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## SECURITIZATION OF ASSET BACKED SECURITIES

BY

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for the degree of Master of Business Administration

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## **ABSTRACT**

Asset Backed Securities is an established type of securitization in most parts of the world and constitutes a growing segment of Asian market. Many assets have been securitized to-date, some of which are mortgages, Credit Cards, Leases, Auto and Car Loans, Shares margin, Franchise Payments, Record Loyalties, Future Contracts, Utility Payments, Manufacturing and Retail Receivables etc.

Malaysia has been looking forward to promoting the Asset Backed Securities as a means to raise funds for its corporate, especially on the Interest free or Islamic securitization. A guideline on the issuance of Asset Backed Securities was issued by the Malaysian Securities Commission on 21 of April 2001 for the above purpose. The Government on the other hand has also been trying to encourage issuance of Islamic Asset Backed Securities by incorporating it into the Malaysia Capital Market Plan.

In addition to a brief discussion of the securitization of Conventional and Islamic Asset Backed Securities, I have adopted two of 13 recommendations highlighted for the Islamic Capital Market in the Capital Master Plan by proposing the issuance of Islamic Study Loan Backed Securities.

The recommendations highlighted in the Islamic Capital Market are to introduce competitive and innovative Islamic financial products and services, efforts to mobilize untapped Islamic assets through securitization.

With the issuance of Islamic Student Loan Backed Securities, there will be sufficient source of financial resource to all citizens of Malaysian for an opportunity to pursue their higher education. Furthermore, not only is it a good generation of new source of funds to finance education, it will also be an attractive Islamic investment for investors.

## APPROVAL

TITLE OF PROJECT PAPER:

SECURITIZATION OF ASSET BACKED SECURITIES

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The undersigned certifies that the above candidate has fulfilled the conditions of the project paper prepared in partial fulfillment of the requirement for the Degree of Master in Business Administration.

Supervisor



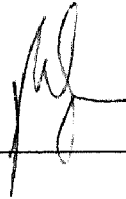
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Date : 9-7-2002

## DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledge by footnotes giving references and a bibliography is appended

Date: 9.7.2002

Signature:  \_\_\_\_\_

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## **ABBREVIATIONS**

ABS	Asset Backed Securities
ABSCP	Asset Backed Securities Commercial Paper
FDSS	Fixed Deposit Depository System
GII	Government Investments Instruments
HEA	Higher Education Act
IELP	Islamic Education Loan Program
JPA	Jabatan Perkhidmatan Awam
LIBOR	London Inter Bank Rate
MARA	Majlis Amanah Rakyat
ROE	Return On Equity
SPE	Special Purpose Entity
SPV	Special Purpose Vehicle
US	United State Of America

## ABBREVIATIONS

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# **CHAPTER 1**

## **OBJECTIVE, METHODOLOGY AND LITERATURE REVIEW**

### **1.1 OBJECTIVE**

This paper discusses the securitization of Conventional and Islamic Asset Backed Securities. The main objective of this paper is the proposed model for issuance of Islamic Study Loan Asset Backed Securities which is discussed in Chapter 7. The concept of the Islamic Study Loan Asset Backed Securities is adapting the student loans model offered to the citizen in United States known as Sallie Mae. Sallie Mae is a short name for Student Loan Marketing Association incorporated in United States. Selected student loans owned by Sallie Mae are sold to a trust. The trust company will issue Notes or Certificates that uses the Student loan as a collateral. These Notes and Certificates are called Student Loan Asset Backed Securities.

Chapter 2 will provide a brief definition and basic structure of Asset Backed Securities. It will also discuss the different types of securitization assets. Chapter 3 will highlight the benefits of Asset Backed Securities to the issuer and the investors, while Chapter 4 will highlight the risk involved in Asset Backed Securities.

Chapter 5 will briefly discuss the application of Asset Backed Securities in the Global Market especially in Europe, United States of America, Asia and Malaysia.

Chapter 6 will discuss the Islamic Securitization. It will highlight syariah views and objections, and also compare the Islamic and Conventional Asset Backed Securities.

## **1.2 RESEARCH METHODOLOGY**

Library and theoretical research method were used for this research. For the purpose of this research, both published and unpublished secondary qualitative data were collected and explained. Secondary data was obtained through library research of recent literatures such as books, magazines, journals, website, pamphlets and newspaper articles, both from local and foreign origins.

## CHAPTER 2

# INTRODUCTION: SECURITISATION OF ASSET BACKED SECURITIES

### 2.1 Introduction

Although Asset Backed Securities has been well established in the market, the understanding of this instruments has yet been known to many. Many expert had emerged to better equip the students and investors on the knowledge of Asset Backed Securities. For example, Prof. Ian Giddy of Stern School of Business New York University, has made presentations and research paper all over the world including in Malaysian, Singapore, and Korea. The presentations cover a few topics such as Financial Institution Risk Management, Financing with Asset Backed Securities, Techniques in the Asset Backed Securities Markets, The hidden Risk in Asset Backed Securities, etc.

While in the Islamic perspective in Malaysia, Dr Saiful Azhar Rosly of the International Islamic University Malaysia, in addition to research he has also wrote in the Journal of Islamic Economics and local newspaper on Islamic financial product, including Asset Backed Securities. Another Malaysian that is highly respected and very knowledgeable in the Islamic context of financing is Mr Wan Abdul Rahim Kamil. He has also made a few presentations Seminars held in Malaysian on Islamic Asset Backed Securities. Although many other papers/research/presentation had been written



on the securitisation of Conventional Asset Backed Securities, namely by famous writers like Prof. Ian Giddy of Stern School of Business New York University, Anand K. Bhattacharya, Frank J. Fabozzi John White , Mr. MacCallum (a partner at Brown Raysman Millstein Felder and Steiner LLP), Alexander David (Board of Governors of the Federal Reserve System), Prof. Dr. Joachim Süchting, Vinod Kothari; and Ahmad, Ausaf, Nadeem Ul Haque, Tariqullah Khan and Mr. Suleiman Abdu Dualeh for Islamic Asset Backed Securities; to the best of my knowledge, to date no paper has yet been written on the Islamic Study Loan Asset Backed Securities.

## 2.2 Definition

Asset Backed Securities (ABS) are bonds or notes based on pools of underlying assets<sup>1</sup>. The underlying assets typically consist of receivables other than mortgage loans. They can among others, be in the form of credit card receivables, auto loans, manufactured housing contracts and home-equity loans<sup>2</sup>. The originators of the loans are financial institutions such as banks, credit card providers and finance companies which turn their loans into marketable securities through a process known as '*securitization*'. The securitization process involves issuing of negotiable instruments, which can be sold in a variety of markets. The securities may be fixed or floating rates, short-term or medium-term, senior or subordinated. These assets are usually illiquid and private in nature. The assets are private in nature as it is issued for a specific purposes by any corporation. The "pooling" of assets make the securitization large enough to be

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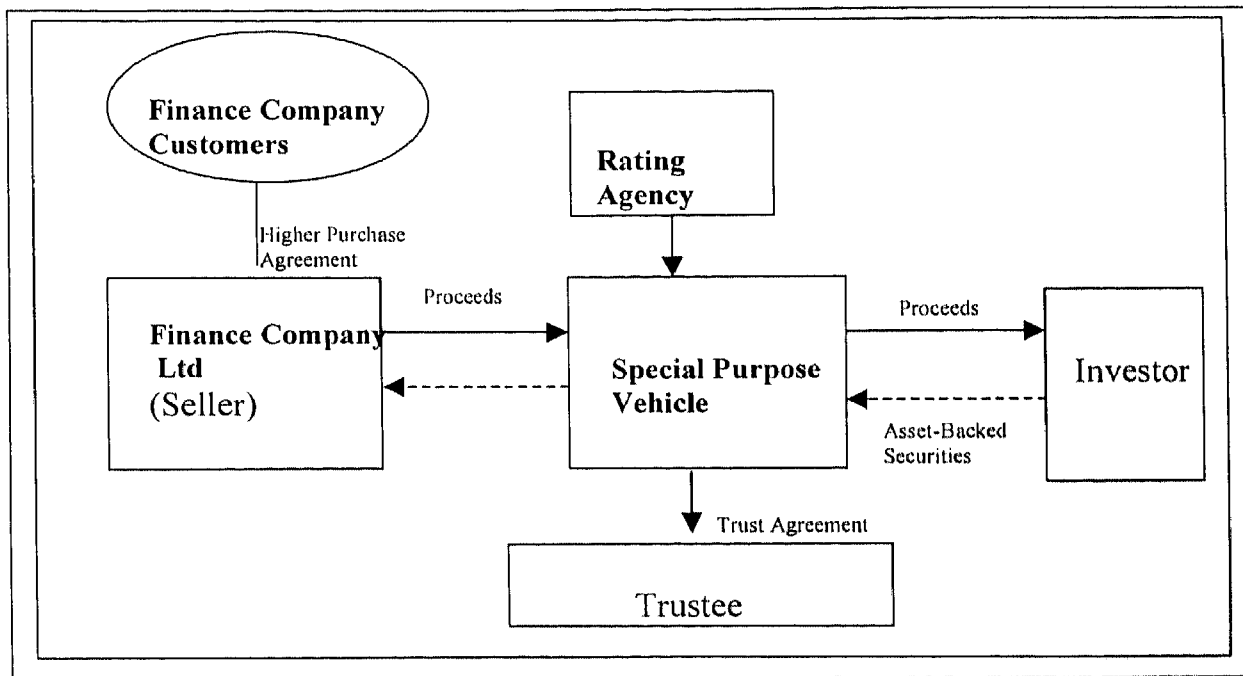
<sup>1</sup> <http://giddy.org/asiansecuritizations> Assets-Backed Securities in Asia: Seminars and Resources on asset-backed securities in Asia extracted on 5 February 2002

<sup>2</sup> <http://www.investinginbonds.com/info/igabs/types.htm>, An Investor's Guide to Asset-Backed Securities

economical and to diversify the qualities of the underlying assets. It also makes these assets available for investment to a much broader range of investors.

### 2.3 Basic Structure of ABS <sup>3</sup>

Flowchart 1: Basic Structure of Asset Backed Securities



An asset backed security is created by the sale of assets by a financial institution, which makes it the legal issuer of the ABS. This process is generally done through turning of loans, credit card receivable, auto loans, manufactured-housing contract and home-equity loans, among others, into marketable securities.

The basic structure of ABS as shown in Flowchart 1, is when financial institutions sell the pools of loans to a special purpose vehicle (SPV). The sole function

extracted on 5 February 2002

<sup>3</sup> Prof Ian H Giddy, Presentation on financial Institution Risk Management: Impact of Securitization Giddy, New York University presented at a Seminar on "Risk Management in Financial Institutions" Sogang University Seoul October 2001. Extracted on 12 February 2002.

of SPV is to buy such assets in order to securitize them, and then sell them to a trust. The SPV is generally a bankruptcy-remote vehicle such as a 'grantor trust', isolating the trust from the sponsor or the owner of the loans. SPV issues securities to investors, where each issue consists of multiple classes of public and private placed notes. Payment on securities depends on the cash flow generated by the pooled assets, and normally is not guaranteed by the original owner. The separation of the original owner from the assets ensures that the investors in the asset-backed securities are not exposed to credit deterioration of the original owner. As the SPV is isolated from the originator, it is structured as an entity that cannot become the subject of a bankruptcy case.

The trust company in turn re-packages the loans as interest bearing securities and actually issues them. Trust company is a company formed pursuant to a Trust Agreement between the SPV and the originator. The trust company embodies the right to certain cash flow arising from the underlying assets. The securities are then sold to investors by the investment banks that underwrite them and enhance the securities with extra protection. Each Asset Backed Securities has a servicer. A servicer often is the originator of the collateral and the assets, is responsible for collecting the cash flow that is generated by the securitized assets. The cash flow arises from the principal, interest, and fees net of losses and any servicing costs as well as other expenses. The servicer will then pass them to the investors in accord with the terms of the securities. The servicer processes the payments and administers the borrower's account in the pool.

## 2.4 Types Of Securitized Assets

Securitization can be divided into a few types of securitized assets. The different types of securitized assets are Fully Amortizing, Controlled Amortizing, Soft/Hard Bullet, Floaters, and Sequential Pay<sup>4</sup>

### 2.4.1 Fully Amortizing

A fully amortizing asset is when the investors will receive the principal of the investment throughout the life of the security. The life of the securities may have varying maturities and duration for repayment of the underlying loans. The repayments of the underlying loans are made through a scheduled interest and principal payments.

Since the loan's contractual amortization schedule is predetermined the repayment on the installment loans is hence, predictable. The interest rate on these Asset Backed Securities is usually fixed slightly the weighted average coupon of the loan pool, incorporating the servicing cost , other expenses as well as potentials for credit loss . Fully amortize assets are highly favored by issuer as it provides a predictable cash flow

The underlying assets of these Asset Backed Securities typically include leases, automobile loans, manufactured-housing contracts, student loans and other fully

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<sup>4</sup> <http://www.investinginbonds.com/info/igabs/types.htm> . An Investor's Guide to Asset-Backed Securities. Extracted on 12 February 2002

amortizing assets. The most common underlying assets used in Asset Backed Securities are Home Equity Loans and Study Loans.

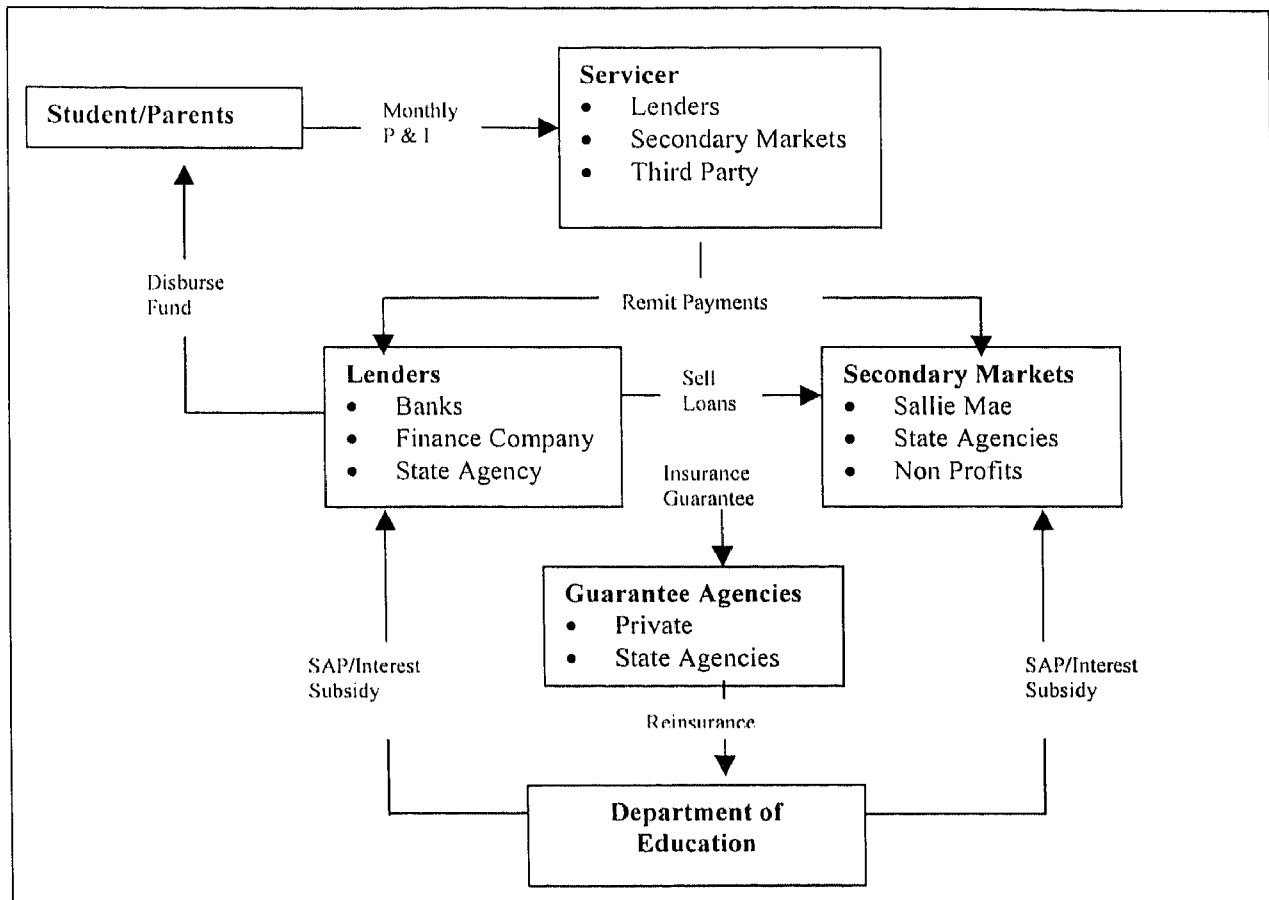
a) Home Equity loans

These loans constitute almost half the Asset Backed Securities issued in US. These types of loan can be classified into two. They are Closed-end Home Equity loans and Home Equity lines of credit.

These loans enable homeowners to borrow money against the non-mortgaged value of their homes and would have fixed term ranges between 10 to 30 years. In most cases, the borrowers will consolidate all their debt into one monthly payment. The advantage of Closed-end Home-Equity loans is that the interest payment is tax deductible.

b) Student Loans

Flowchart 2: Student Loan Asset Backed Securities<sup>5</sup>



Source : Moody

As shown in Flowchart 2, Student Loan Asset Backed Securities is structured where the lender will sell the loan through a trust that will issues an asset backed security to secondary markets mainly Sallie Mae, state agencies or a non-profit organization. A servicer will be appointed to repackage the student loan to an student loan ABS. A servicer will also administer payment from the borrower . In some cases the ABS are subsidized by the Department of Education. The loans

<sup>5</sup> Angela C.Jones and Craig Le Feber, Student Loan-Backed Securities, Banc of America Securities 6 April 2001

sold are guaranteed by the State and private agencies which is reinsured by the Department of Education.

Student loan Asset backed Securities represent 10% of the Asset Backed Securities market in US. Student loans are deemed as amortized assets as it must be paid according to a predetermined schedule. Although, student loans are risky and the default rate is relatively high, they are largely neutralized by government guarantee programs which provide subsidy. Those which are not, will bear the risk on such loans directly.

#### 2.4.2 Controlled Amortization

The type of securitization, in which the principle is not paid off on the schedule, is known as controlled amortization. Controlled amortization structure is mainly revolving debt, which includes credit card receivables, trade receivables, and some leases. In this type of structure, the customers borrow more money while paying off the old debt provided that they do not exceed the credit limit. Credit card debt for example has no actual maturity because cardholders will only need to pay a minimum amount and do not have to pay off the principal on a schedule. This is a method of providing investors with a relatively predictable repayment schedule, even though the underlying assets are non-amortizing.

Credit Cards Asset Backed Securities receivables consist almost 20% of Asset Backed Securities market in US. Holders of credit cards may borrow funds on an unsecured basis up to an assigned limit, and pay the principal and interest as they wish, as long as they make the monthly minimum payment dues. A risk inherent in this kind of Asset Backed Securities is an early amortization event or fully repayment before the due date. When the underlying asset is fully paid, the issuer will loss the right to claim on interest of the outstanding balance.

### 2.4.3 Soft/Hard Bullet

There is also a kind of Asset Backed Securities which offers a single principle payment to investors known as 'Bullet Structure'.

'Bullet' structures, which are also used with revolving assets, are designed to return principal to investors in a single payment. Soft and hard bullet structures are also subject to early amortization risk.

Bullet structures are divided into two. They are Soft Bullets and Hard Bullets.

#### a) Soft Bullets

Soft bullets are the most common structure. The payment on the expected maturity is not guaranteed. If shortfall exists on the maturity date, extension maturity will be given usually for another one to three years for the remaining principal payments.