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**THE IMPACT OF FINANCIAL DEVELOPMENT AND
MACROECONOMICS VARIABLES ON ECONOMIC GROWTH**



**MASTER OF SCIENCE (FINANCE)
UNIVERSITI UTARA MALAYSIA
2017**

**THE IMPACT OF FINANCIAL DEVELOPMENT AND
MACROECONOMICS VARIABLES ON ECONOMIC GROWTH**



**Research Paper Submitted to
School of Economics, Finance and Banking,
Universiti Utara Malaysia,
In Partial Fulfilment of the Requirement for the
Master of Science (MSc) Finance**



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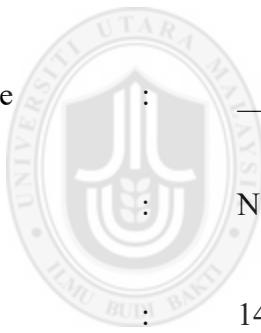
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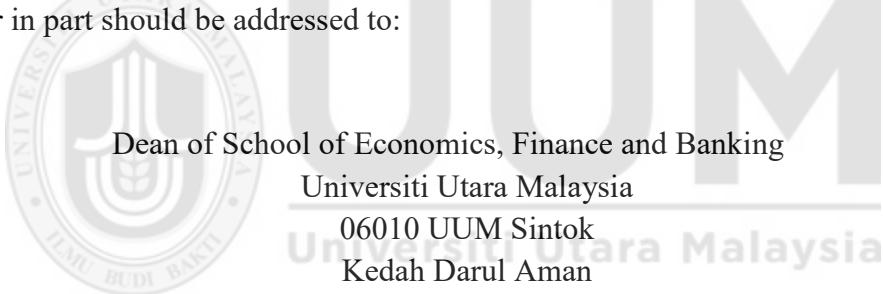
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ABSTRACT

Financial development is an important element for an effective and efficient financial sector which assisted in encouraging the economic growth in ensuring the flows of capital are channelled towards the most productive use, minimizing market frictions and reducing transactions costs. The development of financial sectors as a main indicator for the country's economic growth is strongly recognized in the neo-classical views theory. The objective of the study is to determine the impact of financial development (domestic credit to private sector and gross domestic savings) and macroeconomics variables (inflation, real interest rate and trade) on economic growth for 47 of Asian countries. This study employs the unbalanced panel data in 47 of Asian countries for the period of 2000 and 2016. The dependent variable for this study is economic growth and the independent variables consist of domestic credit to private sector, gross domestic savings, inflation, real interest rate and trade. The study discovers the positive relationship between financial development and economic growth. In contrary, the study finds the negative relationship between two macroeconomics variables (inflation and real interest rate) and the economic growth. In addition, the results argue that trade is not the factor that influencing the economic growth. The findings of the study could assist the policy makers for the future policy making efforts.

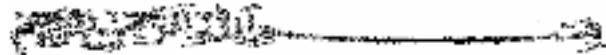
Keywords: Financial Development, Economic Growth, Inflation, Real Interest Rate and Trade

ABSTRAK

Pembangunan kewangan merupakan elemen penting bagi sektor kewangan yang berkesan dan cekap yang membantu dalam menggalakkan pertumbuhan ekonomi dalam memastikan aliran modal disalurkan ke arah penggunaan yang paling produktif, meminimumkan pergeseran pasaran dan mengurangkan kos transaksi. Perkembangan sektor kewangan sebagai petunjuk utama pertumbuhan ekonomi negara sangat diiktiraf dalam teori pandangan neo-klasik. Objektif kajian ini adalah untuk menentukan kesan pembangunan kewangan (kredit domestik kepada sektor swasta dan simpanan domestik kasar) dan pembolehubah makroekonomi (inflasi, kadar faedah sebenar dan perdagangan) terhadap pertumbuhan ekonomi untuk 47 negara Asia. Kajian ini menggunakan data panel yang tidak seimbang di 47 negara Asia untuk tempoh 2000 dan 2016. Pemboleh ubah yang bergantung kepada kajian ini adalah pertumbuhan ekonomi dan pembolehubah bebas terdiri daripada kredit domestik kepada sektor swasta, simpanan domestik kasar, inflasi, kadar faedah sebenar dan perdagangan. Kajian ini mendapati hubungan positif antara pembangunan kewangan dan pertumbuhan ekonomi. Sebaliknya, kajian ini mendapati hubungan negatif antara dua pembolehubah makroekonomi (inflasi dan kadar faedah sebenar) dan pertumbuhan ekonomi. Di samping itu, hasilnya berpendapat bahawa perdagangan bukanlah faktor yang mempengaruhi pertumbuhan ekonomi. Penemuan kajian ini dapat membantu para pembuat dasar untuk usaha membuat kebijakan masa depan.

Kata kunci: Pembangunan Kewangan, Pertumbuhan Ekonomi, Inflasi, Kadar Faedah Sebenar dan Perdagangan

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
FD	= Financial Development
GDP	= Gross Domestic Product
ARDL	= Autoregressive Distributed Lag
MENA	= Middle East and North America
OLS	= Ordinary Least Square
OECD	= Organization for Economic Co-operation and Development.
TAR	= Threshold Autoregressive
DCPS	= Domestic Credit to Private Sector
GDS	= Gross Domestic Savings
RIR	= Real Interest Rate
USD	= United State Dollar



CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF STUDY

The relationship between financial development and economic growth has gained a great deal of attention and become an important topic of research debate for recent decades by a number of researchers (Bittencourt, 2012; Durusu-Ciftci, Ispir & Yetkiner, 2017; Kendall, 2012). Financial development can be defined as an effective and efficient financial sector which assisted in encouraging the economic growth in ensuring the flows of capital are handled towards the most productive use, minimizing market frictions as well as reducing transactions costs (Durusu-Ciftci et al, 2017). The financial development is conducted through establishing a legal framework, building on existing financial structures, harnessing the potential of bank and increasing the liquidity and depth of the capital market.

Adnan (2011) asserts that higher degree of financial development of a country contributes towards a wider availability of the financial services offered in the financial system. Financial systems are group into three categories which consist of markets, instruments and institutions that play a significant role in transmitting fund to deficit units in ensuring a stable economic growth (Hasan & Barua, 2015).

According to Demirguc-Kunt and Levine (2008), a well-developed financial systems assist in reducing the transactions and information costs which enhancing the

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APPENDIX A

```

. (9 vars, 799 obs pasted into editor)

. tsset code year
    panel variable: code, 1 to 47
    time variable: year, 2000 to 2016

. regress lndgdp x1domesticcredittoprivatesectoro x2inflationgdpdeflatorannual x3
> realintererate x4tradeofgdp x5grossdomesticsavingsofgdp

Source |      SS       df      MS
-----+-----+-----+
Model |  768.890944      5  153.778189
Residual |  561.674584  559  1.00478459
-----+-----+
Total |  1330.56553  564  2.35915874

Number of obs =      565
F( 5, 559) = 153.05
Prob > F = 0.0000
R-squared = 0.5779
Adj R-squared = 0.5741
Root MSE = 1.0024

-----+
LnGdp |      Coef.      Std. Err.      t      P>|t|      [95% Conf. Interval]
-----+
x1domestic~o |  .0088109  .0011258  7.83  0.000  .0065996  .0110221
x2inflatio~1 |  -.0682821  .0093202 -7.33  0.000  -.0865889  -.0499753
x3realinte~e |  -.0550839  .0086863 -6.34  0.000  -.0721456  -.0380222
x4tradeofgdp |  .0025665  .0007088  3.62  0.000  .0011743  .0039587
x5grossdom~p |  .0259104  .0019306 13.42  0.000  .0221184  .0297024
_cons |  7.607703  .1787372  42.56  0.000  7.256625  7.958782
-----+
.vif

Variable |      VIF      1/VIF
-----+
x2inflatio~1 |  3.55  0.281403
x3realinte~e |  3.37  0.296866
x1domestic~o |  1.77  0.565917
x5grossdom~p |  1.17  0.855355
x4tradeofgdp |  1.06  0.939476
-----+
Mean VIF |  2.18

ssc install xttest3
checking xttest3 consistency and verifying not already installed...
all files already exist and are up-to-date.

ssc install xtserial
ssc install: "xtserial" not found at SSC, type -findit xtserial-
(To find all packages at SSC that start with x, type -ssc describe x-)
r(601);

findit xtserial

xttest3

Modified Wald test for groupwise heteroskedasticity in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (37) = 1307.09

Prob>chi2 = 0.0000

```

```

. xtserial lngdp x1domesticcredittoprivatesectorox2inflationgdpdeflatorannual x
> 3realintererate x4tradeofgdp x5grossdomesticsavingsofgdp

wooldridge test for autocorrelation in panel data
H0: no first order autocorrelation

F( 1,      36) =    1124.350
Prob > F =      0.0000

. regress lngdp x1domesticcredittoprivatesectoro x2inflationgdpdeflatorannual x3
> realintererate x4tradeofgdp x5grossdomesticsavingsofgdp, robust
cluster (code)

Regression with robust standard errors
Number of obs =      565
F( 5,      36) =    29.18
Prob > F =      0.0000
R-squared =      0.5779
Root MSE =      1.0024

Number of clusters (code) = 37

-----  

LnGdp | Coef.      Robust Std. Err.      t      P>|t|      [95% Conf. Interval]  

-----+-----  

x1domestic~o | .0088109 .0030138      2.92      0.006      .0026987 .014923  

x2inflatio~1 | -.0682821 .0199891     -3.42      0.002     -.1088218 -.0277424  

x3realinte~e | -.0550839 .0191153     -2.88      0.007     -.0938515 -.0163164  

x4tradeofgdp | .0025665 .0018395      1.40      0.171     -.0011641 .0062971  

x5grossdom~p | .0259104 .0067283      3.85      0.000      .0122648 .039556  

_cons | 7.607703 .5407875     14.07      0.000      6.510936 8.704471
-----
```



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APPENDIX B

Descriptive Statistics

	Obs	Minimum	Maximum	Mean	Standard Deviation
GDP (USD billion)	565	138.437	88564.820	10952.810	15860.460
Domestic credit to private sector (%)	565	1.267	253.574	57.879	49.840
Inflation (%)	565	-27.206	39.178	6.395	8.537
Real interest rate (%)	565	-19.927	53.543	5.588	8.918
Trade (%)	565	19.798	441.604	96.789	61.440
Gross domestic savings (%)	565	-102.428	75.550	24.251	23.640

APPENDIX C

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	Y= LNGDP	X1= DCPS	X2= Inf	X3= RIR	X4= Trade	X5= GDS
Y=LNGDP	1.000000					
X1=DCPS	0.416437	1.000000				
X2= Inf	-0.211135	-0.338516	1.000000			
X3= RIR	-0.152685	-0.147316	-0.711563	1.000000		
X4=Trade	0.265480	0.219325	-0.075008	-0.043836	1.000000	
X5=GDS	0.497262	0.226197	-0.009748	-0.249171	0.157309	1.000000