# **Speaking of Securitization of Financial Assets**

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## Abstract

The history of securitization dates back to "Middle Ages", as it has emerged into today's refinements under various ways of obtaining liquidity to finance business growth. As today many blame securitization and low interest rates for the American crisis, this paper aims at shedding light upon what this technique is, what are its benefits and why the past economic growth expanded based on pools of pledged assets. The main risk of securitization is that the systematic risk (beta) of the market is less relevant then the assets' inner risks (alpha), as this technique creates tailor made products with very specific features. The relevance of securitization will remain open for future analysis in America as basis for creating investment resources to sustain development after the gloomy days of September 2008.

**Key words:** asset classes, interest rates, liquidity, ratings, securitization, tranching, **J.E.L. Classification:** G11, G12, G15, G21, G22, G23, G24, G31, G32.

## 1. Introduction

"ANTONIO: Neither have I money, nor commodity To raise a present sum. Therefore go forth, Try what my credit can in Venice do;" The Merchant of Venice William Shakespeare, First edition published in 1600

People tend regard assets as a measure of wealth (Fries et al., 1998, p.3) and as a way to convert equity into liquidity to finance the business. Aside from this, debt financing has been the alternative. The aim of this paper is to take into account the benefits and the risks of the abovementioned financial technique of securitization, for there are special considerations to analyze such as sunk costs related to this particular hybrid form of credit-investment. The primary focus is to explain this concept and I will assess the needs of financial institutions and companies to create such a form of funding.

I consider "The Merchant of Venice" by William Shakespeare an excellent starting point for my assertion as it provides an excellent indication of the origins of collateralized loans, known as mortgage-based securities / asset based lending. For instance, in the play, the character Antonio discusses about diversification. Bassanio's success in obtaining financial capital depended on the value of Antonio's collateral, which, in turn, would depend on how the market assessed Antonio's repayment capacity in time. The financial capital providers of Rialto knew information regarding Antonio's exposure at sea perils. Information regarding the adequacy and liquidity of his capital may have been less accurate.

"ANTONIO: My ventures are not in one bottom trusted, Nor to one place; nor is my whole estate Upon the fortune of the present year." Antonio managed his exposure to losses at sea by diversifying across independent businesses in regards to geography and maturity. The weakness in his capital structure was a shortage of liquidity. The benefits of diversification of his portfolio reflect exposure to the concentration in a single sector characterized by a high degree of systematic risk. Antonio agrees to issue a bond collateralized by his most valuable asset because he was certain of his ability to honor his obligations, but his investment model is incorrect.

"BASSANIO: Hath all his ventures failed? What, not one hit? And not one vessel scape the dreadful touch Of merchant-marring rocks?"

Antonio's losses did not threat the integrity of the Venetian financial market. However, the true source of risk was the regulation of such financial transactions in case of default. The issued bond had merchandise as collateral and affected the expected cash flows necessary for the repayment of the loan.

#### 2. The expansion of securitization technique

The earliest securitized transactions occured around 1970 and consisted of the sales of pooled mortgage loans by the Government National Mortgage Association in USA (Ginnie Mae). Then, Federal Home Loan Mortgage Corporation (Freddie Mac) and Federal National Mortgage Association (Fannie Mae) structured such transactions in the early 1980s (Pulido, 2004, p.1). Benefiting from guarantees, these securities (also known as single-class mortgage pass-through) were attributed AAA credit rating (Gangwani, 1998, p.1).

However, the capital markets developed diverse maturity products, thus appearing multi-class mortgage pass-through, soon to be followed by midterm asset backed securities. This new market was created in 1985, when the Sperry Lease Finance Corporation, a special-purpose company set up by Sperry Corporation, sold to institutional investors \$192.4 million in fixed-rate notes collateralized by computer leases. Managed and structured by First Boston Corporation, this deal enabled Sperry to compensate and respond to rising marketplace resistance to its conventional debt, preventing the company to lease new equipment. Another milestone came in October 1986, when GMAC issued \$4 billion in notes backed by automobile loans (Zweig, 1989, p. 56).

Asset-backed securities emerged from the mortgage-backed securities market, in the 1970s, when financial institutions had booked residential mortgages that were earning less than what they were paying for deposits due to interest rates levels. Compared with mortgage-backed securities, asset-backed issues have been relatively unaffected by swings in interest rates. The reason is that the loans backing the securities have shorter maturities than mortgages, and therefore people are less likely to refinance when interest rates fall (Gangwani, 1998, p.5).

Although the legal devices used to package non-mortgage assets are very similar to those used for mortgage-backed securities, there are several key differences. U.S. government agencies provide guarantees for mortgage-backed securities. In contrast, issuers of asset-backed securities typically gain a top investment-grade rating by selling the assets into a "bankruptcy-proof" entity, called a special-purpose company or trust, and cushioning investors against loss of principal with one or more kinds of credit support (Gangwani, 1998, p.4). The analysis focuses on the relative priority of cash flows (return and maturity) and on the credit risks specific to this private market.

### 3. The process of securitization

Today, in order for a company to operate, it must have assets, and in order to acquire assets, the firm must raise capital. Capital comes in two basic forms: debt and equity. Debt, i.e. borrowing from others, is a common method of raising capital. Another term is "financial leveraging" with three important implications. First, by raising funds through debt, the owners maintain control of the firm with a limited investment. Second, creditors look to the equity, or owner-supplied funds, to provide a margin of safety. Third, if the firm earns more on investments financed with borrowed funds than it pays in interest, then the return on the owners' capital is augmented, or "leveraged."

Financial leveraging raises the rate of return to stockholders for two reasons. First, since interest is deductible, the use of debt financing lowers the tax bill and leaves more of the firm's operating income available to its investors. Second, if the rate of return on assets exceeds the interest rate on debt, then a company can use debt to finance assets, pay the interest on the debt, and have an excess for its stockholders (Brigham et al., 2007, p.108).

Commercial banks are generally the least expensive source of debt financing. In return, they are perhaps the most conservative financing sources, maintaining strict credit requirements and strong collateral for any loans they make. One important reason for this is that commercial banks must meet bank regulator requirements for safety and soundness for any loan they make.

Banks directly provide several types of business financing that include: small business loans, with and without guarantees; secured loans, commercial loans, and real estate loans; accounts receivables and inventory financing, dealer inventory financing, and the purchase of dealeroriginated loans; revolving and non-revolving lines of credit and domestic and international letters of credit; import/export financing, foreign drafts, collections of export documents and foreign exchange contracts; various commercial and personal credit card services, etc.

If potential borrowers lack sufficient collateral for the type or size of debt financing requested, banks are willing to extend the loans with supplementary guarantees. The fundamental principle in a securitization is to be able to provide the flexibility with which the issuers can meet the needs of investors without compromising their own wealth (Gangwani, 1998, p.5). Asset-backed securities represent a segment of the capital markets, based on mortgages. The asset securitization process (IMF, 2008, p.2) is important for the corporate financing and investment portfolios as it provides to the originators a source of funding and a source of returns for investors.

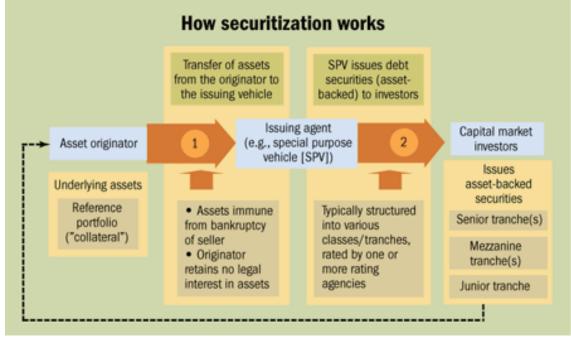


Figure no. 1. The Securitization Process

Source: IMF, 2008

Securitization transforms illiquid assets into tradeable securities and modifies risk by separation of good financial assets from a company or financial institution with little loss of revenue. Quality securities require collateralized and separated from the originator assets. (Giddy, 1999, p.1).

#### 4. Benefits and deterrents in securitization

Asset-backed securities allow financial institutions and corporations to reflect liquidity in their balance sheets (i.e., obtain cash by pledging assets) and develop new sources of capital. The assets make the classes as collateral for intermediate-term securities and the public markets can distribute

them as private placements. Asset backed securities have a double nature, being in the same time, fixed income instruments that pay a regular coupon, and derivative instruments tranched from an underlying pool of assets.

The ratings companies, such as Standard & Poors, Fitch, Moody's or Japan Credit Rating Agency evaluate emissions of such instruments from AAA to below investment level BBB- on differentiated classes according to liquidity and safety. Emission of such instruments create additional value stored in the new derivative instrument by dividing a pool of assets into securities tranches while maintaining the rights for repayment. A recommended structure (Gangwani, 1998, p.3) might be to structure the transaction as 93% AAA securities, 5% BBB securities and 2% unrated first loss security plus the rights to any excess cash flows from residual market value.

The advantages for the financial institutions (issuers that securitize assets) is given by portfolio expansion outside their balance sheet, by packaging receivables as securities, as it diminishes the minimum capital required under the guidelines of regulators.

Securitization provides advantages. First, the access to cash to finance gaps of treasury. Any business assesses the growth potential and possibilities in the business plan to expand its business, including repayment of its maturing debt obligations, or to buy back capital. The possibilities are to resort to on-balance sheet funding (the debt-to-equity ratio would increase), the issuance of new unsecured debt in today's environment or by pledging the existing assets and borrow against them. Second, off-balance sheet funding via securitization when the company has an improved rating gives access to diversified funding sources. A requirement of a neatly structured securitization is the assets separation from the creditors, receiving a rating for the securities backed by those assets, based on cash flows. In the same time, securitization may create diversification of instruments depending on maturity, coupons, duration, repayment risk, etc. Third, lower capital requirements due to assets classes' tranching reflect in the efficiency of the cost of financing as additional availability of capital (Moody's Investors Service, 2003, p.6).

It is important to determine the estimated real market value of the residual class (usually kept by issuer). The higher the value, the more wealth but the danger of overvaluation can lead to a future negative financial impact for the issuer. Investors prefer to place financial resources into assetbacked securities because of the relatively high yields and relatively short maturities (often, five years), combined with investment-grade credit ratings, typically the highest two ratings available. A bond insurance backing the derivative securities often gives a comfort for investors.

The success of securitization relies on the investment features of the securities, mainly given by credit risk and extension tolerance to cash flow risks. Risk mitigation is based on repayment probability, benefiting from internal credit enhancement such as the Senior-Subordinate Structure (Fabozzi, 2010, ch.13) where AAA rated assets having priority of payment to AA, AA to A, A to BBB and so on. Any loses are first allocated to the unrated or lowest rated part.

Usually there can be an external enhancement such as insurances, letters of credit from top-rated commercial banks, third-party guaranties, and reserve funds, recourse to the parent company, and cash collateral accounts, letters of credit being one of the most common methods. The highest rating assigned to a class depends on the quality of assets and the estimations of the rating agency for the derivative security to be issued.

The cash flow related risks are the result of borrower's ability to pay in advance the underlying assets in a transaction. These payments in advance are passed through to investors (they own a call option - a purchase right - on the assets).

In USA, the federal agencies buy mortgage loans from financial institutions, repackage them as securities, and sell them to investors as mortgage-backed securities. Institutional investors, such as pension funds and life insurance companies, invest into asset-backed securities because of the higher yields. Investors acquire a piece of a mortgage pool, taking into account such factors as loan-to-value ratio, maturity and the spread between the yield on the mortgage security and the yield on 10-year US Treasuries, considered a benchmark in this market (Fernald et al., 1994, p.92).

These securities incorporate uncertainty because they can receive varying amounts of monthly payments depending on how quickly homeowners pay off their mortgages. Although the contractual maturity can be as long as 40 years, in practice the average lifetime (until the complete repayment of these mortgage loans) has been much shorter, according to the website mortgagecalculator.org.

The securitized assets are not homogenous, they tailor made financing products designed to satisfy the best each borrower. Therefore, it is not easy to gather and pool similar portfolios of financial assets for a securitization.

# 5. Conclusions

Concluding, securitizations are structured derivative products that set apart the legal ownership of the assets from the issuer of support real assets. The sale of such derivative assets can face hurdles should the bankruptcy of issuer happen, as they represent a pledge against the cash flow they should generate until the expiration date. On the other hand, this kind of financing is specific for the lending market and any other markets that involve financial products generating a cash flow. Companies choose to borrow against their assets and liabilities instead of undertaking an unsecured simple loan, leaving them "light-leveraged" and qualified for future banks' credits.

There are many factors to take into account in making a determination of equity vs. debt issuance, among which legal, accounting and tax aspects are very important. Most issuers would like to have the best of both: a "sale" for accounting and a "debt" for tax. The best of both may not give the most optimal execution for transactions. The art of structuring a securitization is to optimize all parameters relevant to the issuers as well as the investors.

## 6. References

- Brigham, E.F, Houston, J.F, "Fundamentals of Financial Management", 11<sup>th</sup> Edition, Thomson Higher Education, 2007, Mason, Ohio, USA
- Fabozzi, F., "Bond Markets: Analysis and Strategies", 7th Edition, Pearson Education, Prentice Hall Publishing Company, London, UK, 2010
- Fernald, J., Keane, F., Mosser, P.C., "Mortgage Securities Hedging and Yield Curve", Federal Reserve Bank of New York, Quarterly Review, p.92-100, summer-fall 1994, New York, USA
- Fries, G., Starr-McCluer, M. and Sunden, A.E., "The Measurement of Household Wealth using Survey Data: An Overview of the Survey of Consumer Finances", US FED, March 1998, Washington D.C., USA
- Gangwani, S., "Securitization 101", Deloitte & Touche, Vol.3, Issue 4-1 (special edition), Jul 1998, New York, USA
- Giddy, I. "Asset-Backed Securities in the New European Capital Market", Institut fur Kapitalmarktforschung Center for Financial Studies, Jun 1999, Frankfurt am Main, Germany
- Jobst, A., "What is Securitization?" International Monetary Fund, Vol. 45, Issue 3, Sep 2008, Washington DC, USA
- Moody's Investors Service, Global Credit Research, "Demystifying Securitization for Unsecured Investors", Securitization Standing Committee, Report 77213, Jan 2003, New York, USA and London, UK
- Pulido, D. "Securitization 101-an introduction to securitization", Deloitte Financial Services, Vol. 9, Issue 3, Oct. 2004
- Shakespeare, W. "Complete Works", Wordsworth Publishing, 1999, Oxford, Kent, UK.
- Zweig, P.L. Asset Securitization Handbook, 1989, Dow Jones-Irwin Publishing House, Michigan, USA
- http://atc4.bentley.edu/media/gujarathi/Securitization101.pdf
- http://mx.nthu.edu.tw/~chclin/Class/securitization.pdf
- http://www.barbicanconsulting.co.uk/abcp\_and\_siv
- http://www.investopedia.com/ask/answers/07/securitization.asp
- http://www.mortgagecalculator.org/helpful-advice/american-mortgage-history.php
- http://www.vinodkothari.com/
- https://www.fimarkets.com/pagesen/securitization.php
- https://www.iasplus.com/en/binary/usa/sos0207.pdf