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An Empirical Analysis of Primary Market Spread in Securitizing Government Staff Housing Loans and Personal Loans in Malaysia

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ABSTRACT

Securitization is generally defined as the process of transforming illiquid assets, either real or synthetic, of the loan originator into marketable assets of the issuing firm. These assets are sold by issuing bonds by the issuer, known as the special purpose vehicle, separated from the borrower, referred as the originator, either government or corporate bonds. These bonds have strong liquidity as they have to comply with the strict requirements of rating agency that the question of defaults is unlikely for their long-term obligations to pay interests yearly and repay principal at maturity. With these requirements, asset securitization can offer cheaper financing to the originator and better return to the long-term investors. The objective of the study is to testify that securitization for government staff loan has an ability to increase its net assets value even during global financial crisis 2008-2009 and to examine the determinants of primary market spread and measure of financial performance of Cagamas (government bond) and RCE Marketing (corporate bond) as case study .White method and regression analysis are applied for the study period 2004. As a preliminary case study of Cagamas Mortgage-Backed Securities (CMBS) and Tresor as Special Purpose Vehicle for RCE Marketing as respective issuers, the financial performance of its both issues is measured by key financial ratios in terms of profitability, capitalization and debt coverage for financial years of 2008-2012, and its key performance indicators as measured by net default and prepayment rates. For leverage effects, both firms show higher debt coverage and higher earning capacities. For corporate bond, on one hand, the findings show that the use of RMBSs have demonstrated its remarkable ability to roll-over housing loans to the civil servants in Malaysia by securitizing its highly graded RMBSs as long-term Cagamas bonds. On the other hand, the government staff personal loan securitization where Tresor as SPV would also be able give more loans to government staff. The findings also support past studies on benefits of asset securitization and interestingly verifying that Cagamas and Tresor can provide highly rated long-term investment to bank institutions, insurance companies and fund managers and have ability to increase their net assets value. Likewise, the regression result shows that four variable has positive relationship with spread and two determinants influence or contribute to the primary market spread and are statistically significant to the government staff loan securitization and their financial performance shows that both companies resilient during financial crisis. In fact, Cagamas and RCE Marketing also show better profitability and dividend payment records to their long-term investors. As such, the study concludes that the selected determinants have a positive relationship with primary market spread, implying that both issuers have ability to offer cheaper financing cost to their respective originators and better investment return to portfolio managers.

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INTRODUCTION

Asset-Backed Securities (ABS) were introduced by the United State government for housing loan funding program back in the 1970s and followed by other securities such as credit card and mortgage. It has become one of the financing tools after 1980 and it is widely spread all over the world. In the case of Malaysian market (Ismail *et al*., 2008), the origin of securitization can be traced back to 1986 when the government set up a

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mortgage financing body called National Mortgage Corporation (Cagamas Berhad). Cagamas was formed on the model of Fannie Mae and Freddie Mac of USA, as described in details by Gangwani (1998). Accordingly, Cagamas functions as a Special Purpose Vehicles (SPV) between the house mortgage lenders and investors of long-term funds. Cagamas is by far the most important issuer of securitized instruments in Malaysia.

In view of the vast developments that have occurred in the Malaysian financial markets since the introduction of the asset securitization in 1986, it recognizes the importance in developing a comprehensive capital framework for asset securitization, including both traditional forms and synthetic forms of securitization (Ismail and Serguieva, 2009). Therefore, the authors are motivated to examine on the ability of Cagamas as the sole mortgage agency in Malaysia to provide cheaper financing and better investment return in its financial markets. The asset securitization technique, while complex, has won a secured place in corporate financing and investment portfolios because it can, paradoxically, offer originators a cheaper source of funding and investors a superior return (Giddy, 2000; Ismail *et al*., 2008)., Tresor acts as a Special Purpose Vehicle (SPV) which is 100% subsidiary of RCE Marketing that acts as an originator. This study focuses on Malaysia as one of the developing securitization market in which RCE acts as an intermediary between long term investors and personal loan financing whereby it issues financial instrument to capital market players, and hence, it represents the case study.

Problem Statement and Significance of Study:

Since 1980s, there are many extensive literatures on factors that impact the pricing of corporate bonds issued under securization market. In contrast, little research has been done on the determinants the impact the pricing of asset backed securities in most developed countries (Fabozzi & Vink, 2012), notably on mortgage-backed securities (MBS). In United Kingdom, MBS offered the largest securitization sector and many empirical evidences on the factors that impact the new issues on pricing of MBS has been published. In Malaysia, there are two types of loans that could be securitized; one is the housing government-staff loans while the other is personal government-staff loans. The former one is securitized by Cagamas MBS to represent the quasi-government bonds while then latter is securitized by Tresor Asset to represent corporate bonds. Cagamas is the key player for securitizing government-staff housing loans that issue amount of RM1.5 billion in 2004 and last issue in 2007 amount of RM2.4 billion. On the other hand, Tresor is the key player for financing personal loan to government staff that issued nine series of tranches start from Tranche A in 2007 amount of RM100 million and the last Tranche I in 2010 amount of RM83 million. Little empirical anaylisis and research has been written on the determinants of primary market spread in Malaysia. Spread is the premium or yield that investors demand above a reference rate. In predicting securitized loans performance, Seagreves (2012) stated that it should include additional information on loan originators such as type of firm as well as the extent to which originators retain an equity stake in target MBS. Therefore, this study is to fill in the research gap by exploring the determinants of primary market spread in Malaysia by focusing on the securitizations of government-staff housing and personal loans.

Literature Review:

The empirical studies of asset-backed using statistical models, however, are very limited. The first published doctoral study was conducted by Holland (1989) who examined off-balance-sheet activities of the 100 largest U.S. banks. He noted that off-balance-sheet activities are various types of commitments and contingencies that are not recorded on the balance sheet of an organization. He reveals the increased involvement of banking organizations in off-balance-sheet activities and a more competitive economic environment in the banking sector.

Likewise, Borgman (1996) documented that the assembly and analysis of a substantial dataset that describes the pricing and characteristics of over 700 ABS issues. His analysis finds that ABS pricing (absolute and relative yield spreads) is rational and prices reflect premiums for default risk, interest rate and reinvestment risk, and marketability.Thomas (2001) analyzes effects on debt and equity claimants of as set of sales into securitizations. His early result shows that shareholders' returns are increasing in shareholder capitalization. Securitizers with actively traded bonds enjoy substantial and significant shareholder gains, and wealth transfer from bondholders to shareholders occurs in asset-backed securities among sellers with low credit ratings. In addition, Higgins and Mason (2004) use credit card securitization data to show that recourse to securitized debt may benefit short and long term stocks returns and long term operating performance of sponsors. It appears that the asset backed securities market according to him is like the commercial paper market, where a firm’s ability to issue is directly correlated with credit quality.

Pelletier (2003) in his study provides an analysis of each step and aspect that is necessary to structure a securitization transaction. Securitization involves a multitude of legal, accounting and tax issues, and concentrates on the most central of such issues and his study concludes with some insight into what the future holds for the securitization market. Interestingly, several recent theories address the usage of securitization financing. Interestingly, Ayotte and Gaon (2011) show how ABS can reduce bankruptcy costs for some firms.

These models make predictions regarding the conditions under which asset securitization can lower the firm's overall cost of financing.

There are inconclusive findings on sample less variation of types of originators and nature of underlying assets in other markets in comparison with euromarkets. The question whether these other markets are less advanced than euromarkets remains unanswered. It has been demonstrated that the determinants of primary market spreads are relevant for different financial market participants, previous researchers Vink (2007) found out that default and recovery risk characteristics represent the most important group in explaining loan spread variability. Within this group, the credit rating dummies are the most important variables to determine loan spread. Meanwhile, The finding from the research suggest that an investor must not rely only on certain factor such as credit rating but there is other more relevant factors which is related to the spread (Fabozzi &Vink, 2012). Investors must not depend absolutely on the credit rating even though credit rating most significant variable in determining spreads but many other factors such as enhancement, nature of asset, loan to value, no of trenches, time of issue and many others.

Profile of RCE Marketing for Financing Personal Loans:

RCE Capital was incorporated in Malaysia on 18 December 1953 as a limited company under the name of Leong Tian Tin Mines Limited. On 15 April 1966, the Company changed its name to Leong Tian Tin Mines Sdn Berhad. The name was later changed to Rislee Enterprise Sdn Berhad on 7 December 1978 before adopting the name Rislee Enterprise Bhd on 18 August 1993 to reflect its conversion to public limited company. Subsequently on 25 September 1993, the Company changed its name to Rediffusion Berhad before assuming its present name on 9 October 2003 to RCE Capital Berhad. RCE Capital is a 43.4%-associate company of Amcorp Group Berhad. On 20 Sep 1994 the company was listed on the Second Board of Bursa Securities and later shifted to the Main Board (now known as Main Market) on 23 Aug 2006. RCE Capital's subsidiaries are now involved in financial services following the acquisition of RCE Marketing Sdn Bhd (RCEM) and the sale of the broadcasting business, both in 2003. In early-2007, RCE Capital bought into AMDB Factoring (renamed RCE Factoring), which provides credit factoring solutions to the manufacturing, construction, information and communications technology and services sectors. Tresor Asset Berhad issue the first tranche of RM100 million from the total of RM1.5 billion Asset Backed Securitization. This 5.5-year program is secured against RCEM's pool of loan receivables and is accorded AAA-rating by RAM Ratings Berhad. RCE Marketing has issue one of the biggest ABS in 2007 through its SPV in terms of total issue size.

RCE Marketing is a financing entity that gives personal loan to government staff through KOWAJA one of the cooperative in Malaysia and therefore operates personal loan securitization for promoting the secondary mortgage market. As such, Tresor Asset Berhad as Special Purpose Vehicle was set up by RCE Marketing Sdn Bhd as wholly owned subsidiary which referred as an issuer of instrument. As for Tresor , its role is to be an intermediary between primary lenders and investors of long-term funds. Its function is very much similar to those of unit trust company but differs as Tresor will pool debts or personal loan that it securitized for issuance of the unsecured but highly rated debt securities. Interestingly, Tresor debt securities are seen to be assigned the highest ratings Rating Agency Malaysia and Malaysian Rating Corporation, the only two local rating agencies in Malaysia that denotes its strong credit quality of property market, and hence, researchers are motivated to study its financial performance during sub-prime crisis rooted in USA in 2007 and spread all over financial centers, including Kuala Lumpur, till 2012.

Table 1: Summary of ABS issued by Tresor.

Tressor issued	T A 2007	T B 2008	T C 2008	T D 2008	T E 2009	T F 2010	T G 2010	T H 2010	T I 2010
Issue date	23-Nov-07	13-Mar-08	16-Jun-08	1-Dec-08	25-Jun-09	12-Jan-10	28-Apr-10	15-Jul-10	22-Sep-10
Issue amoun (RM million)	100	100	100	100	96.9	100	100	100	83.8

Profile of Cagamas for Financing Housing Loans:

Cagamas Berhad was incorporated as a company in Malaysia in 1986 with a paid up capital of RM150 million. Until 2009, the RMBS sector had been dominated by Cagamas MBS, an entity incorporated to undertake the securitisation of the Government‟s portfolios of staff housing loans. To date, Cagamas MBS has issued 5 facilities valued at RM10.2 billion in aggregate. Its issuances account for a third of the value of all domestic structured finance products. The entity‟s fourth and fifth programmes were issued in 2007. Cagamas MBS‟ Series 2007-1-i Sukuk *Musharakah,* issued in June 2007, represented the first global offering of an Islamic RMBS. With an outstanding principal balance of RM26.7 billion on the housing loans extended by the Treasury Housing-Loans Division as at end-December 2009, we believe that RMBS still has upside potential, once ABS pricing normalises. RAM's cashflow analysis has taken into consideration the potential cashflow losses as a result of delinquencies and prepayments that commensurate with the AAA rating. Based on the

portfolio's performance, our cashflow analysis indicates that it will be able to generate sufficient cash to cover the coupons on a timely basis, as well as the principal redemption by each maturity date.

Table 2: Summary of RMBS issued by Cagamas MBS

RMBS issued	CMBS 2004-1	CMBS 2005-1-i	CMBS 2005-2	CMBS 2007-1-i	CMBS 2007-2
Issue date	20-Oct-04	8-Aug-05	12-Dec-05	29-May-07	21-Aug-07
Issue amount (RM million)	1,555	2,050	2,060	2,110	2,410

As for Cagamas, its role is to be an intermediary between primary lenders and investors of long-term funds. Its function is very much similar to unit trust companies but differ as Cagamas will pool debts or mortgages that it securitized for issuance of the unsecured but highly rated debt securities. Interestingly, Cagamas' debt securities are seen to be assigned the highest ratings Rating Agency Malaysia and Malaysian Rating Corporation, the only two local rating agencies in Malaysia that denotes its strong credit quality of property market, and hence, researchers are motivated to study its financial performance and key performance indicators during sub-prime crisis rooted in USA in 2007 and spread all over financial centres, including Kuala Lumpur, till 2009. Based on the empirical result of this study, (Olaniyi & Sc, 2013) it can be concluded that, liquidity motive is the main driving force for bank engagement in securitization in Malaysia. The increasing demand for loan thus makes it necessary for the banks to embark on securitization activities to meet their liquidity requirement.

Housing financing facilities disbursed by BPP formed around 10% of the outstanding housing loans in Malaysia as at end-2012. Outstanding housing financing facilities disbursed by BPP had expanded 5.7% to RM32.98 billion by the end of last year (end-2011: RM31.21 billion).1 During the same period, the amount of loans approved by BPP had risen 22.4% to RM8.32 billion (end-2011: RM6.80 billion). As announced through Budget 2013, the GOM plans to outsource civil servants' housing loan and financing schemes to commercial banks to help ease its financial burden. BPP had indicated to RAM that this plan was still in its infancy as of March this year. The outsourcing will involve new financing facilities and will encompass the entire financing process, i.e. from origination to servicing. The GOM will bear the difference between the commercial interest rate or profit rate and the subsidised rate of 4%. A gradual restructuring of functions and a reduction in workforce are expected to follow the outsourcing exercise. That said, we understand that the existing financing facilities originated by BPP will still come under its purview and the servicing of the existing securitised portfolios will remain unchanged.

In Malaysian civil service, with a work-force of 1.4 million, the government is obligated to provide housing loans to its staff with a maturity of up to 30 years. Thus, with a mandate given to CMBS to acquire its government staff housing loans (GSHLs)) since 2004, the Malaysian government has better option to roll-over its housing loans which is about RM13 billion to RM26 billion as outstanding balance every year for the past 10 years (2001-2010) as shown in following the Table 3.

Table 3: Outstanding Balance per Year for Government Staff Housing Loans: 2001-2010.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Outstanding Bal (RM bil)	13.3	14.5	17.2	19.6	22.7	25.6	20.3	20.5	21.5	26.1

(Source: Bahagian Pinjaman Perumahan, Perbendaharan Malaysia, Ministry of Finance, 2011

Data and Methodology:

Previous researchers include Smith (1980), Edwards (1984), Boehmer & Megginson (1990), Booth (1992), Blackwell & Winters (1997), Eichengreen, & Ashoka (2000) has made empirical studies. The loan pricing tests we perform are most similar to those presented in Vink both in the actual model estimated and in the average size of loans under examination with additional new variable Liquidity and Leverage. According to the model explained in the equation 1 we could estimate the determinants of primary market spread. In order to allow for a comparison of the empirical results, the proxies we used to test which factors affect primary market spread are based on theory. We shall provide a brief explanation for each variable below. In line with previous research in this area, using White (1980) methodology would assist to determine the factor of influencing the primary market spread We employ standard OLS regression estimation techniques and adjust for heteros kedasticity. The model estimated is:

$$y = X\beta + u \quad (1)$$

This study focuses on how spread responds to the various variables specifically on Tresor as a case study. During financial crisis, Tresor still make handsomely profit compare to other market especially in United State of America which having problem with sub-prime mortgage. The SPREAD (primary market spread) represents the price for the risk taken on by the lender on the basis of information at the time of issue. In our sample, the spread is defined as the difference between the margins yielded by the security at issue above a corresponding benchmark. The benchmark is presented in basis points. According to Sorge & Godanecz (2004), these measurements of the spread for floating and fixed rate issues have become standard in the loan pricing literature. Only various adjustments and refinements are applied in different studies in order to capture the comparability of pricing variables across floating and fixed rate issues in a better fashion.

Daily spread basis points for the primary market spread are obtained from data-stream. The sample of data of transactions of primary market spread throughout 2007 to 2012. This research is also using hypothesis testing to test relationship between the dependent variable with independent variables. The dependent variable is SPREAD. Vink (2008) used SPREAD to test the determinants of cross sectional variation with systematic, marketability of financing and non performing characteristic of the loan The independent variables are number of tranches, loan size, maturity, loan to value, liquidity, leverage and year of issue. Table 4 shows the hypotheses for this study:-

Table 4: Hypothesis.

H_1:	Loan to Value is negatively related with primary market SPREAD
H_2:	Maturity is positively related with primary market SPREAD
H_3:	Loan Size is negatively related with primary market SPREAD
H_4:	Number of Tranches is negatively related with primary market SPREAD
H_5:	Liquidity is positively related with primary market SPREAD
H_6:	Leverage is positively related with primary market SPREAD
H_7:	Year of issue is positively related with primary market SPREAD

Lastly, a cross sectional regression analysis is applied to show the relationship between dependent and independent variables at one period or point in time. The determinants of a primary market SPREAD are examined through cross-sectional regression analysis. The general cross-sectional regression model as follows:-

SPREADi = αn + ß1 LOAN TO VALUEi + ß2 MATURITYi + ß3 LOAN SIZEi + ß4 # TRANCHESi + ß5 LIQUIDITY+ ß6 LEVERAGE + ß7 YEAR OF ISSUE + eit *(2)*

Findings for Determinant of Primary Market Spread:

Table 4 provides the result from the sample data by using the econometric views (E-VIEWS) statistical package by applying the based on Tresor securitization in Malaysia. The cross section regression model is spelt out as follows:-

SPREAD = 82.06338 + -96.07078 LTV + 2.00660 MAT + -0.085889 LOAN_SIZE + 9.246993TRN + -2.824966 LIQUID + 6.576215 LVG + 27.56626 YR_ISSUE + eit *(3)*

The results show that the model as a whole perform well in terms of the joint significance of variables, F-value is 13.271 (Prob. > F=0.0000). In other word, the model is significantly fitted and this research has value to proceed. On the other hand, the average adjusted R Squared (61%) contribute explaining the variable.

Table 5: Ordinary Least Square –The Results of Basic Model Parameter Estimates and Test of Significance for Determinant Primary Market Spread.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	82.06338	166.1988	0.493766	0.6233
LTV	-96.07078	59.74135	-1.608112	0.1131
MAT	2.006606	7.189188	0.279114	0.7811
LOAN_SIZE	-0.085889	0.048179	-1.782706	0.0797***
TRN	9.246993	12.39344	0.74612	0.4585
LIQUID	-2.824966	9.515324	-0.296886	0.7676
LVG	6.576215	7.984232	0.82365	0.4134
YR_ISSUE	27.56626	12.99076	2.121989	0.038***
R-squared	0.607	F-statistic		13.271
Adjusted R-squared	0.5617	Prob(F-statistic)		0.000
Sum squared resid	398578.8			

***Significant level of 1%

At the level of the individual variable, loan to value has a negative relationship (Coefficient=-1.631196) with SPREAD whereby an increase in the number of loan to value would decrease SPREAD and statistically not significant (prob. = 0.1131) at 1% significant level. This supports hypothesis 1 that the loan to value negatively related with primary market spread. Another variable is maturity has a positive relationship (Coefficient = 2.0066) with the primary market spread and statistically not significant (prob. = 0.7811) at 1% significant level. This result support hypothesis 2 that maturity is positively related to the primary market spread.

Based on other independent variables, LOAN SIZE has a negative relationship (Coefficient = -0.085889) with primary market spread whereby an increase in number of LOAN SIZE would decrease SPREAD and statistically not significant (prob. t= 0.0797) at 1% significant level. This support hypothesis 3 that the LOAN SIZE negatively related to determine primary market spread. TRN has a positive relationship (Coefficient=9.246993) with primary market spread and statistically not significant (prob. = 0.4585) at 1% significant level. This result reject hypothesis 4 that TRN is positive relationship to the primary market spread. The other variable which is LIQUID has a negative relationship (Coefficient = -2.824966) with the primary market spread, and is statistically not significant (prob. = 0.7676) at 1% significant level. This result rejects hypothesis 5 that LIQUID is negatively related to the primary market spread. The firm LEVERAGE has a positive relationship (Coefficient = 6.5762) with primary market spread and statistically not significant (prob. = 0.4134) at 1% significant level which is similar with the finding of Merton (1974). This result supports hypothesis 6 that the firm LEVERAGE is positively related to the primary market spread. The last determinant is YR_ISSUE. The YR_ISSUE has a positive relationship (Coefficient = 27.56626) with primary market spread and statistically significant (prob. = 0.038) at 1% significant level. This result support hypothesis 7 that YR_ISSUE is positively related to the primary market spread.

Findings for Revenue and Profits 2008-2012:

RCE Marketing:

Table 6 provides the result from the sample data by using the financial report from RCE Marketing . The analysis is spelt out as follows:-

Table 6: Revenue and Profits 2008-2012 (RM '000).

Revenues and Profits	2008	2009	2010	2011	2012
Revenue	131,938	215,400	255,611	269,580	229,859
Profit Before Taxation	66,761	92,335	109,989	140,099	128,165
Net Profit	50,589	66,555	81,094	104,257	101,355
Earnings per Share (sen)	7.83	9.37	10.72	13.33	12.95

The revenue from interest income shows that kept on increasing every year but slightly fall 14% on 2012 from previous year it's and simultaneously with the profit before tax which is RM128 million consider stable since 2008 which that can be seen from the table above. In fact, during the financial crisis between 2008 and 2009 which is at the top of sub-prime mortgage crisis, the result from the table above showed that there was an increment in net profit of from RM51 million to RM 66 million in 2009, which is steady increase of of 29%. Fascinatingly, its net profits keep on increasing during uncertainties of financial crisis globally especially in the United States of America which seen many giant company collapse and has been bailed out by the US government during 2008-2009 periods. Other than net profit its earnings per share also record good earning at RM12.95 per share in 2012 from RM7.83 per share in 2008.

Cagamas:

Table 7: Revenue and Profits 2008-2012 (RM '000).

Revenues and Profits	2008	2009	2010	2011	2012
Gross Revenue	1214.3	1154.3	1119.4	1047.1	1005.2
Net Revenue	620.9	662.8	647.7	628.4	579.4
Profit Before Taxation and Zakat	564.3	559.2	610.5	591.4	551.9
Net Profit	419.7	414.7	455.7	442.1	413.6
Earnings Per Share (RM)	279.8	276.5	303.8	294.74	275.44

eaFrom the above table, despite its revenues from interest income kept on falling slightly 17%, it's but the earning before tax and zakat are steady income which is RM552 million consider stable since 2008. In fact, at the peak of sub-prime crisis in 2008-2009, it managed to weather its impacts with increasing net income of RM663 million in 2009 from RM621 million in 2008, unexpected steady rise of 7%. Interestingly, its net profit recorded with only a negligible drop of 1% during global acute financial uncertainties of 2008-2009 periods. Reflecting its strong net profits from 2008-2012, its earnings per share also record good earning RM2.75 per share in 2012.

As a sole mortgage agency in Malaysia, Cagamas has very heavy debt obligations with average of 92% of its debt ratio for 2008 but it shows improvement to 87% in 2012. Despite heavy interest regular payments, it still has steady payment capacities of 1.1 times in 2008 to 1.6 times in 2012. In fact, at the peak of global financial crisis in mid 2008 with capacity of 1.1 times, implying it did not default any contractual interest payment of RM699 million in its financial year of 2008. Interestingly, as an approved financial institution in Malaysia its risk weighted capital ratios were increasing from 21.6% in 2008 to 36.4% in 2012, representing a hefty increase of 71%, indicating it has sufficient capital adequacy ratio as stipulated by central bank of Malaysia.

Findings for Debt and Profitability 2008-2012:

RCE Marketing:

RCE Marketing has a good track record of on income statement and financial position for the past five years as shown on following Table

Table 8: Debt and Profitability Ratio.

Type of Ratio	2008	2009	2010	2011	2012
Gearing Ratio (x)	3.04	2.47	1.83	1.51	0.89
Return on Shareholder (%)	24.37	22.32	19.36	23.25	19.15
Interest Coverage Ratio (x)	3.01	3.99	3.94	3.61	3.56
Return on Asset (%)	5.18	5.19	5.26	5.87	6.76
Dividend Per Share (sen)	0.75	0.75	1.53	1.50	1.50
Net Tangible Asset (sen)	32.11	41.92	53.56	57.31	67.64

According the table 7 RCE Marketing had paid quite high dividend of 75 sen in 2008 and 2009 even though there was a subprime crisis during that time. Following strong financial performances for 2008-2012, its satisfactory returns on investment in funds and assets, its net tangible asset were increasing steadily from RM32.11 to RM67.64, a superb growth of 110%. As such, the net value of RCE Marketing is growing stronger even during global financial crisis, a strong testimony that RCE Marketing is a way forward to appeal banking institutions, insurance companies, asset management companies, as well as government funds and public companies to be its primary personal loan lenders.

The ability of RCE Marketing to have superb performance for both issues is testified by its key performance indicators. According RAM (2012) for cumulative net default rate for the underlying portfolio, Tresor Asset Tranche I stood at 3.61% which is very low default.

For cumulative repayment rate, Tresor Tranche I recorded at 36.22% since purchase date 2010 is consider good repayment with low average monthly net default rate at 0.16%. With its defaults and losses as well as prepayments of the personal loans shall continue to fall from year to year, RCE Marketing is seen capable to be alternative to the Bank Rakyat that provide financing personal loan to the government staff continuously and consistently.

Cagamas:

Moving forward favourably, Cagamas has a record of dividend payments to its shareholders for the past five years. Likewise, its returns on investment on shareholders' funds and assets are well-documented in the following Table 9

Table 9: Debt and Profitability ratios for 2008-2012.

Type of Ratio	2008	2009	2010	2011	2012
Debt Ratio (%)	92.43	90.74	89.17	87.89	86.62
Return on Average Shareholders' Funds (%)	17.1	14.6	14.0	12.0	10.1
Interest Coverage Ratio (Times)	1.1	1.6	1.6	1.6	1.6
Return on Average Total Assets (%)	1.2	1.2	1.4	1.4	1.3
Dividend Per Share (RM)	16.7	22.5	22.5	22.5	45
Risk-Weighted Capital Ratio (%)	21.6	21.6	26.8	35.7	36.4
Net Tangible Asset (RM per share)	17.36	20.21	23.10	25.86	28.35

From the above table, during global financial crisis of 2008-2009, Cagamas even had paid dividends of 17 sen and 23 sen in 2008 and 2009, respectively, a hefty increase of 35%. Following strong financial performances for 2008-2012, its satisfactory returns on investment in funds and assets, its net tangible asset were increasing steadily from RM17.36 to RM28.35, a superb growth of 63%. As such, the net value of Cagamas is growing stronger even during global financial crisis, a strong testimony that Cagamas is a way forward to appeal banking institutions, insurance companies, asset management companies, as well as government funds and public companies to be its primary mortgage lenders. Even though Cagamas was formed

on the mortgage American model of Fannie Mae and Freddie Mac that both reported to lose at least US$10 billion in 2008, Cagamas still remains profitable till 2012 for both conventional and shariah RMBSs.

The ability of RMBSs to have superb performance for both issues is testified by its key performance indicators. According RAM (2012), for cumulative net default rate for the underlying portfolio, conventional RMBS stood at 0.39% which is much below its benchmark rate of 1.69%, or 4.33 times coverage, while shariah stood 0.43% against its benchmark of 2.81%, that is 6.53 times coverage. Therefore, in term of percentage of principal balance on the purchase date, shariah RMBS performs better than conventional with higher coverage of its cumulative net default.

For cumulative repayment rate, conventional RMBS recorded at 5.78% that is lower than its indicative rate of 8.35%, or 1.44 times of its coverage, while shariah RMBS posted at 3.85% against its indicative rate of 8.44%, or 2.19 times coverage. Therefore, as a percentage of principal balance on the date of purchase, shariah RMBS also performs better than conventional with a higher rate of coverage of cumulative prepayment rate. With its defaults and losses as well as prepayments of the GSHLs shall continue to fall from year to year, Cagamas is seen capable to provide funding to government staff housing loans (GSHLs) in Malaysia continuously and consistently.

Concluding Comments:

Overall, the basic model used in this study to examine the relationships between the possible determinants with the primary market spread statistically significant for two variables. From seven hypotheses, five hypotheses supported indicates that the determinants have a relationship with primary market spread. It can be concluded that loan size and year of issue significantly contribute to the determinant primary market spread.

In term of measurement of performance of RCE Marketing and Cagamas, it is significantly consistent profitable throughout the period even each share that shareholders earns consistently stable during 5 years period. Shareholders are still holding the portfolio for long term. In addition, for the long term debt shows that the improvement in term reducing of debt over equity within the period. Moreover, the dividend paid is increasing every year especially for 2012; which give investor handsomely huge dividend for every share they hold. It shows that the value of the company keeps on increasing every year. It conclude that it meets its objective of the study is to testify that securitization for government staff loan has an ability to increase its net assets value even during global financial crisis 2008-2009 and to examine the determinants of primary market spread and measure of financial performance of Cagamas (government bond) and RCE Marketing (corporate bond) as case study

Besides, there is a room for improvement over the basic model of this study; by adding more variables. The model can also be expanded by adding new macro factor variables such as GDP, inflation rate, budget as well as other default and recovery risk characteristic such as credit rating, credit enhancement and others to make the model more acceptable and make the study more robust. Besides, future researchers can relate the pricing theories with the determinants to make the future study more interesting. Findings from this study can contribute to the existing literature on primary market spread particularly on advanced emerging markets for future researchers.

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