

Determinants Contributing to the Primary Market Spread of Securitization in Malaysia

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During the year 1997, the Asian financial crisis disclosed the inherent weaknesses of the financial market in Asia. Organisations had an over-dependence to the banks as the primary sources of fund is one of the reasons why companies faced difficulty during the financial crisis. One of the factors that contributed to the financial crisis was that organizations failed to diversify their financing structure. It is to be noted that when organisations want to source for funds, they can either issue stocks, bonds or finance from banks locally or globally. Source capital from equity and borrowing through debt is considered difficult, expensive and will distort the financial leverage of the company. The development of securitization allows the organization to smooth up their cash flow by converting the illiquid assets into a liquid asset through a special purpose vehicle (SPV). SPV is a legally separated entity from the company or the holder of the assets. SPV can take the forms of either a trust, corporation or partnership set up just for the purchasing of the originator's assets. There are many literature pieces of research that regard the factors that contribute to the pricing of corporate bonds but there are few empirical studies on the determinants on securitization in Malaysia. In view of the increases of awareness of securitization, this paper intends to investigate the determinants contribute to the primary market spread of securitization in Malaysia. The primary market rate is the initial or first-time offer rate by the originator and issued by the SPV. The rate offered by the SPV is based on the underlying lease payment form the originator collection. This research applied regression analysis for the period from 2004 to 2014. The regression results show that three variables

have negative and one positive relationship with the primary market spread. Thus, it can conclude that selective variables can act as an important influence to the primary market spread in helping the originators setting the competitive prices in securitization.

Key words: *Spread, Securitization, determinants, regression analysis and SPV.*

Introduction

During the year 1997 the Asian financial crisis disclosed the weaknesses of the financial market in Asia. Organizations that over dependence to the traditional way of sourcing fund is one of the reasons why companies facing difficulty during the financial crisis. One of the factors that contributed to the financial crisis was the organizations failed to diversify the company financing structure. The issue of the local currency bond by the corporate sector is still considered low as compared to the worldwide bond market (Bhattacharyay 2013). To develop and expand the financial system in Malaysia, in the year 2001 the Malaysiangovernment introduced the capital market master plan to improve the corporate bond market or securitization as an alternative source of fund for organisations (Kien Hwa, Ting., & Yen Keng 2004).

It is to be noted that when organisations want to source for funds, they can either issue stocks, bonds or finance from banks locally or globally. Source capital from equity and borrowing through debt is considered difficult, expensive and will distort the financial leverage of the company. As now securitization is able to provide the “off-balance-sheet” source of funds with reasonable price. Introduction of securitization in the market not only provide long-term borrowing and also offer a lower cost to the originator. For investors, securitization not only allows diversification but also direct exposure to lower risk (J.B. Hans 2011). For US banks, they used securitization to transfer risk and increase performance (Schuetz 2011).

Financial markets consist primarily of three types of instruments: direct obligations of corporations and sovereigns, derivatives, such as swaps and futures and securitized and structured assets (Davidson, Ching, Sanders, & Wolff, 2003). Introduce of securitization in U.S by the department of housing and urban development at 1970 marked the first asset securitization in the world. The first Residential Mortgage-Backed Security (RMBS) was created this time to promote the liquidity of the market.

Asset securitization involves the transfer of the illiquid assets or risks to a third party where such transfer is funded by the issuance of debt securities called Asset-Backed Debt Securities (ABS) to investors. Firms issued of ABS due to the need for cash in order to grow and expand its business, locking their money in illiquid assets will not help in this case. The

Sperry Lease Finance Corporation created the first ABS in the year of 1985. The securities were backed by its computer equipment leases where the cash flows can be predicted. In the recent year, ABS has grown and evolved to include a variety of asset types for examples: credit card receivables, manufactured housing loans, auto loans, home equity loans, student loans and even future entertainment royalties.

Traditionally organizations will receive the payments stream or cash flow spread out over the assets life but as compare to securitization the originators will receive the payments as a lump sum in advance. Originators refer to sponsor or parent company. Sometime originators will serve as an agent to collect back the regular loans or lease payments and pay them back to Special Purpose Vehicle (SPV) with some fee for their work. SPV is a legally separated entity from the company or the holder of the assets. SPV can take as the forms of trust, corporation or partnership set up just for purchasing of the originator's assets.

There is a lot of literature study about securitization, Ainsworth (2011) found that market-based variables can be used to explain the variation of CDS spread in his study of Australian CDS spread research. In the year 2014, an internal versus external factors used in analyzing the impact to the emerging market bond spread have been conducted by Kennedy and Palerm (2014), and the research provides an insight to the securitization spread. According to the researchers, political risk and size play an important role in reducing the borrowing cost. The most recent research done in the year 2017 by Bertay, Gong, and Wagner (2017) regarding the types of securitization impact on the economic growth. The study suggested that household and business securitization associated with the economic activity.

Surprisingly, Malaysia is the largest securitization market in ASEAN countries. After the Asian currency crisis the Malaysian government created the regulatory framework for securitization to encourage companies to use securitization within Malaysia (Sekine, Kodachi, and Kamiyama 2008). As early as the year 1986, the Malaysian government formed the National Mortgage Corporation called the Cagamas Berhad (Cagamas) as to broaden the spread of house ownership and to growth the secondary mortgage market. The purpose of the forming of Cagamas is to provide liquidity to financial institutions at a reasonable cost for further expansion of financing for houses at an affordable cost (Kien Hwa, Ting., & Yen Keng 2004). Establishment of Cagamas as a Special Purpose vehicles (SPV) is marked as the starting of securitization in Malaysia (Ismail.S, Bakri.M.H 2014).

In the following section, we shall discuss our finding and results. The remainder of this article is arranged as follows. In section 2, background information will be detailed. Section 3, contains the statement of the problem. Section 4, is the explanation of data. Section 5, method use to analyze the data. Section 6, results and discussion. Section 7, the conclusion of the article.

Background Information

Asset-backed Securitization (ABS) has had significant growth and development in Malaysia in term of number and size (S. Ismail and Serguieva 2010). Guidelines introduced by Securities Commission Malaysia (SC) in 2001 on issuing securitization provide Malaysia firm to have more option in sourcing new fund (Rosalan Ali, Ismail, and Bakri 2013).

Malaysia is the major issuer of Islamic global bond by taking 54 per cent in 2008, 60 per cent in 2009 and 78 per cent in 2010 with the value of US\$40 billion (Shafinar Ismail et al. 2014). Securitization not only help to improving the company debt obligation and book value per share (Shafinar Ismail and Ali, Rosalan., Serguieva, A., Gregoriou 2008)(Rosalan Ali 2009) but also can be a way to reduce the burden of Malaysia government in providing education fund to the public and improve student's quality life by offering lower charges. The primary study focus is the possibility of issuing student loan-backed securitization in Malaysia (R. Ali, Ismail, and Bakri 2015). The most recent research is Ismail.S and Bakri.M.H (2014) study of factors contributed to the spread on the securitization of government-staff housing and personal loans. The organizations involved in the study were Cagamas and RCE Marketing only where Cagamas for a government housing loan and RCE for personal government-staff loans.

Malaysia not only practising Islamic way of issuing securitization or Sukuk and the good results in decreasing debt obligation and improve company book value per share attract many investors around the world. Malaysia's first ABS was introduced in the year 2001(Ismail et al., 2008). Studies between conventional and shariah regarding residential mortgage-backed securities (RMBS) also have shown that shariah RMBS performance better than Conventional RMBS. This study compared Cagamas performance using key financial ration for the year 2003, 2004 and 2005 (Rosalan Ali, Ismail, and Bakri 2013).

The first empirical analysis of factors contributes to the asset-backed securities conducted by Vink & Thibeault, A. E., (2008). In the following year, another studies find that credit rating and bond market condition play an important role in explaining the market spread (Vink, D., & Fabozzi 2009). The authors analyze the relationship between the nature of the assets and the primary market spread. In the year 2012, another investigation was conducted to compare the common pricing factors between ABS, MBS and CDO. Fabozzi & Vink, (2012) study the factors of primary spreads on U.K Residential Mortgage-Backed Securities. They analyze the credit ratings, subordination level, seniority, external credit enhancement and collateral quality toward the market spread. Meanwhile, Bakri, M.H. et. al (2014) and Bakri et al 2018 study the pre and post subprime mortgage crisis in Malaysia.

Statement of problems

When an organisation needs fund for rapid expansion for their business, it searches for a traditional way of funding. As the market provide more alternatives to choose, an organisation may want to choose a fund that offers a lower rate as the cost of operation will reduce. However, the securitization offer rate must be attractive enough to attract investors to invest in securitization. By adding new variables, elements in the study of securitization will improve the rate that an organization offers to market.

There are many pieces of research that regard the factors that contribute to the pricing of the corporate bond. Still, there is little empirical evidence on the determinants on securitization in Malaysia. This paper intends to investigate the possible factors that contribute to the spread of securitization in Malaysia. This paper will cover data from the year 2004 to the year 2014.

Data Description

Variables	Description	Expected Sign	
Dependent			
Spread	Spread is the different between the offered rate and overnight policy rate.		
<u>Internal Independent Variables</u>			
Maturity	Number of year to mature	+	MT. Firla-Cuchra (2005), Helwege and Turner (1998)
Tranches	Number of classes	-	Vink, D., & Thibeault, A. E. (2008)
Loan Size	Size of the Securitization	+	Liu and Skully (2005)
<u>External Independent Variable</u>			
GDP	Gross Domestic Product	-	Perego and Vermeulen (2016), Cantor and Packer (1996)

We use an overnight policy rate (OPR) as our benchmark to compare with the initial interest offers by the originators. The OPR data collected from Bank Negara website and the market spread is stated in basis points. The primary market rate is the initial or first-time offer rate by the originator and issued by the special-purpose vehicle (SPV). This is parallel with Bonsall, Koharki, and Neamtiu (2015) research paper which stated the initial credit rating is more accurate than the subsequent evaluating. The rate offered by the SPV is based on the underlying lease payment from the originator collections. The spread calculated as interest offered minus the OPR. The variables data collected for analysis is from Rating Agency Malaysia (RAM). RAM is a private and independent rating agency in Malaysia.

We divided the independent variables into two groups, internal variables and external variable. The internal variables include maturity, tranches and loan size where the external variable is GDP. Maturity has been considered in Merton (1974) studies in evaluating the corporate debt. In our study, we included maturity in a year. It was calculated as the year to mature starting from the current year of issue. We expect a positive coefficient relationship for maturity parallel with MT. Firla-Cuchra (2005) and Helwege and Turner (1998). Tranches refer to the number of classes for each transaction issued by the originators to collect fund. We expect that the number of tranches will have a negative coefficient with the spread (Vink, D., & Thibeault, A. E., 2008). Size of the loan may play an important role in contribution to the spread as we expect a positive coefficient relationship (Liu and Skully 2005). When the environment of the economy of the country is good where it can be reflected in the GDP, the market will offer many choices for investors to source for fund. As a result, we forecast that the relationship with spread is a negative coefficient (Cantor and Packer 1996).

Methodology

Black and Scholes (1973) provide an insight on how to evaluate the credit-risk debt. The model is a call option pricing model. Later Merton (1974) improve the model created by Black and Scholes. The model used to predict a relation between credit spreads and leverage, volatility, and interest rates. After since many researchers adopt and improve the model (Black and Cox 1976) (Longstaff and Schwartz 1995) (Duffee 1998) (Campbell and Taksler 2003).

In recent study, Ismail, Bakri and Ali (2014) used White (1980) method and regression analysis in measuring the primary market spread for 2004. Based on Vink model (2008) Ordinary Least Square Model (OLS), we come out the following simplified model:

$$\text{SPREAD} = \alpha_n + \beta_1 \text{Maturity} + \beta_2 \text{Tranches} + \beta_3 \text{Loan Size} + \beta_4 \text{GDP} + \varepsilon_i$$

Results and Discussion

Table 1

	OLS	Fixed Effect	Random Effect
Constant	1510.173*** (19.83)	556.3045* (1.81)	1132.094*** (7.27)
Maturity	23.7788*** (8.19)	3.8680* (2.64)	5.3555*** (3.66)
Tranches	0.6945 (0.20)	-21.7102*** (-4.06)	-10.9355*** (-3.11)
Loan Size	-48.3050*** (-11.61)	-5.2673 (-0.29)	-39.1782*** (-4.31)
GDP	-1.3594*** (-11.10)	-0.2442*** (3.60)	-0.3151*** (-4.62)
BP-LM	1168.58***	-	-
Hausman	-	-	23.33***
R ²	0.3437	0.1248	0.2415
Adjusted R ²	0.3390	-	-
Root MSE	138.21	-	-
F-Statistic	72.4***	36***	-
Wald Chi Square	-	-	164.17***
Num. of Observation	558	558	558

***, ** and * indicates significant at 0.01, 0.05 and 0.10 level respectively.

Note value in parenthesis () are t-value except for RE, it is z-value.

From Table 1 it could be concluded as per Hausman test, Random Effect is the appropriate model. The estimation output exhibits that the coefficient for loan size and GDP are negative whereas maturity is positively significant at 0.01 levels for pooled OLS. As for Random Effect, maturity is positively coefficient, and the others are negatively related.

Likewise, the significant negative relationship at 0.01 level of GDP growth is consistent with the findings of Perego and Vermeulen (2016), where they found a significantly negative relationship to bond market prices. Tranches is at a 0.01 level, and negative relationship with the primary market spread as same with Vink, D., & Thibeault, A. E. (2008).

Interestingly, the significant positive relationship at 0.10 level from maturity to primary market spread in Malaysia is coherent with the findings from the work of MT. Firla-Cuchra (2005), Helwege and Turner (1998). The use of maturity as one of the main explanations of the primary market spread of securitization in Malaysia is supporting the findings by Elton et al. (2004), Nakashima and Saito (2009).



Conclusions

Securitization becomes an important instrument for organization and investors to source better fund and to get higher return tool. This paper intends to find possible determinants that contribute to the primary market spread on securitization, especially in Malaysia market. The data we gather for the investigation is from the year 2004 to the year 2014 with a total of 558 data.

The analysis provides the maturity, tranches and GDP variables have a statistically significant impact on the primary market spread in Malaysia. Our study suggests that maturity has a positive relationship with the primary market spread in Malaysia. This indicates that the longer the securitization may increase the primary market spread where investors will request a higher return as the money invested will lock for a long period. For tranches, the result suggests a number of tranches may influence the primary market spread. The number of tranches increase may separate the risk among the tranches issue to investors. The reduction of risk may have resulted in the primary market spread will also reduce. The macrocosmic environment may play an important role in the primary market spread as an organization influence by the market. We suggest than GDP may contribute to the primary market spread since when the economy is consider good investors will shift to stock market make the bond market less attractive.

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