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**IMPACT OF INTERNET BANKING AND SOCIAL MEDIA
ADOPTION ON PROFITABILITY OF
LOCAL COMMERCIAL BANKS IN MALAYSIA**



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UUM
Universiti Utara Malaysia

**MASTER OF SCIENCE
UNIVERSITI UTARA MALAYSIA
JUNE 2017**

IMPACT OF INTERNET BANKING AND SOCIAL MEDIA ADOPTION ON
PROFITABILITY OF LOCAL COMMERCIAL BANKS IN MALAYSIA



By
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Universiti Utara Malaysia

Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Partial Fulfillment of the Requirement for the Master of Science (Banking)



**Pusat Pengajian Ekonomi,
Kewangan dan Perbankan**

SCHOOL OF ECONOMICS, FINANCE, AND BANKING

Universiti Utara Malaysia

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ABSTRACT

This study investigated the impact of Internet Banking and social media adoption on the profitability of local commercial banks in Malaysia. A sample of eight local commercial banks in Malaysia for the period ranging from 1998-2016 was chosen for this study. Multiple regression analysis was used to identify the relationship between the dependent variable namely Net Interest Margin and independent variables including Internet Banking and social media which were in the form of dummy variables. Two control variables namely Loan Deposit Ratio and Loan Loss Provisions over Total Loans ratio were included to assure robustness and comparability in findings. Findings show that there was negative significant relationship between Internet Banking and social media on the profitability of local commercial banks in Malaysia at 0.01 significance levels. Thus, increasing usage of Internet Banking and social media by Malaysia's local commercial banks caused margin compression in banks. Despite the reduction in term of bank profitability associated with Internet Banking and social media adoption, margin compression actually promote market efficiency in the long-term.

Keywords: Malaysia, Internet Banking, social media, multiple regression analysis, dummy variables

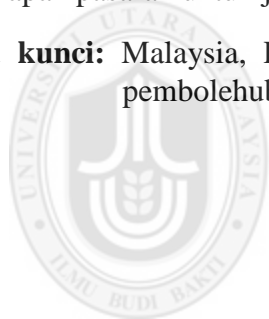


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ABSTRAK

Kajian ini mengkaji kesan penggunaan Perbankan Internet dan media sosial terhadap keuntungan bank perdagangan tempatan di Malaysia. Sampel kajian terdiri daripada lapan bank perdagangan tempatan di Malaysia telah dipilih untuk tempoh 1998-2016. Analisis regresi berganda telah digunakan untuk mengenal pasti hubungan antara pembolehubah bersandar iaitu Margin Faedah Bersih dan pembolehubah bebas termasuk Perbankan Internet dan media social dalam bentuk pembolehubah dummy. Dua pembolehubah kawalan termasuk Nisbah Pinjaman-Deposit dan Nisbah Peruntukan Kerugian Pinjaman ke atas Jumlah Pinjaman juga dimasukkan dalam kajian ini untuk memastikan keteguhan dan perbandingan dalam dapatan. Dapatan kajian menunjukkan bahawa hubungan yang signifikan negatif wujud antara Perbankan Internet dan media sosial ke atas keuntungan banks perdagangan tempatan di Malaysia pada 0.01 taraf keertian. Justeru itu, peningkatan penggunaan Perbankan Internet dan media sosial oleh bank perdagangan tempatan Malaysia menyebabkan mampatan margin dalam banks. Walaupun pengguna Perbankan Internet dan media social menyebabkan penurunan keuntungan bank dalam jangka pendek, mampatan margin sebenarnya menggalakkan kecekapan pasaran untuk jangka panjang.

Kata kunci: Malaysia, Perbankan Internet, media social, analisis regresi berganda, pembolehubah dummy



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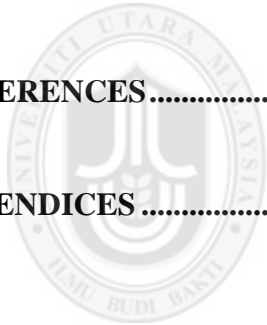
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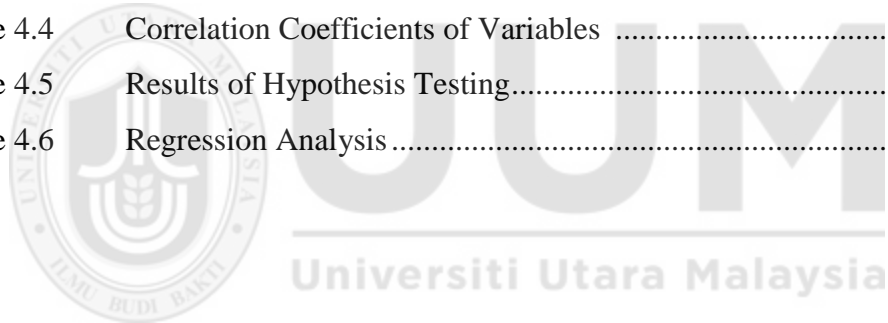
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LIST OF ABBREVIATIONS

| | |
|--------|---------------------------------------|
| NIM | Net Interest Margin |
| IB | Internet Banking |
| SM | Social Media |
| LDR | Loan Deposit Ratio |
| LLPOTL | Loan Loss Provisions over Total Loans |



CHAPTER ONE

INTRODUCTION

1.1 Introduction

Traditional internet consumption such as email and general browsing had undergone significant revolution with the introduction of new digital technologies and websites that provide a more interactive and humanize services. Previously, majority of the internet were accessed through fixed-line connection to desktop, however with the emergence of WiFi and the growth of the mobile devices such as smartphones, tablets and laptop, the role of internet has changed.

E-banking is a process of performing banking transaction electronically without the need to visit physical branch. Electronic banking encompasses personal computer (PC) banking, Internet Banking, online banking and phone banking, in which different types of electronic banking are often used interchangeably. Internet Banking provides a mean of transferring funds from savings account to current account as well as third party account. Services provided under Internet banking include balance enquiries, bill payment, fund transfer, account statement and so on. The unique feature of Internet has made banking products and services available to customer across the boundary.

Online banking was first introduced in New York, United States followed by United Kingdom in early 1980s. In New York, online services was introduced as home banking services in four major city, namely Citibank, Chase Manhattan, Chemical and

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APPENDICES

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
|--------------------|-----------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| | | | | | | Statistic | Statistic | Statistic | Statistic |
| NIM | 136 | -.0078 | .2659 | .116899 | .0394394 | 1.041 | .208 | 4.211 | .413 |
| IB | 136 | 0 | 1 | .83 | .376 | -1.785 | .208 | 1.204 | .413 |
| SM | 136 | 0 | 1 | .32 | .467 | .800 | .208 | -1.381 | .413 |
| LDR | 136 | -.1461 | .0937 | -.033989 | .0372013 | -.182 | .208 | 1.997 | .413 |
| LLPOTL | 136 | -3.5229 | -1.1113 | 2.161883 | .4520581 | -.684 | .208 | .499 | .413 |
| Valid N (listwise) | 136 | | | | | | | | |

Correlations

| | | NIM | IB | SM | LDR | LLPOTL |
|---------------------|--------|-------|-------|-------|-------|--------|
| Pearson Correlation | NIM | 1.000 | -.382 | -.440 | .211 | .421 |
| | IB | -.382 | 1.000 | .307 | -.097 | -.399 |
| | SM | -.440 | .307 | 1.000 | .064 | -.655 |
| | LDR | .211 | -.097 | .064 | 1.000 | .222 |
| | LLPOTL | .421 | -.399 | -.655 | .222 | 1.000 |
| Sig. (1-tailed) | NIM | . | .000 | .000 | .007 | .000 |
| | IB | .000 | . | .000 | .129 | .000 |
| | SM | .000 | .000 | . | .229 | .000 |
| | LDR | .007 | .129 | .229 | . | .005 |
| | LLPOTL | .000 | .000 | .000 | .005 | . |
| N | NIM | 136 | 136 | 136 | 136 | 136 |
| | IB | 136 | 136 | 136 | 136 | 136 |
| | SM | 136 | 136 | 136 | 136 | 136 |
| | LDR | 136 | 136 | 136 | 136 | 136 |
| | LLPOTL | 136 | 136 | 136 | 136 | 136 |

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .554 ^a | .307 | .286 | .0333365 | 1.073 |

a. Predictors: (Constant), LLPOTL, LDR, IB, SM

b. Dependent Variable: NIM

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | .064 | 4 | .016 | 14.488 | .000 ^b |
| | Residual | .146 | 131 | .001 | | |
| | Total | .210 | 135 | | | |

a. Dependent Variable: NIM

b. Predictors: (Constant), LLPOTL, LDR, IB, SM

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | .165 | .017 | | 9.571 | .000 | | |
| | IB | -.025 | .008 | -.234 | -2.942 | .004 | .836 | 1.196 |
| | SM | -.029 | .009 | -.342 | -3.403 | .001 | .523 | 1.914 |
| | LDR | .209 | .083 | .197 | 2.529 | .013 | .873 | 1.145 |
| | LLPOTL | .005 | .009 | .059 | .559 | .577 | .470 | 2.127 |

a. Dependent Variable: NIM