative underwriting criteria to compensate for situations where the underlying risks are higher.

For example, more conservative underwriting standards (e.g. LTV ratios or servicing requirements) could be considered where:

- ...there are considerable risks that an asset price bubble is building up in the property market as a whole or in specific segments or geographical areas;
- ...the loan is in a market segment that, compared with other mortgage loans in that jurisdiction, tends to perform worse than average in a property downturn (depending on the jurisdiction, examples of such a market segment might include luxury apartments, buy-to-let investors, second homes, cash-out refinancers, etc.)...
- ...Jurisdictions may want to impose absolute minimum levels of particular dimensions of mortgage underwriting standards below which no mortgage would be deemed acceptable, irrespective of the settings across the other dimensions.

Financial Stability Board Mortgage Underwriting Principles (2012)

- 19. One of the major lessons from the ongoing financial crisis, ignited in part by the systemic failures of the US sub-prime mortgage market, is that products ill-conceived mortgage and underwriting and servicing can affect entire financial systems even if such practices may be initially limited to specific institutions. In the broad trend of revising and strengthening the "basics" of housing finance - mortgage loans as such - increased attention to underwriting practices has been evident among market stakeholders and regulators. The need to define and implement adequate underwriting standards is of particular importance in the ECA region where funding constraints or incomplete mortgage market infrastructure may conflict with the soundness of lending.
- 20. The market-wide consequences of poorly conceived and implemented origination policies and practices, out of proportion with the micro level of

the triggering factors, are costly in terms of systemic stability and institutional bailout. Additionally, they halt the deepening of housing finance and demonstrate the importance of sound and prudent lending standards for the sustainability of market development. Since 2007, recommendations and regulatory adjustments related to strengthening of mortgage lending framework have been issued in many countries, including the US, EU,¹¹ the UK,¹² and Hungary,¹³ as well as internationally, e.g., by FSB and BIS. They provide an updated foundation for healthy policies, which however needs to be customized to the specificities and development level of each national market. Some the most critical principles are:

- 21. Assessing borrowers' ability to repay is the primary consideration when lending for housing. Elements of this include:
 - a. gaining accurate knowledge of the borrower's income both volume and type;
 - b. taking all the existing borrower's obligations into account, and

¹² Mortgage Market Review: Responsible Lending (FSA, 2010) Mortgages: Conduct of Business (FSA, 2007), Handbook for Mortgage and Home Reversion Brokers (FSA, 2008)

¹¹ EU Consumer Credit Directive 2008/48/EC

¹³ Consumer Credit Act 162/2009 and Decree 361/2009 (12/2009)

- c. in the case of ARM or FX mortgages assessing the future repayment capacity based on conservative assumptions and periodic stress tests. Understandably, enforcement of forward-looking positive covenants, e.g., related to minimum DTI levels, raises challenging loan servicing issues and should be best approached by lenders on an individual basis vis-à-vis specific borrower circumstances.
- 22. Protection against price cycles particularly from price bubbles. LTVs should be set at levels that do not reflect the extrapolation of an appreciation trend in the future, but instead should reflect realistic assumptions of recovery rates. Some jurisdictions have established regulatory "hard" limits, an approach that depends on the specificities of a particular market.
- 23. Prudent origination must rely on certain supporting infrastructure, such as:
 - a. The availability of credit registers, including both negative and positive information and utilization of information from the bureau during underwriting and servicing processes;
 - Reliable, standardized and independent appraisal capacities to ensure the accuracy of LTV values – including typically on-site appraisal at loan origination and periodic desktop portfolio reviews;
 - c. Credible and time-predictable foreclosure process;
 - d. Availability and utilization of appropriate insurance products and mechanisms, including coverage for lender credit risk, property hazards and borrower health.
- 24. Compensating for, rather than adding risk factors. Particular attention should be exercised by regulators and supervisors to "risk layering" or adding several risk factors within the same transaction, which is one of the most damaging practices associated with the US sub-prime market. Broadly, lenders should establish a certain normalized "prime" level of risks associated with their mortgage portfolio both in terms of borrower profile and loan terms and conditions. Variations of the products should strive to maintain a symmetrical approach to modifying such level, e.g., when a riskier borrower strata is targeted, loan features should offset such increased risk, and not simply, as is common practice, add more credit risk by increasing the interest rate. Compensatory measures may include modifying underwriting criteria, enhancing loan servicing, avoiding FX, hybrid and ARM features, requiring additional or modified insurance coverage, etc. Examples of such asymmetric combinations, which need to be avoided, include:
 - a. ARM loans to borrowers with irregular incomes or in combination with high LTV and DTI;
 - b. gimmicks used to make debt affordable to lower income borrowers but that often have a delayed, time bomb impact of their solvency such as bullet repayments, repayment profile involving negative amortization, or initial teasers rates; and
 - c. FX loans in combination with high LTVs and DTI.
- 25. Draft Recommendation S (as per the version made available to the Mission) is a significant step forward and incorporates much of the global guidance on prudent mortgage underwriting. However, certain aspects of it should be fine-tuned. In particular, the KNF inclination to leave the policy and practice matters of the decisions related to DTI to the lenders, and the currently vague description of the mortgage insurance role in underwriting are advised to be reconsidered.

26. Firstly, the decision to exclude DTI limits from the Recommendation leaving the DTI limit and guidelines to individual lenders should be reconsidered as it may lead to risky and undesirable consequences, such as:

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- a. There is a risk that multiple incomparable DTIs in the system will emerge, as different lenders may use different definitions and calculation methods. A critical aspect of this risk is that this metric may become irrelevant both in the aggregate (affecting macro policy actions) and comparatively between institutions, leading to difficulties in portfolio pricing, prudential oversight or secondary mortgage transactions.
- b. Delegation of the DTI-related policy to the lenders' Boards may create a conflict where KNF, in case it questions a given bank's DTI practices, has no legally enforceable powers to deal with the bank's Boards;
- c. DTI and LTV are interrelated metrics of the credit risk of a mortgage loan; avoiding guidance on one of them creates challenges for understanding the overall credit risk profile of the micro and macro portfolio. This in particular is important for the regulator in a down cycle, as both the countercyclical steps and emergency asset quality related measures may need to be taken rather swiftly.
- d. As DTI is highly susceptible to borrower and lender manipulation both at origination and during the life of a loan, avoiding regulatory guidance on DTI leaves ample room for risky practices and thus creates challenges for understanding the overall credit risk profile of the micro and macro portfolio.
- 27. Additionally, mortgage loan risk factors should not be allowed to stack, e.g., for a given loan, maximum values of both DTI and LTV should not be allowed. KNF is encouraged to consider that the interconnectedness between several key parameters of a mortgage loan as regards to the credit risk as well as macroeconomic impact has been established and used by regulators and the industry in other jurisdictions. Below are a few examples that may illustrate this concept.
 - a. The canonical definition of a credit risk as a product of the probability of a negative credit event and the severity of such event, in the mortgage context traditionally uses LTV and DTI as proxies for the loss severity and event probability, respectively. In other words, while the LTV ratio traditionally serves as an indicator for the potential loss of the lender in case of a borrower default, the DTI is seen as an indicator of the borrower's ability to pay, which, together with the borrower's incentive to pay (influenced by such factors as property price evolutions, LTV, family circumstances, occupation of the collateralized property, etc.) drives the probability of a default event.
 - b. LTV and DTI ratios are highly correlated, i.e., in case of an economic downturn, typically real estate asset prices fall (LTV increases) and unemployment rises, reducing the borrowers' incomes (DTI increases).
 - c. Regulators in the EU have recognized the importance of stacking or "layering" of the various risk factors in mortgage loans, evidenced in part by the FSB and BIS, and illustrated by a number of related reports and research.¹⁴

¹⁴ 2011 Liikanen Report http://ec.europa.eu/internal_market/bank/docs/high-level_expert_group/report_en.pdf, 2010 BIS The Joint Forum Review of the Differentiated Nature and Scope of Financial Regulation Key Issues and Recommendations

- d. Capital market funding intermediaries in the US have recognized the importance of a matrix approach to mortgage loan terms and conditions. For example, Federal National Mortgage Association (FNMA) explicitly defines the procedure for DTI calculation and uses the matrix of DTI, LTV and credit score to determine borrower eligibility.
- e. Mortgage insurers in the US, e.g., MGIC, also use a matrix approach to borrower eligibility combining loan amount, DTI, LTV and the credit score.
- f. Capital market funding intermediaries in Russia have also recognized the interrelated nature of the various loan terms and conditions, e.g., the Agency for Home Mortgage Lending (AHML) in the Federal Standards for certain products uses the matrix of the loan amount, LTV, location of the property, and a number of other factors.
- 28. At the very least there should be a standard methodology for calculation of this ratio as well as a prudent upper limit [40-45 %]. At the same time, it is clear that lenders and investors would have appetite for mortgages with a different credit risk profile and would want to have flexibility in designing products which would fit in the loan parameter matrix. Thus DTI regulatory guidance may take the form of capital allocation requirements which would be dependent either on the nominal values of this parameter or values outside of a certain prudent range. Additionally KNF are advised to consider that in general DTI, as an aspect of the borrower's eligibility, is a relatively "softer" parameter when compared, for example, to LTV. This softness is due to significant uncertainty as to current and future borrower income. Thus the regulatory and policy guidance on the DTI limits and the methodology for income assessment (e.g., approaches for including multiple income types and projecting future borrower income) need to be carefully designed, implemented, and enforced preferably in cooperation with the major lenders in order to establish a statistically meaningful basis for risk assessment and thus capital consumption guidelines.
- 29. Additionally, the Polish regulators are encouraged to consider that the true meaning of the prudent loan parameters and their efficacy as macro policy tools depends on the prevailing mortgage products. For illustration, see the table below.

Mortgage Loan Type	Stylized forward looking DTI scenario	Stylized Corollary
Fixed rate, local currency fully amortizing mortgage, e.g. US, Russia	The periodic mortgage payment is fixed and known with certainty for the life of the loan. In real terms declines with inflation. Incomes broadly follow inflation, lag possible. Prevailing interest rates do not affect payment amount. Ceteris paribus DTIs decrease.	Credit risk potentially less sensitive to elevated initial DTI parameters in certain cases of expected income increase, e.g., young family, government employees, etc.
Local currency loans with multiyear interest rate reset periods, e.g., Canada, France, Germany	The periodic mortgage payment is fixed and known with certainty for 3-5 years. In real terms declines with inflation during reset period. Incomes broadly follow inflation, lag possible. Prevailing interest rates do not affect payment amount during rest period. At reset time, prevailing interest rates used, borrower and property underwriting may be actualized. Ceteris paribus DTIs likely level with reduced cyclical sensitivity.	Credit risk potentially less sensitive to elevated initial DTI parameters in certain cases of expected income increase, e.g., young family, government employees, etc. Actualization of underwriting a significant risk management factor.

Monthly tracker adjustable FX mortgage, e.g., Poland, many ECA countries

The periodic mortgage payment is fixed and known with certainty for 1 month. Sensitivity to FX and interest rate volatility beyond lender discretion. Incomes broadly do not adjust monthly. At reset time borrower and property underwriting is not actualized. Ceteris paribus DTIs likely erratic and sensitive to factors beyond lender or borrower control.

Credit risk potentially very sensitive to DTI due to direct translation of FX, interest rate and cyclical volatility. Lender discretion in rate resets may be risk mitigating measure, e.g. BY, JO, RU. Negative amortization may happen in some product designs.

30. In reviewing the global experience with DTI limits, the following qualifications should be noted. Firstly, in many cases the marketplace - often related to the capital market funding - imposes underwriting guidance on lenders, including for DTI. Secondly, as discussed above, in many instances DTI limits are connected to the other loan parameters, and thus should not be viewed as a stand-alone factor. Note that in cases of either regulatory or market-driven DTI limits, the relevant parties provide exhaustive procedures for calculating the ratio itself, e.g., what types of income to consider, what documentation to use, etc. Thus, subject to these qualifications, the following DTI limits illustrate broad tendencies:

US 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act, 2013 Regulation \mathbb{Z}^{15}	Regulation	back end DTI of 43% subject to certain qualifications and conditions, matrix approach
US (FNMA) ¹⁶	Market intermediary	back end DTI of 45% subject to certain qualifications and conditions, matrix approach
US (FHA, MGIC) ¹⁷	Mortgage Insurers	back end DTI of 43% subject to certain qualifications and conditions, matrix approach
Russia (AHML) ¹⁸	Market intermediary	back end DTI of 45% subject to certain qualifications and conditions, matrix approach
US VA Loans	Subsidy program	back end DTI of 41% subject to certain qualifications and conditions

- At the same time, the Polish authorities are encouraged to view the best global practices as 31. references only and aim to take further steps, specifically as regards to periodic DTI and LTV actualization and usage of such data both for risk management and macroeconomic purposes. Specifically, the FSB guidance which explicitly instructs regulators to adopt policies and practices which prevent risk layering should be of the most relevant to Poland as a member of the EU.
- 32. Third, the brief mention in the draft Recommendation S of the use of credit risk insurance in connection with LTV limits needs to be clarified and stringent conditions applied to such insurance vis-àvis related party transactions, pricing, and other regulatory treatment (e.g., capital adequacy ratio or provisioning rules applicable to such insurance). Global market and regulatory practices in this regard vary, although certain principles may be used as a basis for consideration by the authorities:
 - a. Mortgage Insurance (MI) is a catastrophic type insurance and is often sold by monoline insurers; re-insurance opportunities are rather limited globally, which puts significant capital and balance sheet pressures on such monoliners;

18 www.ahml.ru/ru/borrower/ipProg/standart/

¹⁵ www.gpo.gov/fdsys/pkg/PLAW-111publ203/html/PLAW-111publ203.htm www.consumerfinance.gov/regulations/ability-torepay-and-qualified-mortgage-standards-under-the-truth-in-lending-act-regulation-z/
www.fanniemae.com/content/guide/sel011713.pdf

www.fha.com/fha requirements debt

- b. MI may take the form of a guarantee (i.e., immediate payment continuity protection for the lenders), loan-level insurance (i.e. compensation of loss to the lender after the default resolution), and pool-level insurance in cases of capital market transactions;
- c. Loan-level MI is frequently seen by the authorities as a beneficial socially oriented measure and thus risk is frequently mispriced, creating additional institutional stability and sustainability challenges which transform at the times of distress to the systemic stability issues and fiscal liabilities;
- d. Prudential treatment of MI coverage needs to be carefully considered, as to its quality, target market segments, presence of a subsidy, quality of the underlying mortgages and lender incentives. Especially in the context of Basel 2 and 3, MI coverage could be treated equally with actual LTV coverage as regards to capital adequacy and provisioning, subject to high quality of the risk transfer effected by the insurance product and procedures;
- e. Broadly, lenders globally seem to prefer increasing the risk premia, e.g., interest rates in the case of high LTV loans as opposed to utilizing MI in the absence of regulatory or market-based incentives.
- 33. The Polish authorities are strongly encouraged to consider the question of MI utilization thoroughly, including in the context of the upcoming MDM subsidy program. Pricing and regulatory treatment of this insurance type may be the key challenges and KNF together with MoF are strongly encouraged to seek diverse international expertise on this subject. Countries with significant MI experience in both public and private sectors include Australia, Canada, and US.

Modernization of the Mortgage Covered Bonds System

- 34. Polish authorities are encouraged to consider that in the absence of a capital market funding channel the lenders have been free to pursue risky product development and origination policies and practices limited by only the KNF regulatory guidance. In jurisdictions with developed capital market funding, e.g., US, Canada, certain EU members, Russia, Korea, and Japan, the guidance from such channels (legal, regulatory or practitioner-driven) in large part determines the terms and conditions of mortgages.
- 35. It follows that when (and if) the large Polish mortgage lenders, which are universal banks, are allowed to issue MCBs, the MCB eligibility criteria will define at least a portion of the originations. The development of a securitization funding channel will also lead to additional underwriting guidance for mortgages which are to be used in RMBS transactions. Based on a broad global experience, typically less than 50% of the funding for mortgage lending comes from capital market channels, even in the highly developed countries. Thus, some of the mortgages even in the environment of diversified funding sources will still have terms and conditions defined largely by the prudential regulations.
- 36. In 2012 the Polish market stakeholders formed three working groups under the chairmanship of KNF on covered bonds, on securitization, and broadly on long term funding sources. The Mission was advised by the participants of these groups that all three were successful in identifying key legal and regulatory issues which prevent the development of a long term funding system in Poland both broadly and specifically to mortgages. In early 2013 all three groups delivered reports to the authorities listing the issues and outlining plans to conduct further selection and deliberation and ultimately draft an action plan. The main thrust of the reports is reportedly in reviving the currently nonfunctional system of the specialized mortgage banks by addressing certain legal and regulatory deficiencies, e.g., a scheme to allow universal lenders to use the balance sheet of their mortgage subsidiaries and avoid the reregistration costs; finalization of the electronic centralized re-registration mechanism, elimination of VAT on mortgage loan sales to the specialized banks, etc. The text of the reports was not made available to the Mission, thus further commentary on the scope and substance of the proposed amendments is impossible.
- 37. The Polish market stakeholders enjoy a productive and rich exchange with the counterparts from the EU jurisdictions with well-developed MCB markets; however, a number of specific MCB-related questions seem to have been more important or less understood than others. Therefore, this Note will only briefly cover the general MCB characteristics, focusing instead on the following questions:
 - a. Key MCB characteristics from a rating agency perspective;
 - b. Potential approaches to manage asset encumbrance;
 - c. MCB issuance models.
- 38. Ultimately, the Polish regulators are encouraged to pursue a comprehensive approach to strengthening the quality of their mortgage lending sector. As discussed in the section above, modernizing the Recommendation S is an important immediate element of such approach; development of a proper capital market funding channel is another.

Key MCB Characteristics from a Rating Agency Perspective

- 39. Essential features of Covered Bonds from a rating perspective:
 - a. Credit rating of the issuer: the (implied) rating of the issuer forms the basis of the analysis for the rating agencies and the floor for the MCB rating;

- b. Strength of legal framework and/or contractual arrangement: issuing Covered Bonds under a specific framework is preferred as, besides the legal certainty, this also gives the raters comfort of regulatory support, supervision, and stability of the framework. In many countries where MCBs initially were issued under general law (e.g., UK, The Netherlands, and France), specific MCB laws were later implemented. On top of the law, raters would like to see more details in the contracts on asset and liquidity tests (e.g., prematurity test, extension periods), potential commingling, and set-off reserves etc.;
- c. Recourse to a cover pool of high quality: MCB-investors need to have a preferential claim on the cover pool in case of insolvency of the issuer of the MCBs. They will require confirmation in a legal opinion. The only other creditors which can rank pari passu at the same level as MCB investors are swap counterparties that hedge interest and/or currency risk in the MCB program. Raters will impose a penalty in terms of overcollateralization (OC) if other creditors rank at the same or higher level as MCB holders. The cover pool is in general managed and serviced by the issuer/originator to ensure assets in cover pool are eligible;
- d. Supervision by the regulator and/or by the Cover Asset Monitor: Most cover pools are monitored by a Cover Asset Monitor which is a trustee or qualified auditor and reports to the regulator. The Cover Asset Monitor also checks that the asset tests are met over time.
- 40. Rating agencies in general have the following requirements to mitigate the risks embedded in Covered Bonds:
 - a. Credit risk: the credit risk is assessed by rating agencies using similar techniques to RMBS scoring models on a loan-by-loan basis (S&P and Fitch) or stratification table basis (Moody's). The credit risk needs to be covered by OC but in general it is not the main driver of OC and accounts for less than 10% of the OC. In the MCB legislative framework there are provisions for maximum LTV of mortgage loans eligible for inclusion in cover pools 80% (most countries) or even lower (60% Germany, 70% Finland, 75% Norway and Sweden). Credit risk is also mitigated by the replacement of the by the issuer. The cover pool should at all times meet the asset test with more performing assets than outstanding Covered Bonds;
 - b. Liquidity risk: this is the main driver for the OC in MCB programs. Most Covered Bonds have a fixed rate and a bullet maturity (often with a one-year extension period). On the other hand, the cover pool consists of assets which amortize over time, pay a mixture of interest rates, and have long maturities of up to 30 years. Therefore, the liquidity risk in case of an issuer default is significant;
 - c. Market risk: interest and currency risk stemming from mismatches between value of the collateral and Covered Bonds over time. This risk is in general mitigated by derivatives or by providing more OC;
 - d. Counterparty risk: main one being issuer/originator: this is typically mitigated by relying on the rating of the issuer or the parent supporting the issuer. The servicing risk in general is mitigated by triggers that arrange for back up servicer activation once the rating of the primary servicer falls below a certain level. For swaps and payment agents, rating agencies apply their standard counterparty criteria, e.g., below a certain rating (single A for AAA-rated CBs) counterparties need to be replaced, obtain a guarantee, or

- provide collateral to prevent a downgrade of the MCBs. This is outlined in the standard counterparty criteria report published and regularly updated by the raters. To hedge commingling risk and set-off risk, raters will require reserves to be set up if the issuer's rating is below a certain minimum level;
- Sovereign risk: the rating of the sovereign has emerged an in increasing number of MCB programs as the limiting factor because the rating agencies cannot rate MCBs above the sovereign rating ceiling. Moody's allows 3 notches above the sovereign rating, Fitch four and S&P up to six for Eurozone countries.

Approaches to Manage Asset Encumbrance

- In a number of conversations during the FSAP mission, the Polish regulators broached the subject of asset encumbrance. In their view, MCBs issued by universal banks may pose a stability and fiscal liability risk since the high-quality assets in the MCB cover pool would be excluded from the issuer's bankruptcy estate and not available for resolution purposes. This situation, depending on the particular circumstances of a given issuer, may lead to higher losses for the lower-ranked creditors and depositors of the bank, the latter potentially increasing the fiscal exposure in case of the losses exceeding the capacity of the deposit insurance guarantee.
- 42. The policy and regulatory dialogue as regards to covered bond asset encumbrance is developing, and the recent surge in MCB issuance in the context of ongoing EU bank failures has further fuelled this discussion. In this regard, the asset encumbrance discussion can be broadly approached from the following perspectives. Firstly, the most straightforward mechanism to ensure that the issuing bank's depositors and creditors (besides MCB holders) are protected in case of bank insolvency is a hard limit on the MCB cover pool relative to issuer assets. A number of countries have imposed limits on MCB volume outstanding in order to better protect the interests of depositors, other bondholders and creditors. These limits can explicitly be part of the covered bond legal framework, as for example in Australia, ¹⁹ Canada, ²⁰ New Zealand, ²¹ Italy, ²² US²³; with the same issuance limit applied to all issuers. Alternatively, issuance limits may be agreed on a case-by-case basis between the regulator and the issuer, e.g., in the Netherlands and the UK. Note that the legal limit applies not to the MCB issuance volumes, but to the cover pool assets, which are typically larger that the MCB volumes due to OC requirements.
- 43. The potential volume of MCB issuance by a given bank is not unlimited, as the availability of high-quality mortgage loans (a subset of the overall mortgage origination) is a restricting factor putting a cap on the actual issue volumes. The rating agencies have been recently raising their requirements on the OC well above the legal limits which further reduces the available headroom for covered bond issuance. Fitch's 2012 study showed that more than 50% of covered bond issuers have a funding reliance (defined as outstanding covered bonds as a percentage of total assets) of less than 10%. Only 1 in 5 issuers (almost exclusively specialized mortgage banks) has a funding reliance of more than 20%. In addition to the cover

¹⁹ The value of the cover pool must not exceed 8% of the issuer's assets for authorized deposit taking institutions (European Covered Bond Council (ECBC)).

The maximum issuance limit is currently 4% of total assets (ECBC).

²¹ The value of the cover pool must not exceed 10% of total assets (ECBC).

²² Issuance limits depend on the capital strength of the issuing bank – though there's no ceiling if total capital ratios are over 11

per cent and Tier 1 is above 7% (ECBC).

23 In the US there is a cover pool asset limit of 4 per cent of total issuer liabilities (Federal Deposit Insurance Corporation (FDIC)).

pool size limit, many jurisdictions impose an OC minimal ratio, which serves as a tool both to increase MCB quality and to prevent the issuers from increasing MCB issuance.

- 44. To address the potential increase of fiscal liabilities in the context of the deposit guarantee scheme, increasing the MCB issuer's contributions to the BFG may be considered. In the situation where every issuer (and its MCB program) is well known and licensed by the regulators, the increased payments can be calculated on a straightforward basis per issuer and be adjusted periodically according to the bank's capital and asset and liability composition. Of course, the bank insolvency law and related practices need to take into account the potential presence of the MCB cover pool, both from the segregation perspective and to ensure that MCBs do not accelerate. Also, such differentiation of BFG contributions should not create market distortions by skewing the funding mechanism choices, and they should not unduly increase the MCB funding costs as well.
- 45. Finally, the Polish authorities are encouraged to consider that the challenges of asset encumbrance-related policy, supervision, and practice are subject to an active global policy and regulatory dialogue. For the market stakeholders in Poland, the process of modernizing their MCB framework presents an opportunity to utilize the latest global experience on an important issue.

Covered Bonds Issuance Models

46. In Europe, the different Covered Bonds systems can be grouped in 4 issuance models:

MODEL 1: DIRECT ON-BALANCE ISSUANCE RING-FENCED POOL

The MCB issuer is a universal credit institution, either with a qualified covered bond license (e.g., Austria, Denmark, Finland, Germany since mid-2005, Iceland, Latvia, Slovenia, Sweden) or without such license (e.g., Bulgaria, Czech Republic, Greece, Lithuania, Portugal, Spain, Slovakia).

The issuer originates and services both MCB-eligible and non-eligible mortgages. Pool cover loans are MCB-eligible. MCB issuance is governed by a special legal framework. The cover pool assets are kept on the balance of the issuer and are segregated (ring-fenced) from the insolvency estate of the credit institution via the creation of a register that contains a list of all the assets that are part of the cover pool on which MCB holders have a preferential ranking claim in case of the insolvency of the issuer. The advantages of this model are that it is a simple structure and assets do not need to be transferred or sold to a different entity. It allows for direct double recourse but it may require a change in insolvency law in order to avoid issues with other creditors.

MODEL 2: SPECIALIST ISSUER

The covered bond issuer is a separate licensed specialized credit institution. In general, the activities of these institutions are limited to MCB issuance to fund the cover pool assets. This model exists in France, Ireland, Norway, Finland and Sweden. MCB issuance is governed by a special legal framework.

The origination and the servicing of the eligible assets and the management of the MCB issuing institution are done by the parent bank which in general fully owns and supports the issuing entity. Most of the activities of the covered bond issuer are outsourced to its parent bank. The insolvency segregation of the covered bond issuer from the parent bank is fundamental. This means that no ring fencing of the cover assets is needed as all the assets of the issuer are part of the cover pool. The advantage of this structure is that assets are separated in a different legal entity. The disadvantages are that transfer of the assets is required and there is no automatic direct recourse to the parent of the issuer which is the originator of the assets (only via consolidation).

MODEL 3: DIRECT ISSUANCE WITH SEGREGATED POOL

The MCB issuer is using a Special Purpose Vehicle (SPV) to achieve insolvency segregation of the cover assets.

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This structure is used for example in Italy, Netherlands and UK.

The MCBs are issued by the originating bank itself. The cover assets are transferred (or sometimes pledged) to a legally separated entity, mostly an SPV. This SPV guarantees the payment of the principal and interest of the Covered Bonds issued by the bank. This model uses securitization techniques to transfer the legal title on the assets. This model was used in countries where MCBs were initially set up using the general law as no covered bond law existed. The laws in these countries have basically endorsed those structures by making them law-based without changing the set-up.

MODEL 4: POOLING

The originator and covered bond issuers are different legal entities, with the issuer aggregating eligible mortgages from a number of originators. Pooling MCB models exist in legislation and/or in practical use in Austria, Denmark, Finland, France, Germany, Hungary, Norway, Spain and Switzerland. This option has been used by smaller originators who combined pools of mortgages with other issuers (typically from other regions) for economies of scale.

- 47. In this regard, the Polish authorities are advised to consider that the choice of a particular model is both a dynamic process (e.g., Germany and Denmark have recently modernized their systems) and in large part predicated on historical circumstances. Often an emulation of a particular country experience is not possible due to the fact that present systems are a result of a long and challenging experience. At the same time, each country may do well by adapting the principles and elements of a given MCB model to one's specific circumstances. In this regard, Polish experience with establishing specialized mortgage banks is telling, as that framework may have put these banks at a disadvantage vis-à-vis large universal mortgage lenders. This may have led to the current situation where "the portfolio holders cannot issue" and the "issuers do not have the portfolio". Unfortunately, making substantial changes to the current model has become difficult as time has passed both politically and operationally.
- 48. The Polish authorities are recommended to adopt Model 1 and transition from the current Model #2. Additionally, as the FSAP Mission does not suggest elimination of the specialist mortgage banks in the near term, elements of the pooling Model #4 can also exist, as the smaller originators may find it financially and economically efficient to utilize the mortgage banks as the issuing agents. Finally, the Polish authorities are reminded that regardless of a particular model the high quality of the MCB is treated by the investor and regulator community on the same level. In other words, since MCBs will be defined in a single law (modified current 1997 Law), regardless of the issuing entity, MCB legal and regulatory treatment, as well as broad risk profile and asset characteristics, should be the same.²⁴
- 49. The Mission recognizes the important and active current industry efforts to optimize the operations of the mortgage banks vis-à-vis the lenders and appreciates the political and other constraints which may reduce the regulator flexibility in modifying the existing mortgage covered bonds system. At the same time, it should be noted that the currently existing Model #2 may not be financially efficient even if loan transfer obstacles are overcome. MCBs have a dynamic asset pool, i.e., the mortgages in the cover pool are routinely replaced by the MCB issuer; there would be a need for ongoing whole loan sales from the mortgage originators to the mortgage banks which are MCB issuers. In addition to the costs, the risk transfer aspect of such sale transactions would need to be ascertained in the context of their impact on the MCB investor perception, funding costs, lender incentives, and true dual MCB coverage.

²⁴ Note that of course the terms and conditions of each issuance may differ in tenor, duration, currency, size, etc. Furthermore, the credit rating of the MCB will be different as they are dependent on the rating of the issuer.

Elements of the Modern Securitization Framework

- 50. In addition to modernizing the MCB environment, the Polish authorities are advised to consider implementing a legal and regulatory framework for mortgage securitization. This initiative may be a medium-term undertaking, although certain elements of the system are already in place, e.g., existing securitization structures for delinquent mortgages and a draft of the securitization law. Furthermore, the current global regulatory and policy dialogue on securitization is very active. Since Poland does not currently have a securitization framework in place, the Polish authorities may implement global best practices without the need to alter an existing system a potentially easier undertaking compared to the countries with large securitization markets, e.g., UK and US.
- 51. RMBSs are structured debt instruments that transfer cash flows from a pool of mortgage loans to capital market investors who purchase tranches of such securities. RMBSs are created via a series of transactions which move the mortgages from the balance sheet of the originator to a balance sheet of another company (Special Purpose Vehicle a trust or corporation with a narrowly and specifically defined corporate charter), which does the primary placement of RMBSs.

RMBS Benefits for Originators and Investors		
Originators	Investors	
Funding diversification. RMBSs provide a stable and low cost source of financing and allow greater access to credit markets. They reduce lenders' reliance on retail deposits and issuance of unsecured commercial debt. They allow smaller, un- or low rated institutions to access capital markets based on the credit quality of the mortgages they originate - to get financing at rates appropriate for 'AAA' rated firms.	High credit quality instrument (for senior tranches), portfolio diversification, and attractive yields relative to instruments of comparable credit quality.	
Risk transfer . RMBSs transform illiquid mortgages that otherwise would be held in a bank's portfolio, into marketable securities. Issuance of RMBSs is one means of transferring credit, liquidity, interest rate, prepayment and market risk associated with that collateral to investors. Ability to achieve balance sheet asset derecognition varies by jurisdiction.	RMBS investors could avoid exceeding concentration limits (both regulatory and internal limits) on exposures to a single name.	
Revenue generation. RMBSs have been a means for generating revenues, e.g., origination fees, underwriting and structuring fees, selling RMBS credit and liquidity enhancements. Issuers also created revenue streams through credit arbitrage — the positive spread differential between longer-term assets and shorter RMBS bonds.	RMBSs facilitate portfolio risk management as holding securitized assets may have a low correlation with other portfolio components.	
Regulatory capital and financial reporting . Removal of long-term mortgages from the balance sheet improves financial ratios, such as the LCR or ROA, and reduces the balance sheet duration gap, exposure to capital provisioning, and reserves in case of mortgage portfolio performance deterioration.	RMBS risk-adjusted returns are typically higher relative to a similarly rated sovereign debt, which leads to higher returns per rating.	

- 52. RMBSs have been widely used in the US and other countries, such as Spain, the UK, The Netherlands, Belgium, Italy, Australia, France, and Japan. Relative to mortgage lending volumes, the share of funding provided by RMBSs varies by country, but commonly is between 10% and 60% in larger markets. In 2009 nearly 19% of the outstanding US book of real estate and consumer credit loans worth USD 18 trillion was funded by private label securitization. A number of countries have also enacted specific legal and regulatory RMBS frameworks with a view to establish a high-quality instrument suitable for institutional long-term investors, such as pension funds and insurers. In Eastern Europe, RMBSs have been used in Russia (ongoing), Kazakhstan and Ukraine (pre-2008).
- 53. In the context of emerging economies with young mortgage markets, the benefits for lenders and investors were particularly pronounced. Mortgage lenders typically lack balance sheet or capital strength

to carry significant duration gaps created by increased mortgage loan portfolios. Plain vanilla RMBSs were viewed as a relatively simple and safe mechanism to introduce a low risk asset class to local institutional investors which lacked diversification in private fixed income instruments. International investors were also interested in the arbitrage between performance of "cherry picked" mortgage loans in the collateral pools and perceived high legal, country or transactional risks which skewed RMBS yield/risk performance vis-à-vis other debt instruments.

- 54. Since 2007 the global private mortgage securitization markets have been largely closed due to lack of investor interest in the asset class. Although origination volumes have dropped in light of the global financial crisis, high unemployment, and economic slowdown, without RMBSs lenders have fewer options in obtaining long-term capital market funding. In ECA this is relevant for countries where RMBS issuance was taking place before the crisis Russia, Kazakhstan and Ukraine. Although in Russia securitization has been continuing, in other countries it has ceased. As a consequence, borrowers are faced with inefficient mortgage product features and high pricing.
- 55. RMBSs, particularly in developed markets with a large volume of complex products, were affected by misaligned incentives or conflicts of interest. Certain market idiosyncrasies may have facilitated such misalignment, e.g., the evolution of the originate-to-distribute model, the involvement of a large number of parties in transactions, complex yet opaque investor disclosure and transaction documentation, and not easily deducible risk path between loan originators and investors. Issuer and lender compensation programs, which emphasized volume and growth, overshadowed concerns about the quality of the mortgages. Investors, regulators, and rating agencies came to rely heavily on the representations and warranties made by originators. Investors chose to respond to growing product complexity by relying on credit ratings rather than conducting appropriate due diligence. Lenders had incentives to choose riskier assets in constructing asset pools. On the investor side, portfolio managers and hedge funds were incentivized to maximize short-term gains and yields without considering long-term risk. Investors failed to assess the RMBS risks adequately in part due to the information asymmetry which tended to favor the supply side and in part due to own institutional capacity constraints
- 56. However, RMBS and MCB frameworks are complementary, as the products have different characteristics and appeal to different investor needs. From the mortgage lender perspective, loans compliant with RMBS and MCB may also have different terms and conditions. As RMBSs' perceived quality is more closely linked with the performance of the mortgage loan pool, smaller and lower rated originators have a natural incentive to utilize RMBSs instead of MCBs.
- 57. The Polish authorities are encouraged to consider that RMBSs, in addition to MCBs, will likely improve the overall risk profile of the national mortgage portfolio by imposing stringent loan eligibility criteria, in addition to requiring improved practices from the market participants. Specific RMBS benefits in this regard compared to MCBs include:
 - a. More advanced, detailed and transparent loan level investor and public disclosure both at the time of securitization and ongoing;
 - b. Strong links between performance and pricing of the mortgage pools and the RMBSs which incentivize originators and servicers to follow prudent practices;
 - c. Ability, due to the structured nature of RMBSs, to reach different investors with one issuance, as different tranches are purchased by different investors;
 - d. A viable capital market funding channel for smaller, lower rated originators, incentivizing them to follow high quality lending and servicing practices;

- e. The RMBS requirement for significant standardization of loans and market practices may serve as a driver for the whole market to improve;
- 58. Additionally, the Polish authorities are encouraged to consider that RMBSs allow lenders to deleverage their balance sheets, which may be desirable in the context of a large share of mortgages in the banking loan book as well as a potentially highly risky profile of the aggregate portfolio. Admittedly, RMBS transactions with the most problematic mortgages, e.g., LTV > 100%, may be challenging for the issuers, although their creativity should not be underestimated. KNF is advised to consider establishing minimum loan eligibility criteria for the domestic RMBS, e.g. limiting LTV to [80% without and 90% with appropriate MI] on the pool and individual loan level, requiring performing PLN loans, etc.
- 59. As the other countries with previously large securitization markets, including the US and EU are actively searching for the legal and regulatory frameworks that would instill investor confidence in RMBS, the Polish authorities are advised to implement such best practices in setting up the national mortgage securitization environment.

The main themes of post 2008 global initiatives to re-start the RMBS markets		
Re-aligning incentives of transaction parties, e.g., originator risk retention, rating agency governance improvements, and reduced reliance on credit ratings.		
	y, knowledge of, and monitoring of the mortgage assets, e.g., loan level disclosure, "qualified mortgage loans", liting and due diligence.	
Simplifying and	standardizing RMBS structures, e.g., improved transaction documentation, uniform definitions	
Risk retention	In the EU, Article 122(a) of the Capital Requirements Directive (CRD II) includes a minimum risk retention rate which shall not be less than 5% of the total issuance. Similar risk retention requirements will be included in forthcoming Directive 2009/138/EC known as Solvency II.	
and alignment of incentives	In the US, Section 941 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act) requires a securitizer to retain at least 5 % of the credit risk The "safe harbor" provisions of the FDIC Securitization Rule impose a 5 % credit risk retention requirement for bank-sponsored RMBSs. Pools consisting of high quality Qualifying Residential Mortgages may be excluded from such requirements.	
Transparency and disclosure	In 2009 IOSCO issued guidance on increasing transparency of risk verification and assurance practices and improving asset pool performance information available to investors on an initial and ongoing basis. In the EU, new disclosure requirements (2010 CRD amendments) require that prospective investors have readily available access to all materially relevant data on securitization structures. The ECB and the Bank of England have launched initiatives to implement new disclosure requirements in the context of collateral eligibility frameworks. The first EU loan-by-loan RMBS template was published by the ECB in 2010.	
	In the US, the Dodd-Frank Act has provisions relating to disclosure for ABS issuers. In 2010, the SEC proposed revisions to "Regulation AB", which included new requirements to increase the transparency and standardization in the private ABS market. In Japan, the supervisory guidelines for securities companies were revised in order to ensure the traceability of underlying assets of securitized products in April 2008.	
Credit agency governance and regulation	In Japan, in line with IOSCO's revised code of conduct (2008), rating agencies are required to publish information that may be deemed valuable in an assessment by a third party of the appropriateness of the credit rating. In the US and Europe, rating agencies will be subject to increased disclosure requirements to increase transparency in connection with structured finance ratings.	
Banking regulation	Basel III includes elements that will significantly affect the incentives for banks to securitize loans and invest in RMBS, in part via significantly increased RMBS risk weights. To address the lack of investor due diligence and to deter them from relying solely on external credit ratings, the Basel framework requires banks to meet specific operational criteria in order to use the risk weights specified in the Basel II securitization framework. Solvency II will also establish new capital requirements for the insurance sector with increased risk sensitivity and make investment in RMBSs potentially less attractive to insurers.	

60. An important aspect of restarting private RMBS markets in any country (or initiating mortgage securitization in countries like Poland, where it does not exist currently) is creation of the "Label", i.e., a high quality framework of securitization. Establishing a RMBS Label is a complex initiative with elements in virtually all aspects of mortgage securitization. The Label brand name recognition and value should be such that its potential loss would be a deterrent to any issuers from being lax on origination, servicing and provision of transparency. It is also important that introducing a Label allows for simultaneous (i) strengthening of existing statute or law, e.g., timely deliverance of information, as well as (ii) promotion of improvements before they are codified, e.g., trade transparency, loan servicing pooling and quality of service agreements.

Private RMBS Restart Agenda

- 1. Assess the market thoroughly, as not all global practices and issues may apply.
- 2. Achieve high quality in the Asset, Instrument and Market.
- 3. Convey quality with transparency, disclosure and standardization.
- 4. Introduce a Label to reflect the holistic nature of the changes and to further elevate the RMBS quality.

What is RMBS Label Quality?

Mortgage Asset Quality, i.e., the degree of standardization of transaction documentation, terminology, underwriting and servicing practices, foreclosure regime and, availability of loan-level analytical data.

RMBS Instrument Quality, i.e., trustee quality and functionality, predictability and transparency of transaction documents, initial and ongoing investor disclosure, servicer regime, including the framework and rules for servicer substitution.

Market Operations Quality, i.e., transparency of primary and secondary trading in price formation, transparency of movements, incentives for issuance participants, including rating agencies, RMBS investment regime vis-à-vis other instruments.

- 61. RMBSs certified to carry the Label can be considered for certain regulatory preferences, particularly in terms of investor portfolio management and capital allocation. Investor confidence in RMBS has severely diminished and a re-start would require increasing actual and perceived quality of the instrument. Given that RMBS instrument performance relies on the performance of the underlying assets, the quality of the mortgage loans and availability of information about such quality are paramount.
- 62. Specific Label related practices include:
 - a. Eligible mortgage loans should be of high, consistent and verifiable quality. Collateral quality should be based on auditable information and processes; it should be perceived as high by investors and rating agencies. The quality of the mortgage pool should be credibly and transparently assessed and certified before issuance as part of enhancing quality of the pre-issuance process. Investors should be able to perform, should they so wish, certain verifications. Pre-issuance audits should pertain to the conformity of loan files in terms of data and loan quality to the representations made by transaction sponsor. Current, complete and accurate data on mortgage loans is vital and should be on loan level and updated at least monthly. Loan-level trustee reports during the life of the Label RMBS instrument and data on the pool performance should be available from origination of individual mortgage loans.
 - b. Legally established limits on LTV and DTI. Additionally to actual numeric limits, the quality of assessing the ratios is important and raises the issues of real estate appraisal industry, income verification and overall underwriting policies and practices. Standardized terminology is critical, as RMBS transactions may involve multiple loan

- originators, i.e., all market stakeholders should have a common understanding of key performance and analytical notation, such as delinquency, LTV, and servicer.
- c. Label RMBS structures can be standard and plain vanilla, possibly 3-tier senior, mezzanine and equity. This facilitates external credit enhancement mechanisms and allows for straightforward risk retention by the originators, caters to different types of investors, and eases analytical modeling and pricing. External Label RMBS credit enhancement features, e.g., guarantees, liquidity registers, etc., should be transparent and standardized so that investors have the ability to evaluate their impact on the credit quality of the transaction. Legal agreements used in Label RMBS transactions should be standardized and created using "a by reference" model, i.e., pooling and servicing agreements, whole loan sales agreements, servicing and special servicing documentation, etc.
- d. Investors and market participants should have unhindered and free access to accurate, timely and complete RMBS performance information. This includes loan level at securitization static pool data, periodic loan level disclosure, and investor reports with relevant information.
- 63. RMBS transactions have an impact on financial markets and mortgage funding only in case there is a sufficient volume of primary and secondary trading. Market infrastructure should support transparent price formation and absence of collusion at issuance. Additional market operational quality features worth considering are:
 - a. A backup servicer should be provided for in the transaction documentation including scope of its services and remuneration.
 - b. While market making in relation to Label RMBS may be impractical for all tranches, "benchmark/reference tranches" of particularly high quality would benefit from it.
 - c. Statutory portfolio allocations of key institutional investors should be de-linked from ratings per se, and instead should include quality and instrument type guidance.
- 64. Particularly relevant to mortgages, whole loan sale and purchase transactions should be subject to a neutral legal and regulatory framework, particularly in such aspects as the taxation regime, rights reregistration process, servicing transfer, disclosure, and transparency. In this regard, SPV establishment and operations play an important role, as economic and financial efficiency of whole loan transfers to such companies as part of a securitization transaction critically affect the Label securities.
- 65. Notwithstanding limited presence of this instrument in ECA, RMBSs can play an important role in the mortgage industry's spectrum of long term wholesale funding. While all of the above discussion is relevant for emerging markets, the initial step that market stakeholders could undertake is to thoroughly assess the deficiencies in the existing RMBS framework. The overall goal of such an assessment would be to identify areas of securitization policies and practices that may require changes along the lines discussed above.
- 66. From the implementation perspective, the development of the MCB legal and regulatory framework, as suggested in the previous section, does not need to coincide chronologically with the development of the mortgage securitization framework. Passage of legal and regulatory amendments, especially numerous ones under a single comprehensive agenda, may require significant political discussions, which may not be relevant to the substance of such changes. The Polish authorities are

encouraged to ascertain and devise the most expedient mechanism of supporting the adoption of both components of the capital market funding mechanisms for the mortgage industry.

Conclusions

- 67. The Polish Mortgage market, while well developed and large, presents several opportunities to the stakeholders for significant strengthening. The existing portfolio contains a large portion of highly risky assets which may present a micro and macro stability challenge, should its performance deteriorate. In this regard the authorities are encouraged to actively cooperate with the industry in performing a comprehensive and thorough data collection and analysis exercise with the goal of identifying portfolio segments of the potentially risky mortgages on the aggregate and institutional level. Furthermore, should the analysis so warrant, a loan modification program may be designed to proactively reduce the credit risks for the borrowers and lenders.
- 68. In addition to the activities aimed at the existing portfolio, the Polish authorities are encouraged to strengthen the existing regulatory environment by revising Recommendation S is a few areas, such as designing modern guidance on the underwriting practices, usage of mortgage insurance and establishing a matrix of key loan parameters which can be used to compensate for the risk factors, and not to allow them to pile one on top of the other. Such guidance should be reflected in lender capital allocation policies.
- 69. Furthermore, the Polish authorities are encouraged to utilize a modern well-developed capital market access channels to both strengthen the banking sector in terms of funding diversification and reduction of liquidity gaps and create additional mechanism to ensure prudent origination and servicing practices. In this regard modernization of the MCB framework by allowing universal banks to issue Mortgage Covered Bonds and establishing a mortgage securitization framework are advised.

Annex 1. MCB in the Legal, Regulatory and Marketplace context

Covered Bonds are debt securities issued by a credit institution that are backed by a dynamic cover pool of high quality assets. Investors have double recourse to the issuer and to the cover pool. MCBs are mostly issued under a dedicated legal framework and the issuers are publicly licensed and supervised by the regulator. The covered bond is one of the key components of European capital markets. The asset class plays an important role in the financial system by contributing to the efficient allocation of capital and ultimately economic development and prosperity. With over EUR 2.7 Trillion outstanding in the EU at the end of 2012, Covered Bonds continue to play an essential role in bank funding strategies for the European banks – the amount of outstanding mortgage Covered Bonds is equivalent to around 20% of outstanding residential mortgage loans in the EU.

The introduction of a MCB system represents a strategically important addition in the funding options available to mortgage lenders. This on-balance-sheet instrument, based on specific legislation and supervision, provides the market with a long-term funding tool with cost-efficient performance on the issuer's side and a stable and safe long-term, liquid investment on the investor' side, contributing significantly to the creation of an efficient housing market, capital market development, and financial stability. In view of the main features of MCB, the smooth functioning of this market is perceived by regulators as an important contribution from a financial stability perspective and as a priority in current debate on Basel III and revision of the European regulatory framework, resolution regimes and the REPO policies.

Under EU law there are two working definitions of Covered Bonds. Bonds which meet these criteria are eligible for preferential treatment in various ways (including a lower risk weighting, exemption from certain concentration rules and eligibility for bank liquidity ratios). Furthermore, the European Central Bank's (ECB) rules defining eligible assets for repo operations refer to definitions under EU law.

The two definitions of Covered Bonds are those contained in the Directive on Undertakings of Collective Investment in Transferable Securities (UCITS Directive or EU directive 2009/65) and in the Capital Requirements Directives (CRD or EU Directives 2006/48 and 2006/49):

- Article 52(4) of the UCITS Directive requires a special regulatory regime designed to protect the interests of covered bondholders to be in place:
- CBs must be issued by an EU credit institution which is subject to special public supervision by virtue of legal provisions protecting bondholders;
- Bondholders' claims on the issuer must be fully secured by eligible assets until maturity;
- Bondholders must have a preferential claim on the cover assets in case of the issuer's default;
- The cover assets must be constituted only of assets of specially defined types and credit
 quality. The CRD (Annex VI, Part 1, Paragraph 68) defines a list of assets eligible to back the
 bonds;
- New quantitative restrictions must be imposed on cover assets (e.g. 15% exposure on credit institutions);
- The issuers of MCBs must meet certain minimum requirements regarding mortgage property valuation and monitoring.

Key elements to be considered in the MCB legislation are:

- Segregation and ring-fencing of the cover pool in case of issuer insolvency: procedures should clearly state that in such event MCB holders have preferential claim on the assets in the cover pool which should survive and be fully segregated from the bankruptcy estate;
- Licensing requirements: Each issuer needs to apply for a specific license by the regulator. The license should be public and monitored on an ongoing basis. Conditions for licensing should include regulatory capital levels and other limitations, e.g., a specified minimum level of core capital, adequate technical resources, and a sufficient organizational structure;
- Strict public supervision on issuer and cover pool: The regulator can outsource reporting to a Cover Asset Monitor which represents the interests of the bondholders and if required acts to ensure timely payment by procuring liquidity, acting as a servicer, sell or refinance assets, or issue new bonds.
- Strict eligibility criteria for cover assets: Residential or Commercial mortgages or public
 sector exposures are in general the only types of eligible assets. Mortgages are subject to
 strict LTVs [up to 80%] and valuation conditions. Substitution assets are limited to 15% and
 subject to strict eligibility conditions. Derivatives can be part of the pool but should be clearly
 defined. Each class of assets should be in a separate cover pool.

The majority of the Covered Bonds issued in Europe are UCITS-compliant and in most cases also CRD-compliant which means that the capital weights for bank investors are much lower. Under the Basel I and Basel II standardized approach, the capital weight for UCITS-compliant MCBs is 20% and for CRD-compliant MCBs 10%. The capital weight under Basel II advanced approach can be lower but depends on the issuer rating. MCBs continue to be attractive for bank investors as they are eligible as level-2 high-quality liquid assets for the Liquidity Coverage Ratio (LCR) under Basel III. This favorable regulatory treatment has resulted in some Asset Backed Securities (ABS) investors (especially Asset Liability management (ALM)) desks of banks for their liquidity portfolios) turning to the MCB-market in Europe. MCBs in 5-year maturities are dominated by bank investors while the largest portion of MCBs issued in longer maturities are taken up by insurers and pension funds. Central banks account for 15-20% of the issuance. Covered Bonds are also treated favorably as repo-eligible collateral by the ECB and other central banks:

- a. Covered Bonds only need a BBB- rating while initially only AAA rated-ABS were eligible; ABS needed two ratings while MCBs with one rating are eligible;
- b. The haircut applied to CBs (0.5-7.5%) is much lower than for ABS (minimum 16.4% on market value).

Annex 2. Comparison between MCBs and RMBSs

Feature Comparison between MCBs and RMBS			
	Covered Bonds RMBS		
Issuer	Licensed credit institution, in most cases a bank or dedicated specialist issuer	SPV	
Legal Framework	Generally specific law and regulation		
Supervision	Bank supervision, trustee, capital market authority	Bond trustee, capital market authority	
Payments from	Lender - operating cash flows until insolvency, then priority claim on cover pool	SPV – from collateral pool, tranche waterfall defines priority between bondholders	
Payment acceleration	Upon issuer and pool default	On specific events by triggers	
Claim	Investors have dual claim: recourse on issuer and priority claim on the cover pool assets in case of issuer insolvency; claims of bond holders rank pari passu and at same level with swap counterparties prior to all other creditors	Investors have claim on collateral and its cash flows; priority to other bond holders depends on tranche	
Balance sheet treatment	Assets mostly remain on issuer's balance sheet	Assets (or associated risks) are transferred to an SPV	
Pool Homogeneity	High degree of standardization, ass	et eligibility defined in law	
Cover pool	Dynamic & managed	Mostly static, asset substitution may be possible in certain cases	
Credit enhancement	Overcollateralization provided by issuer. Min OC required by law	Various, including OC, reserves, guarantees, structuring, etc.	
Issue structure	Mostly bullet (or soft bullet), independent of asset amortization	Pass-through, according to asset amortization and issue structure	
Interest rate	Mostly fixed	Typically asset dependent	
Documentation	Program documentation	Documentation per transaction	
Security	All series of bonds have recourse to one single cover pool	Each issue is secured by distinct asset pool	
Capital weighting	Typically 10% in standardized approach for CRD-compliant CB (20% for UCITS-compliant bonds), (new jurisdictions may start at 20% for CRD purposes)	Depends on rating and jurisdiction	
Credit risk	Retained by issuer	Passed to investors, may flow to lower tranches retained by transaction sponsor	
Servicing	By issuers	Typically by specialized servicers	
Valuation and LTV	Eligibility criteria vary, often defined by law		
Disclosure	Minimum level defined by law; extensive defined by regulation or marketplace		
ALM	Defined by law or program Typically pass-through		
Rating methodologies	Separate methodologies combining fundamental and structured finance elements. Issuer rating forms minimum rating and basis for analysis. Maximum rating dependent on country, legal framework, pool quality, ALM and liquidity risk.	Multifaceted: structured finance approach + servicer ratings. Maximum rating dependent on country, legal framework, pool quality, ALM and liquidity risk.	
Liquidation	Insolvency remoteness of cover pools	Insolvency remoteness of SPV	

While public issuance of RMBSs recovered in the past two years, issuance levels are still far from historical highs. In the case of MCBs on the other hand, issuance levels were at historically high levels in H2 2010 and Q1 2011, although issuer retention (i.e., bonds not placed to market) remained high at over 75% in the EU. There are key differences between the two products:

- a. RMBS investors are exposed to the risk of underperformance of the cover pool. During the financial crisis, high non-performing loans and lower pre-payments were drivers of cover pool underperformance and maturity extensions of RMBS;
- b. MCBs are bank bonds, and holders of MCBs benefit from a preferential claim on a cover pool, the support of the issuing bank and every kind of external support provided to the issuing bank;
- c. MCB pools are dynamic, and due to typically high asset liability mismatches between cover assets and outstanding MCBs, OC requirements by rating agencies for MCBs are much higher than credit enhancements for senior tranches of RMBSs, in turn increasing investor protection.

MCBs are an on-balance sheet funding tool; RMBSs free up capital. In contrast to securitization, in the MCB context mortgage assets remain on the balance sheet of the issuers and all credit risk is retained by the issuers. Some structures could be seen as utilizing a quasi-SPV specifically dedicated to the issuance of MCBs because although the issuer is a licensed credit institution, it is in fact a specialized Covered Bond bank. The specialized issuer uses the bond placement proceeds to buy mortgage loans at the lender bank or to grant loans to the operating bank, the originator of the mortgage loans. In case of the latter, the operating bank keeps the mortgage loans on its balance sheet and pledges them as security for the loan received from the Covered Bond issuing bank. However, in both cases, Covered Bonds are an on-bank-balance sheet funding tool and as such have no asset derecognition or capital relief consequences for the issuer.

MCB are backed by a dynamic cover pool; RMBSs are backed by a static pool. All outstanding bonds issued under one MCB program by an issuer are typically backed by all loans in the cover pool, independent on the timing of the issuance. The pool is dynamic and managed which means that issuers can add and delete assets from the cover pool as long as all legal and rating agency criteria are met. The issuer typically takes out non-performing loans (i.e., keeps the pool clean). In most countries, issuers are obliged to do so by law. Increasing levels of non-performing loans in the cover pool could indicate that the issuer is no longer able to support the cover pool. In case of issuer insolvency, the pool in general becomes static and no further assets will typically be added to the cover pool and no further Covered Bonds can be issued. The level of support to CB investors can be increased over time by higher OC levels. RMBS investors are generally more exposed to the performance of the pool, depending on bond structure and credit enhancement mechanisms, as well as on which tranche was purchased.

The reason for the higher credit enhancement of MCBs comes from the maturity mismatch between the bonds (mostly bullet structures) and cover pool assets (amortizing). The resultant MCB liquidity risk can be mitigated by including ALM tests and/or a higher OC required by the rating agencies. RMBS notes are in general amortizing on a pass-through basis with the amortization of the portfolio and generally have no liquidity risk. Additionally to the credit risk of the pool assets, risks are

- a. the potential lower yield of newly added assets (negative carry risk of differing amortization profiles of bonds and pool assets);
- b. interest rates and currency mismatches between fixed rate MCBs and (often) variable rate mortgage loans, and
- c. the need to sell cover assets in a short period of time in case of issuer insolvency to pay MCBs with bullet maturities.

MCB recourse is to the issuer and cover pool; RMBS recourse is to the asset pool. An important difference between MBC and RMBS is that MBC holders have double recourse, firstly to the issuing bank and secondly to the cover pool of assets while securitization investors only have recourse to the pool of assets in the SPV. Some view that the benefit from the additional recourse to the bank is limited for specialist MCB issuers who fund most of their balance sheet via MCBs due to potential correlation between the quality of the cover pool and the credit quality of the issuer.

MCB issuers are licensed and supervised by regulators so benefit from intrinsic support in most cases. Regulators often monitor the impact of the issuance of MCBs on the issuer and its unsecured creditors and depositors. In some cases, regulators have set maximum limits to the amounts of MCBs that issuers can issue without specific permission of the regulators. Moreover, regulations relating to liquidity buffers, leverage limits, reserve requirements and valuations are likely to make banks fundamentally stronger which in turn would support MCBs. The regulatory support and oversight is seen as one of the reasons for MCBs outperforming RMBSs during the financial crisis.

One of the main risks of highly rated RMBSs is maturity extension as the repayment profile depends on the (p)repayment rate of the underlying assets which can vary over time. Falling prepayment rates along with the lack of fully functioning debt capital markets has meant extension risk has become a core consideration in European RMBSs. MCB OC is typically higher than subordination in RMBS. Typically, OC requirements of rating agencies to achieve AAA ratings are much higher for MCBs than for senior RMBS tranches. This is mainly due to MCBs facing not only credit risk but also market risks, especially liquidity risk stemming from maturity mismatches between cover pool assets and outstanding fixed bullet MCBs. MCB legislation in many countries stipulates a minimum level required by law (2% in France and Germany, 20% for Spanish Cédulas, and 5% in other countries).

On an even playing field, MCBs and securitization should be viewed as complementary rather than competing funding vehicles. During normal times, they both increase the range of available financial products, benefiting borrowers, financial intermediaries, and savers. During periods of market stress, MCBs provide a time-tested funding backstop, albeit mainly for investment-grade banks (rated "BBB-/Baa3" and better). Moreover, the legally defined quality principles for selection of underlying assets and strict segregation of assets of the cover pool suggest little valuation uncertainty even in distress situations. In regard to securitization, the multitude of complex relationships between issuers, arrangers and liquidity providers in securitization transactions could introduce an element of uncertainty in times of stress, such as the adverse impact of originator insolvency (despite the insulation of the reference portfolio of securitized assets).

Generally, particularly post 2007, RMBSs face increasing legal and regulatory restrictions. On the other hand, legislators and regulators increasingly support MCBs. For instance,

- a. CRD II 5% retention and greater disclosure requirements for RMBSs,
- b. CRD III more onerous capital requirements for securitizations held in trading books,
- c. CRD IV more onerous liquidity requirements,
- d. Solvency II capital requirements for insurance companies and credit rating agency legislation,
- e. ECB collateral requirements two AAA ratings in case of RMBS compared to BBB-in case of MCBs.