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**THE FINANCIAL PERFORMANCE OF ISLAMIC AND CONVENTIONAL
BANKS BEFORE AND AFTER THE ADOPTION OF FINANCIAL BLUEPRINT
POLICY IN MALAYSIA.**

By

KHADAR AHMED DIRIE



**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
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Studies**



Pusat Pengajian Perniagaan Islam
ISLAMIC BUSINESS SCHOOL
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ABSTRACT

The purpose of this research is to analyse the performance of Islamic and Conventional banks before and after the adoption of Malaysian financial blueprint policy in 2011 in terms of profitability. The study was analysed using secondary data from 2006 to 2018. Data for bank specific variables are mainly taken from the Bloomberg, DataStream and banks websites while macroeconomic indicators were mainly collected from Bank Negara Malaysia website. Ordinary Least Square (OLS) model was applied in order to identify the financial difference of Islamic and conventional banks in Malaysia. In addition, the paper also intends to identify the determinant factors that explain the variation in the banking performance models and whether there is also difference in terms of profitability between conventional and Islamic banks before and after the adoption of financial blueprint policy in Malaysia. The research question also addressed whether there is structural change in the performance's parameters before and after the adoption of the financial blueprint policy reforms using Chow test. The results indicate that the performance of Malaysian banks was affected by asset quality, financial risk, operational efficiency, liquidity, gross domestic product, bank sector development and inflation rate across all study period. The results also compared the performance of Islamic and conventional banks before and after the adoption of the reform and it reveals that conventional banks to be more profitable than Islamic banks but the difference isn't that big at the same time foreign banks in Malaysia seem to be performing better than local banks. . Moreover, using year 2011 as break point, the structural stability tests of banks' performance parameters show that there is no structural change between the two periods namely before the adoption of the financial blueprint reforms and after.

Keyword: Conventional banks, Islamic banks, Policy reforms, Panel data, Performance.

ABSTRAK

Tujuan kajian ini adalah untuk menganalisis prestasi bank Islam dan Konvensional sebelum dan selepas penggunaan dasar pelan kewangan kewangan Malaysia pada tahun 2011 dari segi keuntungan. Kajian ini dianalisis dengan menggunakan data sekunder dari tahun 2006 hingga 2018. Data bagi pemboleh ubah tertentu bank terutamanya diambil dari Bloomberg, DataStream dan laman web bank manakala petunjuk makroekonomi kebanyakannya dikumpulkan dari laman web Bank Negara Malaysia. Model Biasa Biasa (OLS) digunakan untuk mengenal pasti perbezaan kewangan bank Islam dan konvensional di Malaysia. Di samping itu, kertas itu juga bertujuan untuk mengenal pasti faktor penentu yang menjelaskan variasi dalam model prestasi perbankan dan sama ada terdapat perbezaan dari segi keuntungan antara bank konvensional dan Islam sebelum dan selepas penggunaan dasar pelan kewangan di Malaysia. Soalan penyelidikan juga membahas apakah terdapat perubahan struktur dalam parameter prestasi sebelum dan selepas penggunaan pembaharuan dasar pelan tindakan kewangan menggunakan ujian Chow. Hasilnya menunjukkan bahawa prestasi bank Malaysia terjejas oleh kualiti aset, risiko kewangan, kecekapan operasi, kecairan, keluaran dalam negeri kasar, pembangunan sektor bank dan kadar inflasi merentas semua tempoh kajian. Hasilnya juga membandingkan prestasi bank Islam dan konvensional sebelum dan selepas penggunaan pembaharuan dan ia mendedahkan bahawa bank konvensional menjadi lebih menguntungkan daripada bank Islam tetapi perbezaannya tidak begitu besar pada masa yang sama bank asing di Malaysia nampaknya melakukan lebih baik daripada bank tempatan. Selain itu, dengan menggunakan tahun 2011 sebagai titik putus, ujian kestabilan struktur parameter prestasi bank menunjukkan bahawa tidak ada perubahan struktur antara kedua-dua tempoh sebelum penggunaan reformasi pelan tindakan kewangan dan selepas itu.

Kata kunci: Bank konvensional, Bank Islam, Data panel, Pembaharuan dasar, Prestasi.

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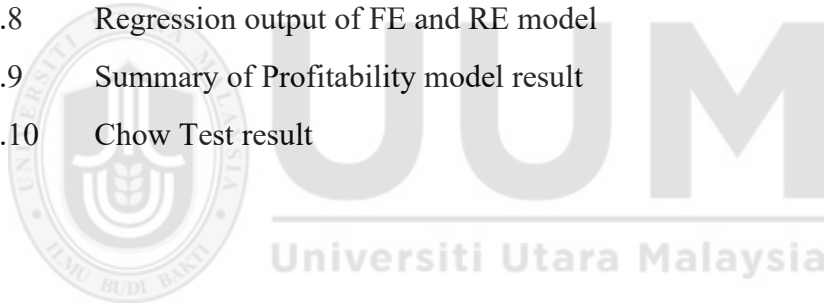
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LIST OF ABBREVIATIONS

BNM	Bank Negara Malaysia
IFSA	Islamic Financial Services Act
DEA	Data envelopment analysis
UUM	University Utara Malaysia
ROA	Return on Assets
ROE	Return on Equity
OLS	Ordinary Least Square
FE	Fixed Effect
RE	Random Effect
DV	Dependent variable
IV	Independent variables
BSD	Bank Sector Development
IF	Inflation
AQ	Asset Quality
OE	Operation Efficiency
FR	Financial Risk
GDP	Gross Domestic Product
LR	Liquidity Ratio
CIR	Cost Income Ratio
LAR	Loan Asset Ratio
HI	Herfindahl Index
LTA	Log Total Assets
LDR	Loan Deposit Ratio

CAR	Current Asset Ratio
CDR	Cash Deposit Ratio
CPIDR	Cash and Portfolio Investment to Deposit Ratio
IMLGL	Impaired Loan to Gross Loan Ratio
EQL	Equity to Net Loan Ratio
NPL	Non-performing Loan
NIM	Net Interest Margin
VRS	variable Return to Scale
CRS	Constant Return to Scale
ROCE	Return of Capital Employed



CHAPTER 1

INTRODUCTION

1.0 Introduction

This research seeks to inspect the financial performance of Malaysian banks before and after the adoption of the Malaysia financial blueprint policy. This study will compare both conventional and Islamic bank's performance in terms of profitability and whether the policy reform have made any difference in transforming Malaysia's financial system particularly the banking sector performance. This section contains of the background of the report to provide general discussion with regards to the topic under investigation, research problem in order to discuss on arising issues, research questions and research objectives as a guideline to this topic. Besides that, the importance of this research, scope and limitation and structure of the research will be discussed in chapter too.

1.1 Background of the Study

The essential position of the financial sector in the course of economic development and advancement is commonly recognized by academics and legislators. Over the last two spans, numerous nations have reformed their financial sector and have applied a variety of structural and financial modifications with the objective to encourage the responsibility of financial establishments and banks in the economic system. This implies that, the significance of the finance sector is theorized that banks are the most

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Appendix 1A

Islamic Banks

Islamic Banks		
No.	Name	Ownership
1	Affin Islamic Bank Berhad	L
2	Al Rajhi Banking & Investment Corporation (Malaysia) Berhad	F
3	Alliance Islamic Bank Berhad	L
4	AmBank Islamic Berhad	L
5	Bank Islam Malaysia Berhad	L
6	Bank Muamalat Malaysia Berhad	L
7	CIMB Islamic Bank Berhad	L
8	HSBC Amanah Malaysia Berhad	F
9	Hong Leong Islamic Bank Berhad	L
10	Kuwait Finance House (Malaysia) Berhad	F
11	MBSB Bank Berhad	L
12	Maybank Islamic Berhad	L
13	OCBC Al-Amin Bank Berhad	F
14	Public Islamic Bank Berhad	L
15	RHB Islamic Bank Berhad	L
16	Standard Chartered Saadiq Berhad	F

Appendix 1B

Conventional Banks

Commercial Banks		
No.	Name	Ownership
1	Affin Bank Berhad	L
2	Alliance Bank Malaysia Berhad	L
3	AmBank (M) Berhad	L
4	BNP Paribas Malaysia Berhad	F
5	Bangkok Bank Berhad	F
6	Bank of America Malaysia Berhad	F
7	Bank of China (Malaysia) Berhad	F
8	CIMB Bank Berhad	L
9	China Construction Bank (Malaysia) Berhad	F
10	Citibank Berhad	F
11	Deutsche Bank (Malaysia) Berhad	F
12	HSBC Bank Malaysia Berhad	F
13	Hong Leong Bank Berhad	L
14	India International Bank (Malaysia) Berhad	F
15	Industrial and Commercial Bank of China (Malaysia) Berhad	F
16	J.P. Morgan Chase Bank Berhad	F
17	MUFG Bank (Malaysia) Berhad	F
18	Malayan Banking Berhad	L
19	Mizuho Bank (Malaysia) Berhad	F
20	OCBC Bank (Malaysia) Berhad	F
21	Public Bank Berhad	L
22	RHB Bank Berhad	L
23	Standard Chartered Bank Malaysia Berhad	F
24	Sumitomo Mitsui Banking Corporation Malaysia Berhad	F
25	The Bank of Nova Scotia Berhad	F
26	United Overseas Bank (Malaysia) Bhd	F

Appendix 2

```

----- (R)
/ / / / /
/ / / / /
Statistics/Data Analysis 14.0
MP - Parallel Edition
Copyright 1985-2015 StataCorp LP
StataCorp
4905 Lakeway Drive
College Station, Texas 77845 USA
800-STATA-PC http://www.stata.com
979-696-4600 stata@stata.com
979-696-4601 (fax)

```

```

Single-user 8-core Stata perpetual license:
Serial number: 10699393
Licensed to: Irfan
Group

```

```

Checking for updates...
(contacting http://www.stata.com)
bad serial number
unable to check for update; verify Internet settings are correct.

```

```

. edit
. *(12 variables, 286 observations pasted into data editor)

. xtset id year
panel variable: id (strongly balanced)
time variable: year, 2006 to 2018
delta: 1 unit

```

Descriptive Analysis

```

ALL BANKS
. sum roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation

```

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	286	1.525944	.9992258	-6.76	5.5
liquidityratio	286	.6005989	.1607468	.0082642	.8325188
assetquality	286	.0036429	.0070534	-.0013536	.0784827
financialrisk	286	.9052205	.0562812	.2281897	.9984131
operationefficiency	286	.0223467	.0215806	.0010131	.2600901
gdp	286	4.915385	2.022238	-1.5	7.4
banksectordev	286	14.01981	25.88092	-74.40667	29.50238
inflation	286	2.494615	1.253707	.6	5.43

```

. sktest roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation

```

Islamic Banks

```

. *(12 variables, 117 observations pasted into data editor)

. xtset id year
panel variable: id (strongly balanced)
time variable: year, 2006 to 2018
delta: 1 unit

. sum roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation

```

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	117	1.449145	.8938155	.18	5.5

liquidityr~o	117	.5906849	.1394392	.0082642	.8325188
assetquality	117	.0046894	.0101508	-.0003026	.0784827
financialr~k	117	.9102221	.0735973	.2281897	.9984131
operatione~y	117	.0131565	.0271751	.0010131	.2600901

gdp	117	4.915385	2.027382	-1.5	7.4
banksector~v	117	14.01981	25.94675	-74.40667	29.50238
inflation	117	2.494615	1.256896	.6	5.43

. edit

. drop _all

Conventional Banks

. *(12 variables, 169 observations pasted into data editor)

. xtset id year

panel variable: id (strongly balanced)

time variable: year, 2006 to 2018

delta: 1 unit

. sum roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	169	1.623609	.8504673	-.4	4.65
liquidityr~o	169	.6074626	.1740515	.0581134	.8206398
assetquality	169	.0029184	.0034586	-.0013536	.0262755
financialr~k	169	.9017578	.040051	.6499927	.958194
operatione~y	169	.0287092	.0134394	.0056608	.0707068

gdp	169	4.915385	2.024699	-1.5	7.4
banksector~v	169	14.01981	25.91241	-74.40667	29.50238
inflation	169	2.494615	1.255233	.6	5.43

Normality Test

Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
roa	286	0.0000	0.0000	.	0.0000
liquidityr~o	286	0.0000	0.0000	67.69	0.0000
assetquality	286	0.0000	0.0000	.	0.0000
financialr~k	286	0.0000	0.0000	.	0.0000
operatione~y	286	0.0000	0.0000	.	0.0000
gdp	286	0.0000	0.0000	.	0.0000
banksector~v	286	0.0000	0.0000	.	0.0000
inflation	286	0.0000	0.6193	17.26	0.0002

. swilk roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
roa	286	0.81869	37.027	8.458	0.00000
liquidityr~o	286	0.85818	28.962	7.883	0.00000
assetquality	286	0.39382	123.794	11.285	0.00000
financialr~k	286	0.54734	92.441	10.601	0.00000
operatione~y	286	0.65040	71.396	9.996	0.00000
gdp	286	0.67960	65.431	9.792	0.00000

```
banksector~v |      286    0.43234    115.927    11.131    0.00000
inflation |      286    0.93453     13.370     6.073    0.00000
```

```
. sfrancia roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation
```

Shapiro-Francia W' test for normal data

Variable	Obs	W'	V'	z	Prob>z
roa	286	0.80891	42.316	7.926	0.00001
liquidityr~o	286	0.85871	31.288	7.287	0.00001
assetquality	286	0.38534	136.114	10.398	0.00001
financialr~k	286	0.53639	102.666	9.801	0.00001
operatione~y	286	0.64108	79.481	9.260	0.00001
gdp	286	0.67796	71.314	9.030	0.00001
banksector~v	286	0.43074	126.061	10.236	0.00001
inflation	286	0.93439	14.530	5.663	0.00001

```
. regress roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation
```

Source	SS	df	MS	Number of obs	=	286
Model	58.6396923	8	7.32996153	F(8, 264)	=	10.09
Residual	191.825737	264	.72661264	Prob > F	=	0.0000
				R-squared	=	0.2341
				Adj R-squared	=	0.2109
Total	250.465429	272	.920828783	Root MSE	=	.85242

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
liquidityratio	.3418365	.3796694	0.90	0.369	-.4055555	1.089228
assetquality	-9.823505	8.081422	-1.22	0.225	-25.73206	6.085049
financialrisk	-5.214593	1.193977	-4.37	0.000	-7.564977	-2.864208
operationefficiency	-19.49506	3.024511	-6.45	0.000	-25.44891	-13.54121
gdp	.0365112	.0525042	0.70	0.487	-.0668451	.1398674
banksectordev	-.0011345	.0041842	-0.27	0.786	-.0093712	.0071022
inflation	.0010432	.0485321	0.02	0.983	-.0944939	.0965803
_cons	6.346267	1.060373	5.98	0.000	4.258887	8.433647

```
. estat hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance
Variables: fitted values of roa

chi2(1) = 2.21
Prob > chi2 = 0.1347

```
. estat ovtest
```

Ramsey RESET test using powers of the fitted values of roa

Ho: model has no omitted variables
F(3, 57) = 0.19
Prob > F = 0.8889

```
. estat ovtest
```

Ramsey RESET test using powers of the fitted values of roa

Ho: model has no omitted variables
F(3, 275) = 27.04
Prob > F = 0.0000

```
. vif
```

Variable	VIF	1/VIF
banksector~v	3.89	0.257235
gdp	3.74	0.267583
financialr~k	1.50	0.668023
operatione~y	1.41	0.708062
liquidityr~o	1.23	0.809869
inflation	1.23	0.814817
assetquality	1.08	0.928410
Mean VIF	2.01	

```
. xtreg roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation, fe
```

```
Fixed-effects (within) regression
```

```
Group variable: id
```

```
Number of obs = 286
```

```
Number of groups = 22
```

```
R-sq:
```

```
within = 0.4591
```

```
between = 0.0429
```

```
overall = 0.2272
```

```
Obs per group:
```

```
min = 13
```

```
avg = 13.0
```

```
max = 13
```

```
corr(u_i, Xb) = -0.1234
```

```
F(8,24) = 25.88
```

```
Prob > F = 0.1740
```

	roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
liquidityratio		.5510556	.4185619	1.32	0.189	-.2734 1.375511
assetquality		-2.56956	.961861	-0.86	0.000	-.25231 -4.88682
financialrisk		-0.582815	3.36411	-0.66	0.098	-1.20922 1.043587
operationefficiency		-1.33106	3.870976	-0.48	0.000	-2.95585 -9.706267
gdp		.0827084	.0306464	2.70	0.007	.0223432 .1430736
banksectordev		-.0068809	.0024894	-2.76	0.006	-.0117843 -.0019775
inflation		.0264379	.0280999	0.94	0.348	-.0289114 .0817872
_cons		6.550327	3.337208	1.96	0.051	-.0230851 13.12374
sigma_u		.70588858				
sigma_e		.5199944				
rho		.64823244	(fraction of variance due to u_i)			

```
F test that all u_i=0: F(20, 24) = 2.27
```

```
Prob > F = 0.0000
```

```
. estimates store fixed
```

```
. xtreg roa liquidityratio assetquality financialrisk operationefficiency gdp
banksectordev inflation, re
```

```
Random-effects GLS regression
```

```
Group variable: id
```

```
Number of obs = 286
```

```
Number of groups = 22
```

```
R-sq:
```

```
within = 0.4590
```

```
between = 0.0429
```

```
overall = 0.2279
```

```
Obs per group:
```

```
min = 13
```

```
avg = 13.0
```

```
max = 13
```

```
corr(u_i, X) = 0 (assumed)
```

```
Wald chi2(8) = 209.22
```

```
Prob > chi2 = 0.0000
```

	roa	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
liquidityratio		.5367135	.3898468	1.38	0.169	-.2273722 1.300799
assetquality		-2.74574	7.717069	-0.13	0.000	-.87092 -4.62056

```

financialrisk | -0.248533 3.275322 -0.60 0.109 -1.66805 1.170981
operationefficiency | -1.877 3.56387 -0.74 0.000 -2.86205 -9.89194
      gdp | .0826125 .0304225 2.72 0.007 .0229855 .1422395
banksectordev | -.0068645 .0024651 -2.78 0.005 -.011696 -.002033
inflation | .0258515 .0279277 0.93 0.355 -.0288858 .0805889
      _cons | 6.229637 3.260109 1.91 0.056 -.16006 12.61933
-----+-----
sigma_u | .74775769
sigma_e | .5199944
      rho | .67404156 (fraction of variance due to u_i)
-----+-----

```

```
. estimates store random
```

```
. hausman fixed random
```

Note: the rank of the differenced variance matrix (7) does not equal the number of coefficients being tested (8); be sure this is

what you expect, or there may be problems computing the test. Examine the output of your estimators for anything

unexpected and possibly consider scaling your variables so that the coefficients are on a similar scale.

```

----- Coefficients -----
      |      (b)      (B)      (b-B)      sqrt(diag(V_b-V_B))
      |      fixed      random      Difference      S.E.
-----+-----
liquidityr~o | .5510556 .5367135 .0143421 .1523598
assetquality | -2.56956 -2.74574 .1761783 1.9591
financialr~k | -0.582815 -5.248533 -.334282 .7677895
operatione~y | -1.33106 -1.877 -.4540626 1.511054
      gdp | .0827084 .0826125 .0000959 .0036975
banksector~v | -.0068809 -.0068645 -.0000164 .0003467
inflation | .0264379 .0258515 .0005864 .0031056
-----+-----

```

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

```

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
        = 0.88
Prob>chi2 = 0.9965

```

```
. edit
```

```
. drop _all
```

```
. *(12 variables, 169 observations pasted into data editor)
```

```
. xtset id year
```

```

panel variable: id (strongly balanced)
time variable: year, 2006 to 2018
delta: 1 unit

```

Comparative analysis

Conventional banks all years

```
. regress roa capitaladequacy liquidityratio assetquality financialrisk
operationefficiency gdp banksectordev inflation
```

```

Source |      SS      df      MS      Number of obs      =      169
-----+-----
Model | 31.7515948      8 3.96894936      F(8, 160)      =      7.07
Residual | 89.7619049     160 .561011906      Prob > F      =      0.0000
-----+-----
Adj R-squared      =      0.2613
Adj R-squared      =      0.2244

```

Total | 121.5135 168 .723294641 Root MSE = .74901

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
liquidityratio	.529496	.4271603	1.24	0.217	-.3141035	1.373096
assetquality	44.44069	19.49672	2.28	0.024	5.936586	82.9448
financialrisk	1.554167	4.280608	0.36	0.717	-6.899613	10.00795
operationefficiency	-39.14627	5.890309	-6.65	0.000	-50.77905	-27.51349
gdp	-.0128541	.0554101	-0.23	0.817	-.1222836	.0965753
banksectordev	.0031598	.0044481	0.71	0.479	-.0056248	.0119444
inflation	-.0062624	.0511985	-0.12	0.903	-.1073745	.0948496
_cons	.9274797	4.301688	0.22	0.830	-7.56793	9.422889

```
. edit
. drop _all
. *(12 variables, 117 observations pasted into data editor)
. xtset id year
    panel variable: id (strongly balanced)
    time variable: year, 2006 to 2018
    delta: 1 unit
```

Islamic Banks

```
. regress roa capitaladequency liquidityratio assetquality financialrisk
operationefficiency gdp banksectordev inflation
```

Source	SS	df	MS	Number of obs	=	117
Model	64.1590483	8	8.01988103	F(8, 95)	=	13.54
Residual	56.2584326	95	.592194028	Prob > F	=	0.0000
				R-squared	=	0.5328
				Adj R-squared	=	0.4935
Total	120.417481	103	1.16910176	Root MSE	=	.76954

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
liquidityratio	.2077097	.6049102	0.34	0.732	-.9931889	1.408608
assetquality	-67.29053	13.48837	-4.99	0.000	-94.06833	-40.51274
financialrisk	-7.708261	6.512096	-1.18	0.239	-20.63641	5.219883
operationefficiency	-20.63033	5.492531	-3.76	0.000	-31.53438	-9.726276
gdp	.1313363	.0758168	1.73	0.086	-.019179	.2818516
banksectordev	-.0107595	.0062664	-1.72	0.089	-.0231998	.0016808
inflation	.0126344	.0680766	0.19	0.853	-.1225148	.1477836
_cons	8.317332	6.519797	1.28	0.205	-4.626102	21.26077

```
. drop _all
. *(12 variables, 45 observations pasted into data editor)
. xtset id year
    panel variable: id (strongly balanced)
    time variable: year, 2006 to 2011
    delta: 1 unit
```

Islamic banks

```
. regress roa capitaladequency liquidityratio assetquality financialrisk
operationefficiency gdp banksectordev inflation
```

Source	SS	df	MS	Number of obs	=	54
Model	53.1732474	7	7.59617821	F(7, 46)	=	5.42
				Prob > F	=	0.0001


```

Residual | 64.4998108      46  1.4021698  R-squared      =  0.4519
-----+-----
Total    | 117.673058     53  2.22024638  Adj R-squared  =  0.3685
                                         Root MSE      =  1.1841

```

```

-----+-----
          roa |      Coef.  Std. Err.      t    P>|t|      [95% Conf. Interval]
-----+-----
liquidityratio | .2340789   1.158724    0.20  0.841   -2.098311   2.566469
assetquality   | -7.611036  12.39785   -0.61  0.542   -32.56661   17.34454
financialrisk   | -11.55556  2.575481   -4.49  0.000   -16.73973   -6.371381
operationefficiency | -37.87245  6.994164   -5.41  0.000   -51.95098  -23.79393
      gdp      |  -.4583583  .3235327   -1.42  0.163   -1.109596   .1928792
banksectordev  |  .0519015  .0329762    1.57  0.122   -.014476    .1182791
inflation      |  -.3718206  .2749434   -1.35  0.183   -.9252529   .1816117
      _cons    |  15.37257  3.171868    4.85  0.000    8.98793    21.75721
-----+-----

```

```
. *(12 variables, 65 observations pasted into data editor)
```

```
. xtset id year
      panel variable:  id (strongly balanced)
      time variable:  year, 2006 to 2011
      delta: 1 unit
```

Conventional banks

```
. regress roa capitaladequency liquidityratio assetquality financialrisk
operationefficiency gdp banksectordev inflation
```

```

Source |      SS      df      MS      Number of obs =      78
-----+-----
Model | 15.4313195      7  2.20447422  F(7, 70) =      4.59
Residual | 33.6192108     70  .48027444  Prob > F =      0.0003
-----+-----
Total | 49.0505304     77  .637019875  R-squared =      0.3146
                                         Adj R-squared =      0.2461
                                         Root MSE =      .69302

```

```

-----+-----
          roa |      Coef.  Std. Err.      t    P>|t|      [95% Conf. Interval]
-----+-----
liquidityratio | .5603952   .5262749    1.06  0.291   -.4892269   1.610017
assetquality   | -.2758371  24.76386   -0.01  0.991   -49.6658    49.11412
financialrisk   |  3.218618  1.586248    2.03  0.046    .0549455   6.382291
operationefficiency | -32.83129  7.887879   -4.16  0.000   -48.56317  -17.09941
      gdp      |  .02785    .1563082    0.18  0.859   -.2838968   .3395968
banksectordev  | -.0019153  .015926    -0.12  0.905   -.0336787   .029848
inflation      |  .0451647  .1332359    0.34  0.736   -.2205659   .3108954
      _cons    | -.9386403  1.753061   -0.54  0.594   -4.435011   2.557731
-----+-----

```

```
. drop _all
```

```
. *(12 variables, 104 observations pasted into data editor)
```

```
. xtset id year
      panel variable:  id (strongly balanced)
      time variable:  year, 2012 to 2018
      delta: 1 unit
```

Conventional Banks

```
. regress roa capitaladequency liquidityratio assetquality financialrisk
operationefficiency gdp banksectordev inflation
```

```

Source |      SS      df      MS      Number of obs =      104
-----+-----
Model | 28.2472175      8  3.53090218  F(8, 95) =      6.55
Residual | 51.2386204     95  .539353899  Prob > F =      0.0000
-----+-----
Total | 79.4858378    103  .771707163  R-squared =      0.3554
                                         Adj R-squared =      0.3011
                                         Root MSE =      .73441

```

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
liquidityratio	1.520398	.6802761	2.23	0.028	.1698787	2.870916
assetquality	172.2451	36.68794	4.69	0.000	99.41031	245.0798
financialrisk	-9.738187	5.986866	-1.63	0.107	-21.62362	2.147244
operationefficiency	-41.75621	8.287185	-5.04	0.000	-58.20835	-25.30406
gdp	-.0191545	.4226064	-0.05	0.964	-.8581343	.8198253
banksectordev	-.0325869	.0722267	-0.45	0.653	-.1759751	.1108013
inflation	-.1011326	.1115052	-0.91	0.367	-.3224985	.1202332
_cons	11.46127	7.211029	1.59	0.115	-2.854434	25.77697

. drop _all

. *(12 variables, 72 observations pasted into data editor)

. xtset id year

panel variable: id (strongly balanced)

time variable: year, 2012 to 2018

delta: 1 unit

Islamic Banks

. regress roa capitaladequcy liquidityratio assetquality financialrisk
operationefficiency gdp banksectordev inflation

Source	SS	df	MS	Number of obs	=	63
Model	20.187349	7	2.883907	F(7, 55)	=	7.49
Residual	21.1870165	55	.385218482	Prob > F	=	0.0000
				R-squared	=	0.4879
				Adj R-squared	=	0.4227
Total	41.3743655	62	.667328476	Root MSE	=	.62066

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
liquidityratio	.9372808	1.04076	0.90	0.372	-1.148448	3.02301
assetquality	-4.124076	44.94464	-0.09	0.927	-94.19514	85.94699
financialrisk	-17.03255	3.004326	-5.67	0.000	-23.05335	-11.01174
operationefficiency	-3.839154	8.049139	-0.48	0.635	-19.96999	12.29168
gdp	-1.03658	.9231461	-1.12	0.266	-2.886607	.8134457
banksectordev	-.2236696	.1577714	-1.42	0.162	-.5398506	.0925114
inflation	-.0242895	.1568224	-0.15	0.877	-.3385686	.2899895
_cons	27.18687	8.666802	3.14	0.003	9.81821	44.55553

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