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## THE PROCESS OF SECURITIZATION AND THE IMPACT OF NEW FINANCIAL PRODUCTS ON THE OCCURRENCE OF THE GLOBAL FINANCIAL CRISIS

### Abstract

One of the most conspicuous phenomena observed in recent financial markets is the development of new financial products. With rapid development in financial techniques and engineering, new financial products are being constantly developed and introduced into the financial markets. New financial products have both positive and negative effects on financial development. They induce financial innovation and accelerate the growth of financial markets; they can also be widely used as the tools for risk management. In addition, new financial products widen the source of financing, such as structured finance, to financial institutions. However, these products also have the potential to destabilize financial markets, especially when actively used as speculative investments. Since speculators take advantage of the leverage implicit in these products, investment failure may result in great losses that can affect entire financial markets, as seen in the recent sub-prime mortgage turmoil in the U.S.

The major idea behind this study was to provide an overview of one of the most important new financial products, the securitization process, to understand the essence of the process, to identify its main features, as well as the relevant consequences of the process to the global financial system and to implement measures to minimize the impact of the current crisis and prevent recurrence.

**Key words:** securitization; new financial products; collateral debt obligations (CDO's); financial crisis; investment banking.

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## 1. THE PROCESS OF SECURITIZATION

**Securitization**<sup>1)</sup> is the process in which certain types of assets are pooled so that they can be repackaged into interest-bearing securities. The interest and principal payments from the assets are passed through to the purchasers of the securities. There are mortgage-backed securities (MBS) and asset-backed securities (ABS). Asset-backed securities (ABS) are backed by receivables other than mortgage loans. Asset types used in securitization include also, automobile loans, credit card receivables, equipment leases, high-yield bonds, tax liens, and tobacco settlements. Securitization is one of the ways the global marketplace has grown. It provides businesses with access to new sources of capital at lower costs, even when upfront analysis, structuring, and credit enhancement costs are factored in. Also, securitization provides a crucial source of funding for companies with limited access to other forms of credit, because ABC (Asset-backed securities) are rated on their own merit, independent of the issuing company's financial standing.

### 1.1 Securitization Structure

Securitization programs usually involve several participants (Figure 1), each carrying out a specialist function, such as, creating and analysing the asset pool, administration, credit rating, accounting, legal negotiation, etc.

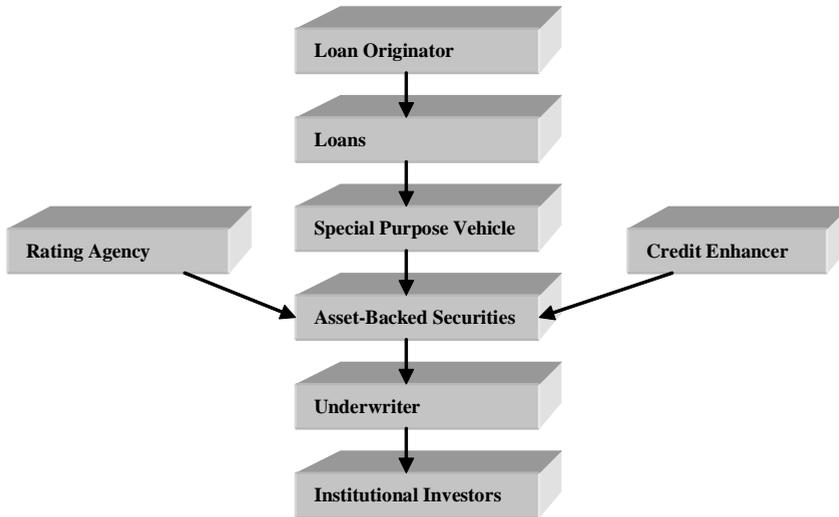
According to Figure 1, process of securitization was implemented through several phases: creation of asset pool and its sale, issuance of the securitised paper, credit enhancement and tranching, servicing and repayment.

The originator (may be a bank, a finance company, a credit card issuer, or a securities firm) initially owns the assets engaged in the deal. In structuring a securitization program, it is essential that the originator achieves a true sale in the transfer of assets to the trust holding the collateral, called a *special purpose vehicle (SPV)*.

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<sup>1)</sup> The term "securitization" is derived from the fact that the form of financial instruments used to obtain funds from the investors are called securities. Liaw K.Thomas, *The Business of Investment Banking, A Comprehensive Overview*, Second Edition, John Wiley & Sons, Inc., 2006, pg. 168.

**Figure 1, Securitization Structure**



Source: Liaw K.Thomas, *The Business of Investment Banking, A Comprehensive Overview, Second Edition, John Wiley & Sons, Inc., 2006, pg. 171.*

The collateral held in the special purpose vehicle (SPV) can be either existing or future income producing assets.<sup>2)</sup> In an asset backed securities (ABS), the originator sells an existing pool of assets, such as mortgages, to the special purpose vehicle (SPV). In this case, investors who purchase the securities do not assume any originator performance risk, or the risk that the originator will fail to remain in business and produce assets. In contrast, under a future cash-flow securitization, the originator sells assets to the SPV before the assets have come into existence. The SPV then issues the securities and uses the proceeds to make a prepayment to the originator. Investors assume the originator performance risk because the interest and principal on the securities will be paid only if the originator stays in business and creates the assets.

Unlike conventional corporate bonds which are unsecured, securities generated in a securitization deal are “*credit enhanced*,” meaning their credit quality is increased above that of the originator’s unsecured debt or underlying asset pool. This increases the likelihood that the investors will receive cash flows to which they are entitled, and thus causes the securities to have a higher credit rating than the originator. The amount and type of credit enhancement depend on the historical loss experience of similar loans and the rating sought by the issuer. Internal credit enhancements include over

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<sup>2)</sup> Liaw K.Thomas, *The Business of Investment Banking, A Comprehensive Overview, Second Edition, John Wiley & Sons, Inc., 2006, pg. 172.*

collateralization, excess spread, or a reserve account. External credit enhancement may be in the form of a bank letter of credit, a surety bond, or a financial guarantee from a bond insurance company.

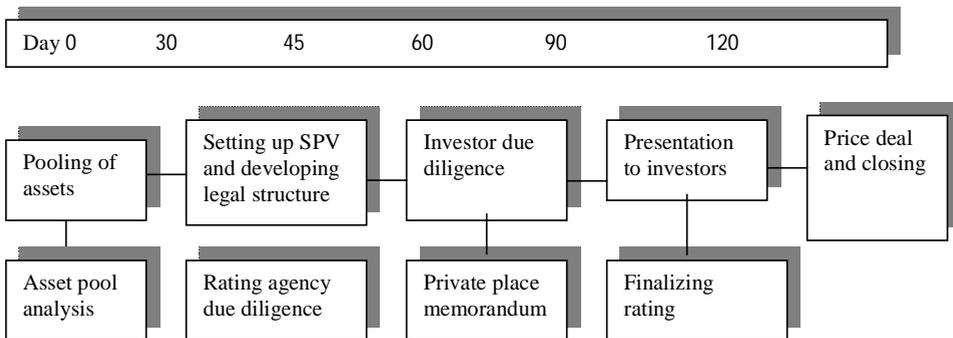
In the phase of distribution, *investment banks* play a vital role. They underwrite and market the securities to investors.

The *servicer* collects money from debtors and distributes the funds, net of fees, to the SPV and to investors. The servicer can often be the originator, because the servicer needs very similar expertise to the originator and would want to ensure that loan repayments are paid to the Special Purpose Vehicle. The servicer can significantly affect the cash flows to the investors because it controls the collection policy, which influences the proceeds collected, the charge-offs and the recoveries on the loans. Any income remaining after payments and expenses is usually accumulated to some extent in a reserve or spread account, and any further excess is returned to the seller. Bond rating agencies publish ratings of asset-backed securities based on the performance of the collateral pool, the credit enhancements and the probability of default.<sup>3)</sup>

*Credit ratings* provide investors with an indication of the likelihood that they will be repaid on time and full. In a securitization process, rating agencies examine the legal and structural protections provided to investors. In future cash-flow transactions, the agencies also review the generation and business risks applicable to the origination.

It usually takes several months from the origination of the loans to the creation of the ABS.

**Figure 2, Illustrative Timetable for a Securitization Transaction**



Source: Liaw K.Thomas, *The Business of Investment Banking, A Comprehensive Overview, Second Edition, John Wiley & Sons, Inc., 2006, pg. 173.*

<sup>3)</sup> Sabarwal Tarun, *Common Structures of Asset-Backed Securities and Their Risks*, Department of Economics Campus Box 1208 Washington University in St. Louis, pg. 13, 2005.

Figure 2, summarize the steps which include pooling of the underlying loans (a period of 30 days), setting up the special purpose vehicle, analyzing the pool, rating agency due diligence (a period of 30-45 days), investor due diligence, preparation of memorandum (a period of 60-90 days) and presentation to investors, price and closing of the deal (a period of 90-120 days).

## **1.2. Benefits and costs from the securitization**

Issuers, investors, and investment banks all benefit from asset securitization. However, they also face some disadvantages. At the beginning we will see the advantages of the process of securitization to issuers:<sup>4)</sup>

- ***Funding alternative***

Being distinct and different from the originator's own obligations, a well structured process of securitization stands on its own credit rating and thus generates genuine incremental funding. This is so as the originator's existing creditors may invest in the ABS in addition to providing lines of credit to the originator. Further, there may also be other investors in the ABS who do not have a lending relationship with the originator. It is also possible to achieve a superior credit rating for the ABS than the originator's own through appropriate structuring and credit enhancement.

This could mean accessing an investor base focusing on high grades, which otherwise may not be possible for an originator. Also, where the originator is not permitted to issue capital market instruments on his own, ABS could help overcome such constraints.

- ***Balance sheet management***

Fundamental benefit of a true sale, i.e., freeing up the capital of the originator would apply in the case of all securitization transactions. In response, the balance sheet gets compressed and becomes more robust. Its ratios improve. Alternately, reduction in leverage post-securitised sale can be restored by adding on new assets to the balance sheet. Thus the asset through-put of the originator's balance sheet increases. Securitization can also generate matched funding for balance sheet assets. Further, it may also enable the disposal of non-core assets through suitable structuring.

- ***Re-allocation of risks***

Securitization transfers much of the credit risk in the portfolio to the ABS investors and helps to quantify the residual credit risk that the originator is exposed to. This is very useful, as the originator can take larger exposure to individual obligors, as

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<sup>4)</sup> G. Shiva, *Securitization of Debt*, Head – Fixed Income & Money Markets, Citibank, N.A., India Paper presented in October 1997, pg. 201-202.

well as provide a higher degree of comfort to his creditors. Securitization also transfers the originator's market risks, i.e., liquidity, interest rate and prepayment risks, to ABS investors and reduces risk capital requirement. This can lead to more competitive pricing of the underlying asset products.

- ***Securitization improves operating leverage***

The originator usually assumes the function of the servicer, the issuing and paying agent, and sometimes that of the credit enhancer. Fees accrue on account of all of these. Excess servicing, i.e., the difference between the asset yield and the cost of funds, is also normally extracted by the originator. These income streams can push up the operating leverage of the originator generating income from a larger asset base than what may be otherwise possible for a given capital structure.

Apart from the advantages that it offers to originators, securitization confer several benefits to its investors as well. These include:

- ***Low event risk***

The diversity that the securitization pool represents makes the ABS largely immune to event risks.

- ***Higher yields for lower/similar risk***

ABS usually offer higher yields over securities of comparable credit and maturities. In some cases, ABS also provide an opportunity to invest into a pool of otherwise illiquid and inaccessible assets.

- ***Structured issuances***

Working with a pool of receivables gives the originator the needed flexibility to be able to offer investors a menu of options around which issuances could be made.

- ***Secondary Market Liquidity.***

The securitization process also benefits to investment banks. The securities created generate profits to bankers, there are the underwriter spreads and potential proprietary trading profits. More importantly, the process produces a continuous flow of underwriting income.

However, securitization process also faces some disadvantages:

- May reduce portfolio quality;
- Securitizations are expensive due to management and system costs, legal fees, underwriting fees, rating fees and ongoing administration. An allowance for unforeseen costs is usually essential in securitizations, especially if it is an atypical securitization;
- Securitizations often require large scale structuring, and thus may not be cost-efficient for small and medium transactions;

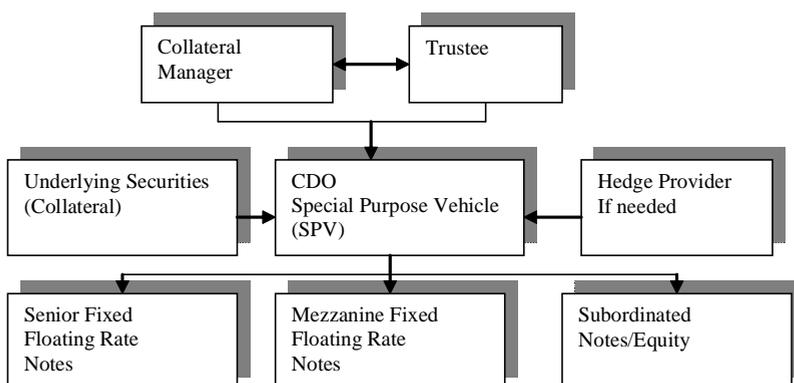
- Since securitization is a structured transaction, it may include par structures as well as credit enhancements that are subject to risks of impairment, such as prepayment, as well as credit loss, especially for structures where there are some retained strips.

Despite the disadvantages, the process of securitization is most used financial product, because the benefits of this process are far greater than the costs.

## 2. COLLATERALIZED DEBT OBLIGATION –CDO

A CDO is a debt security whose underlying collateral is typically a portfolio of bonds (corporate or sovereign) or bank loans. A typical contractual framework for CDOs is pictured in Figure 3.

*Figure 3. Typical CDO contractual relationships*



*Source: Duffie Darrell, BIS Working Papers No 255 Innovations in credit risk transfer: implications for financial stability, Monetary and Economic Department July 2008, pg. 13.*

As we see from Figure 3, the collateral is held by a special purpose vehicle (SPV), a corporation or trust whose only purpose is to collect collateral cash flows and pass them to CDO investors. CDOs backed by consumer loans, such as mortgages or credit card debt, are often called asset-backed securities (ABSs). Those backed by corporate loans are usually called collateralised loan obligations (CLOs). CDOs allocate interest income and principal repayments from the asset collateral pool to prioritised CDO securities, often called **tranches**. While there are many variations, a standard prioritisation scheme is simple subordination: senior CDO notes are paid before mezzanine and lower-subordinated notes, with any residual cash flow paid to an equity piece.

The first CDO was issued in 1987 by bankers at now-defunct Drexel Burnham Lambert Inc. for Imperial Savings Association, a savings institution. In 1990s, CDOs became a fast growing sector of the asset-backed securities market. Based on whether the CDOs own underlying assets, they can be classified as cash CDOs which own underlying assets and synthetic CDOs which do not own underlying assets. The underlying assets in cash CDOs are a portfolio of cash assets, such as loans, corporate bonds, asset-backed securities or mortgage-backed securities. Synthetic CDOs do not own cash assets like bonds or loans. They provide credit protection to a portfolio of fixed income assets without owning those assets through the use of credit default swaps -CDSs.

CDOs can be divided into following four categories based on their underlying assets:<sup>5)</sup> 1) collateralized loan obligations (CLOs) where CDOs are backed primarily by leveraged bank loans; 2) collateralized bond obligations (CBOs) where CDOs are backed primarily by leveraged fixed income securities; 3) collateralized synthetic obligations (CSOs) where CDOs are backed primarily by credit derivatives; 4) structured finance CDOs (SFCDOs) where CDOs backed primarily by structured products (such as asset-backed securities and mortgage-backed securities).

CDOs offered returns that were sometimes 2-3 percentage points higher than corporate bonds with the same credit rating.<sup>6)</sup> This made CDO backed by mortgages a relatively more attractive investment versus say treasury bonds or other low-yielding, safe investments. This search for yield by global investors caused many to purchase CDOs, trusting the credit rating and without fully understanding the risks.

Table 1, shows data for global CDO Issuance Volume.

**Table 1. Global CDO Issuance Volume**

Year	2004	2005	2006	2007	2008	2009	2010
<b>USD bil.</b>	<b>157.4</b>	<b>271.8</b>	<b>520.6</b>	<b>481.6</b>	<b>61.09</b>	<b>4.3</b>	<b>8.0</b>

Source: *Securities Industry and Financial Markets Association*, <http://www.sifma.org/research/pdf/CDO-Data2010-Q4.pdf>

The data in Table 1 shows that CDO issuance grew from an estimated \$157,4 billion in 2004 to its peak of over \$520 billion by 2006, then declined to \$4.3 billion by 2009, and grew again to \$8 billion by 2010.

<sup>5)</sup> Qing-Ping Ma, Financial innovations and risks in the financial system, Paper presented at The 2nd GEP Conference in China *The Global Financial Crisis*, 10-11 November 2009, University of Nottingham Ningbo China, pg.5-6.

<sup>6)</sup> Douglas J. Lucas, Laurie S. Goodman, Frank J. Fabozzi, *Collateralized Debt Obligations: structures and analysis*, Second Edition, John Wiley & Sons, Inc, 2006, pg. 5-15.

CDOs, like all asset backed securities, enable the originators of the underlying assets to transfer credit risk to institutional or individual investors. The risk and return for investment in CDOs depends directly on how the CDOs and their tranches are defined and on the assumptions and methods used to define the risk and return of the tranches. The performance of the underlying assets in the CDOs also affects the risk and returns for the investors. The issuers of CDOs earn a commission at time of issue and management fees during the life of the CDO. The transfer of credit risk and the ability to earn substantial fees from originating and securitizing loans may provide the incentives for CDO originators to favor loan volumes rather than loan quality. Since the issuers of CDOs may have better knowledge about the underlying assets than the investors, if the rating agencies underestimate the risk of CDOs, will unwittingly take on too much risk.

The transfer of credit risk in this business model distances the borrower from the (end) lenders, and leads to two disadvantages in terms of risk control and management. First, it is difficult to know who holds what risk. By selling the CDO's to other financial institutions, banks may think that they have got rid of the credit risk. Second, the banks incentives to carefully examine the loan applications and to monitor (and even to collect) the approved loans are drastically reduced because the risk is now mainly borne by other financial institutions.

Financial innovations including CDOs can be useful tools for improving risk management and provide the synthetic assets for investors. The current financial crisis is not inherently due to the financial innovations. It is more because people underestimated risk in applying these financial models.

### **3. THE ROLE OF NEW FINANCIAL PRODUCTS ON THE OCCURRENCE OF THE GLOBAL FINANCIAL CRISIS**

The current financial crisis is an outgrowth of a set of potent *long-term* structural changes in business and financial markets. Among the microeconomic systemic failures were: securitisation, fundamental flaws in the rating agencies, the Basel capital adequacy requirements, and competitive international de-regulation.<sup>7)</sup>

In addition we will perform analysis of the impact of securitization on the occurrence of the recent global crises. There are several problems associated with securitisation (and the generally associated creation of off-balance sheet vehicles).<sup>8)</sup>

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<sup>7)</sup> Wil lem H. Buiters, Professor of European Political Economy European Institute London School of Economics and Political Science, Lessons from the 2007 financial crisis, Universiteit van Amsterdam, CEPR and NBER 11 December 2007, pg. 1.

<sup>8)</sup> Ibidem, pg. 3-4.

### ***1. Credit risk management.***

The process of securitization created the greater opportunities for risk trading and made it possible to hedge risk better. It also permitted investors to seek out and take on additional risk, to further “unhedge” risk and to create open positions not achievable before. When risk-trading opportunities are enhanced through the creation of new instruments or new institutions, and when new populations of potential investors enter the risk-trading markets, we can only be sure that the risk will end up with those most willing to bear it. There can be no guarantee that risk will end up being borne by those most able to bear it.

### ***2. Liquidity risk management.***

In the process of securitization the pooling and tranching of credit assets, generated complex structured products that appeared to meet the credit rating agencies (CRAs) criteria for high ratings. Credit enhancements by financial guarantors contributed further to the perception of unlimited high-quality investment opportunities. The growth of the credit default swap market and related index markets made credit risk easier to trade and to hedge. This greatly increased the perceived liquidity of credit instruments. Financial institutions established off-balance sheet funding and investment vehicles, which in many cases invested in highly rated structured credit products, in turn often largely backed by mortgage-backed securities (MBSs). These vehicles, which benefited from regulatory and accounting incentives, operated without capital buffers, with significant liquidity and maturity mismatches and with asset compositions that were often misunderstood by investors in them.

Investment banks misjudged the liquidity and concentration risks that deterioration in general economic conditions would pose. Banks also misjudged the risks that were created by their explicit and implicit commitments to these vehicles, including the reputational risks arising from the sponsorship of the vehicles.

Worsening underwriting standards for subprime mortgages and a weakening in the US housing market led to a steady rise in delinquencies and, from early 2007 onwards, sharply falling prices for indices based on subprime-related assets. This produced losses and margin calls for leveraged holders of highly rated products backed by subprime mortgages. The problems in the subprime market provided the trigger for a broad reversal in market risk-taking. As CRAs made multiple-level downgrades of subprime-backed structured products, investors lost confidence in the ratings of a wider range of structured assets.

As the turmoil spread, increased risk aversion, reduced liquidity, market uncertainty about the soundness of major financial institutions, questions about the quality of structured credit products, and uncertainty about the macroeconomic outlook fed on each other. New issuance in securitisation markets fell sharply. As large banks reabsorbed assets and sustained large valuation losses, their balance sheets swelled and their capital cushions shrank. This caused banks to tighten lending conditions. Both bank-based and capital-market channels of credit intermediation slowed.

### **3. Transparency risk management**

The “originate and distribute” model destroys information compared to the “originate and hold” model. The information destruction occurs at the level of the originator of the assets that are to be securitized. Securitisation puts information in the wrong place. Whatever information is collected by the loan originator about the collateral value of the underlying assets and the credit worthiness of the ultimate borrower, remains with the originator and is not effectively transmitted to the SPV, let alone to the subsequent buyers of the securities issued by the SPV that are backed by these assets.

With asymmetric information and costly monitoring, the agency relationship dilutes the incentive for information gathering at the origination stage. Reputation considerations will mitigate this problem, but will not eliminate it.

### **4. Rating agencies**

There are a small number of internationally recognised rating agencies (really no more than three: Standard & Poor’s, Moody’s and Fitch) which account for most of the rating of complex financial instruments, including ABS. They have been given a formal regulatory role, because their ratings determine the risk weighting of a whole range of assets bank hold on their balance sheets. Their role raises a number of important issues because it creates a number of problems.<sup>9)</sup>

First, they only rate default risk. Rating agencies provide estimates of default risk (the probability of default and the expected loss conditional on a default occurring). Even if default risk is absent, market risk or price risk can be abundant. Liquidity risk is one source of price risk. As long as the liquidity risk does not mutate into insolvency risk, the liquidity risk is not reflected in the ratings provided by the rating agencies. The fact that many “consumers” of credit ratings misunderstood the narrow scope of these ratings is not the fault of the rating agencies, but it does point to a problem that needs to be addressed.

Second, they are conflicted. Rating agencies are subject to multiple potential conflicts of interest. They are the only example of an industry where the appraiser is paid by the seller rather than the buyer, even though the buyers is likely to have the greatest information deficiency.

They are multi-product firms that sell advisory and consulting services to the same clients to whom they sell ratings. This can include selling advice to a client on how to structure a security so as to obtain the best rating and subsequently rating the security designed according to these specifications.

The complexity of some of the structured finance products they are asked to evaluate makes it inevitable that the rating agencies will have to work closely with the

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<sup>9)</sup> Ibidem, pg. 4-6.

designers of the structured products. The models used to evaluate default risk will tend to be the models designed by the clients.

The market turmoil has revealed weaknesses in risk management at the banks and securities firms at the core of the global financial system, and in the system of incentives that regulators and supervisors provide through capital and liquidity requirements and oversight.

It is especially important to strengthen the prudential framework for securitisation and off-balance sheet activities. This requires action by market participants to better manage risks, as well as by supervisory and regulatory authorities to better align incentives, reduce regulatory arbitrage and strengthen market discipline for structured products and for financial institutions' off-balance sheet activities. Moreover, initiatives are required to make the operational infrastructure for over-the-counter (OTC) derivatives more robust.

The goal of future activities will be to strengthen the efficiency and resilience of the system, without hindering the processes of market discipline and innovation that are essential to the financial system's contribution to economic growth.

The crisis has provided many important lessons including those involving:<sup>10)</sup>

- **Liquidity risk management.** Firms will need to factor in more severe price jumps (“gapping”) and correlation movements in their market risk models, employing adjustments to risk measures where possible. Better stress tests could be undertaken with longer periods of funding illiquidity and improved contingency plans. More transparency regarding how liquidity risk is managed within the firm could be available to investors.
- **More realistic assumptions about the liquidity of complex structured securities.** Firms reliance on highly structured securities to generate collateral proved problematic during the crisis. Greater availability on balance sheets of highly liquid assets to use as collateral could allow institutions easier access to funding sources during periods of stress. Financial regulators and supervisory authorities also need to take a more active role in reviewing liquidity management issues and supervisory guidance, and considering other regulatory improvements.
- **Bank balance sheet repair.** Writedowns, undertaken as soon as reasonable estimates of their size can be established, will help cleanse banks balance sheets. Weakly capitalized institutions should immediately seek to raise fresh equity and medium-term funding even if the cost of doing so appears high.
- **Consistency of treatment.** Along with auditors, supervisors can encourage transparency and ensure the consistency of approach for difficult-to-

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<sup>10)</sup> Global Financial Stability Report, Containing Systemic Risks and Restoring Financial Soundness, IMF, Washington DC, April 2008.

value securities so that accounting and valuation discrepancies across global financial institutions are minimized. Supervisors should be able to evaluate the robustness of the models used by regulated entities to value securities. Some latitude in the strict application of fair value accounting during stressful events may need to be more formally recognized.

- **Changing the role and importance of rating agencies.** First, reputation is a key asset of rating agencies. That, plus the fear of law suits will mitigate the conflict of interest problem. Second, the potential for conflict of interest when a rating agency sells consultancy and advisory services is inescapable and unacceptable. The obvious solution is to require any firm offering rating services to provide just that. Third, payment by the buyer (the investors) is desirable but subject to a “free rider” problem. One solution would be to have the ratings paid for by a representative body for the (corporate) investor side of the market. This could be financed through a levy on the firms in the industry. Paying the levy could be made mandatory for all firms in a regulated industry. Conceivably, the security issuers could also be asked to contribute. Conflict of interest is avoided as long as no individual issuer pays for his own ratings. Fourth, competition in the rating process is desirable. Entry should be easier when rating agencies become single-product firms, although establishing a reputation will inevitably take time.
- **More intense supervision.** Supervisors will need to better assess capital adequacy related to risks that may not be covered in Pillar 1 of the Basel II framework. More attention could be paid to ensuring that banks have an appropriate risk management system (including for market and liquidity risks) and a strong internal governance structure. When supervisors are not satisfied that risk is being appropriately managed or that adequate contingency plans are in place, they should be able to insist on greater capital and liquidity buffers.
- **Special stability reports.** To help reduce uncertainty and correct negative public misperceptions, especially in the current context of illiquid, hard-to-value structured credit securities, special stability reports could be helpful. Such reports could usefully draw on relevant supervisory information, assess current risks objectively, and highlight plans to address vulnerabilities in the countries involved.
- **Early action to resolve troubled institutions.** The public sector should proactively stand ready to promptly address stress within troubled financial institutions. In such cases, early remedial action or intervention may be warranted.
- **Public plans for impaired assets.** National authorities may wish to prepare contingency plans for dealing with large stocks of impaired assets if writedowns lead to disruptive dynamics and significant negative effects on

the real economy. The modalities of doing so will differ across countries and sectors, but successful instances in which fire sales of impaired assets have been prevented could usefully be emulated.

## **Conclusion**

The major idea behind this study was to provide an overview of the securitization process, to understand the essence of the process, to identify its major features, as well as the relevant consequences of the process to the global financial system.

The beginning it was important to be underlined the explanation of the process of the securitization. Asset securitization is the issuance of securities using a pool of similar assets as collateral. Securitized financing is one of the ways the global marketplace has grown and has played an important role in development of the derivatives market. Securitization generates fee income for bankers and provides them with additional trading opportunities.

But that was only one side from the medal. The other side was the implication of the process of securitization in genesis the financial crisis in 2007. The crisis can be attributed to a number of factors pervasive in both housing and credit markets, factors which emerged over a number of years. Causes proposed include the inability of homeowners to make their mortgage payments (due primarily to adjustable-rate mortgages resetting, borrowers overextending, predatory lending, and speculation), overbuilding during the boom period, risky mortgage products, high personal and corporate debt levels, financial products that distributed and perhaps concealed the risk of mortgage default, bad monetary and housing policies, international trade imbalances, and inappropriate government regulation.

A variety of regulatory changes have been proposed by economists, politicians, journalists, and business leaders to minimize the impact of the current crisis and prevent recurrence. The proposals address consumer protection, executive pay, bank financial cushions or capital requirements, expanded regulation of the shadow banking system and derivatives, and enhanced authority for the Federal Reserve to safely wind-down systemically important institutions, among others.

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