



# Mortgage securitization: Some Lessons from the Crisis for New Markets

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The World Bank

Financial and Private Sector Development

# OUTLINE

- Most develop markets are closed since Sept.2008 (private label MBS in the US)
  - MBS issues mostly target Central Banks' lending
  - Warehouse lending and servicers advances also stopped lack of funding
- The subprime crisis revealed that securitization markets could be dangerous, hence a deep loss of confidence in the instrument: a brief explanation
- Intrinsic benefits of securitization however still remain
- International initiatives to establish it on a more solid ground and restore trust are relevant for new markets
- In some emerging markets that have already shown the way, the securitization market is still open:
  - Mexico Example
  - Colombia Example

# Securitization – Basic Structure

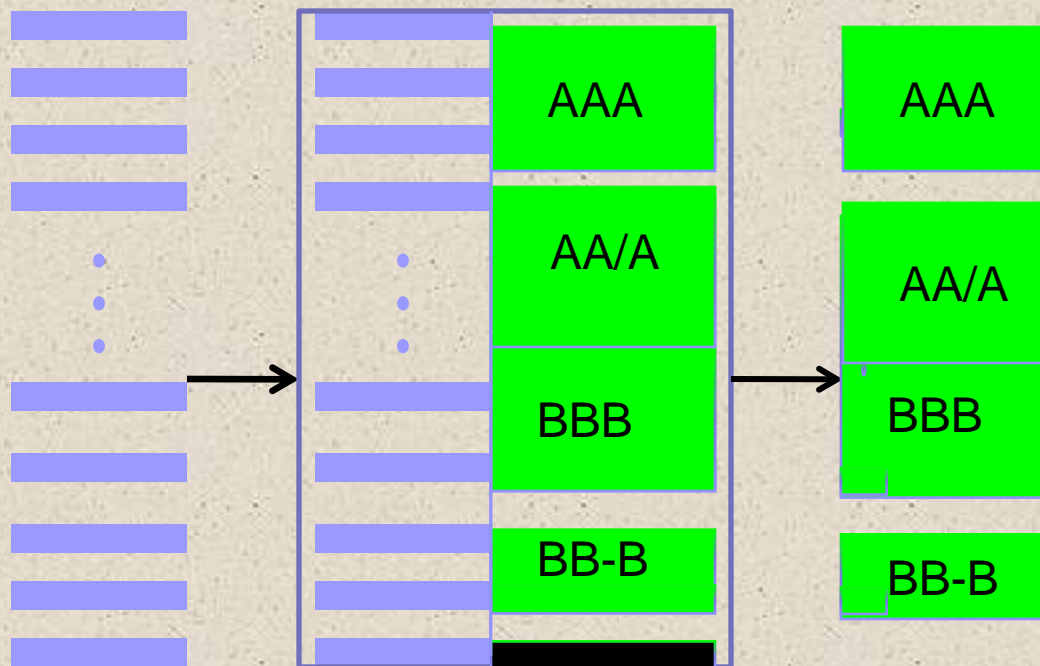
Individual Mortgages

MBS

Originator

SPV

Investors



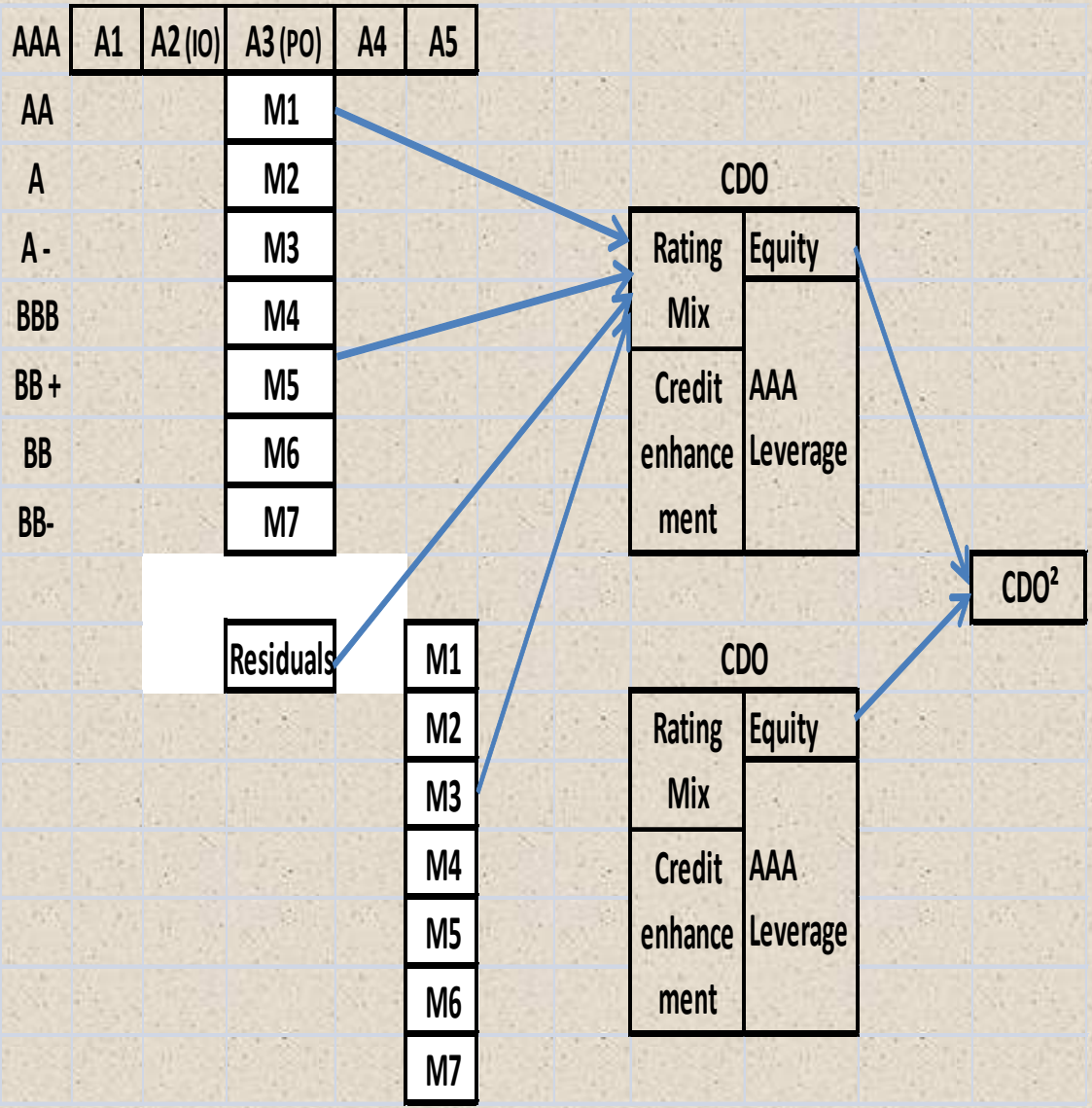
- Portfolio sold to a Special Purpose Vehicle
- Bankruptcy remoteness
- Condition: “True Sale” (independent SPV, originators relinquish control over assets)
- Investors’ direct exposure on the portfolio → various degrees of protection (credit enhancement)
- Restructuration of cash flows
- Issuance of bonds with different profiles (tranches)

# Many Securitization structures did not withstand subprime losses – A typical case

	Water Fall Allocation					(allocation of principal)	Allocation of losses
AAA	A1	A2 (IO)	A3 (PO)	A4	A5		
AA			M1				
A			M2				
A -			M3				
BBB			M4				
BB +			M5				
BB			M6				
BB-			M7				
First loss	OC, Excess Spread			4%			
	(Credit enhancement)						
Equity	Residual		(ex post)				

- Multiple tranches/bonds (CUSIP) with different characteristics and behaviors
- Normally, credit enhancement increases over time since AAA bonds are repaid first
- Sub-prime/ Alt A 2005-2007: losses quickly exceeded credit enhancement (20% typical for subprime), overflowing on senior tranches

# Re-securitization : a major contagion vehicle



- Second, or third level structures, based on leverage and rating arbitrage
- Credit enhancement created an illusion of safety :
  - Either internal and overwhelmed by actual losses
  - Either external (“bond wraps”) by monoline financial guarantors. *Incurred large losses, leading to drastic downgrades and weakening of the support*
- Leverage mostly short term (credit, ABCP), based on investors’ illusion- banks, money market funds- that a AAA paper would always be liquid

# Many Factors of the Crisis were **context specific** (developed markets)

- Very low level of interest rates in the context of a large national savings deficit (*USA*)
- Extreme Fragmentation of the regulatory Structure (*USA*)
- Huge Transaction Volumes leading to Operational Deficiencies (*USA and other developed markets*)
  - Explosion of claims within the financial system . Growth of MBS disconnected of the real economy (\*4, or +27% p.a. 2000-07)
  - Millions of mortgages , millions of bond tranches, re-securitization, illegible trustee reports
  - Inability of rating Agencies to adequately assess and monitor all the bonds
  - Lags and weaknesses of valuation models(e.g. use of CDS to price credit risk)
- Extreme Complexity of Capital Markets Products (*USA and other developed markets*)
  - Sophistication of products – e.g. multiple tranches with specific behavior
  - Leveraged structures
  - Regulatory vacuum (“shadow banking systems”)

# But the crisis also emphasized issues that are **instrument specific**

- Moral hazard (origination)
- Principal/agent problems (servicing)
- Valuation of complex securities
  - Understanding of risks
    - Direct exposure on loan portfolios
    - Meaning of rating, underlying models and assumptions
    - Assessment of risk /return trade off for tranches of different profiles
  - Projection of cash flows
    - Delinquencies
    - Prepayment option

## ■ Market liquidity

Basic premise: transformation of loans into easily tradable assets, rarely achieved

- For issuers: true sale, bankruptcy remoteness and the transfer “off balance sheet” of risks questioned

# The Fundamental Benefits of Securitization are still valid

- Immunization of intermediaries against financial risks - liquidity, interest rate, prepayment -

--> Removal of a major roadblock to the extension of housing finance, especially of fixed rate home loans

Securitization took off as the remedy to the Savings & Loans crisis , largely triggered by major financial mismatches

- Re-allocation of credit risks → capital relief, and re-investing of the originator's capital in new lending
- Restructuration of cash flows: → customization of bonds to investors' needs (various grades, various sensitivities to interest rates, inverse floaters, fixed or variable maturities, etc.)

# Ongoing International Initiatives

*Either aim at managing the crisis*

- Provide liquidity (Eligibility to Central Banks repo windows, US Term Asset Backed Securities Loan Facility-TALF)
- Clean up legacy (impaired) portfolios

*Or at strengthening the basis of securitization in the future*

- Clarify Rating Agencies Role
- Restore trust –policy or industry level initiatives, in particular:
  - Financial Stability Forum
  - Basle Committee
  - European Central Bank
  - IOSCO
  - Global SIFA /American, Australian & European Securitization Forums
  - National initiatives: ASF (project RESTART), ESF
- Recommendations to improve confidence and stability, relevant for the sustainable development of recent securitization markets

# Enhance Transparency

## 1) Increase available data

### loans characteristics

- Initially
- On going, post issuance reporting

Issues: unmanageable volumes, confidentiality if information loan/loan

### Underwriting and origination practices

Ex. Income verification, broker intermediation, appraisal conduct, new loan or refinancing,


## 2) Standardize definitions

Homogeneity in defining LTVs ,debt-to income ratio (net or gross?),defaults, etc.

## 3) Improve accessibility and processing capacity

Information channel, standardized format directly usable by investors

Limit: Publicity of information if loan/loan ?



# Ensure the reliability of information and strengthen market discipline

## Independent oversight and certification

### ■ Initial due diligence standards

- Independent reviewers
- information on checks actually performed (sampling guidelines, verification of sources)
- Inclusion of lending practices
- Due diligence attestations

### ■ Post issuance reviews

- Importance of “master servicers”
- Standardize buy-back obligations

# Align incentives:

Originators and servicers should keep “skin in the game”

## ■ Interest retention by originators / servicers

- US: Draft Mortgage Reform and Anti Predatory Lending Act  
5% of credit risk (adjustable by the Fed) retained by originator for non-standard loans
- EU: Reform of the Capital adequacy directive (decided by the EU Parliament in May):
  - Banks must keep 5% stake in loans they securitized
  - Capital surcharge if investing in securities not in compliance

## ■ Servicers performance

- Clear servicing standards
- Ex: clear rules for loss mitigation and loan restructuring, interest rate resetting,
- Monitoring servicers performance: objectives and indicators for maintaining asset quality

# Enhance Valuation and Pricing Infrastructure and Capacities

- Post trading reporting (prices, volume)
  - Important, but can it provide valid references if secondary transactions rare ?
- Accounting rules
  - Mark-to market: appropriateness in “inactive” markets?
  - Accounting alternatives?
  - Conditions for accepting mark-to-model?
  - Take into account actual marketability, and not only rating, in the investment and accounting rules
  - [Consolidation of off balance sheet vehicles are being considered under certain conditions]
- Valuation methodology
  - Need of building capacities of investors and intermediaries

Investors should be able to make their own simulations and not only rely on rating

  - Development of industry wide standardized models?

# Mexico Market

- Already obligation of equity retention by servicers
- Sociedad Hipotecaria Federal  
(Second tier public institution entrusted with multi-faceted functions to support the mortgage market)
  - Provides credit enhancement on MBS complying with precise rules: nature and content of documentation, existence of trustees, investors representation agent, master servicer (verification and validation of information)
  - Standardizes information
  - Provides public calculators
  - Monitors the secondary market
  - Established a mortgage market wide data base



# Colombia: Role of Titularizadora Colombiana

- Central private sector securitization agency
  - Select originators and servicers
  - Define lending standards and loan eligibility criteria, e.g. scoring
  - Provides valuation model
  - Acts as a master servicer
  - Provides regularly market information
- Ensures transparency and allows investors' confidence