# ASSET SECURITIZATION PROBLEMS AND PROSPECTS

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### Abstract

Applying off balance sheet financing mechanism is largely driven by its practicality, flexibility, and the most importantly it provides a platform for cheaper capital and solves many accounting related issues. Off balance sheet financing, particularly asset securitization, will continue to become the most dominant financing alternatives in view of its multi functional capabilities in solving financing requirement and hedging needs. Asset securitization has been widely applied by the emerging economies in helping them during the economic crisis. Securitization has also been a lifesaver for banks in helping them recapitalizing during financial crisis. Securitization to a certain extent has contributed to the disintermediation of commercial banks being a major provider of capital. Despite the significant benefits and impacts, asset securitization has also its flaws or weaknesses. A flaw in structuring the deal could be one of the contributory factors of a failed deal. It could also attract excessive abuse, which consequently will be catastrophic to the financial system. Thus, proper control and regulation of off balance sheet financing is inevitable.

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#### Introduction

Off balance sheet financing is the most popular alternative of raising capital besides the traditional Companies, ways through debts and equities. particularly large corporations, use off balance sheet financing in enhancing their financial potentials and other related needs. Government agencies or even (especially sovereign nations for emerging economies) are opting for off balance sheet tools in raising capital to mitigate sovereign or country risks issues and to raise cheaper funding alternatives. Financial institutions use off balance sheet techniques for hedging and enhancing credit risks. The scope of application is very wide i.e. it involves various products and mechanism. Some of the popular off balance sheet financing mechanisms are asset securitization, leasing, a join venture project (JV), a research & development (R&D) project, standby letter of credit, derivative products and credit derivatives (credit swaps, credit options, credit default swaps, credit linked swaps). Financial market's derivative products such as futures, options & swaps are widely used by companies and banks for trading and risk management's hedging purposes.

On the company's perspective, off balance sheet is the way a company raises money which does not appear on the balance sheet, unlike loans, debts, or equities which do appear on the balance sheet. For companies, the common off balance sheet financing tools applied is asset securitization and leasing. R&D and JV projects are getting more popular for companies as a way to minimize risks and optimize return of certain undertaken project especially in hightech such as in the field of information technology (IT). Off balance sheet financing offers many benefits in various angles. On financial perspective, it optimizes financial ratios such as EPS, ROE and ROA, improves interest coverage and debt to equity ratios. On accounting perspective, it eliminates book depreciation, provides tax advantage and funding diversification. Off balance sheet activities have also threatened the commercial banks' intermediation function as many companies are switching to capital market to raise capital. Despite the various benefit or advantages of off balance sheet financing, this approach also attracts shortcoming or disadvantages. As it usually involves complex structure and requires thorough understanding, a poorly structured financing could be a disaster to the companies involved. Potential severity of a failed structure due to it 'off' treatment in nature has led to the governing bodies such as the Financial Accounting Standard Board (FASB) frequently changing or enacting the new rules and regulations for off balance sheet financing. The new proposed Basle Accord on the banking industry's capital adequacy requirements emphasizes on risk mitigating of banks' off balance sheet activities.

The following discussion will focus on asset securitization as one of the off balance sheet financing tools being widely applied by all entities. Large corporations, banks, local governments and sovereign nations have been extensively using asset securitization for the purpose of optimizing funding potential, mitigating credit rating issues, managing risks and other related benefits.

#### **Research Problems**

Off balance sheet financing, besides its extensive benefits and huge potential, also causes or creates



many weaknesses and shortcomings. The seriousness of a failed off balance sheet leverages has led to a special attention made by banks and companies such as through risk management to mitigate risks. The following highlights key risks and problems of asset securitization, as one of the off balance sheet financing tools:

- The mechanism is complex and not fully understood
- Manipulation of financial position
- Poor asset quality
- Economic crisis

## **Objectives of Research**

The objectives of the research are-

- a) To explore off balance sheet financing with special attention on analyzing asset securitization being one of the primary vehicles of raising capital for companies, governments as well as financial institutions.
- b) To explore the impact of securitization to the financial landscape as a whole.
- c) To identify the advantage and disadvantages of securitization being an innovative off balance sheet financing tool.
- d) To highlight and explain the financial and accounting abuses by companies through off balance sheet financing and steps taken by the accounting governing body such as FASB in protecting investors, shareholders and the financial system at large.

### Scope of Research

The study focuses on the creative financial tools of off balance sheet financing with special attention on the asset securitization, in assisting companies soliciting their capital requirements in relation to the relative costs and risks. The study explores the funding options created by the off balance sheet vehicles to complement the traditional modes of raising capital through borrowing and equity as well as the impact on the bank's intermediation function. It also stresses on the importance of understanding the concept, as it usually involves a complex structure. It also covers the potential abuses from innovative financial packages in misleading financial information. The scope of research is also to review the accounting, legal, and statutory aspects of securitization.

### **Survey of Literature**

Barry Howcroft (1998) states that traditional on balance sheet services for large companies have been largely replaced by the off balance sheet activities such as via asset-based securitization. Barry elaborates that the actual process of securitization can be discussed at two broad levels i.e. the primary and secondary levels. The primary level is securitization at commercial banks such as asset-backed securities for car loan, mortgages etc. The secondary level represents a serious challenge to commercial banks in which companies are obtaining direct financing from capital market, which led to bank disintermediation. Barry further highlights that innovation has undoubtedly been able to reduce the cost of financing vis-a-vis lower interest rate and risk unbundling (credit risk, funding risk, pricing risk) from bank to directly carry either by borrower or investors as well as it also increases efficiency. As a result, it has significantly changed commercial bank's assets composition landscape. Besides, innovation has also led to the bank disintermediation as large corporate or the multinational companies have effectively established its own banking department or increasingly used agents to raise finance direct on the world's capital market. The limitation of this literature is that it only gives an overview of the financial market evolution in which the mechanism aspect of the innovative off balance sheet tools is not widely explained. The literature also fails to provide examples of the corporate issues being undertaken during the coverage period to support or strengthen his argument.

Minton, Opler & Stanton (1997) state that assetbacked securities are created when common financial assets such as mortgage loans or credit card receivables are pooled and sold in the market. The securitization becomes the most popular funding mechanism for corporate America and the size has been significantly growing and it is expected to even be more important in the future. This literature also states financial institutions often move assets of off balance sheet to avoid taking regulatory capital charges. The literature further explains why companies are choosing asset-backed securities despite other available financing options such as unsecured debt. Minton et al examines theories that suggest firms will prefer to securitize when capital market frictions related to agency cost of unsecured debt and asymmetric information are important. The study covers five segments of industries namely airlines, automobiles, mainframe/microcomputers, retail and trucks/tractors/heavy equipments. Minton et al identifies two main determinants for opting securitization. Firstly, to benefit from economies of scale - large firms and bigger size of receivables are being the contributory factors. Secondly, financially distressed or poor rating company will likely opt for securitization. It is in line to the other theories that argue that the securitization decision is driven in part by the firm's effort to avoid informational and agencyrelated frictions that arise when issuing unsecured debt. The limitation of the literature is that the scope of study is confined to the determinants of securitizations to these industries and it does not independently determine the potential for securitization of receivables in other industries. It may distort the conclusion of the findings if we broaden the base by covering other industries. Besides, the



literature is also highly dependent on secondary sources to support the study.

Anthony Baldo (1996) states that securitization is booming and the value as well as the number of deals created has been on the increase. There are several benefits that could be derived from securitization. Securitization enables a company to monitize its receivables without losing an earning stream; a below-investment-grade company is able to raise relatively cheaper funds at AAA rating as well as it is identified of being able to boost return on the company's remaining assets and equity. Anthony however reminds that the company involves in securitization must well verse with the structure and must realize that by taking the most liquid assets off the balance sheet and if defaulted payments, the assets can be confiscated and depriving them a cash flow. Besides, the structure of securitization itself is usually very complex. The limitation of the literature is that there are no thorough and specific explanations on a failed securitization program to make it clearly understand. Baldo also fails to suggest clear example of the right structure of the deal.

Chito Santiago (2000) reports the first ever securitization of credit card receivables in Singapore by Diners Club to raise up to S\$100 million and became the first issuer to benefit from a government tax incentive scheme aimed at encouraging innovative bond issues in the island republic. The facility is arranged by ABN Amro and funded by offshore financial market without an adverse tax implication. ABN provides Diners a competitive fixed or floating rate funding from the US commercial paper without exposing Diners with currency risk. It allows Diners to sell securities (receivables) on monthly basis to the special purpose vehicle (SPV) - Card Center Assets Purchase Co (CCAP) in which it will issue a 30-day certificates to be sold to pre-existing conduit owned by ABN - Tulip Asset Purchase Co (Singapore). In turn, Tulip issues certificate to be sold to US investors through Tulip's US arm. The limitation is that Chito only explains the structure of the deal and he does not cover other important features such as legal aspect of the deal.

Simon Littlewood (1999) highlights that raising funds via off balance sheet is becoming more popular in Asia. After the financial turmoil, companies in Asia, which faced a 'sky-high' capital cost with limited option in raising liquidity, had turned to asset backed-securitization (ABS) to raise cheaper and competitive funds. Simon reiterates that securitization will not be an easy process due to increased risk from downgrading and lack of investor confidence. Simon further highlights that the initiating process is more complex than those arranged in US as it needed to do a sizeable issue to help defray the cost of putting together such a complicated offering, such as legal framework and other financial works. Simon suggested that for ABS is really to take off in Asia, the domestic bond market must take a root as it could avoid hassles of setting up offshore SPV. A typical article, the literature only highlights events that took place and the subject is not thoroughly explained. The literature also fails to explain the securitization concept in detail.

Christopher O'Leary (2000) predicts a new concept, namely the 'whole company securitization' of the asset-backed securities (ABS) that could become the next hot market in the near future. The concept is companies are securitizing all or large pieces of its entire balance sheet as an alternative to traditional methods of financing. Christopher further states that securitization will be expanded to encompass all different methods of future income, including tobacco legal settlement, rock star future royalties and potential natural disaster insurance. For example, an automobile company could go further by securitizing all sources of income including trademarks, franchises, rent payments and hard assets. The limitation of the literature is that it does not provide sufficient information to elaborate the concept in detail. The literature also fails to clearly highlight the differentiation between the concept and the normal ABS.

James Smalhout (2000) states that emerging countries are developing asset backed securities (ABS) as a way to improve on inefficient bank's financial intermediation. The aim is to stimulate domestic investment and to attract foreign investment through innovative financing mode, such as mortgage securitization schemes that are running in Argentina, South Africa and other emerging countries with the help from the International Finance Corporation (IFC). In this literature, James further describes that the emerging markets' domestic securitization is at an infancy stage in which they are still largely reliant on bank credit for the bulk of financial intermediation. James stated that emerging markets have to address issues such as transparency, standard of disclosure, bankruptcy law and credit quality in order to develop their market and to get investors' confidence. The limitation of the literature is that it does not suggest the right framework for the program. The literature also fails to explain in a more structured manner for easy reference and guidance.

Nikos Valance (2000) highlights that the vendor's financing scheme is a method used especially by hightech telecommunication companies such Lucent, Motorola, Nortel and Cisco Systems, as a source for growth with the help of off balance sheet financing such as securitizations. Nikos further highlights that competition and the aggressive marketing are the prime reasons for companies adopting vendorfinancing scheme to the customers. Nikos reminded that companies must decide how to manage risk and should also look at merits of the products such as good and sound technology with the good back-up support of services. Nikos also highlights possible customer default due to worsening asset quality especially in unfavourable economic condition. The limitation of the literature is that a possible failure is entirely based on opinion, which does not refer any

actual failure. The literature also fails to indicate any specific off balance sheet financing tools being used.

Eric Lammers (2000) states that with the deregulated market, traditional financing for electricity generated companies including independent power producers (IPP) via the issuance of corporate utility debt or raising equity is becoming insignificant. These companies will be subjected to performance based ratemaking or go through the process of functional disaggregation - spinning their generating units into unregulated subsidiaries. Eric highlights that the management must be more focussed particularly on the financial techniques aimed at hedging risk, optimizing tax benefits as well as improving earnings per share. Eric further elaborates on several off balance sheet financing vehicles such as leveraged leases and synthetic leasing are being increasingly used by the power utility companies. The limitation of the literature is that it does not explain the deregulation in detail. The literature is also silent on the possible shortcomings associated with off balance sheet leveraging.

Fred D. Compobasso (2001) discusses on the adoption of off balance sheet financing strategies by integrated healthcare delivery systems (IDS) to effectively manage a diverse real estate portfolio in the United States. Using OBS methods such as sale and lease bank, synthetic leasing and JV arrangements in which assets are being moved off the balance sheet will free up capital to use for other strategic purposes. Fred further explains on several advantages of OBS such as provide 100% financing platform, long term control over the use and tenancy, improved accounting ratios (ROE, ROI and Debt to Equity Ratio), potential to be structured as an operating lease in accordance with GAAP and potential to be structured to achieve off-credit treatment. Fred also explains the disadvantages of OBS's method. In the literature, Fred advises IDS should look into various perspectives such as financial impact, its cash-flow pattern, restriction, investment decision, implications and determine whether ownership and control of the real estate asset is necessary to achieve the IDS's overall strategic objectives. The limitation of the literature is that it does not sufficiently explain the OBS vehicles. The literature also fails to provide evidence of a failed OBS mechanism.

Suzanne Woolley (1996) notes that asset backed securities (ABS) issued by corporations have been growing and is viewed as the best alternative i.e. cheaper financing. All sorts of assets are currently being securitized such as aircraft lease, royalty stream, home improvement loans, property tax liens, student loans, auto loans etc. Suzanne also quotes that ABS has been a lifesaver for many banks during financial crisis, getting off the assets from balance sheet and improved their capital ratio. In this literature Suzanne highlights that the banks' intermediation function is under threat as more and more companies are using ABS through capital market to finance growth. Suzanne also highlights high-profile ABS blowups involving small private placements such as sub-prime auto-loans due to poor credit history. The limitation of the literature is that Suzanne uses a hypothetical example to explain the mechanism. The literature also fails to provide enough evidence on concerns over risk associated with ABS.

Steven Todd (2000) examines the effects of securitization on consumer mortgage costs on two dimensions, namely the coupon rate and the loan origination fees. Securitization activity includes passthrough or fixed rate mortgage creation and collateralized mortgage obligation (CMO) creation. In theory, securitization creates value by reducing intermedation costs and increasing risk sharing and risk diversification. As a result, mortgage assets are more liquid and a large pool of investors shares mortgage risks. The effect of securitization on loan origination fees is significant, as it is one of the key components of cost of mortgage loan which includes prepayment penalties and other adverse selection costs by loan origination. In 1993 alone, homebuyers in the United States paid more than \$16 billion in mortgage fees. Whilst, the study of securitization's effect on adjustable-rate mortgage costs commands merit due to mortgage loans comprise a large share of the overall mortgage loan markets, adjustable-rate mortgages have been securitized more slowly and adjustable-rate mortgages have different interest-rate risk and prepayment characteristics. The findings indicated that there is no evidence of reduction in coupon rate either fixed or adjustable rate due to securitization. Instead, securitization appears to lower mortgage loan origination fees, resulting in substantial savings for consumers. A possible cause of lower origination fees may be due to increased competition among mortgage lenders. In 1995 alone, securitization produced consumer savings of more than \$2.0 billion in loan origination fees. Steven also found that there is no indistinguishable effect on loan rate and origination fees for both passthrough and CMO creations and suggested that a large derivatives market for mortgage loans is not creating value for consumers. The limitation of the study is that Steven uses a complex quantitative analysis, which requires thorough and more illustrative explanation to clarify Besides, Steven also uses different the findings. approach as opposed to the previous study, which will likely produce different kind of findings.

Joan Harrison (2001) highlights Coca-Cola's strategy of forging strategic alliances to tap noncarbonated drinks via joint venture (JV) in addressing flat sales in its main stream produced - carbonated drink. In the literature, Joan explains that JV format is an off balance sheet approach of exploring the opportunities would offer an opportunity to play off the strengths between the partners to optimize the brands potential. Joan further indicates that using partners' distribution system could significantly drive consumption and increase the value of brand. The limitation of the literature is that it does not sufficiently explain the JV concept in detail. The literature also fails to highlight a possible shortcoming of the JV project.

Martin E Zimmerman (1999) explains on how emerging companies raising affordable capital by subscribing venture leasing for a new joint venture project. Venture leasing is equipment financing for a new company in which leasors sometimes take an equity position. Martin further highlights the advantages of venture leasing such as proper utilization of capital, tax treatment, 100% financing, cheaper, limited collateral as well as its flexibility. Pricing will depend on several criteria such as the experience of venture capitalists, evaluation of the company, the overall cost, the use of a fair market value and warrant covenant. The limitation of the literature is that it does not sufficiently explain the mechanism of venture leasing. The literature also fails to highlight the weaknesses or disadvantages of using the method.

Matt Hudgins (2000) explains that synthetic leasing enables a company to use a third party to buy a property to which the company will occupy, and then make payments to that third party under a leaselike arrangement. 'Lease' is almost a misnomer, because the method is closer to ownership than a lease from a landlord, the operating company can even claim depreciation despite technically the asset belongs to the third party. Matt highlights that synthetic leasing will benefit companies especially below investment grade companies benefiting like owning the property, having a healthy balance sheet, enjoying tax benefits, getting depreciation deduction treatment, providing a cheaper cost than conventional leasing and attractive especially in high interest rate atmosphere. Matt further highlights that synthetic leasing is complex, and required high initiation cost and proper structuring. The limitation of the literature is that the structure of synthetic leasing is not sufficiently explained which is important in view of the complexity of the deal. The literature also fails to quote an example of failed deal.

Anthony Baldo (1999) reviews on Engelhard's raising funds through leasing to take advantage of the alternative minimum tax (AMT) status - a tax incentive, which has an impact of the overall tax paid. In 1998 Engelhard paid an average of 28.2% as compared to an average of 35% federal tax rate paid by companies in the United States. Engelhard, a highly leveraged diversified company specializes in chemical, refining and precious metal activities, chooses a global leasing program rather than raising fund via a conventional method of issuing new equity or floating debt. Anthony notes that the method will salvage its liquidity costs. The limitation of the literature is that it does not sufficiently elaborate how the deal will benefit the company. The literature also fails to acknowledge the mechanism of the deal in detail. Richard H Gamble (1997) highlights that off balance sheet financing conjures up images of cooked books and criminal activity, in which many CFOs are using some sound, legal techniques to make the companies appear to be more attractive to creditors as well as reduce taxes. Richard further highlights that with less debt, rating agencies, finance companies, banks or creditors see an enhanced balance sheet and may respond by offering more credits, better rate or lighter the loan covenants as well as certain OBS transactions may result into lower taxes. In the literature, Richard also states the popular OBS financing are leasing, asset securitization and creation of a joint venture project. In a joint venture, a special project is put under a satellite balance sheet, therefore, a selected assets and liabilities can be moved from company's balance sheet. Richard advises that special attention have to be focussed on OBS activities to ensure the actual exposure beyond balance sheet where creditors may be overlooked. The limitation of the literature is that it does not sufficiently explain the concerns highlighted. The literature also fails to provide enough suggestion to mitigate shortcomings brought by the OBS activities.

Alan P. Murray (2001) discusses on concerns over the stability of the financial institutions (with regard to increased risks) as a consequence of the surging volume of securitizations. Alan highlights criticism on securitization as one in a combination factors that does entail significant risks, in which securitization promotes excessive credit creations and promote an illusion of liquidity and diminish the role of depository. The finding by Alan, however, is less worrisome and reveals that securitization has not increased risks to the financial system through its impact on credit creation, asset monitoring, liquidity illusion, or monetary policy. The finding further indicates that the increased risk is rather due to the deterioration in asset quality being used as security and the promotion of rapid asset growth that encourages greater leverage and lower profit margin. The limitation of the literature is that the findings may be misleading by incomprehensive selection of data, hence, the creditworthiness of these instruments has not been rigorously tested. The literature also fails to provide an example of a failed structure to support his study. Berthany McLean (1999) highlights on the criticism to Elan, a high profile Irish's drug company, which uses 'creative accounting' and also the impact of FASB on proposed amendments to crack down accounting abuses. Concern of impact has led to Elan's share being sold short by 8% - higher than industry standard. Berthany further elaborates criticism to Elan, which uses total write-off of acquired technology still under development ('inprocess' R & D), off balance sheet R&D as well as the controversial accounting gambits i.e. charging a license fee to the companies that Elan has investment interest which eventually uses its technology. The limitation of the literature is that it does not thoroughly explain the impact of FASB's proposed ruling. Besides, the point of criticism is entirely based on opinions. The literature also fails to suggest a solution that could guide the right approach.

Ronald Fink (1999) focuses on the new proposed change in rules of accounting aimed at off balance sheet financing i.e. on unconsolidated subsidiaries that could jeopardize Enron Corp, an energy company. Ronald states that creative financing is crucial to the industry characterized by high capital investment and with low initial cash flow and earning stream. Ronald further states that conventional method of raising funds will dilute shareholders and worsen its credit rating, which would not only increase its cost of capital but also eventually hinder them from its core energy-trading business. FASB's new ruling requires a company to consolidate subsidiaries unless the parent can show they do not control them, regardless of their ownership position. Currently, Enron uses the equity method of treating these subsidiaries' result i.e. keeping their debt and assets off its book. The limitation of the literature is that it does not illustratively explain how the impact on the proposed new ruling could effect the company's financial position such as rating etc. The literature also fails to extensively explain the FASB rulings.

Eugene M Katz (2001) explains that the existing Basle's capital frameworks is viewed as 'one-size-fitsall' approach and it has failed to mitigate a more complex issue to reflect the underlying risks of financial innovation particularly on the off balance sheet activities such as assets securitization and other derivative activities. Eugene elaborates that the new proposed capital adequacy framework employs '3-Pillar Approach' namely the First Pillar (minimum capital requirements), the Second Pillar (supervisory review process) and the Third Pillar (market discipline). Basle maintains the mandatory capital requirement ruling of 8 % but also incorporates 'riskmeasurement' elements (credit risks, operational risks and market risks) - risk bucketing depending on the nature of risks of products (20%, 50%, 100% and 150%). Quantification of credit risks is using internalratings-based (IRB) based on universally accepted method - by the adopting foundation approach and the advanced approach based on four key risk inputs namely probability of default, estimate of loss severity, amount at risk and remaining maturity. Supervisory review process is adopted to ensure banks' capital position is consistent with the overall risk profile. Whilst, market discipline is used for the purpose of encouraging banks to disclose information. The limitation of the literature is that it is a broadbased explanation, which are not only focusing on off balance sheet issue alone but also covering other capital aspects. As such, the impact on Basle Accord on off balance sheet activities is not sufficiently explained. The literature also fails to provide some hypothetical examples to elaborate the impact.

## **Research Methodology**

The research project is based on a pool of data and information extracted from various sources of secondary data such as articles, journals and research studies published in on-line mazagines and other publications. These on-line mazagines and publications were downloaded from the Internet websites like Google, Emerald, Ebcohost and SSRN. From the extracted secondary data, the research framework is developed on off balance sheet financing. This is illustrated as per Figure 1. (Appendix A)

### **Discussion, Analysis and Findings**

Using off balance sheet financing technique is inevitable especially in the context of raising capital not only to companies but also to financial institutions and even the governments at large. Companies use off balance sheet techniques such as asset securitization, leasing, joint venture (JV) program and research & development (R&D) program. Leasing, be it a sale and lease back or synthetic lease - operating lease, a favourite tool, helps companies in the form of reducing operating cost, enjoying tax treatment, optimizing financial ratios and in term of the accounting treatment. In the high profile investment undertaking such as in information technology (IT), R&D and JV programs are popular as it involves high risk and high initial capital expenditure. Even a reputable company such as Coca-Cola Inc opted for a JV undertaking with other companies to venture into a new product line. Its not only accommodating in term of cost sharing but also optimizing utilization of partners' facilities. Whilst, banks are using off balance sheet tools such as swaps, options, futures, credit derivatives or even asset securitization for their hedging as well as optimizing utilization of assets and improved its capital adequacy ratio.

Asset securitization likes other off balance sheet financing tools has evolved to become a crucial tool in streamlining organization's capital requirement in relation to financing, accounting and risk mitigation. In simple terminology, securitization is the process of pooling together relatively homogenous assets such as mortgages, trade or credit card receivables or consumer loans and packaging them for sale in the form of securities. The securitization process begins with the originating company transferring its receivables to a trust namely special purpose vehicle (SPV). SPV acts as an intermediary between the company and the investors of the newly created securities by acquiring the receivables from the company and issuing securities backed by these receivables (assets). SPV also acts as a conduit for payments of principal and interest to investors of the asset backed Commercial Paper (CP). The deal is usually done through the capital market and it involves a process of due diligence assessing the receivables being used as a security in securitization to determine its credit worthiness. In other words, the credit risk is no longer based on the originating company but it is based on the assets or receivables being securitized. As the assets involved are usually good quality assets, hence, it will command better rating than if it is based on the rating of the originating company. In short, the success of the securitization market is attributable largely to the innovative structures created. The isolation of collateral pools from insolvency of the originator, efficient allocation of cash flows, segmentation of credit risks, and risk-adjusted yields have fueled demand for these securitization. As a whole, there is no standard format of securitization as each product has different characteristic in term of the nature of assets, tenor of the assets, risk profile of the assets, deal structure etc. Thus, these differential variables would determine the complexity of the deal structure.

Asset securitization produces a lot of benefits or advantages. Companies, undertaking of securitization are usually driven by the urge of raising funds at affordable rate as opposed to raising capital through debts or equity. A financially distressed company or poor rating company will likely to use securitization as cost of borrowing through raising debts will be escalating as the assessment made is based solely on merits of the company. Whilst, large size receivables is another factor for company choosing securitization as it could benefit from the economies of scale in term of the pro-rate effect of initiation cost. Securitization eliminates the requirement of assessing the company, as it will straight away be zooming on the assets being used for securitization. As a result, the company will be getting a competitive rate (cheaper interest rate) of equivalent to AAA rating as usually good receivables are used as security of the issue. With the off balance sheet treatment of securitization, the company's assets and liabilities composition will be more streamlined. Consequently, it optimizes the financial ratios such as Earning Per Share (EPS), Return on Assets (ROA) and Return on Equity (ROE) and Debt to Equity ratio. By monetizing receivables, it helps companies optimizing utilization of its assets without loosing its income stream. Besides, securitization program also attracts tax benefit depending on the structure of the deal. From the investors' point of view, it provides a save platform of investment due to the credit issue or risk is no longer tied on the issuer but on the quality of the assets itself. Usually during the initiation stage, this issue has already been resolved - rating for the asset backed securities is determined. For example, good rating of investment grade equivalent is the main consideration for investors investing in the issue. It also contributes to enlarge investment choices.

Banks or financial institutions, besides enjoying some of the benefits of the company, the main reason of undertaking securitization program are usually driven by mitigation of the Capital Adequacy Ratio. Banks are required under the Bank for International Settlement (BIS) as outlined under Basle Accord to maintain a minimum adequacy ratio of 8%. It is evidenced that securitization has been a lifesaver for many banks during the financial crisis, in helping them out of trouble due to a worsening asset quality. Japanese banks are adopting securitization method by selling off property related non-performing loan to foreign investors at a huge discount in an attempt to meet BIS requirement. Besides, securitization also benefits banks in mobilizing funds, achieving optimum utilization of capital, and improving liquidity position, credit quality and recapitalization. Collateralized Bond Obligations (CBO) and Collateralized Loan Obligations (CLO) are the most common securitization of the bank.

Whilst, securitization is becoming popular for government agencies or sovereign nations itself in raising capital. At government levels, securitization has been noted of overcoming capital raising issue at relatively lower cost. During the financial turmoil in Asia, raising fund through conventional debts is extremely expensive due to sovereign risks. The emerging economies have to pay dearly on the cost or interest rates of averaging up to 500 BP (basis-point) over US Treasury or LIBO (the London Interbank Bank Offered Rate) depending on the countries' rating category. To avoid capital raising difficulty and soaring cost of fund, emerging economies are turning to asset securitization method. Securitizing futureflow receivables is a popular mode for crisis stricken countries, which was first undertaken by Mexico's Telmex in 1987. During the crisis, finding an innovative way for developing countries is inevitable in order to tap external funds at relatively reduced cost. Future receivables such as oils, other mineral proceeds and also agricultural commodities by mineral rich countries has been used by Russia, Latin America and Middle East during crisis. Whilst for South Asia, the potential for securitization lies in remittances, credit card vouchers and telephone receivables. Securitization has been identified as a tool that can help Japan revive its economy. The Japanese government has high expectation from securitization and sees its proliferation as an integral part of the financial liberalization program. Japan sees securitization as the solution to its bad loan crisis and its banking system is in dire need of liquidity and securitization is seen as a source of new capital. Further, public sentiment is strongly opposed to using tax revenue to solve the bad loan crisis. Securitization offers an option that will appease the Japanese taxpayer.

The most obvious impact seen from asset securitization program is that it provides a reliable alternative to the issuers (be it companies, banks or governments), an option of raising capital and diverting the attention from only seeking traditional method of raising capital through debts or equity. This 'window' coupled with other off balance sheet mechanisms as illustrated earlier, have provided a multiple option for the issuers and positively enhanced their funding diversification. Another significant impact is disintermediation. Securitization produces a serious challenge to intermediation function of commercial banks. Companies are obtaining direct financing from capital market instead of using commercial banks as the main provider of capital. Competition has forced commercial banks to

be more innovative and proactive to market sensitivity or needs, hence, reduces cost of borrowing of the issuers. It is evidenced by most of capital requirement of large corporation is being handled by capital market. It has an impact on cost saving in regard to mortgage loans. In the United States, securitization of mortgage loans (fixed rate and colleteralized mortgage obligation /CMO - involving Ginnie Mae, Fannie Mae and Freddie Mae) has brought a positive impact on lowering loan origination fees. As mortgage fees is one of the major cost components, lower origination fees will eventually produce significant saving to homebuyers in term of lower interest rate fixed. Secutization also increases efficiency, as the risk (credit risks, funding risks or pricing risks) is unbundled from banks to be directly carried either by borrower or investors involved. It is benefiting in many ways such as it increases investors' investment choices, saving cost due to good rating, liquid and transferable investments.

Notwithstanding, securitization also has it flaws and created 'havoc' particularly to the financial market. There are several factors contributed to problems or weaknesses. The most worrying factor is manipulation by the issuers especially poor rated or financial distressed companies or organizations, in taking advantage of certain regulatory loop-wholes. The company may appear to be more impressive that could mislead rating agencies, financial institutions and most importantly the creditors. As a result, this company may hide its actual leverage position, which consequently would be detrimental to financial market as a whole. The weakness also lies on the deal structure. There is no 'one-size-fits-all' solution to securitization program, in which each deal has its own A weak-structured program, in characteristics. relation to various variables involved such as poor assessment on assets, poor quantification of risks, lack of experienced professionals in deal making (teams of capable accountants and lawyers) and the management itself, would be catastrophic. Poor asset quality is also contributed to a failed deal. There were evidences of high profile blowups involving small private placements such as sub-prime auto loans. Economic factor is crucial, as it determines the quality of assets or receivables involved in securitization, in which economic crisis will inevitably deteriorate the underlying assets.

There are several impediments to the securitization program. In Japan, major obstacles to securitization of loan are difficulty in the assessment of credit risk, insufficient yield over high risks involved, illiquid market (due to thin and characterized by wide spreads), disclosure of information and also lacks of the financial infrastructure to support an economy of its size. Whilst, the emerging economies with relatively immature market, are required to address issues such as transparency, standard of disclosure, its bankruptcy law and also credit quality issue. Countries in South East Asia are in difficulty of undertaking

securitization program due to lack of investors' confidence and downgrading. Thus, formulating the right framework and developing the domestic capital market is the catalyst for the securitization and other off balance sheet mechanisms as a whole.

The main concern of asset securitization or other off balance sheet financing leverages is on the treatment of the tools in the legal and accounting regulatory perspectives. In regulating the financial institutions and markets, the proposed new Basle Accord requires a more streamline structure to incorporate the risk quantification elements to be reflected in off balance sheet activities. Although under BIS; the capital adequacy remains at 8%, the new proposed Basle Accord incorporates the risk measurement elements (credit risks, operational risks and market risks) depending on the nature of the risks based on risk bucketing (20%, 50%, 100% and 150%). The new framework employs 3-pillar approach, namely the First Pillar (minimum capital requirements), the Second Pillar (supervisory review process) and the Third Pillar (market discipline). The aim is to enhance the measuring of risks involved consequent to failures in banking system, especially during the financial crisis.

In response to significant weaknesses in the asset securitization practices, the US Agencies namely the Federal Deposit Insurance Corporation (FDIC), Federal Reserve, Comptroller of Currency and Office of Thrift Supervision, have jointly reminded the financial institutions and the examiners of the importance of fundamental risk management practices. This guidance emphasizes on the importance of prudent risk management measures. Financial institutions must ensure independent risk management processes are in place to monitor securitization pool performance inclusive using the Management Information Systems (MIS) tools as part of the monitoring function. Besides, financial institutions must adopt conservative valuation assumptions and modeling methodologies, periodical review by internal auditors, accurate and timely riskbased capital calculation are maintained, internal limits are in place as well as a realistic liquidity plan is in place. Deteriorating asset quality, which is being used as security, is the contributory factor to the increased risks.

In the latest effort of streamlining and monitoring securitization activities, FASB issued Statement of Financial Accounting Standards (SFAS) 140, "Accounting for Transfers and servicing of Financial Assets and Extinguishments of Liablities", to supercede SFAS 125. SFAS 140 provides guidance for determining whether a transfer of financial assets should be accounted for as a sale or a secured borrowing and whether a liability has been extinguished. It provides guidance for accounting for servicing of financial assets, the receipt or pledging of collateral, and requires certain disclosures. SFAS 140 clarifies major issues such as the effects of the FDIC's receivership powers on legal isolation, guidance on removal of account provisions (ROAP), the Qualifying Special Purpose Entity (QSPE) activities, disclosure relating to securitization transactions and collateral. SFAS significantly increases the required disclosures that a company must make about its securitized financial assets and the retained interests. The company requires to disclosure information about accounting policy, volume, cash flows, key assumptions made in determining fair values of retained interests, and the sensitivity of those fair values to changes in key assumptions. This enhanced rule indicates that the FASB is serious to put securitization activities to be adequately monitored and guided.

Rating agencies, such as Fitch IBCA, for example in rating consumer finance companies considers macroeconomic factors, industry dynamics, and individual company performance. The agency examines external factors in relation to the impact of these factors to a company's growth opportunities and credit conditions. Thereafter, the agency analyzes several variables, namely the management, asset quality, earnings and profitability and also its leverage and funding positions. This role is crucial, as preserving strong balance sheets has been an important factor in the general maintenance of rating levels. This also will determine the overall rating off balance sheet program in relation to cheaper cost of funds of these companies and will uphold the mechanism as a whole. For example, good rated corporation such as A+ rated Ford Motor Credit Co is commanding an extremely competitive price.

It is paramount for the participants (the issuers, underwriters, SPVs or trustees, and also investors) to comprehensively understand the deal as the structure is usually complex and each deal has different characteristics as compared to other deals. Thorough examination of all variables involved such as planning approach, assessment of the underlying assets, due diligence process, and also with the help of experienced and professional team involving expert accountants and lawyers in structuring the deal. Given the grave consequences of a failed deal, the parties involved must also ensure of asset quality measurement of the post deal in line with the recommendations outlined by the governing statutory bodies such as FASB.

#### Conclusion

Off balance sheet financing tools are very important for raising capital and also funding diversification. Companies, banks and government bodies are turning to these mechanisms for various reasons. The literature has proven the usefulness of off balance financing tools particularly asset securitization in scalping financial needs of almost every organization. In summary, the main consideration for securitization program is the ability of raising cheaper capital at the most convenience way as the assessment lies on the assets itself. Companies, financial institutions and governments use securitization to optimize Financial Ratios (EPS, ROA, ROE, and Debt to Equity Ratio), to obtain tax benefits, funding diversification, to mitigate poor rating, monetize receivables productively, to mobilize funds, to improve capital ratio and also to overcome capital raising issues. In other word, off balance sheet financing or securitizations provides an optional 'window' to substitute or complement the conventional financing of raising debts or equity. Securitization has largely contributed to the disintermediation of commercial banks as the main provider of capital. Statistics indicated that off balance sheet financing tools are replacing conventional financing techniques as the main source of capital. Flexibility and practicality of securitization are making this off balance sheet tools very applicable and well accepted. In tandem with innovative financial market, analysts predict a new concept of 'whole company securitization' could become popular in the near future, involving securitization of all or a large piece of the company's entire balance sheet. Besides, the illustrated benefits and impacts, securitization and any other off balance sheet financing tools also produce many flaws and setbacks. Dire consequences require proper controls and coordinated action of the governing bodies involved to protect the financial market as a whole.

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