

Securitization: A Financial Innovation

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Abstract— Any form of financial innovation comes with a cost and benefit. A sound and efficient securitization market can be supportive to capital market and economy as a whole by providing lower cost of capital to the firms, better capital utilization, diversification of risk and transforming pool of illiquid security into tradable one. However these benefits need to be assessed with the cost they bring including excessive credit growth outside formal banking channel, heavy dependency on the rating agencies, complex products, and principle agent problem that comes from perverse incentive schemes. The current paper explains about the concept of securitization, its process, role in sub-prime crisis and its future.

Keywords-Financial innovation, securitization, sub-prime crisis.

I. SECURITIZATION: UNDERSTANDING THE CONCEPT

Securitization is a process in which a certain type of assets are combined and repacked into interest bearing securities. It has three distinct characteristics namely-

- (a) Pooling of assets which can be done either cash based or are synthetically created,
- (b) Delinking the credit risk attached with the assets and transferring the same to the SPV and
- (c) Trenching to accommodate different risk appetite investors.

Securitization got its first start in the year 1970 in US Financial System. The Government Mortgage Association first time

issued securities backed by pool of residential mortgage loans. From 1980 onwards, other income producing assets also started to be securitized and later this process rapidly developed in Europe especially in UK, Italy, Germany, Australia and France.

Securitization helps banks in removing assets from their books which helps in maintaining lower capital through lower bad debt provisions alongside bank can use the cash proceeds to retire a debt, or buy back shares from the market. This “originate and distribute” approach brought broad benefits like spreading the credit risk to other financial institutions which help in reducing the concentration and systemic risk.

II. OBJECTIVES

The paper aims to explore the concept of securitization which is relatively unknown to many. It is a financial innovation if used judiciously or it can be dangerous as evident by the sub-prime crisis. The paper studies the process of securitization, its types, benefits, role in sub-prime crisis and its future.

III. METHODOLOGY

The paper is exploratory in nature and is based on secondary sources and inputs from author’s own understanding of the topic.

IV. SECURITIZATION PROCESS

The securitization process involved 5 parties

1. Loan originator (Bank or Financial Intermediary)

2. Loan Purchaser (Special Purpose Vehicle)
3. Loan Packager (Underwriter)
4. Guarantor (Insurance Company)
5. Investor (Banks, Insurance company, Pension Funds)
6. Rating Agency

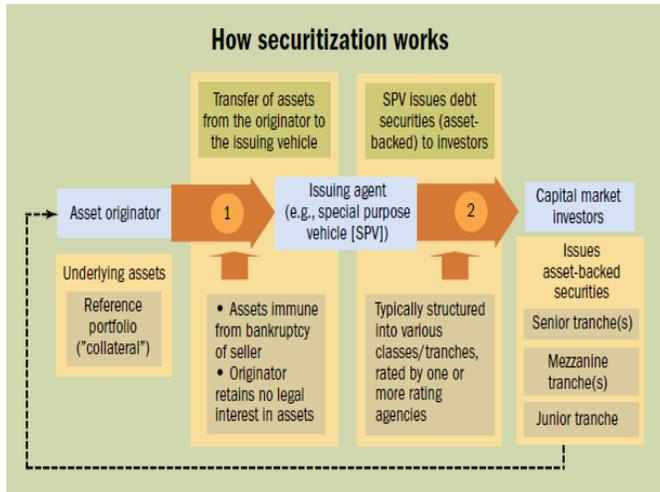


Figure.1 Securitization Process

The company having loan or income producing asset called the originator identifies the asset that it need to remove from its books and pools them into the reference portfolio. The issuer then acquires the pool asset from the originator and issues certificates which will eventually be sold to the investor. However, the issuer doesn't directly offer the certificate of deposit to the issuer but gives to underwriter who is usually an investment banker. The investment banker purchases the certificates the offer them for sale to the ultimate investor.

The money paid by the investor is transferred to originator by the underwriter. Each investor who purchases the certificate is entitled to receive monthly principle and interest from the SPV. The order of payment of interest and principle depends on the class or tranche of certificate which is purchased by the

investor. The SPV makes the distribution from the cash flow of the reference portfolio.

Rating agency play a very significant role in securitization process by closely examining the legal structure of the transaction, the quality of the asset securitized and the ability of the originator in servicing the asset. Based on the analysis and amount of credit enhancement, rating of the security is determined.

The conventional securitization structure assumes three tier security designs namely,

- **Senior Tranche**, normally highly rated, pays lowest rate of interest but is paid first.
- **Junior Tranche**, middle of the tranche, usually rated at investment grade level, repaid after the senior tranche but not late than mezzanine.

Mezzanine Tranche, lowest tranche, usually below the investment grade level, pays very high interest rate but absorbs all the losses before any other tranche.

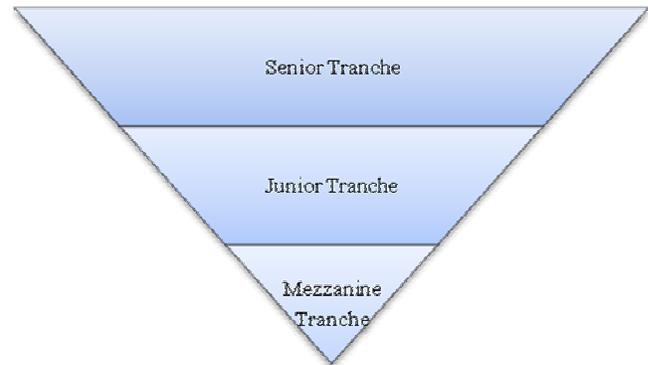


Figure. 2 Securitization Structure

V. SECURITIZATION: TYPES

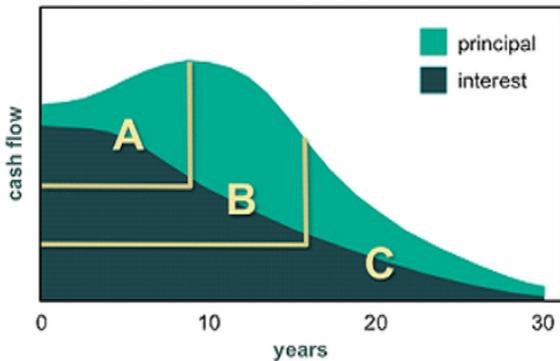
Securitization is of following types:-

- i. Asset Backed Securities (ABS)* – They are simple pool of financial products that have cash flows coming from credit cards, mortgage loans, auto loans, etc.

ii. **Mortgage Backed Securities (MBS)** – They are subset of ABS in which thousands of mortgage are pooled together to form a single Mortgage Backed Security. The principle and interest paid by home owners are distributed to the investors by the SPV.

iii. **Collateralized Mortgage Obligation (CMO)**

- It is a type of mortgage back security in which the issuer collects the residential mortgages and repackages them into loan pool and distribute to the investor. The key distinction of CMO is that the issuer can slice the predictable source of income from the mortgage and divide the same into tranches. For e.g. as shown in the figure all the three tranches A, B, and C will received interest payments through life but principle payment



will flow sequentially i.e. Tranche C will not receive any principle repayment until Tranche B is retired. Similarly Tranche B will not receive any principle repayment until Tranche A is retired.

Figure 3:CMO

iv. **Collateralized Debt Obligations (CDO)** – CDO is quite similar to CMO but the major difference is that the underlying can be any income producing debt like Credit Cards, Auto Loans, Students Loans, Corporate Debt, etc. Like CMO, the loans are sliced into tranches from senior to

junior with some oversight from rating agencies who assign ratings just as they do for single issues. For e.g. as shown in the figure each CDO has a balance sheet. Assets comprises of any income generating assets. On the liability side bonds are created which are tied with specific asset pool. These are then rated by the rating agencies based on the underlying. Bonds of lower quality will command higher rate of interest from the investor.

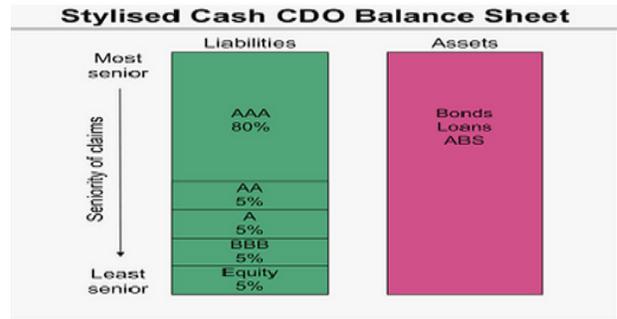


Figure 4: CDO

VI. BENEFITS OF SECURITIZATION

The benefits of securitization are summarized in the table below.

Table 1: Benefits of Securitization to its Participants

Originator	Investor
<ul style="list-style-type: none"> Raise funds through the proceeds of reference portfolio sale. 	<ul style="list-style-type: none"> Invest in asset class and tranche based on the risk appetite.
<ul style="list-style-type: none"> Limit credit exposure to any particular asset/ asset class 	<ul style="list-style-type: none"> Asset backed securities are less volatile compared to corporate bonds
<ul style="list-style-type: none"> Reduce funding cost through lower rate of interest as compared to bank loans. 	<ul style="list-style-type: none"> Yields are higher compared to corporate bonds
<ul style="list-style-type: none"> Tap different source of funding and target 	<ul style="list-style-type: none"> Not susceptible to event risk or the risk

different	investor	of	a	rating
class.			downgrade	of a
			single	borrower.

VII.ROLE OF SECURITIZATION IN FINANCIAL CRISIS

Before securitization lenders used to solicit the loan application which they received, underwrite the same, fund the loan and held the loan in their books till maturity. Lenders earn income from the interest payments over the period of loan and in case the loan defaults they bear the losses. Default had a direct impact on the bottom line which makes lenders underwrite the loan seriously.

But with new development in securitization over the period 2000-07 simply amplified the financial crisis. With the backdrop of accommodative monetary policy, irresponsible loan origination process, complex product structure and valuation increased the demand for low quality underlying which later served as collateral for other financial securities. Leverage and risk concentration simply magnified the problem and led to the financial crisis. Following are the basic reasons of financial crisis caused due to securitization

- i. Originate to Distribute Model wherein the originator of the loan has little or no incentive in the loan that is been written and whether the same will be repaid or not. This resulted in poor loan documentation and low quality borrowers.
- ii. From early 2000 demand for low quality loans started generated as brokers and dealers used advanced structuring techniques to transfer the loan into high yielding securities.
- iii. 2004 “Uniform Net Capital Rule” exemption by the SEC paved the way for increasing the leverage of brokers/ dealers on their balance sheet, many of who were active in securitization deals.

- iv. Credit Rating Agencies were assumed to provide independent rating on the securitized asset taking into account the credit risk they have.
- v. Credit Rating Agencies were paid by the issuer and this payment structure increased the incentive of agencies to give more favorable rating to the underlying.
- vi. Highly accommodative monetary policy and global liquidity resulted in greater demand for these high yielding securities.
- vii. With growth of securitization industry many specialized leverage investment entities emerged like Structured Investment vehicle (SIV), SIV-lites and Asset Backed Commercial Papers (ABCP) Conduits. These entities typically accumulated assets of around 3 years which are financed with debts of lower term. Once the asset started to deplete in value in early 2007, these entities faced asset liability mismatch which further aggregated the crisis.
- viii. Under Basel II, corporate loans and securitized assets are exposed to same risk weights provided securitized assets are of investment grade. This resulted in issuers to get more favorable rating for these products so that lower capital needs to be set aside.

VIII. SECURITIZATION – POST CRISIS LEARNING’S

Securitization prior to crisis and even now provide one of the primary mechanisms for raising capital, bypassing high cost of funding. The positives might be outweighed by the flaws observed in the recent crisis. The subprime mortgage securitization was based on the

assumption that the home prices always rise. But now the securitization product can be properly structured taking into account this possibility. Originate to Distribute model created moral hazard where in the originator was not much interested in the loan he is underwriting. This can be tackled with better underwriting standards and ensuring that the originator has some realistic risk in the loss. Over dependence on Credit Rating Agency and their fee structure resulted in over stating the rating which could be tackled with making decision on taking into account other information also rather than just the rating provided by the CRE.

IX. FUTURE OF SECURITIZATION

The landscape of securitization has changed dramatically after the global crisis. No longer is it considered for the traditional assets such as mortgage, consumer or bank loans. Improvement in risk management techniques for risk quantification and greater data availability wide variety of asset types are now being considered for securitization. So far major focus is being observed in the mature and developed financial markets, but significant growth can be expected with the developing economies where large and highly rated corporate entities and banks can securitize future cash flows from hard currency export receivables.

The securitized products in the future would be made simpler to cater to large investor base. Previously no significant amount of capital was required against the highly rated securitized debt but soon issuers will be faced with regulatory changes that require comprehensive valuation and regulatory capital against the exposure. To boost up the confidence of investor in securitization after global crisis, insurers may need to retain the performance

of securitized asset at each level of seniority and not just at junior tranche.

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Dr. M. M. Goyal has taught in University of Delhi for over forty years. An alumnus of Shri Ram College of Commerce and Delhi School of Economics, he has taught at post-graduate level at Delhi University as well as several management institutes. He has conducted many training programmes for Indian Revenue Service (I.R.S.) probationers and on behalf of National Council of Educational Research & Training (N.C.E.R.T.) at different cities across the country. He has contributed to various international Journals as well as several N.C.E.R.T. books. He specializes in Finance, Management Accounting & Business Statistics. Currently he is functioning as O.S.D.-Principal of P.G.D.A.V. College, University of Delhi.