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ASSET SECURITIZATION: CONVERTING INTANGIBLE ASSETS INTO FINANCIAL SECURITIES

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Abstract: The financial landscape witnessed a significant transformation in the 1980s with the emergence of a groundbreaking innovation known as the securitization of assets. This innovation fundamentally reshaped the role of financial intermediaries within the capital market. Securitization involves the process through which financial intermediaries, such as investment banks, package and sell property assets from owners to investors in the form of securities. During this process, the property assets are detached from the owner's balance sheet, and funds are raised directly from investors who acquire tradable instruments representing a claim on the underlying debt, independent of the original owner. The concept of asset securitization originated in the United States during the 1970s and has since become a pivotal and highly valued financial product in global capital markets.

Keywords: Asset securitization, Financial innovation, Capital market transformation, Investment banks, Securitization process.

1. Introduction

The most important financial innovation in 1980's which strongly affected the role of financial intermediaries in capital market, was changing properties into securities. This is a process in which financial intermediaries such as investment banks sell properties of the owners through securities, directly to investors. In this process, properties of the owner is separated from its balance sheet, and instead providing funds is being done by investors who buy an exchangeable tool which is an index of above-mentioned debt, without referring to the first owner. Concept of changing properties into securities was first created and acquired in the U.S. in 1970s. This technique was accepted as a very important and valuable product in capital market during the past decades.

2. Abstract fundamentals& background review

2-1. Concept of securitization: The first recorded case of changing properties into securities, was done by National

Institute of Governmental Mortgage Loans in the U.S. in 1970. The institute expanded "*pass-through security*" which was a kind of securities based on mortgage loans and runs war soldiers' affairs, guaranteed by mortgage loans of Federal Inhabitation Office (Greenbaum &Thakor 1995). *Pass-through security* based on loans are symbols of direct possession in a mortgage loan basket which are the same, concerning due date, profit rate, and the same features. In this process, a portfolio is being sold to a warrantor, and possessive certifications are directly being sold to investors: in a way that each certification shows a debt against all properties. Regarding concept of *pass-through security*, professionals have presented some definitions, however all suggest that above-mentioned certificate is a document symbolizing "having the right of exact immediate profit of future cash flows of a property" (Mojtahed [et al],2011).

Consequently, a person who buys securities, has certainly the access to that part of properties which has already bought, based on the definition of possessions on its future cash flows benefits, and though until he has not sold

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those securities, he has the right to the future benefits of the property. However such rights is necessarily goes to the owner and the certificate of its holder.

2-2. Definition of securitization: Before 1980's, the concept of securitization used to be applied to define process of replacing securities' issuance in order to raise finance from banks, though loan is the borrowers commitment to those lenders. Economists have called it (providing financial resources) **disintermediation** (Kendal & Fishman, 2000). Today securitization has more particular definition according to what has been mentioned by Lampkain (1999).

Recently, the expression of **structured financing** has been used in raising finance. **Structured financing** is a process in which all sold properties are recollected and regained. Securities' profit presents cash flows income and interests issue done loans for third party investors. Fabbozi, Davis, & Chadhuri (2006) pointed out that this expression covers a wide range of financial market activities. Here is their applicable definition for **structured financing**: "...these techniques used when necessary for publisher of property holder, whether related to financing, risk transferring, or any other needs cannot be prepared as a product or an accessible tool. So, in order to meet this demand all available products and techniques should be designed as a customized product or process. Therefore, a

Structured financing is a flexible financial engineering instrument".

According to this definition, **structured financing** includes not only securitization, but also structured credits. The following definition is published by *International Liquidation Bank* in relation to **structured financing** in 2005: "Structured financing instruments can be defined through three main features:

1. Aggregating capital (based on cash funds)
2. Scanning debts to be supported by properties (this feature distinguishes between structured financing & traditional securitization instruments)
3. Cutting credit risk connection of deposited properties from promoter credit risk which is normally done through a mediator organization SPV that is independent and has a limited life. (Quoted by Rah Neshin & Riahi, 1393, p.20).

3- **2.General Process of Changing Properties to securitization:**

In this process, a company or an institute which needs finance, establishes a company having a special purpose and sells a part of its properties to a SPV (Special Purpose Vehicle) which has future cash- In- flows. SPV issues debt securities (ABS = Asset Backed Securities) in order to provide necessary fund to buy above-mentioned financial properties and then presents it to investors. Then SPV pays money which has received from selling debt securities to main company in order to buy financial properties. Investors who have bought such instruments may take restitution received from future cash-In- flows came from SPV financial properties. This process is shown in

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figure 1.

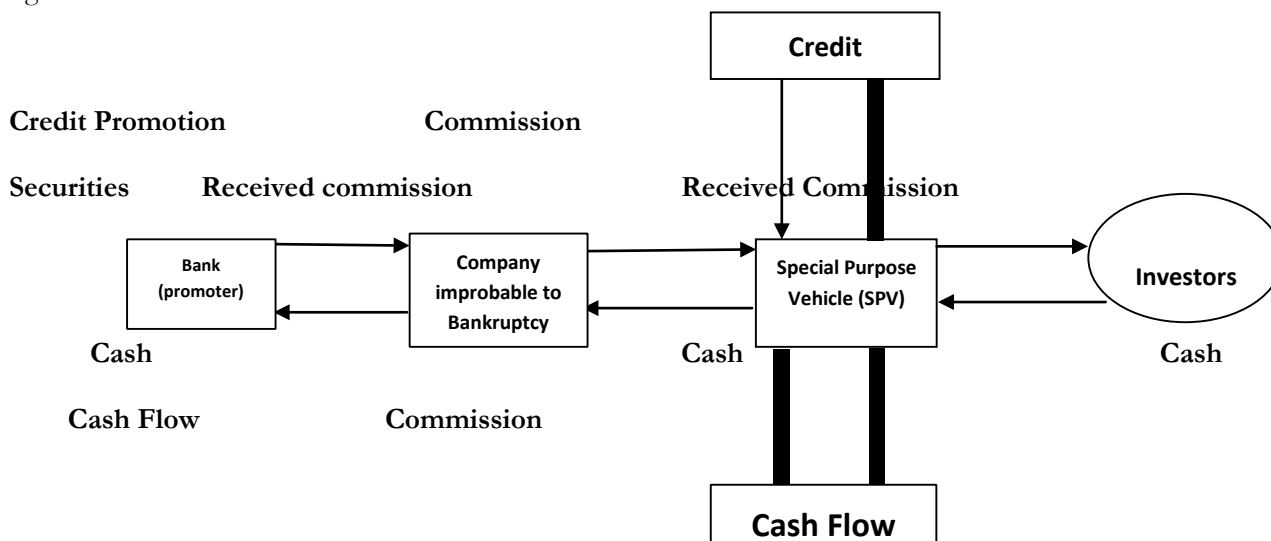


Figure 1: benefit bonds

From the issuers' point of view, target property or cash flow would be paid separately due to balance sheet separation and from the investor's point of view; separation of property and future cash-In- flow would be to secure exchange against potential bankruptcy of securities' issuers and credit risk of property. So investors prefer minimum risk to properties risk or debts of securities' issuers.

4- 2.General Process of Changing Properties to securitization:

In below table the advantages of securitization based on various beneficiaries are presented.

finance applicants	Banks & Financial Institutes	Government
1. balance sheet separation and cash equivalent replacements	1. More investor accessibility	1. More effective finance methods
2. Making new receivables by securities publisher	2. ROE increase, more balance sheet items allocation to other needs	2. Better risk management and consequently improving financial policies and facilitating new financial market creation
3. Reducing investment costs for publisher compared to traditional securities	3. Better ALM	3. Variety of financial properties and focus on optimized usage of resources
4. ROE increase , through using less capital	4. Credit risk, liquidity and interest rate decrease	
5. Increasing & diversification of financing methods	5. Economy of scale	
6. ROA increase, through reducing finance costs		

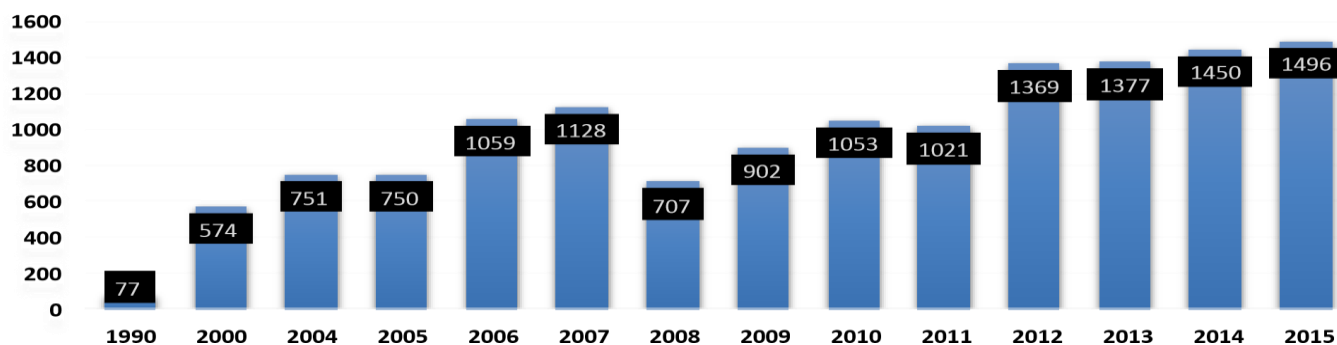
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7. Decreasing credit risk facing through minimizing some of high risk properties out of company balance sheet and or replacing them with low risk properties		
8. Adjusting financial resources of some properties through reinforcing financing methods with longer due dates compared to other markets		

Table 1: Advantages of securitization on various beneficiaries

5- **2.Value of Published Bonds in Iran & throughout the World:** There is no exact estimation of debt securities

value in the world. In graph 1 volume/amount of newly published debt bonds in the U.S is presented.



Graph 1: Amount of issued debt securities from 1990 to 2015 in the U.S numbers in billion dollars (Statista

As seen, within 25 years 13,710 billion dollars debt securities have been totally issued in the U.S. Compared to total amount of published bonds (13,710 billion dollars), amount of issued bonds in first ten years of mentioned period (77 billion dollars) has been about 0.05% of total bonds. This increase shows approval, acceptance, & application of securitization for financing. In Iran, the first bond has been issued in 2005, first Ijarah Sukuk in 2010, first Murabaha Sukuk in 2012, and finally a listed company has issued Istisna & a bank published the first mortgage – backed securities (MBS) in 2015 through the Securities & Exchange Organization permit. In table 2, value of issued bonds in Iran shown from 2005 to 2016.

Type of securities	Number of issued Bonds	Total Amount of issued Bonds	Buyers	having non-bank Guarantee	having bank & nonbank Syndicate guarantee	having bank Guarantee
Government	28	92,431	59,131	7	1	20
Ijarah	32	85,055	77,251	9	2	21
Murabaha	10	28,565	26,564	3	0	7
MBS	1	3,000	3,000	0	0	1
Istisna	1	1,629	1,629	1	0	0
Total	72	210,680	167,575	20	3	49

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Table 2: Value of Issued bonds in Iran capital market (billion Rials), Source: The Securities & Exchange Organization (2017)

3. Brand and Its Different Types:

According to definition, brand or trade mark is sign, mark, design, or a combination of these, which are used to identify products or services of seller or a group of sellers and to distinguish between these products or competitors services. Trade mark (brand) is to identify and distinguish seller or producer. Actually, the trade mark (brand) is a seller permanent commitment to present a collection of special features, advantages, and services to buyers. Trade mark can be a symbol of some more complicated cases such as product identity, product character, and culture of how to use a product as well as personality of product user. Brands are invisible properties of companies which increase final value of product in costumers' point of view and also will result in added value for investors and consequently increase company income. Brand are various, which some of its famous ones are as follows:

1. Trade sign (Brand): It is a name, an expression, a symbol, a design or a combination of them that tends to identify product and services of a seller or a group of sellers and also to distinguish between these and other competitors.
2. Brand Name: That part of a sign which can be stated verbally. For instance, Fiat car, Sony TV, Bata shoes, etc.
3. Brand Mark: Part of a brand name that can be recognized but cannot be imitated. For instance, a symbol, a design, or color of a particular letter.

3- 1.Value of Top Brands in the World:

Based on latest estimations in Forbs & Interbrand sites, value of 100 top global brands in 2017 has been about 1.948 billion USD according to various industries which is summarized in table 3. Based on above-mentioned table, 42% of all top brands' value (approximately 810.7 billion dollars) belong to Telecommunication & Information Technology and Related Industries. Services and entertainment industry goes to second class having 14% of total value of top famous brands in the world. If services are considered as technology and other welfare & financial services, then total value of top brands in this field reaches to 63% of all brand values. These companies such as Apple, Google, & Microsoft have respectively the highest brand value as 184, 140, & 87 billion dollars, each one has 20% of 100 top global brands' value.

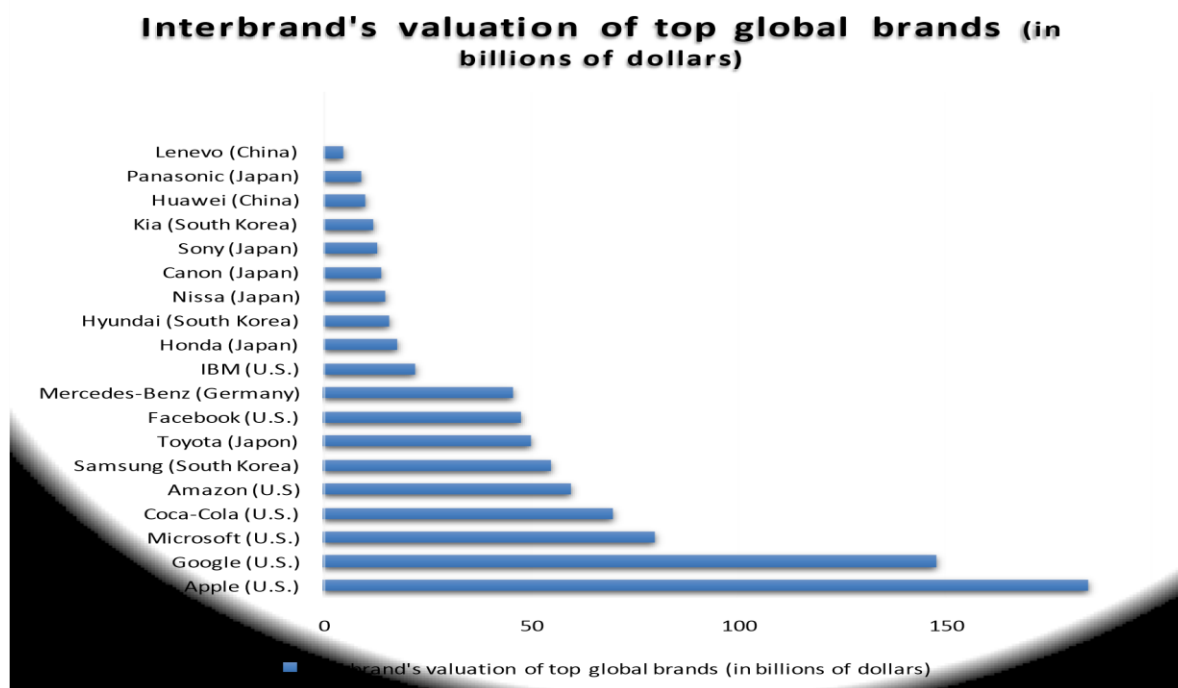
Brand Income	Brand Value	Industry
Billion Dollar	Billion Dollar	
1589,2	810,7	Technology&Information Industry&Telecommunication
394,8	278,3	Services(entertainment,restaurant,transportation,packing,...)
979,4	197,8	Automobil & related industries
729,9	150,4	Financial services
1011,5	119,5	Retail
614,5	393,6	Other industries
5337,6	1948,3	Total sum of industries

Table 3.Value & Income of 100 top companies of the world in 2017 by Forbes

According to the estimations, regarding amount of incomes made through brands, we can say total income via 100 top global brands in 2017,were 5,337.6 billion USD. This number shows that income gained by brand has been 2.7 times more than the value of top global brands. So, we conclude that 2.7 units of income have been made

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for each unit of brand dollar. Table of value and grade of top global brands is presented below. Interbrand valuations of top global brands (p.9)



3-2. Top Brands in Iran:

No exact and valid estimation has been formally published yet regarding brands and their values and also income gained through brand in Iran. According to what has been mentioned in 10th National Festival of Champions of Iran Industry, Tadbir Smart Study Group, has selected 300 top brands of Iran to be evaluated and classified in 3 groups of A, B, & C which estimated their approximate value as 300 thousand billion Rials. However, according to some informal assessment, some of top and known Iranian brands (as in table 4) are considered as pricing basis (at the time of assignment).

NO	Company's name	Value (Billion IRR)	Announcer source	Valuation Year
1	Iran Air	15000	Private Organization	2011
2	Iran Khudro	4000	Iran khudro	2014
3	Persepolis sports club	2900	Private Organization	2014
4	Esteghlal sports club	2900	Private Organization	2014
5	Iran Saderat Bank	5035	Benker Tractate	2014
6	Iran Melli Bank	4293	Benker Tractate	2014

Table 4: Brand value of some top companies according to latest assessments. IRR means Iranian Rials(1 USD =43,295 IRR)

3-3. Necessity to Use Brand in Financing Human Capital-Based Companies:

In securitization process, promoter for financing issues new bonds based on his properties, which are mostly claims and mortgage loans. Nowadays, knowledge-based companies have an important role one conomy, and technology-based companies specially play an important role in this area. As it was mentioned in table 3, 63% of

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global brands' value belongs to technology and services sector. An outstanding point is the dependency to human and knowledge based companies which results in gaining more profits and create and promote values. The value of brand might be the reflection of the role of human capitals in such companies. In fact, the value of brand can reflect the ability and capability to provide future income gained through its effects on the market. Leading companies do not usually depend on their physical properties but on their human capitals. Ongoing companies are not able to have an access to financial resources to meet their demands, so they may face with some limitations. Therefore, we suggest that these companies use their most important and valuable property (brand), for financing. By expanding these kinds of activities and making more values to the companies, the value of brand will be strengthened.

Benefit Bonds:

Benefit can be considered as continuous earnings derived from particular property or the right to use services or other transferable rights which can be the basis to issue benefit bonds. Benefit bond (Manfaat Sukuk) is a kind of securities that shows in-common possession of its holder for specified amount of future benefits derived from properties or presents particular services and any specified transferable rights in a certain period of time. These bonds are exchangeable in stock exchange or other markets out of it. In these bonds, the investors are the owner of benefit derived from a special property which is a basis to issued bonds. Based on earnings received from this specified property, the investors' profit or loss would be defined. Benefit bonds are one of various securities which are based on rent contract and are exchangeable in secondary market. Benefit bonds are being used in different ways: these bonds can be used as assignment of other future benefits received from property or long-lasting property. Benefit bonds also include a wide range of services and public facilities which enjoy future benefits of such services. These services may contain the following:

1. Services related to affairs such as power (electricity, gas), cleaning garbage, and post services,
2. Phone, radio, air lines & bridges,
3. Intercity and suburban railway services
4. Ports and roads services
5. Hotels, restaurants, & public health and training services.

One of these services or benefits that can be trusted to issue benefit bonds is benefit received from brand name of well-known and international companies. In figure 1, operational type of bonds is presented. **5 Commission contract**

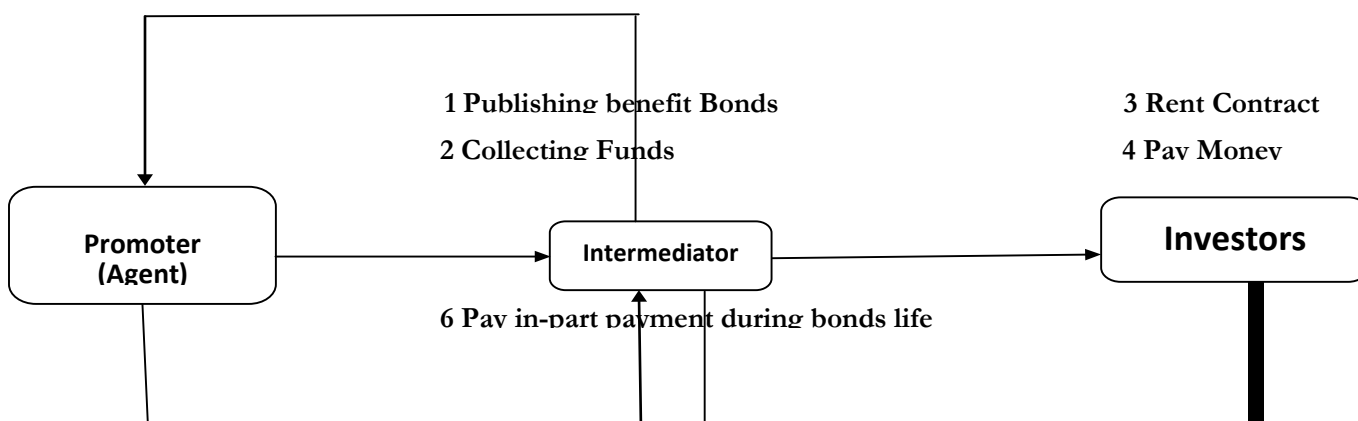


Figure 1: **Securitization** Process

Benefit bonds are classified in 3 groups:

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1. In this type such as highway bond, bond holder has to wait till the due date of bonds to gain all future benefits derived from the property.
2. In this type such as hotel bond, bond holder does not have to wait till the due date of bonds to gain all future benefits derived from the property.
3. In this type, the right to use services or other transferable rights would be the basis to publish such as the right to use certain type of media for instance in TV commercial breaks.

3-5. Elements of Benefit Bonds:

These elements include promoter (or issuers who issue bonds), warrantor (legal entity who warrants paying related amounts of the bonds), trustee (reliable auditor institute of stock exchange which is responsible for ensuring precision and accuracy of promoter operation against made benefits), selling agent (legal entity who sells benefit bonds on behalf of mediator), & paying agent (central depository company of securities and funds liquidation). Promoter may be one of below explained ones having related specifications:

A. Joint stock corporations or a non-governmental organization or an institute:

- * Being the holder of bonds should have been already deserved to the bond's rights.
- * Auditor and his promoter's observations regarding financial statements within last two fiscal years should not be adverse or disclaimer.

B. Governmental organizations or municipalities.

3-6. Economy analysis of benefit bonds from companies' points of view:

A. Since some companies can receive needed capital to expand their activities through these bonds, this instrument may have a positive effect on growing some parts of economy. B. If primary and secondary markets of benefit bonds move toward a clear and vivid competition, restitution rate of bonds will move toward real added value and will help producers to enjoy a fair distribution of their benefits. Moreover, this instrument can influence profit rate to a real restitution rates of capital as an agent of economic added value. C. These companies having a brand can use **Brand Benefit Bonds**. Using such bonds may motivate companies to try more in order to develop their services and to promote quality of services and branding.

3-7. Secondary Market of Benefit Bonds:

Benefit bonds holders deserve the right to use properties' benefits or services of service companies directly in their specified due dates or they can assign them to benefits & services' applicants till their due dates. So these bonds have a lot of advantages for their holders, first they are a kind of reserving benefits and services in a specified time based on which a person can make his plans, second, using services and benefits through these bonds would be in lower cost, and third, whenever the bonds holder needs cash flow or disregards using services and benefits, he can assign bonds to another person. Above-mentioned advantages cause supply and demand and then to be formed for benefit bonds. If benefit bonds present clearer services and benefits and if bonds issuer respects more to bonds holders' rights, secondary market will be booming more. Price of these bonds and profits derived from their transactions depend largely on many factors such as property holder and service companies' credit, face value of services and benefits, restitution rate of similar financial tools, place and time of presenting services and benefits.

3-8. Requirements of Benefit Bonds:

*Promoter is responsible for all costs related to issuing of benefit bonds. *Buyers through buying bonds assign an irrevocable power of attorney to SPV to take any steps concluding necessary contracts with promoter in order to enjoy benefits of bonds and collect funds received from them. Subject of bonds issuance should be mentioned in documents which buying bonds means acceptance of SPV assignment and they would be valid and irrevocable till due date final liquidation of bonds. *Promoter should take necessary steps in order to use properties which make benefits of bonds, to present services and to take advantage of other transferable rights of benefit subject. Promoter is responsible for using benefits of bonds, presenting services, & taking advantage of other transferable

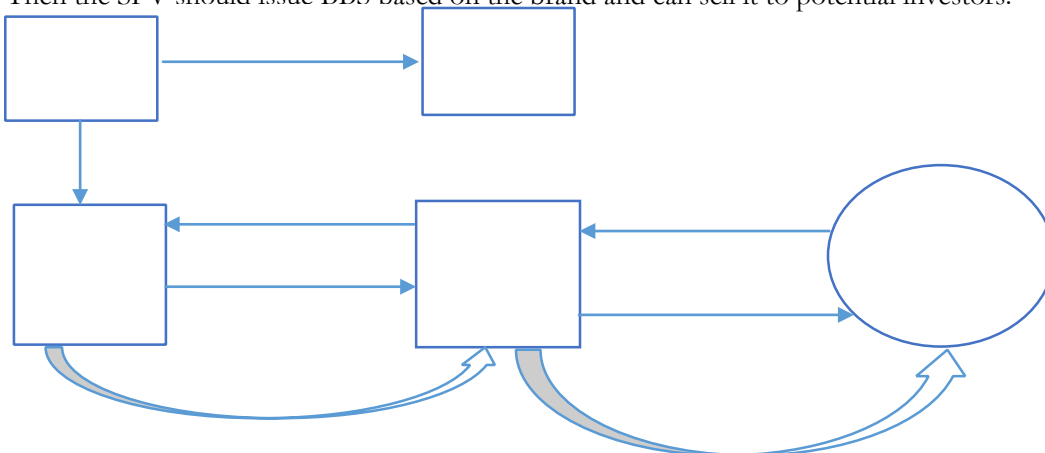
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rights, receiving earnings resulted from benefits and paying them to SPV. *Before issuing bonds, promoter is obliged to design his financial and accounting system in a way that recording and reporting detailed operation would be easily and clearly possible, regardless of other operation and activity of promoter.

4. Brand Benefit Securities

It is essential that there exists an asset in securitization, and as this kind of securitization is our model, in the first step, the brand must be registered and evaluated as an asset of the issuer. Due to the general method of securitization, the structure of Brand Benefit Securities, BBS, would be suggested as shown in figure 2. According to the suggested structure, SPV is needed who is responsible for BBS payment at the due date, to the owner of the asset (main owner of the asset that the BBS must be returned to, at due date). After registering the designated brand in intellectual property market and evaluation of it, the owner should transfer the brand right (under a specific contract)

to a SPV. Then the SPV should issue BBS based on the brand and can sell it to potential investors.



In reference with the transferring brand right, the promoter (agent) would pay SPV benefit for the periodic usage of brand benefit, and the SPV will distribute it among investors as a profit, on behalf of the promoter (agent). In order the assurance of conforming the conditions of Brand right Transferring Contract, a designated organization that is in charge of inspection the quality and quantity of products which produced under the designated brand will be appointed that subsequently reports the results of the inspection to trustee. As of due date of BBS, the designated brand would be returned to the issuer and the initial investment would be returned to investors as well. If the issuer do not fulfil its commitment during the BBS period and at the due date, in order to protect investors' rights, the benefit of the brand will be transferred to others via intellectual property market based on the above mentioned contract.

4.1 The roles and responsibilities of auditing in BBS

As explained before, brand is one of intangible assets which has been formed in public minds as a result of reputation derived indirectly from some specific aspects of products among consumers, customers and local and international markets. The value of a brand is largely dependent on the quality of the reputable products, providing aftersales services and continuity of its maintenance, and perseverance of its market share related to the designated products. Decline in the quality of product and services and also new brands penetrated into market, as rivals due to which the market share of the brand might decrease, are considered as operational risks to which BBS owner are exposed to. Hence, in order to manage (minimizing) these risks, the existence of an auditing unit who is in charge of assuring that the value of brand is being protected till BBS due date and promoter (agent) fulfil all its commitments in usage of brand and reassuring financial regulations.

The auditing institution tasks are as follows:

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- 1- Assuring the compliance of quality of the products and BBS issuer services in accordance with transferring brand right contract;
- 2- Assuring that the amount of products is in accordance with the scheduled plan and transferring brand right contract;
- 3- Monitoring the brand reputation among consumers and customers;
- 4- Reporting to investors and trustee;
- 5- Monitoring, acquiring plan of action and amendments to preventing and adjusting the brand's seat and the related investors as well.

4.2 The Scope of BBS Application

According to its special aspects, BBS applications explained as follows:

- 1- Financing for the companies holding a reputable brand;
- 2- Financing for knowledge based companies, which are rely on their human based capital, not on physical assets, for instance, companies in IT, ICT and high-tech;
- 3- Financing for companies based on their employees skills, like sport clubs.

4.3 The benefits of BBS

BBS has a wide variety of benefits from the point of view of issuer, Promoter (agent) and the Market, which has been shown below:

- 1- Application of intangible assets of companies (in this case Brand) in order to raise fund and to develop companies, specifically the ones which based on human resources (knowledge and skills);
- 2- Decreasing financial costs of human capital based companies;
- 3- Using the capacity of social reputation of brand to raise fund, especially using social potential of advocates of sport clubs;
- 4- Protecting brand seat in the market and facilitating the act of developing brands;
- 5- Evaluating and updating the brand regularly and permanently;
- 6- Creating the possibility if developing a brand and its intellectual assets in the related market.

4.4 The risks of BBS

Related risks to BBS are as follows:

- 1- The value of BBS is highly depended on the value of brand itself, its volatility and the possibility of loss or failure in brand value.
- 2- The value of brand is strongly related to the issuer management.
- 3- Market share of the products or services on which BBS is issued can easily affect the value of BBS.
- 4- The dependency of BBS value on the life cycle of the product when it's not revised and modified after maturity stage.

4.5 To ols and ways of BBS risk management

Due to the fact that BBS is a new structured finance method, it is necessary that some new measurements defined and designed in order to protect diversified stakeholders' rights so investors' fears of their capital decreasing, minimized and BBS applications developed. The tools and risk management methods of BBS are stated in table 5 below.

General Risks	Special Risks	Risk management methods	Tools
Operational risk	producing goods and services not based on the schedule	Inspecting and auditing unit	Contractual regulations, periodical reports on the quantity of products

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	quality volatility of products and services	technical inspection	periodical reports on the quality of products and services
	providing services to the client	technical inspection	Periodical and annual reports on the quality of products and services
Credit Risk	dishonoring basic capital	Trustee and guarantor	Contractual regulations on transferring the Brand benefit through intellectual property market
	lack of commitment to pay benefit to investors	Trustee and profit guarantor	Contractual regulations on transferring the Brand benefit through intellectual property market
	dishonoring basic capital by promoter (agent)	guarantor	Contractual regulations on transferring the Brand benefit through intellectual property market
Market Risk	volatility of brand Value	Trustee and auditing unit	Monitoring the quality, quantity, market share, brand reputation and reporting of these items.

5. Conclusion and suggestions

In this paper, we only focus on a new model on securitization based on the benefits of brand for financing, but the followings are urgently needed to issue the BBS:

- 1- Reviewing and evaluating the laws and regulations, social and economic effects of BBS;
- 2- Reviewing the BBS execution in those companies holding the brand;
- 3- Reviewing the BBS execution in sport clubs;
- 4- Reviewing the BBS issuing by Venture Capitals, ingenious investments and knowledge-based organizations;
- 5- Reviewing the BBS facilitating through capital markets.

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