

The Impact of BNM Guidelines on Household Loans on Commercial Bank and Islamic Bank Performances

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DOI Link: <http://dx.doi.org/10.6007/IJARBS/v6-i11/2406>

Published Date: 17 November 2016

Abstract

This paper aims to analyze the impact of BNM guidelines on household loans on Malaysian bank performances. This paper employs panel data analysis which covers 24 banks (12 commercial banks and 12 Islamic banks) and the data consists of bank specific variables, household loans and other macroeconomic variables for the period of 2004-2015. The results reveal that household loans have significant impact on bank performance. Any policy implemented by government in controlling household loans should be imposed carefully because it will give impact to the banking industry and economic growth of the country.

Keywords: Bank Performance, Bank Negara Malaysia, Guidelines, Household Loans

Introduction

As a central bank, Bank Negara Malaysia (BNM) is responsible for regulating the financial system in Malaysia and monitoring all activities provided by commercial banks and Islamic banks. Statistics show that they are 22 commercial banks and 14 Islamic banks in Malaysia as at December 2015 (BNM website) and they are responsible to ensure that all guidelines introduced by BNM were properly implemented and this include guidelines relating to lending to the household sector. Household debts refer to loans made by individual for specific purposes such as purchase of houses, vehicles, personal loans, credit cards and overdrafts (MARC 2014). Household debts in Malaysia have increased at a rate which is very high for the last 5 years compared to other ASEAN countries where housing loans accounted for nearly 50% of total household loans followed by vehicle loans (20%), personal (9%) and credit card (5%) (BNM, 2015). What is more worrying is the average annual increase in household debts (12%) is more than the increase in household incomes (8%) and this phenomena is not good for the economic health of a country as it can contribute to what is known as a 'debt trap' which lead to the financial imbalances in the economy (Cecchetti et al, 2011).

Bank policies such as the extension of the term for home financing up to 45 years and 25 years for personal financing have encouraged excessive debt accumulation by households. In

addition the increasing number of government servants taking personal loans through automatic salary deduction scheme have booster the demand of household loans (MARC 2014). In fact, it is undeniable that every household in Malaysia owe more than what it should be and finally entangled in a prolonged loans. Although supported by positive earnings, but an increasing trend in the bank financing which do not take into account the capability of consumers have been troubling many parties especially the government and BNM.

The high level of household debt has attracted the attention of the relevant authorities to take action as it could potentially gives rise to systemic risk to the economy as experienced by many countries including Malaysia during the global financial crisis in 2009. This issue should be reviewed from time to time to avoid a repetition of history and for the benefit of future generations. For that reason, several actions have been taken by BNM to reinforce responsible lending practices and to control the growth of household loans in Malaysia. For instance, BNM has introduced the Guidelines on Responsible Financing (BNM / RH / GL 000-5) in January 2012 which aims to ensure that financial institutions implement a prudent process of financing particularly in car financing, home financing, credit cards and bank overdrafts. The control mechanism is introduced to limit the period of housing and personal loans to 35 years and 10 years and require evaluation based on net salary, taking into account their EPF contributions, taxes and debt obligations; not the gross income of the applicant. In July 2013, BNM further stringent the financing by imposing several other guidelines to ensure that the household loans are given only to the borrowers which are capable and with the strong financial position (BNM, 2015).

The introduction of the guidelines has raised concerns among bank customers because their loan applications have to go through a rigorous evaluation process before they can be approved. Enforcement of these guidelines not only affects the new financing application but it affected some sector of economy. For instance it is reported that car sales for January 2012 has declined by 25% and the rejection in bank loan application for vehicle financing was reported nearly 70% for the same period (MAA, 2013). The bank also cannot arbitrarily approve loans to customers in this sector which does not meet the criteria as outlined by BNM. At the same time, the BNM step in tightening the lending policies may affect the performance and profitability of banks. Based on these problems, this paper will investigate the impact of household loans on the performance of banks and special attention is given to the impact of the BNM Guidelines on Responsible Financing on household loans on the commercial bank and Islamic bank performances

Literature Review

Among the earlier studies on bank performance was by Fraser et al (1974) who investigated factors that influenced bank performance. They found that the factors which have biggest influences on bank performance are bank's expenses followed by the bank's deposit and loan compositions. Berger (1995) examined the relationship between the profitability and the capital asset ratio of US banks for the 1983-1992 periods. The result showed that the capital have positive relationship with bank profitability.

Kunt and Huizinga (1998) analyzed the profitability determinants of 80 banks in various countries by using bank characteristics and overall banking environment as variables. They found that well capitalized bank and bank with lower non-interest earning assets are more

profitable. Williams (1998) studied the factors that distinguish between domestic and multinational banks operating in Australia and the effect of these factors in determining the profits and size of foreign banks in Australia. He found that the size of the parent bank in the home country has a positive and significant effect on the size of the foreign bank.

Ben Naceur and Goaid (2001) investigated the determinants of the Tunisian banks' performance during the period 1980-1995. They indicate that the best performing banks are those who managed to improve labor and capital productivity, maintained a high level of deposit accounts relative to their assets and finally and reinforced their equity. Ben Naceur (2003) also investigated the impact of bank's characteristics, financial structure and macroeconomic indicators on bank's net interest margins and profitability in the Tunisian banking industry for the 1980-2000 periods. He found that high net interest margin and profitability tend to be associated with banks that hold a relatively high amount of capital and with large overheads.

With reference to Islamic banking studies, there are several literatures that focus on bank performance. For instance, Bashir (2000) examined the determinations of Islamic bank's performance across 8 Middle Eastern countries for 1993-1998. A number of internal and external factors were used to predict profitability and efficiencies and the results show that higher leverage and larger loans lead to higher profitability. Hassan and Bashir (2003) analyzed how bank characteristics and the overall financial environment affect the performance of Islamic banks. The study examined the performance indicators of Islamic banks' worldwide during 1994-2001 period. A variety of internal and external banking characteristics were used to predict profitability and efficiency. By controlling macroeconomic environment, financial market structure and taxation, the results indicate that high capital and high loan lead to higher profitability.

Haron (2004) investigated the effects of internal and external factors that contribute towards the profitability of 13 Islamic banks worldwide. He found that internal factors (liquidity, total expenditures, fund invested and percentage of profit sharing ratio) and external factors (interest rate, market share and size of the bank) are highly correlated with the profitability of Islamic bank. Other determinants such as funds deposited in current account, total capital and reserves, the percentage of profit sharing and money supply also play a major role in influencing Islamic bank's profitability. Sanusi et al (2005) examined the factors that influenced the Islamic banks performance using 15 samples of full-fledged Islamic banks and Islamic windows from year 1995 to 2004. They found that high profitability tends to be associated with banks that hold a relatively high ratio of total loans over total assets, pay higher zakat, lower non-interest earnings and growth of total assets.

Data And Methodology

The sample consists of 24 commercial banks and Islamic banks in Malaysia and the data were obtained mainly from the bank financial statement over the period 2004-2015 with the total of 257 observations. For the purpose of study, these banks will be categorized into 3 samples: all banks (24 banks) commercial banks (12 banks) and Islamic banks (12 banks). The method of evaluating bank performances is constructed by using financial accounting data which provide a broader understanding of the bank's financial condition. The uses of financial accounting data are quite common in the banking literatures (Samad (1999) and Haron

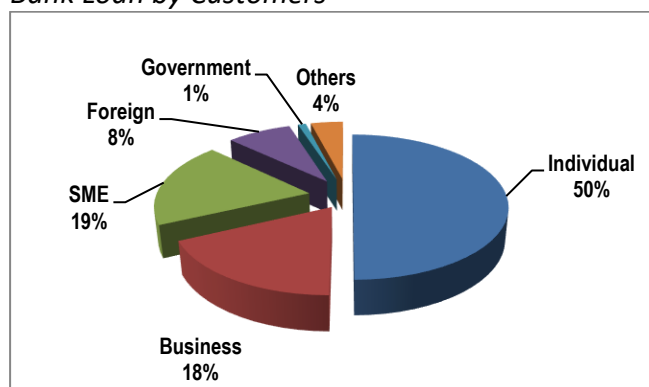
(2004)) where it provides a method of assessing the financial strengths and weaknesses of the banks using information found in its financial statements.

In order to examine the determinants of bank's profitability, this study focuses on the ROA which assumed to be a function of bank characteristics as internal variables, macroeconomic and financial structures as the external variables. ROA measures the net income per ringgit of an average asset and it reflects the ability of the bank to utilize the bank investment of depositors' fund to generate profit. The internal variables are related to the bank itself and they are planned according to the management decisions. This study use these variables as the internal variables: LTA is a proxy measure of bank size, calculated as a natural logarithm of bank total assets, EQTA is a measure of capitalization, calculated as total equities divided by total assets, LOTA refers to bank total loan, calculated as total loan divided by total assets, EXPI is a measure of bank cost financing efficiency, calculated as total expenses divided by total loan income, NPL refers to non performing loans, calculated as rates of non performing loan. The external variables are an outcome of the environment where the bank is operating. Some variable have been considered as the external variables; GDP is the gross domestic products, BLR is the bank lending rate and INF is the rate of inflation

Due to data consistency and availability, this study uses loans to individual as a proxy measure of household loans. Loan to individual refers to a loan that given to individual for retail purposes such as purchasing house, purchasing vehicle, credit cards and personal loans. The data can be extracted from financial notes in the bank annual reports.

Figure 1

Bank Loan by Customers



Source: Annual Reports of Malaysian Commercial Banks

Figure 1 illustrates the composition of loans to the various types of customer for year 2015. As can be seen the individual loans contributes 50% of total loans in year 2015. According to MARC (2014) this trend was due the increased population of young generation in Malaysia and this group is seen to have a high tendency to make more loans especially for buying houses and cars after entering the job. In addition, the low lending rates and unemployment rates have create conducive environment for higher loans for individual borrowers. While loans to SMEs and loans to businesses constitute 19% and 18% of total loans respectively, in year 2015.

The concern on the excessive debts among the households has encouraged BNM to issue guidelines and policies that can slow down the growth of household loans. In January 2012, a guideline which focuses on the household loans has been introduced. Since then, all financial

institutions have to follow the new rules in granting bank loans. For that reason in investigating the impact of BNM guidelines on household loans on bank performance, this study will divide the bank household financing into two periods; before 2012 and after 2012. A dummy year will be established to study the effects of guidelines on bank performance, where 0 = pre event and 1 for post event. Then this dummy variable will be interacted with loans to individual which finally two variables are constructed in the model. The first variable is IND_PRE is an interaction variable between individual loans and a dummy variable of pre event (2012 and below) which takes a value of 0. The second variable is IND_POST is an interaction variable between individual loans and a dummy variable of post event (2012 onwards) which takes a value of 1.

The relationship between performance and these variables will be analyzed using Random Effect Model and Fixed Effect Model and it can be described by the following equation:

$$Return_{it} = \alpha + \beta_1 LTA_{it} + \beta_2 EQTA_{it} + \beta_3 LOTA_{it} + \beta_4 EXTI_{it} + \beta_5 NPL_{it} + \beta_6 IND_PRE_{it} + \beta_7 IND_POST_{it} + \beta_8 GDP_t + \beta_9 BLR_t + \beta_{10} INF_t + \varepsilon_{it}$$

where $Return_{it}$ is the profitability of bank i at year t , LTA_{it} is the log form of total assets of bank i at year t , $EQTA_{it}$ is the equity over total assets of bank i at year t , $LOTA_{it}$ is the total loans/financing over total assets of bank i at year t , $EXTI_{it}$ is the expenses over total loan income of bank i at year t , NPL_{it} is the non performing loans/financing of bank i at year t , IND_PRE_{it} is an interaction variable between individual loans and a dummy variable of pre event (2012 and below) which takes a value of 0. IND_POST_{it} is an interaction variable between individual loans and a dummy variable of post event (2012 onwards) which takes a value of 1, GDP_t is the gross domestic product at year t , BLR_t is the base lending rate at year t , INF_t is the inflation rate at year t and ε_{it} is the error term.

The result of correlation matrix is shown in Table 1 where the maximum correlation value is 0.76 which is between variable individual loans that interact with pre event and variable individual loans that interact with post event. The second highest correlation value is 0.58 which is between base lending rate and inflation rate. Based on this result, it is considered that multicollinearity issue is not severe in the regression model because all correlation values are lower than 0.80 and therefore all these independent variables will be included in the regression analysis.

Table 1
Result of Correlation Matrix

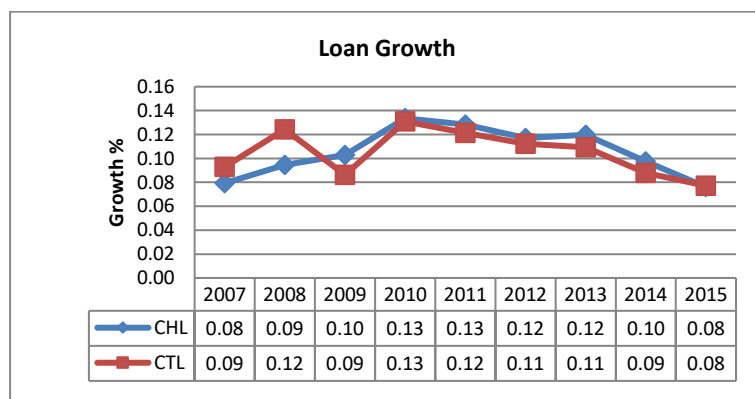
	lta	eqta	lota	exti	npl	ind_p re	ind_po st	gdp	blr	Inf
lta	1.000									
	0									
eqta	-	1.000								
	0.218	0								
	6									
lota	0.376	0.093	1.000							
	0	0	0							

exti	-	-	0.057	1.000						
	0.004	0.153	2	0						
	3	8								
npl	-	-	-	0.102	1.000					
	0.039	0.051	0.071	6	0					
	9	8	2							
ind_pr	-	0.079	-	-	0.161	1.000				
e	0.174	5	0.227	0.098	7	0				
	9		5	5						
ind_po	0.170	0.025	0.164	0.005	-	-	1.000			
st	7	9	4	8	0.194	0.764	0			
					7	8				
gdp	-	-	0.054	0.011	0.076	-	0.061	1.00		
	0.011	0.007	9	1	9	0.075	0	00		
	0	3				6				
blr	0.133	0.095	0.103	-	-	-	0.398	0.51	1.00	
	8	7	5	0.007	0.131	0.328	1	87	00	
				3	0	6				
inf	-	0.163	-	-	0.023	-	-	0.31	0.58	1.00
	0.025	1	0.001	0.031	6	0.011	0.001	32	08	00
	5		3	5		8	5			

Findings

Figure 2 shows an increasing trend of growth of household loans (CHL) in banking system from 2007 to 2010 (average growth 11%) with slight decreases in 2011 and 2012. The same goes to growth of total loans (CTL) which increased by an average of 11% for same period but with a significant decline in 2009 due to global economic downturn. However from the year 2013 onwards both have drastically decreased to 8% in year 2015. The downward trends indicate effectiveness of the financing policies imposed by BNM to control household loans. The decline in household loans has also give affect to the decline of bank total loans where they contributed more than 50% of total loans in the banking system as shown in Figure 1.

Figure 2
Loan Growth (2007-2015)



Source: BNM Statistics

Table 2 reports the panel regression results for the three categories of sample, all bank, commercial banks and Islamic banks. Based on the panel regression models (Random Effects and Fixed Effects), the Fixed Effect model appears to be the best model performance for all three analysis based on the Hausman test results.

Table 2:

Panel Random and Fixed Effects Regression Results - ROA

	ALL		CB		IB	
	RE	FE	RE	FE	RE	FER
LTA	0.0157 (0.767)	-0.7109 (0.000)** *	-0.2786 (0.019)**	-2.2359 (0.000)** *	-0.0918 (0.100)	-0.0122 (0.898)
EQTA	3.5107 (0.009)** *	1.3517 (0.335)	1.5755 (0.640)	4.6584 (0.103)	3.6543 (0.000)** *	2.9537 (0.002)** *
LOTA	0.5643 (0.228)	1.1644 (0.055)*	1.0506 (0.358)	1.0129 (0.466)	0.4994 (0.101)	0.7038 (0.072)*
EXTI	-0.0321 (0.303)	-0.0039 (0.901)	0.0130 (0.839)	0.0104 (0.849)	-0.0578 (0.000)** *	-0.0435 (0.059)*
NPL	-0.0215 (0.286)	-0.0459 (0.035)**	-0.1313 (0.004)** *	-0.2309 (0.000)** *	0.0024 (0.852)	0.0078 (0.563)
IND_PRE	0.7738 (0.022)**	1.1152 (0.018)**	0.4708 (0.515)	1.8982 (0.238)	0.9741 (0.000)** *	0.7741 (0.005)** *
IND_POST	0.3633 (0.323)	1.1116 (0.028)**	-0.1324 (0.866)	2.4136 (0.134)	0.7903 (0.001)** *	0.4807 (0.104)
GDP	0.0069 (0.781)	-0.0173 (0.467)	0.0134 (0.774)	0.0034 (0.930)	-0.0043 (0.822)	-0.0052 (0.722)
BLR	0.3731 (0.063)*	0.7067 (0.000)** *	0.4987 (0.180)	0.9804 (0.002)** *	0.2996 (0.056)*	0.2919 (0.058)*
INF	-0.1009 (0.031)**	-0.1467 (0.001)** *	-0.0988 (0.260)	-0.2023 (0.005)** *	0.0943 (0.009)** *	-0.0818 (0.019)**
CONS	-1.7345 (0.198)	7.8395 (0.001)** *	2.6138 (0.407)	34.3594 (0.000)** *	-0.3285 (0.754)	-1.5420 (0.272)
N	256	256	127	127	129	129
R squared	0.1123	0.0021	0.1142	0.0556	0.4930	0.4310
Prob F	0.0033	0.0000	0.1338	0.0000	0.0000	0.0000
Hausman Test		0.0001		0.0000		0.0000

Panel A in Table 2 shows that bank loans (LOTA) is positively related to the performance of all banks (as measured by ROA) where the coefficient of LOTA is significant at 10% levels. This result gives evidence that bank loans influence positively banks' performance, suggesting that increasing banks loans may also increase the profitability performance of banks. There is also an evidence of a positive relationship between individual loans and bank performance which the results show that individual loans for the pre and post event have significant relationship with ROA for all banks. This suggests that BNM policies and guidelines which imposed in year 2012 did not influence the profitability performance of banks. The growth and the performance of individual loans were not affected by the introduction of BNM Guidelines on Household Loans where for pre and post events, total loans contributed significantly to the performance of banks.

Loan variables are not significantly related with ROA for commercial banks in Panel B, while Panel C shows that ROA for Islamic banks is positively related with bank loans, implying a higher return for banks with higher loans. The same goes to individual loans for the pre event, where during this period their relationship is significant which indicate that banks with higher individual loans experienced higher returns.

The relationship between size (LTA) and bank profitability are negatives and significant for all banks and commercial banks which indicates that banks with small assets obtains higher profitability. This result is somehow contradicts with many literatures (Haron, 2004) which found a positive relationship between size and bank performance. But according to Naceur and Goaid (2008) banks size sometimes have negative impact on bank performance when banks are operating above their optimal level.

For the other bank specific variables, NPL has significant relationship with all banks and commercial banks performances and several inferences can be drawn from this finding. The inverse relationship of NPL implies that banks with higher credit risk exhibit lower profitability level. This also confirm with studies done by Ahmad & Ahmad (2004) on the importance of credit risk management where banks that control and mitigate credit risks properly may experience high returns. With respect to the macroeconomic variables, the results show that only BLR and INF are significant. The negative sign of the coefficient for INF indicates that any increasing in the inflation rate will decrease the bank profitability.

Conclusion

According to the economist, the increase in unproductive household loans can become a cancer to the country because this type of loan does not have a positive impact on the individual wealth and also on the country's development (Cecchetti et al. 2011). The increase in loans may affect borrower's ability because it is sensitive to the changes in interest rates. Rising interest rates led to an increase in monthly loan installment and it can be a burden to the borrower. The failure to fulfill the financial commitment will increase non-performing loans (NPL) which then affect the performance of banks. This study attempts to investigate the impact of BNM Guideline on Responsible Financing on bank performances where several internal variables that represent a bank's characteristics and macroeconomic variables as external variables have been included in these models. By using unbalanced panel data, this study found that household loans influence profitability of all banks and Islamic banks in the pre event; before the introduction of BNM guidelines in controlling household loans. For year

2012 onwards, the household loans give impact on all banks but not for commercial banks and Islamic banks. It same goes to total bank loans which give impact on banking profitability for all banks and Islamic banks but not for commercial banks.

These findings indicate that the policies in moderating the increase of household debts are important to scale back the overleveraged position of the household sector. The decline growth in household loans for the past three years was primarily due to guidelines on responsible financing imposed by BNM. Furthermore, the positive aspect of Malaysia's household debt is that it is largely contributed by the residential property loans which are considered as productive household loans where Malaysian property market was proven resilient and rebounding quickly in economic recoveries in the previous economic crisis.

References

Alien, L. (1988) The Determinants of Bank Interest Margin; A Note. *Journal of Financial and Quantitative Analysis*, 23, p. 231-235.

Bank Negara Malaysia (2015) The Financial Stability and Payment Systems Report 2015. online assessment from www.bnm.gov.my/files/publication/fsps/en/2015/fs2015_book.pdf

Ahmad, N. H. and Ahmad, S. N. (2004). Key Factors Influencing Credit Risk of Islamic Bank: A Malaysian Case. *The Journal of Muamalat and Islamic Finance Research* 1, 65-80.

Bashir A. (2000) Assessing the Performance of Islamic banks: Some Evidence from the Middle East. Paper presented at the ERF 8th meeting in Jordan.

Ben Naceur S. (2003) The Determinants of the Tunisian Banking Industry Profitability: Panel Evidence. Unpublished Manuscript. University Libre de Tunis, Tunisia.

Ben Naceur, S., & Goaid, M. (2001). The Determinants of the Tunisian Deposit Banks' performance. *Applied Financial Economics*, 11, 317-319. <http://dx.doi.org/10.1080/096031001300138717>

Berger, A. (1995) " The Relationship between Capital and Earning in Banking" *Journal of Money, Credit and Banking*. Vol. 27 432-456.

Bourke, P. (1989) "Concentration and Other Determinants of Bank Profitability in Europe, North America and Australia" *Journal of Banking and Finance* 13: 65-79.

Cecchetti, S.G, M S Mohanty and Zampoll, F. (2011) The Real Effect of Debts" BIS Working papers No 352 (<http://www.bis.org/publ/work352.htm>)

Fraser, D. R., Phillips, W. and Rose, P. S. (1974) A Canonical Analysis of Bank Performance, *Journal of Financial and Quantitative Analysis*, 9, 287-95.

Gujarati, D. N. (2003) Basic Econometric. Mcgraw Hill. New York.

Haron, S. and Ahmad, N.A (2000) "The Effects of Conventional Interest Rates and Rate of Profit on Funds Deposited with Islamic Banking System in Malaysia" *International Journal of Islamic Financial Services* Vol. 1 No. 4

Haron, S.(2004) "Determinant of Islamic Bank Profitability" *Global Journal of Finance and Economics* Vol. 1 No. 1: 11-33

Hassan, K. and Bashir, M.A.H (2003), "Determinants of Islamic Banking Profitability", *Proceedings of the ERF 10th Annual Conference, Marrakesh, Morocco, 16-18 December, 2003.*

Kunt, D. A. and Huizinga, H. (1997) "Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence". *Working Paper, Development Research Group World Bank, Washington.*

MAA – Malaysian Automotive Association (2013) Market Review for 2012 and Outlook For 2013 online http://www.maa.org.my/pdf/Market_Review_2012.pdf

MARC - Malaysian Rating Corporation Berhad (2014) Malaysia: Loans and Household Debt – An Assessment. Economic Research Vol: ER/003/2014

Molyneux, P. and Thornton, J. (1992) "Determinants of European Bank Profitability: A Note" *Journal of Banking and Finance* 16: 1173-1178

Rosly, S.A and Apandi, A.B (2003) "Performance of Islamic and Mainstream Banks in Malaysia" *International Journal of Social Economics* Vol. 30 No. 12.

Samad, A (1999). "Relative Performance of Conventional Banking vis-à-vis Islamic Bank in Malaysia." *IJUM Journal of Economics and Management*, Vol. 7 No.1, pp 1-25.

Samad, A and Hassan M.K (1999) "The Performance of Malaysian Banks during 1997: An Exploratory Study". *International Journal of Islamic Financial Services* No.3.

Sanusi, A., Ismail, A.G. and Mohamed, N.(2005) "Profitability of An Islamic Bank : Panel Evidence From Malaysia". *Proceeding SEKI* . Bangi.

William, B. (1998) "A Polled Study of the Profits and Size of Foreign Banks in Australia" *Journal of Multinational Financial Management*, 8, 211-231

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