DETERMINANT OF SECURITIZATION SPREAD IN MALAYSIA

Mohammed Hariri Bakri♣
Universiti Teknikal Malaysia Melaka

Fadzlan Sufian
Xiamen University Malaysia

Baharom Abdul Hamid
International Centre for Education in Islamic Finance

Shafinar Ismail
Universiti Teknologi MARA

ABSTRACT

Malaysian firms have been reported to be involved in Asset-Backed Securities since 1986 when Cagamas Bhd was the pioneer in the field. This research aims to examine the factors influencing spread in Malaysia's securitization market. In order to provide a test of stability and a choice of model, the multicollinearity test was conducted by providing information on the degree of correlation between the explanatory variables used in the multivariate regression analysis. Ordinary Least Square method was used for baseline, and panel data analysis was applied during the study period (2004-2012) for a more robust check of the analysis. The data were obtained from 90 non-financial firms or institutions and the number of observations carried out was 387. The results show that four determinants influence or contribute to the primary market spread and are statistically significant in developing securitisation in Malaysia. It can be concluded that loan to value, maturity, debt and crisis significantly contribute to the determinant primary market spread. From five hypotheses, two hypotheses support that the determinants have a relationship with primary market spread. The result will act as a model and benchmark for other ASEAN countries to use as Malaysia was resilient during the subprime mortgage crisis in 2008. Policy makers can use this study to execute the timing and quantum of issuance securitisation. The other findings of this study have considerable policy relevance. It could be stated that the higher the risk reflects the higher the spread of the firm, especially when there is lower credit rating during crisis periods and higher debt. Therefore, the role of a firm is to reduce the risk in order to reduce the spread, and simultaneously reduce the cost of financing by finding alternative sources of funding. The continued success of the Malaysian securitisation firms depends on their efficiency in using their resources and the competitiveness of the firms.

Keywords: Primary market; Spread; Determinants; Asset backed securities and regression analysis

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♣Corresponding author: Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka, Hnag Tuah Jaya 76100, Durian Tunggal Melaka, Malaysia. Tel: +606 2708047 Email: hariri@utem.edu.my

1. INTRODUCTION

Asset-Backed Securities (ABS) were introduced by the government of the United States for housing loan funding programmes back in the 1970s and this was followed by other securities such as credit cards and mortgages. After 1980, ABS became one of the financing tools and it is currently widely used all over the world. In Malaysia, the government set up Cagamas Bhd, a mortgage-financing body that was formed based on Fannie Mae's and Freddie Mac's model in the US. This national mortgage corporation was established in 1986 and acts as an originator. Its fully-owned subsidiary, Cagamas MBS, as a Special Purpose Vehicle (SPV), is an intermediary between long-term investors and mortgage lenders whereby it issues financial instruments to capital market players. This study focuses on Malaysia as one of the developing securitisation markets.

To further define structured securities as transactions whose ratings leverage on their underlying assets, regardless of the regulatory guidelines under which the transactions had been approved, we have categorised the securities under four asset classes: (1) asset-backed securities (ABS) which involve the securitisation of automotive loans, consumer financing, credit-card receivables and progress-billing receivables; (2) commercial mortgage-backed securities (CMBS); (3) residential mortgage-backed securities (RMBS); and (4) collateralised debt obligations (CDOs). Collateralised bond obligations (or CBOs) and collateralised loan obligations (or CLOs) are collectively classified under CDO transactions.

At the same time, all structured securities backed by commercial real estate (CRE) are generically classified as CMBS. In 2001, the Securities Commission (SC) released its *Guidelines on the Offering of ABS* that paved the way for a CBO issuance by Prisma Assets Berhad, backed by a pool of Ringgit-denominated bonds. Another CBO transaction backed by corporate bonds and a CLO backed by rehabilitating corporate loans followed suit the same year. As at December 2009, an estimated 74 structured transactions had been approved under the SC's guidelines on private debt securities, ABS and other structured products, encompassing an array of asset classes. New issuances of structured finance securities peaked in 2005 and 2007, with almost a quarter of all securitisation transactions being issued in these two years alone. However, the market was rather subdued in the last two years. While the performance of local structured finance securities was largely immune from the myriad issues that affected many of their global counterparts in recent years, it suffered from the spill-over effects that curbed domestic appetite for such products. Given investors' flight to quality and the global market dislocation precipitated by the subprime credit crisis, many of the pipeline deals as of end-2008 were either cancelled or shelved indefinitely. With the pricing of structured credits already rated corporate bonds, these market disruptions also widened spreads to as high as 450 basis points by the end of 2009. The pricing premium over comparable rated corporate bonds was evident across all tenures with AA3-rated structured securities having the largest spread across all maturities relative to similarly rated corporate bonds. Malaysia is well-known for other instruments that are similar to bonds, such as Sukuk or Islamic bonds, which are structured in such a way so as to generate returns to investors without infringing Islamic law (that prohibits *riba* or interest). **Sukuk** represents undivided shares in the ownership of tangible assets relating to particular projects or special investment activity. Malaysia also grew its Sukuk from US$1.5bil (RM4.8bil) of the global outstanding amount in 2001 to over US$148bil (RM473.7bil) in June 2013. This accounted for 60.4% of the outstanding global Sukuk (Fong, 2013). This paper will focus on loan spread (primary market spread) represents the price for the risk associated with the security on the basis of information at the time of issue. In our sample, the spread is defined as the margin yielded by the security at issue above

a corresponding benchmark. The spread is presented in basis points. For floating rate issues, the spread (in basis points) is reported as a quoted margin above the Interbank Offered Rate. For fixed rate issues, the spread is represented in basis points over the closest benchmark of matching maturity. (Vink & Thibeault, 2008)

Since the 1970s, there has been extensive literature on the many factors that impact the pricing of corporate bonds. In contrast, in most developed countries (including in Malaysia, a major sector of the bond market) little empirical evidence has been published of the factors that impact the price of residential mortgage-backed securities (RMBS) (Fabozzi & Vink, 2012a). In the United Kingdom, RMBS is the largest securitisation sector and there are many published articles that provide empirical evidence on the factors that impact the pricing of new issues of UK's RMBS. In Malaysia, Cagamas is the key player for Residential and Commercial Mortgage-Backed Securities (CMBS), but not much research has been done on the determinants of primary market spread. Spread is the premium or yield that investors demand above a reference rate (Ali, Ismail & Bakri, 2015). In predicting CMBS loan performance, Seagraves (2012) suggested that additional information on the loan originators should be included, such as type of firm and the extent to which originators retain an equity stake in the target CMBS.

The findings from that research not only suggested that an investor must rely on certain factors such as credit rating, it also strongly suggested that investors do not ignore other credit factors beyond the assigned credit rating. Investors appear not to rely exclusively on these ratings although credit ratings play a major role in determining spreads because there are so many other factors such as enhancement, nature of asset, loan to value, no of trenches, time of issue, among many others.

The arguments made by Fabozzi (1998), Riddiough (1997), Black and Scholes (1973) and Ingersol (1987) suggest that the value of a derived security, such as CMO, can be traced to a specific set of underlying variables (cash flow, discount rates, etc.) that determine an arbitrage-free price. Security prices, however, can deviate from fundamental values. Gordon (1959), Summers (1986), Schiller (1989) and many others have argued that investors price securities differently than would be indicated by their fundamental values. Nonetheless, the existence of a deviation from fundamentals can indicate that the market for those securities is not operating efficiently, although it is assumed that such a deviation will create an arbitrage opportunity.

Therefore, this study seeks to fill in the research gap by exploring the determinants in Malaysia, focusing on the primary market spread in the securitisation market which had proven to be very successful as companies were still resilient even during the country's financial crisis (Bakri, Ali & Ismail, 2015). It is also crucial to understand the antecedents of spread so that benchmarking of asset pricing for securitisation can be carried out.

2. LITERATURE REVIEW

This part evaluates previous studies done on hypothetical discussions or models in terms of the main market spread, and they include the researches of Black and Cox (1976), Merton (1974), Vink (2008, 2012) and Duffee (1999). Support for the models can similarly be found in Capital Structure-based theories by Modigliani and Miller (1958), Leland (1994), Modigliani & Miller (1963) and Myers (1984).

Seagraves (2012) incorporated supplementary data concerning the loan originators including the type of firm in addition to the degree to which originators keep an equity stake to meet the objective of CMBS. That study recommended that an investor should not depend merely on a credit rating and powerfully proposed that investors do not reject supplementary credit issues ahead of the allocated credit score (Fabozzi & Vink, 2012b). Investors appear to not wholly depend on these scores even though credit ratings play a chief role in establishing spreads. This is related to numerous other issues including leverage and liquidity, in addition to exterior issues, such as interest and inflation, as well as firm management and control.

Ayotte and Gaon (2005) proposed a hypothetical approach that commences with an owner-manager who increases capital in an aggressive credit marketplace. The owner-manager selects a capital arrangement at zero date to decrease his whole financing expense, consequently optimising his payoff if the corporation thrives, and integrates the cash flow rights and differential control rights that a variety of lenders obtained at bankruptcy.

The researchers held that asset securitisation optimises the ex-post guard of bankruptcy creditors. The probability of having weak sponsors continuing in a condition of default is decreased. However, the continuation of the incompetent reduction relies greatly on the nature of the assets that are securitised. On the foundation of this argument, the researchers anticipated that asset securitisation is the major competent tool only when the supporting assets are replaceable. Assets can simply be replaced from exterior resources at a competitive cost in a sponsor default. Consequently, the sponsor might afterward have no inducement to file a claim with the SPV to get the securitised assets, and as a result, the SPV claim is not diluted (Vink & Thibeault, 2007).

There are numerous additional theoretical studies done that support asset securitisation specifications which are in line with corporate objectives in order to take advantage of securitisation in certain market imperfections. Despite the fact that the wide range of studies were founded on hypothetical instead of practical researches, several new hypothetical breakthroughs in the securitisation analysis and its employment have achieved significant insights for the arrangement and valuing aspects of the asset securitisation problem. Major papers comprising hypothetical researches have been conducted by Duffee (1999), Jobst (2002, 2003) and Choudhry and Fabozzi (2003) on initiating theoretical researches on particular objective vehicles. In addition to the above are the studies conducted by Gorton and Souleless (2005) and by Ayotte and Gaon (2005) on the influence on bankruptcy remoteness and collateralised debt obligations. More studies include Firla-Cuchra's (2005) experimental research which discussed launch spreads on arranged bonds; Schwarcz's (1994) asset-backed securitisation evocative researches and its employment; a hypothetical replica offered by Plantin (2004) where tranching shows itself as the best arrangement; Ammer and Clinton's (2004) experiential research which analysed the effect of credit rating modifications on the asset-backed securities pricing; hypothetical researches on initiating mortgage-backed securities conducted by Childs, Ott and Riddiough (1996) and Oldfield (2000); an experiential research by Firla-Cuchra and Jenkinson (2006) that analysed the tranching determinants; evocative researches by Jobst (2005) on the asset securitisation regulatory treatment; Stone and Zissu's (2000) evocative research on collateralised fund compulsions; and lastly, a hypothetical research by Cummins (2004) on the liabilities and life insurance assets securitisation.

The afore-mentioned researches comprehensively explain the structural considerations, valuing aspects and motivations of asset securitisation, which, in the marketplace, normally comprises ABS, MBS and CDO. The securitisation marketplace has matured into a major recognised fixed income division, but securitisation problems have also increased due to the various and ever-increasing array of assets. However, despite the fact that the size of market and the current development are crucial, the pertinent question to ask is: how exactly do monetary marketplace participants value these securities? The answer to this question lies in discovering how determinants affect the initial asset-backed securitisation market spread issues. The analysis of the determinants of principal asset-backed securitisation marketplace spread issues offers a highly useful and major improvement to the understanding of price factors..

The analysis showed that the primary market spread determinants are applicable for diverse monetary marketplace members. Corporations and financial institutions aiming to elevate money in the asset-backed marketplaces will be able to get rational approximations of the standard spread that they will face. Scoring agencies can also obtain experiential data concerning the way their credit risk assessments are assumed by investors. This research does not only balance out and complete the current academic literature on asset securitisation pricing issues, it also adds to the current vast body of experiential and hypothetical studies that aim to clarify the bond spread in excess of treasury yields (Duffee, 1999; Duffie, Pedersen & Singleton, 2003; and Collin-Dufresne, Goldstein & Martin, 2001). The spread (main marketplace spread) shows the price for the risk taken by the lender based on the data available at the time of issue. In our example, the spread is described as the distinction among the margins achieved by the security at issue on top of an equivalent standard. The standard is obtainable in foundation points. In terms of floating rate problems, the spread is supposed to be margin over Kuala Lumpur Interbank Offered Rate (KLIBOR). Sorge and Gadanecz (2004) mentioned that these spread measurements for fixed and floating rate problems have become normal in the loan pricing studies. Merely different refinements and adjustments are used in diverse researches to take the pricing variables comparability across fixed rate and floating problems in a superior fashion (Firla-Cuchra, 2005). However, as the spreads are not comprehensively studied at an Interbank Offered Rate, the risk distinction among the standards are not regulated.

3. METHODOLOGY

3.1.   *Primary Market Spread*

The primary market refers to the initial market in which new issues of bonds are distributed or placed but before the official issue date of the bonds. Different from straight bonds where the transactions are done through a bond dealer, the asset-backed securitisation (ABS) are issued by a special-purpose vehicle (SPV) through the bank dealer. All the financial institutions that have a right to issue asset-backed securitisation (ABS) must have a licence from the Securities Commission (SC).
The yield of asset-backed securitisation (ABS) in the primary market will be determined based on the length of maturity and it may also depend on the underlying assets themselves (Dabas et.al, 2017) As such, one of the complications in the yield, as opposed to normal bonds, is that it will be different both in maturity and in the underlying assets to be securitised, and will thus represent a different yield. This is justified as ABS, in most cases, are issued in tranches that have different maturities and yields (Gangwani, 1998; Vink, 2008).

When issuing asset-backed securitisation (ABS) to the investors, the special-purpose vehicle (SPV) has the obligation to pay the interest and principal. In asset-backed securitisation (ABS), the payment of interest obligations on each of the bond issues is dependent on the underlying lease payments from the originator, which are structured on matching tenures with the sub-lease. Thus, the ability of the originator to pay the lease assets will influence the determination of the interest (Bakri et al, 2017)

Besides the interest obligation, when issuing the asset-backed securitisation (ABS), a special-purpose vehicle (SPV) also has the obligation to repay the principal to the asset-backed securitisation (ABS) holders. The ultimate repayments of the bullet-structured principal at the expected maturity for each bond class are dependent on the sale of the pledged properties, either via the purchase option or through disposal to third parties.

In this study, the data used consisted of data obtained from 90 non-financial firms or institutions and the number of observations undertaken was 387. The data were extract from all securitization transaction in Malaysia since 2004 where the first Cagamas Berhad issued his tranches which focus on Asset Backed Securitized only which all tranches data are complete so that we could test empirical analysis.

3.2. *Internal Determinants*

In the corporate bond market, not only have the determinants of spreads been analyzed, the role of credit ratings in pricing has also been investigated. For example, Campbell and Taksler (2003) found that, consistent with what one would expect from the asset pricing theory, yield spreads are more closely associated with the volatility of a corporate bond issuer's stock price volatility than with its assigned rating. The subprime mortgage crisis that began in the summer of 2007 echoed the concerns about investor over-reliance on ratings. In response, in late 2008, industry associations such as the European Fund and Asset Management Association, the European Securitisation Forum, and Investment Management Association prepared industry guidelines to address the issue of over-reliance on ratings for securities products. Almost all the CREDIT RATING patterns presented by the coefficient dummies indicate that spreads rise when ratings worsen.

The hypothesis that demand from CLOs affect pricing on loan facilities holds that when CLO demand is high, then facilities that are most attractive to CLOs should be favoured by banks issuing loans. Consequently, these facilities should be priced more aggressively than facilities that are less attractive to CLOs. Since loan facilities originated by securitisation-active banks appear to be more likely to be securitized than facilities originated by non-securitisation-active banks, and because CLO demand appears to be more concentrated in B-rated debts, we hypothesise that spreads will reflect differences in this demand (Nadauld & Weisbach, 2012)

We expect that issuance size, which acts as a proxy for liquidity, should reduce spreads, while longer maturity should increase spreads (John, Lynch & Puri, 2003). Kleimeier and Megginson (2001) found a significant positive relationship between spread and maturity for all syndicated loans except for project finance.

3.3. *External Determinants*

The different point estimates, before and after the entry of the Euro Monetary Union, implies that for Germany as an EMU member, a one-percentage-point increase in the projected budget deficit ratio decreases the swap spread by five basis points (Kirsten & Felix, 2004).

Dueker (1997) also found that the yield spread is a relatively good in-sample predictor of recessions. Guidolin and Tam (2013) stated that when there is a financial crisis, the spread will increase.

Table 1 lists the variables used to proxy spread and its determinants. We also included the notations and the expected effects of the determinants according to the literature. Table 2 presents the summary statistics of the dependent and the explanatory variables

To examine the long-run as well as the short-run dynamics of the relationship between crime and weather, we employ the popular error-correction model. Banerjee et al. (1993, 1998) has criticized the two-stage error-correction models of giving substantial small-sample bias compared to the one-step error-correction model, where the long-run relation is restricted to being homogenous. In this study, following Yasar et al. (2006) the generalized one-step error-correction model (ECM) is estimated.

Table 1: Descriptive of the variables used in the regression models

Variable	Description	Hypothesize relationship with Spread and Sources
Dependent		
SPREAD	Spread is the premium or yield that investors demand above a reference ratein year *t*	NA (Vink, 2013)
Independent		
Internal Factors		
CR	Dummy variable : CR=1 – Aaa/AAA, CR=2 - Aa1/AA+ CR=3 - Aa2/AA, CR=4 - Aa3/AA- CR=5- A1/A+, CR=6 - A2/A, CR=7-A3/A-, CR=8 Baa1/BBB+ CR=9-Baa2/BBB, CR=10Baa3/BBB- CR=11-Ba1/BB+CR=12 Ba2/BB CR=13-Ba3/BB- CR=14-B1/B+	+ (Fabozzi, 2009)
LLTV	Loan-to-value ratio as the value of a loan cumulated according to the priority structure divided by the total issue amount of the transaction	– (Vink, 2008)
LMAT	Maturity represent how many years the tranche will be expire	+ (Kleimeier and Megginson, 2000)
External Factors		
LDEBT	Natural logarithm of country debt	- (Kirsten and Felix, 2004)
CRISIS	Construct dummy variables based on year of issue which is FINANCIAL CRISIS and NON FINANCIAL CRISIS.	+ (Guidolin and Tam, 2013)

Source: The data for internal factors are obtained from Rating Agency Malaysia The data for the external factors are sourced from International Monetary Fund (IMF)

Table 2 : Summary statistic of dependent and explanatory variables

	Mean	**Min**	**Max**	**Std. Dev**	**Skewness**	**Kurtosis**
LSPREAD	5.51	2.20	6.93	0.72	-1.17	3.12
CR	1.83	7.00	3.22	1.55	1.99	3.04
LLTV	-0.07	-2.21	4.25	1.16	2.67	6.87
LMAT	1.38	0.00	3.22	1.16	-0.24	-0.87
LDEBT	5.92	5.38	6.26	0.26	-0.42	-1.12
CRISIS	0.13	0.00	1.00	0.34	2.16	2.67

Note: The table presents the summary statistics of the variables used in the regression analysis

Econometric Specification

To test the relationship between bank profitability and the bank's specific and macroeconomic determinants described earlier, we estimated a linear regression model in the following form:

$$y_{jt} = \delta_j + \alpha' X_{ijt} + \beta' X_{et} + \varepsilon_{jt}, \tag{1}$$

where j refers to an individual financial institution; t refers to year; y_{jt} refers to SPREAD and is the observation of organisation j in a particular year t; X_i represents the internal factors (determinants) of a organisation; X_e represents the external factors (determinants) of a organisation; and ε_{jt} is a normally distributed random variable disturbance term. We applied the least square method to a fixed effects (FE) model, where the standard errors are calculated by using White's (1980) transformation to control for cross-section heteroscedasticity. The opportunity to use a fixed effects model rather than a random effects model was tested with the Hausman test. To check for the robustness of the results, we also reported results from the random effects model.

Extending Equation (1) to reflect the variables, as described in Table 1, the baseline model is formulated as follows:

$$SPREAD_{jt} = \delta_0 + \alpha_1 CR_{jt} + \alpha\_2 LLTV_{jt} + \alpha\_3 LMAT_{jt} + \beta_1 LDEBT_t + \beta_2 CRISIS + \varepsilon_{jt} \tag{2}$$

Table 3 provides information on the degree of correlation between the explanatory variables used in the multivariate regression analysis. The matrix shows that, in general, the correlation between the bank-specific variables is not strong, suggesting that multicollinearity problems are either not severe or non-existent. Kennedy (2008) pointed out that multicollinearity is a problem when the correlation is above 0.80, which is not the case here.

Table 3: Correlation matrix for the explanatory variables

Independent Variables	CR	LLTV	LMAT	LDEBT	CRISIS
CR	1				
LLTV	-0.111	1			
LLMAT	-0.066	0.061	1		
LDEBT	-0.152	0.095	-0.147	1	
CRISIS	0.034	-0.002	0.052	-0.240	1

The notation used in the table is defined as follows: CR is a proxy measure rating of issuance marketable securities, the value of rating start from AAA to B ; LLTV is a calculated as the ratio of total loan to value of securitization, calculated as a natural logarithm of loan to value ; LMAT is a measure of how long the tranches will be expire and calculated as a natural log of maturity; LDEBT is a proxy measure for country debt, calculated as natural logarithm of debt; CRISIS is a dummy variable of financial crisis, the value of financial crisis equal to 1 and non crisis equal to 0.

4. THE EMPIRICAL RESULTS

The regression results, focusing on the relationship between financial institutions spread and the explanatory variables, are presented in Table 4. To conserve space, the full regression results, which include both financial and non-financial- and time-specific fixed effects are not reported in the paper. In order for the test to proceed from pooled to panel data, we used Breusch and Pagan Lagragian multiplier test and found significance at the one-percent (1%) level. Therefore, we proceeded with the panel data.Several general comments regarding the test results are warranted. The model performed reasonably well, with most variables remaining stable across the various regressions tested. The explanatory power of the models was also reasonably high, as the *F*-statistics and Wald χ2 statistics for all models were significant at the one-percent level.

Table 4 : Multivariate regressions results

	(0) OLS	(1) Fixed effects	(2) Random effects	(3) Fixed effects	(4) Random effects
CONSTANT	5.781***	5.817***	5.305***	–3.101***	0.963
	(7.41)	(33.78)	(51.26)	(–3.06)	(1.25)
Firm Characteristic					
CR	0.175***	–0.039	0.149***	0.031	0.171***
	(8.38)	(–0.44)	(4.00)	(–0.41)	(4.71)
LLTV	-0.094***	–0.089	–0.053	0.295***	–0.02
	(-3.40)	(0.81)	(–1.09)	(3.10)	(–0.52)
LMAT	-0.167***	-0.164***	-0.121***	0.391***	0.100**
	(-4.49)	(-3.82)	(-3.21)	(5.56)	(1.97)

	(0) OLS	(1) Fixed effects	(2) Random effects	(3) Fixed effects	(4) Random effects
Economic and Market Conditions					
LDEBT	-0.056 (-0.44)	-	-	1.362*** (8.97)	0.671*** (5.72)
CRISIS	-0.270*** (-2.82)	-	-	-0.191*** (-3.97)	-0.216*** (-4.16)
*R*2	0.252	0.048	0.232	0.3240	0.2490
F-statistic	25.62***	5.01***	-	27.98***	
Wald χ2	-		28.77***		93.60***
χ2	-	11.31***	-	49.17***	-
BP-LM	327.21***	-	-	-	-
No. of observations	387	387	387	387	387

Notes: Values in parentheses are *t*-statistics.***, **, and * indicates significance at 1, 5, and 10% levels.

Concerning the impact of firm size, in Malaysia, CR is negatively related to the spread of the organisation, indicating a negative relationship between company spread and credit rating. The negative coefficient indicates that lower (higher) credit rating tends to earn larger (smaller) spread. It is interesting to note that the coefficient of the variable clearly explains the model when other macroeconomic and financial indicators are controlled. This supports the findings of earlier studies. Campbell and Taksler (2003) found that, consistent with what one would expect from asset pricing theory, yield spreads are more closely associated with the volatility of a corporate bond issuer's stock price than with its assigned rating. Fabozzi (2009) offered explanations regarding how credit rating could have a negative impact on spread when credit rating is statistically significant at the one-percent level, and the pattern presented by the coefficient indicates that spreads rise when ratings worsen.

The coefficient of LLTV entered the regression model with a negative sign and is statistically not significant in the internal regression model but is significant at the one-percent level in the external determinant regression model. The empirical findings provide support for the findings of earlier studies such as that by Vink (2007). LLTV has a negative coefficient. On average, a one-percent increase in the level of subordination decreases spread by 24.8 basis points. This finding is consistent with the fact that issues with a higher loan to value ratio require a lower spread, though this is still surprising as credit ratings should capture differences in expected recovery rates in case of default. On the other hand, Vink (2008) found a positive relationship with Asset-Backed Securities but not with Mortgage-Backed Securities and Collateral Debt Obligation.

LLMAT exhibited a negative and significant impact for the internal regression model on the primary market spread in Malaysia and was positively significant at the one-percent level in the external determinant regression model. The results imply that an increase (decrease) in the maturity increases (decreases) the spread of organisations in Malaysia. Kleimeier and Megginson (2000) support the finding that there is a positive relationship.

The impact of macroeconomic conditions and financial industry variables on spread is positive on LDEBT and coefficient is negative on CRISIS. The results on the LDEBT support the argument on

the association between economic deficit or debt and the spread of the organisation. Referring to the impact of the primary market spread, LDEBT was entered into the regression models with the expected negative sign. However, the coefficient of the variable was positively significant in the external regression models. It shows that the higher the debt, the higher the spread is. Contrary to the findings by Kirsten and Felix (2004), the empirical findings seem to imply that the LDEBT is negatively related to Malaysia's primary market spread during the period under study. Guidolin and Tam (2013) pointed out that crisis may have direct effects. The impact of CRISIS on spread is significant in the regression models during the period under study in the Malaysian primary market spread.

5. CONCLUSION

The paper seeks to examine the factors that influence the primary market spread of organisations in a developing economy. The analysis is specifically confined to the firms that were operating in the Malaysian securitisation sector during the period 2004 to 2012. The empirical findings of this study suggest that all the firm-specific determinant variables have a statistically significant impact on the primary market spread in Malaysia except on credit rating. During the period under study, the results suggest that credit rating, loan to value and maturity are positively related to primary market spread. The empirical findings seem to suggest that the crisis is negatively related to Malaysia's primary market spread, implying that during the period under study, the level of crisis was unanticipated by the firms. During the crisis of the subprime mortgage in the United States, it was shown that our Malaysian firms stayed resilient (Bakri, Ali & Ismail, 2016). On the other hand, LDEBT positively and significantly explains the variations in the primary market spread of Malaysian firms. It shows that the higher the debt of the country, the higher the spread is, and the cost of financing will also be higher. On the whole, the rating movements of RAM's Structured Fund portfolio have been positive (except in 2006); upgrades outpace downgrades 3 to 1 while the downgrade-to-upgrade ratio averages 0.3 times. The credit quality and enhancement levels that support SF transactions have improved with time, and upgrades have been driven by the continued faster deleveraging of transactions vis-à-vis the asset run-off rate. In general, the degree of rating upgrades tends to be smaller and is within its rating category while the rating magnitude for downward migration tends to be significantly higher. From the empirical data gleaned over the past few years, upgrades have been limited to an average of two notches while downgrades have averaged four notches. RAM's portfolio continues to highlight the expected inverse relationship between rating grades and default - higher ratings are more stable and have a lower risk of default. The long-term cumulative weighted-average one-year transition matrix indicates that AAA-rated securities are not only more stable than lower-rated ones, they also show a lower propensity for downgrades.

The findings of this study have considerable policy relevance. It could be stated that the higher the risk reflects the higher the spread of the firm. Thus, the role of a firm is to reduce the risk in order to reduce the spread, and simultaneously reduce the cost of financing by finding alternative sources of funding. The continued success of the Malaysian securitisation firms depends on its efficiency in using the resources and competitiveness of the firms.

Future research could include more variables such as transaction size, loan size, year of issue and lead manager as well as indicators of the quality of the offered services. Another possible extension could be the examination of differences in the determinants of spread between small and large or high

and low securitisation firms. In terms of methodology, a time series and generalised method of moments could also be used.

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