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**DETERMINANTS OF CAPITAL STRUCTURE ADJUSTMENT SPEED IN
THE MALAYSIA PROPERTY INDUSTRY**

By

SHARALA NAIR A/P ACHUDAN



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



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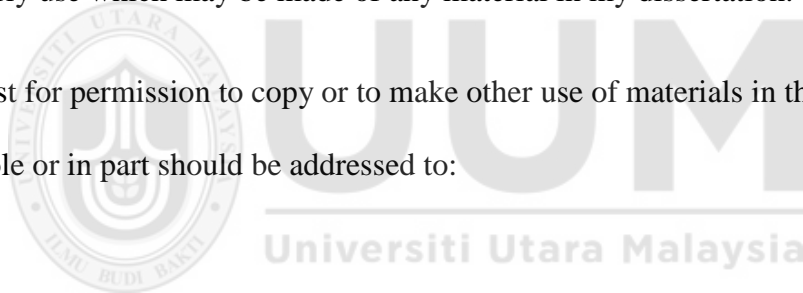
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ABSTRACT

The main focus of this study is to examine the firm's size, firm's growth opportunity, firm's profitability, corporate taxation, corruption, and political stability and the absence of violence impacts on capital structure adjustment speed in the Malaysia property industry. This research is conducted on the 70 listed property companies in Malaysia and the data was collected from the Bursa Malaysia website and the World Bank website using a data stream. Findings of the research revealed that only two (2) out of six variables having a significant relationship with the firm's capital structure adjustment speed, which are the firm's growth opportunity and firm's profitability. A firm with a higher growth opportunity will need more funds to finance their growing investment opportunity as internally generated funds usually not enough to meet the growing opportunity. Higher growth firms will frequently visit the financial market to meet their financing requirements. On the other hand, a profitable firm will prefer to use external sources of funds rather than internal funding to benefits from the tax deduction of interest expense on debt financing.

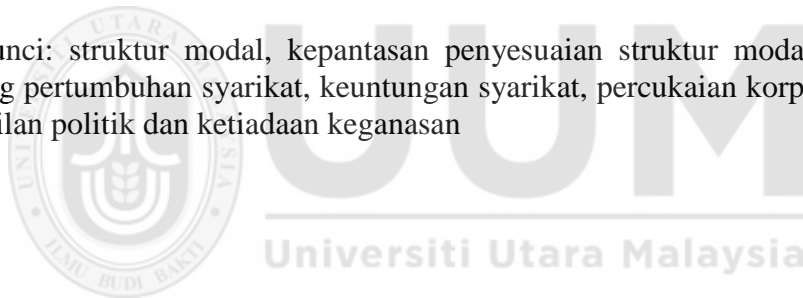
Keywords: capital structure, capital structure adjustment speed, firm's size, firm's growth opportunity, firm's profitability, corporate taxation, corruption, political stability and absence of violence



ABSTRAK

Fokus utama kajian ini adalah untuk mengkaji kesan daripada saiz syarikat, peluang pertumbuhan syarikat, keuntungan syarikat, percukaian korporat, rasuah dan kestabilan politik dan ketiadaan keganasan terhadap kelajuan penyesuaian struktur modal syarikat hartanah di Malaysia. Penyelidikan ini dilakukan ke atas 70 buah syarikat hartanah tersenarai di Malaysia dan data dikumpulkan dari laman web Bursa Malaysia dan juga Bank Dunia dengan menggunakan aliran data. Hasil kajian menunjukkan bahawa hanya dua (2) dari enam pemboleh ubah yang mempunyai hubungan yang signifikan dengan kepantasan penyesuaian struktur modal syarikat iaitu peluang pertumbuhan syarikat dan keuntungan syarikat. Syarikat dengan peluang pertumbuhan yang tinggi akan memerlukan lebih banyak dana untuk membiayai peluang pelaburan tersebut. Ini kerana, dana yang dihasilkan syarikat biasanya tidak cukup untuk memenuhi peluang yang semakin meningkat. Syarikat yang mempunyai pertumbuhan yang lebih tinggi akan sering mengunjungi pasaran kewangan untuk memenuhi keperluan pembiayaan mereka. Disamping itu, syarikat yang mempunyai keuntungan yang lebih tinggi akan menggunakan sumber dana luaran daripada dana dalaman untuk memperolehi pengurangan cukai keatas faedah daripada pembiayaan hutang.

Katakunci: struktur modal, kepantasan penyesuaian struktur modal, saiz syarikat, peluang pertumbuhan syarikat, keuntungan syarikat, percukaian korporat, rasuah dan kestabilan politik dan ketiadaan keganasan



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I dedicated this research to my beloved parents and for their endless support and understanding and also to the rest of my families for their help and encouragement. Beyond a simple thank you, I want them to know that I really appreciate what they had done to me. A sincere and special appreciation dedicated to my friends and course mates as they were showering me with the unconditional supports and help throughout my study and research process.

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TABLE OF CONTENTS

DESCRIPTION	PAGE
TITLE PAGE	i
CERTIFICATION OF THESIS WORK	ii
PERMISSION TO USE	iii
ABSTRACT	iv
ABSTRAK	v
ACKNOWLEDGEMENT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF ABBREVIATIONS	xiv
LIST OF APPENDICES	xv
CHAPTER 1: INTRODUCTION	
1.0 Introduction	1
1.1 Background of Study	1
1.2 Problem Statement	5
1.3 Research Questions	8
1.4 Research Objectives	9

1.5 Scope of Research	9
1.6 Conceptual Definition of Key Variables	10
1.6.1 Capital Structure	10
1.6.2 Capital Structure Adjustment Speed	10
1.6.3 Firm Size	10
1.6.4 Firm Growth Opportunity	10
1.6.5 Firm Profitability	11
1.6.6 Corporate Taxation	11
1.6.7 Corruption	11
1.6.8 Political Stability and the Absence of Violence	11
1.7 Organization of the Study	12
CHAPTER 2: LITERATURE REVIEW	
2.0 Introduction	13
2.1 Capital Structure	13
2.2 Capital Structure Adjustment Speed	14
2.3 Firm Size	16
2.4 Firm Growth Opportunity	16
2.5 Firm Profitability	17
2.6 Corporate Taxation	17

2.7 Corruption	17
2.8 Political Stability and the Absence of Violence	18
2.9 Theories of Capital Structure	18
2.9.1 Trade-Off Theory	18
2.9.2 Pecking Order Theory	20
2.9.3 Market Timing Theory	22
2.9.4 Signaling Theory	23
2.10 Chapter Summary	25
CHAPTER 3: RESEARCH METHODOLOGY	
3.0 Introduction	26
3.1 Research Framework	26
3.2 Summary of Research Hypotheses	28
3.3 Research Design	29
3.4 Operational Definition	30
3.4.1 Capital Structure	30
3.4.2 Capital Structure Adjustment Speed	30
3.4.3 Firm Size	31
3.4.4 Firm Growth Opportunity	31
3.4.5 Firm Profitability	32

3.4.6 Corporate Taxation	32
3.4.7 Corruption	33
3.4.8 Political Stability and the Absence of Violence	33
3.5 Data Collection	34
3.6 Population of the Study	35
3.7 Techniques of Data Analysis	35
3.7.1 Generalized Method of Moment	36
3.8 Chapter Summary	38
CHAPTER 4: DATA ANALYSIS	
4.0 Introduction	40
4.1 Descriptive Analysis	40
4.2 Correlation Coefficient	43
4.3 VIF Test	45
4.4 Hausman Test	46
4.5 Generalized Method of Moment Analysis	48
4.6 Chapter Summary	53
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	
5.0 Introduction	55
5.1 Summary of Findings	55

5.2 Limitations and Recommendations for Future Study	58
5.3 Recommendations to the Selected Firms	59
5.4 Recommendations to the Future Researchers	60
5.5 Conclusions	61
REFERENCES	62
APPENDIX A	68
APPENDIX B	69



LIST OF TABLES

Table 3.0	Research Hypotheses	28
Table 3.1	Data Collection Procedures	34
Table 3.2	Summary of Measurements	39
Table 4.0	Descriptive Analysis	41
Table 4.1	Correlation Coefficient	44
Table 4.2	VIF Test	45
Table 4.3	Hausman Test	46
Table 4.4	Fixed Effects Model	47
Table 4.5	Model Estimation Results by Two-Step GMM Method	49
Table 4.6	Summary of Hypotheses Testing	54



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LIST OF FIGURE

Figure 3.0	Illustrates the Theoretical Framework of the Study	27
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LIST OF ABBREVIATIONS

UUM	Universiti Utara Malaysia
GDP	Gross Domestic Product
LEV	Leverage
LAG_LEV	Lagged Leverage
SIZE	Firm Size
GROW	Firm Growth Opportunity
PROF	Firm Profitability
CT	Corporate Taxation
COR	Corruption
PI	Political Stability and the Absence of Violence



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LIST OF APPENDICES

Appendix A	List of 70 Property Companies	68
Appendix B	Statistical Analysis Output	69



CHAPTER 1 : INTRODUCTION

1.0 Introduction

The main focus of this study is to examine the determinants of capital structure adjustment speed in the Malaysia property industry. This chapter describes the background of the study, and problem statement. Besides, it also provides the details on the research objectives, research questions, scope of research, conceptual definition of key variables, and organization of the study.

1.1 Background of Study

Malaysia's economy faces unprecedented effect during the economic crisis which started in 2008. The real estate industry was badly affected and there was no exception. Malaysian real estate industry accounts for about 2.5 percentage of the GDP which is about 25 percent of the total employment in Malaysia (Bos Abdullah et al., 2019).

Economic Planning Unit of Malaysia government reported that RM1 Million investments in the housing industry will generate about RM1.469 Million cash inflows into the country economy (Isa et al., 2009). The property industry has about 140 local industries and acts as the main employment provider to the people in Malaysia (Bos Abdullah et al., 2019). The property industry is one of the sectors which require huge capital to start up a property development project. There is no main key player in the industry that can influence the property industry direction and future growth.

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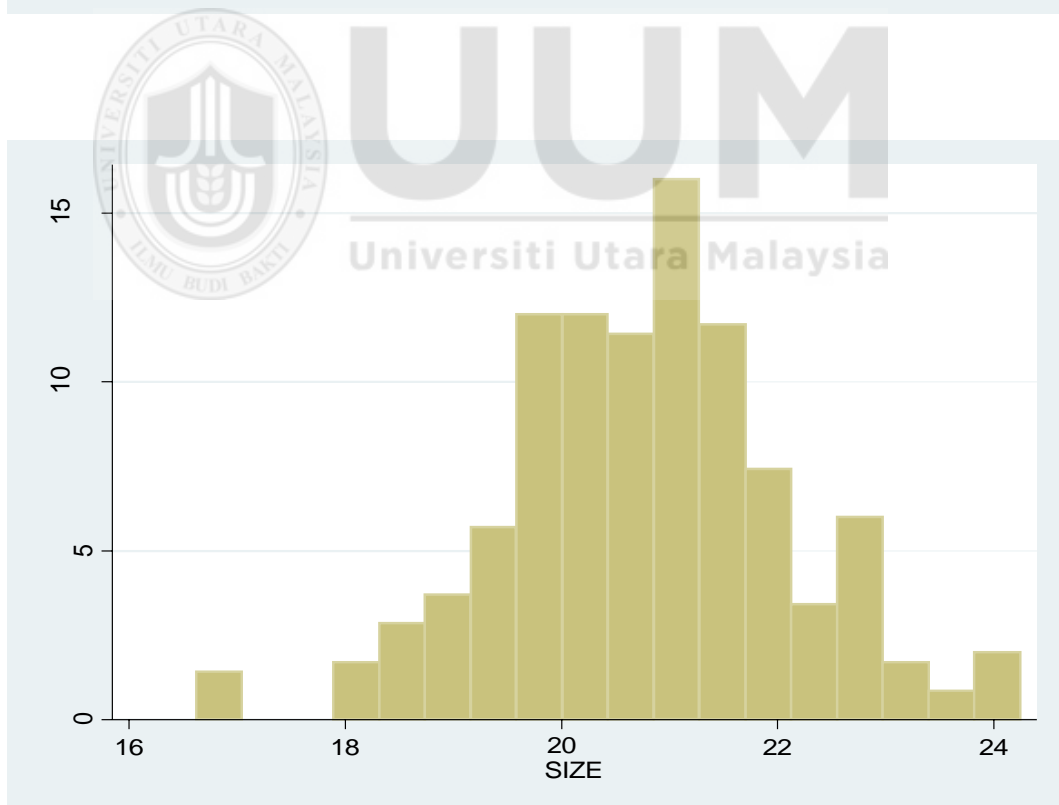
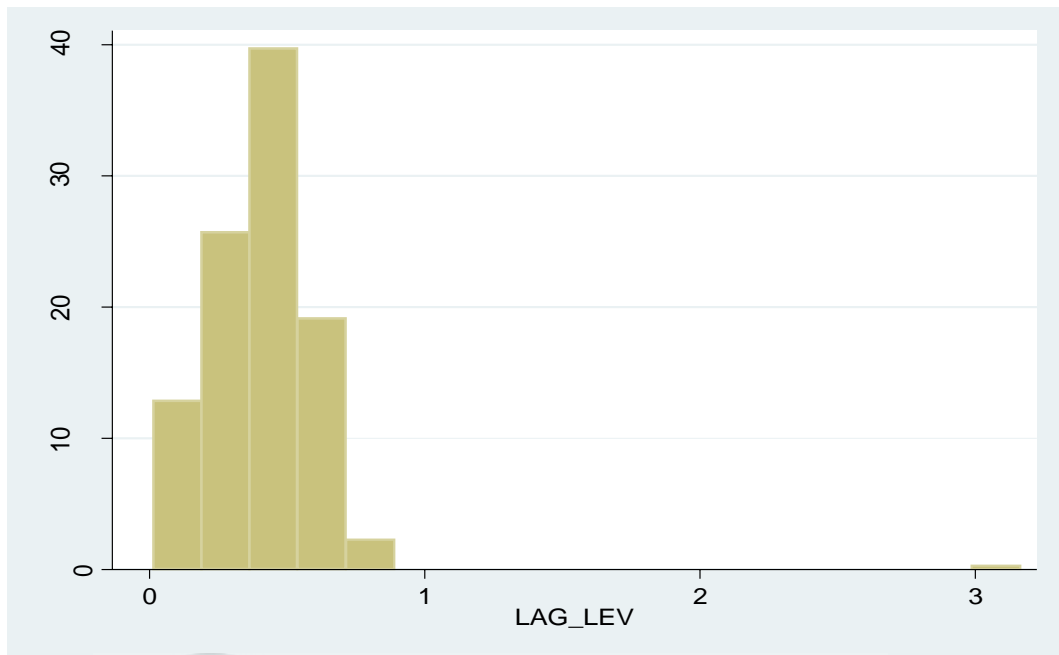
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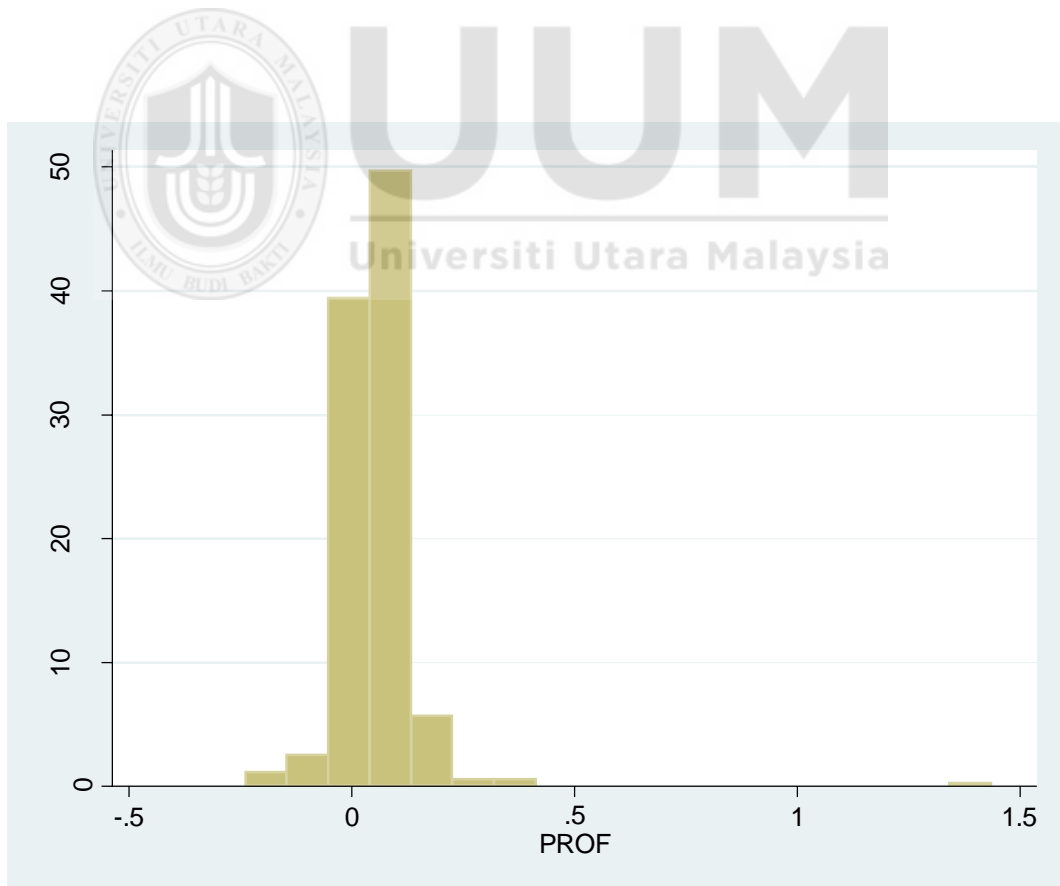
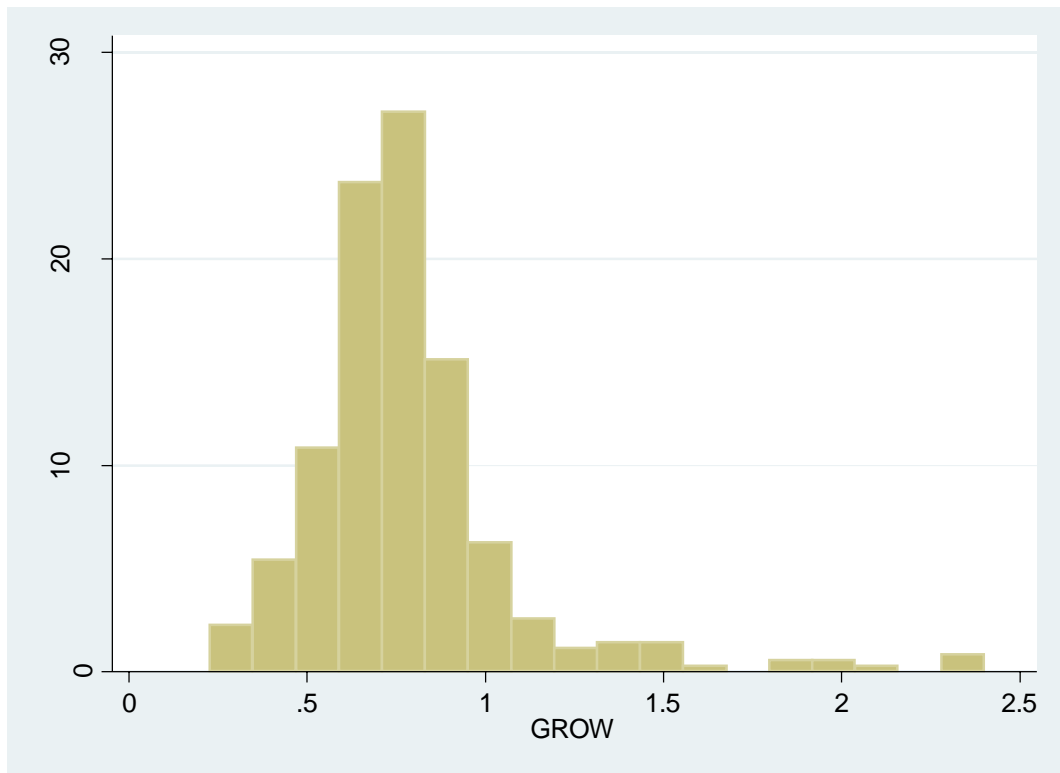
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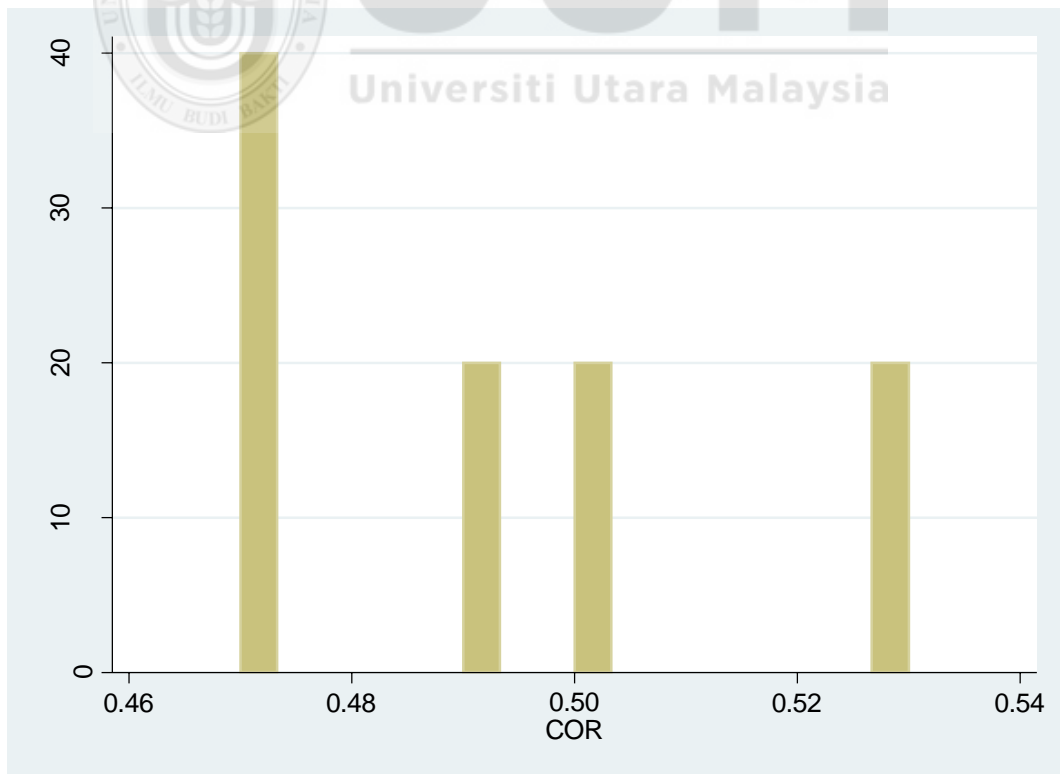
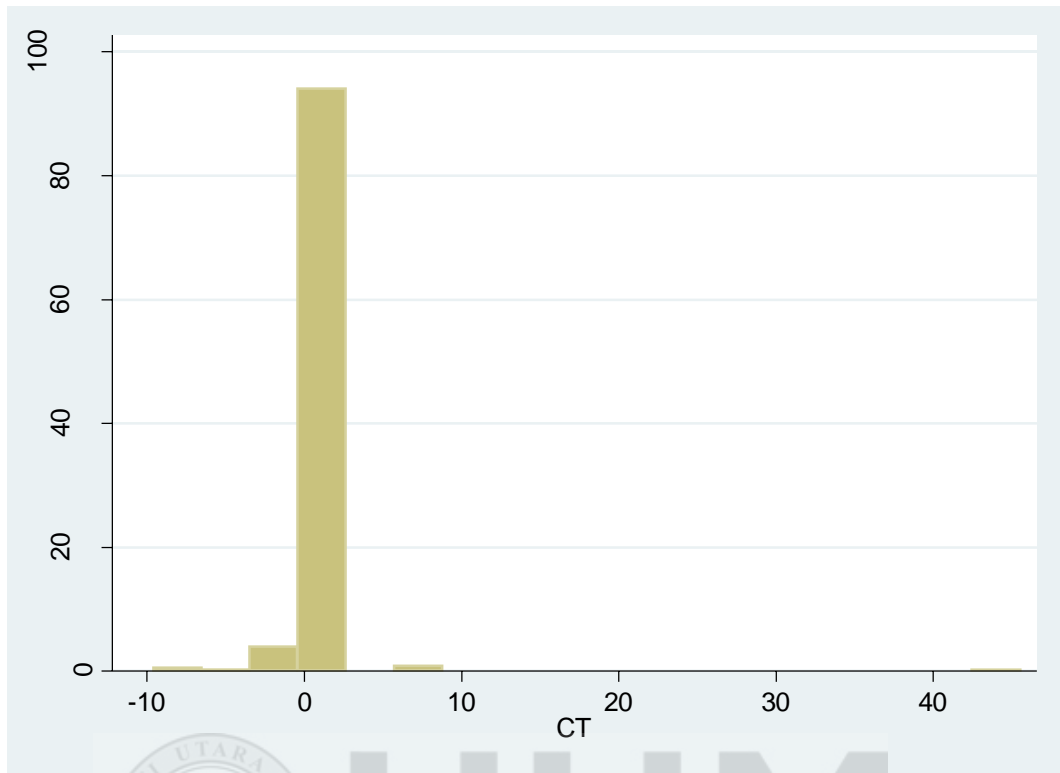
APPENDIX A: List of 70 Property Companies

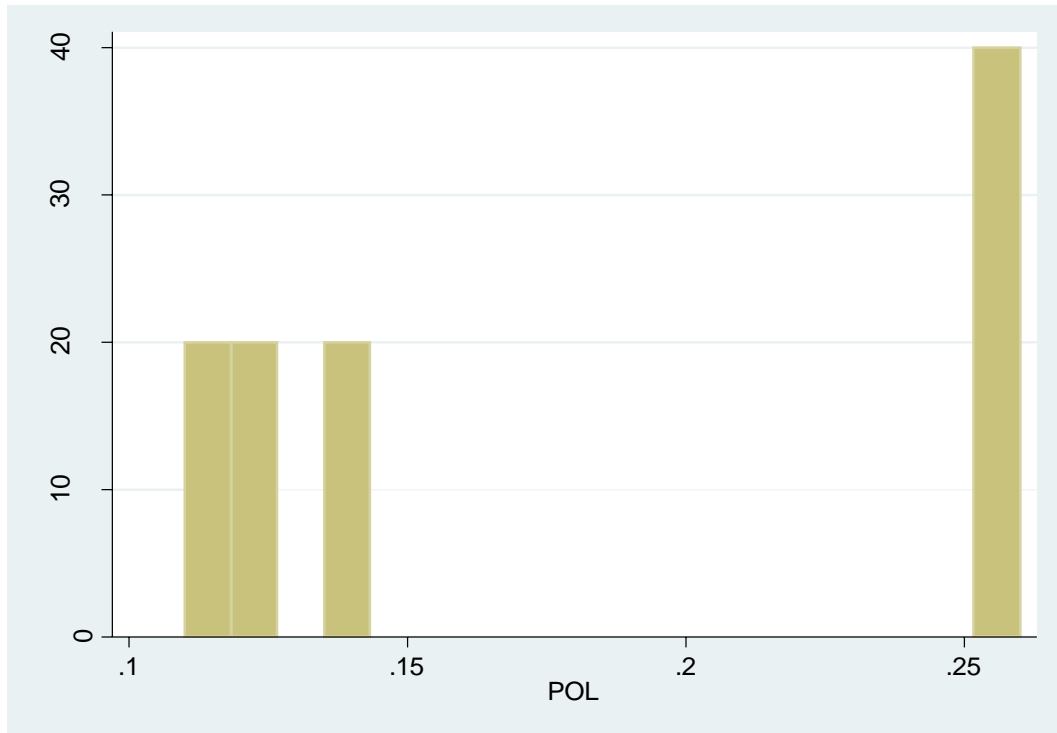
LIST OF COMPANY NAME			
1	Asian Pac Holdings Berhad	46	OSK Property Holdings Bhd
2	AmCorp Properties Bhd	47	Paragon Globe Berhad
3	ARK Resources Holdings Berhad	48	Paramount Corp Bhd
4	Acoustech Berhad	49	Pasdec Holdings Berhad
5	BCB Berhad	50	Pegasus Heights Berhad
6	Berjaya Assets Bhd	51	Plenitude Bhd
7	Bertam Alliance Berhad	52	SBC Corp Bhd
8	Bina Darulaman Berhad	53	Selangor Dredging Bhd
9	Country Heights Holdings Bhd	54	SHL Consolidated Bhd
10	Country View Bhd	55	S P Setia Bhd
11	Crescendo Corp Bhd	56	Sapura Resources Bhd
12	Eastern & Oriental Bhd	57	Symphony Life Bhd
13	Ecofirst Consolidated Bhd	58	TA Global Berhad
14	Encorp Bhd	59	Tanco Holdings Bhd
15	Enra Group Berhad	60	Talam Transform Bhd
16	Eupe Corp Bhd	61	Tiger Synergy Bhd
17	Ewein Berhad	62	Titijaya Land Berhad
18	Glomac Bhd	63	Tropicana Corp Bhd
19	Grand Hoover Berhad	64	Thriven Global Berhad
20	Gromutual Berhad	65	UEM Sunrise Berhad
21	GuocoLand Malaysia Bhd	66	UOA Development Berhad
22	HCK Capital Group Berhad	67	WMG Holdings Berhad
23	Hua Yang Bhd	68	Y&G Corp Bhd
24	IGB Corp Bhd	69	YNH Property Bhd
25	Ibraco Bhd	70	Yong Tai Berhad
26	IOI Properties Group Berhad		
27	Iskandar Waterfront City Berhad		
28	Ivory Properties Group Berhad		
29	JKG Land Berhad		
30	Ken Holdings Bhd		
31	Kerjaya Prospek Property Berhad		
32	KSL Holdings Bhd		
33	Land & General Bhd		
34	LBS Bina Group Bhd		
35	LBI Capital Berhad		
36	Lien Hoe Corporation Berhad		
37	Mah Sing Group Bhd		
38	Malton Bhd		
39	Magna Prima Bhd		
40	MB World Group Berhad		
41	MCT Berhad		
42	Menang Corp Malaysia Bhd		
43	MK Land Holdings Bhd		
44	MKH Bhd		
45	Naim Holdings Bhd		

APPENDIX B: Statistical Analysis Output









Variable	Obs	Mean	Std. Dev.	Min	Max
TA	350	2.52e+09	4.82e+09	1.58e+07	3.36e+10
LEV	350	.4071955	.2193877	.0137423	3.161888
LAG_LEV	350	.4055911	.2224151	.0137423	3.161888
SIZE	350	20.77943	1.323435	16.61947	24.23862
GROW	350	.7804772	.3014395	.2265539	2.399703
PROF	350	.0523907	.0969987	-.2388199	1.434727
CT	350	.3018708	2.64168	-9.620253	45.50602
COR	350	.492	.0223029	.47	.53
POL	350	.178	.067743	.11	.26

```
. correlate LEV LAG_LEV SIZE GROW PROF CT COR POL
(obs=350)
```

	LEV	LAG_LEV	SIZE	GROW	PROF	CT	COR	POL
LEV	1.0000							
LAG_LEV	0.3939	1.0000						
SIZE	0.1959	0.2247	1.0000					
GROW	0.1027	0.0765	-0.3207	1.0000				
PROF	0.5245	0.0473	0.1071	-0.2730	1.0000			
CT	0.0241	0.0300	0.0201	-0.0439	0.0044	1.0000		
COR	0.0159	-0.0273	0.0018	-0.0000	-0.0134	-0.0773	1.0000	
POL	0.0440	-0.0301	-0.0290	-0.0011	0.1088	-0.0745	-0.3160	1.0000

```
. xtreg LAG_LEV SIZE GROW PROF CT COR POL
```

```
Random-effects GLS regression           Number of obs   =       350
Group variable: companyname            Number of groups =        70

R-sq:  within = 0.0151                  Obs per group:  min =         5
      between = 0.1450                  avg =         5.0
      overall  = 0.0747                  max =         5

Wald chi2(6) =       16.66
corr(u_i, X) = 0 (assumed)              Prob > chi2     =       0.0106
```

LAG_LEV	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
SIZE	.0469776	.0124103	3.79	0.000	.0226538 .0713013
GROW	.0989644	.0521027	1.90	0.058	-.0031549 .2010837
PROF	-.0285823	.119539	-0.24	0.811	-.2628744 .2057098
CT	.0009886	.0040692	0.24	0.808	-.0069869 .0089641
COR	-.3689705	.4709413	-0.78	0.433	-1.291999 .5540575
POL	-.1028584	.1563698	-0.66	0.511	-.4093376 .2036208
_cons	-.4467743	.3678341	-1.21	0.225	-1.167716 .2741673
sigma_u	.10572604				
sigma_e	.182116				
rho	.25207327	(fraction of variance due to u_i)			

Variable	VIF	1/VIF
GROW	1.23	0.812472
SIZE	1.20	0.834155
POL	1.14	0.876391
COR	1.13	0.888171
PROF	1.10	0.907941
LAG_LEV	1.09	0.917646
CT	1.02	0.980446
Mean VIF	1.13	

Group variable: companyname		Number of obs = 280			
Time variable : year		Number of groups = 70			
Number of instruments = 10		Obs per group: min = 4			
Wald chi2(6) = 23.98		avg = 4.00			
Prob > chi2 = 0.001		max = 4			
LEV	Coef.	Corrected Std. Err.	z	P> z	[95% Conf. Interval]
LAG_LEV	.0721633	.0484071	1.49	0.136	-.0227129 .1670394
SIZE	.019634	.0632862	0.31	0.756	-.1044048 .1436727
GROW	.316632	.1811025	1.75	0.080	-.0383224 .6715864
PROF	1.479552	.3469034	4.27	0.000	.799634 2.15947
CT	-.0004325	.0006453	-0.67	0.503	-.0016973 .0008323
COR	.2498055	.2450706	1.02	0.308	-.2305241 .7301352
POL	.0033507	.0838397	0.04	0.968	-.1609721 .1676734
Instruments for first differences equation					
Standard					
D.(SIZE GROW PROF CT COR POL)					
GMM-type (missing=0, separate instruments for each period unless collapsed)					
L(1/4).LAG_LEV collapsed					
Arellano-Bond test for AR(1) in first differences: z = -2.24 Pr > z = 0.025					
Arellano-Bond test for AR(2) in first differences: z = -0.58 Pr > z = 0.564					
Sargan test of overid. restrictions: chi2(3) = 0.96 Prob > chi2 = 0.811					
(Not robust, but not weakened by many instruments.)					
Hansen test of overid. restrictions: chi2(3) = 1.86 Prob > chi2 = 0.603					
(Robust, but weakened by many instruments.)					

```
. estimates table, star (.05 .01 .10)
```

Variable	active
LAG_LEV	.07216329
SIZE	.01963396
GROW	.31663202*
PROF	1.4795521***
CT	-.00043245
COR	.24980551
POL	.00335066

legend: * p<.1; ** p<.05; *** p<.01

```
. hausman fe re
```

	Coefficients			
	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
SIZE	.0712349	.0469776	.0242573	.039528
GROW	-.0195759	.0989644	-.1185403	.0774316
PROF	-.1719563	-.0285823	-.143374	.0581994
CT	-.0000496	.0009886	-.0010382	.0010875
COR	-.3571341	-.3689705	.0118364	.
POL	-.0691759	-.1028584	.0336825	.

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

$$\begin{aligned} \text{chi2}(6) &= (b-B)'[(V_b-V_B)^{-1}](b-B) \\ &= 17.15 \end{aligned}$$

Prob>chi2 = 0.0088

(V_b-V_B is not positive definite)

Fixed-effects (within) regression		Number of obs	=	350
Group variable: companyname		Number of groups	=	70
R-sq: within	= 0.5602	Obs per group: min	=	5
between	= 0.1590	avg	=	5.0
overall	= 0.3485	max	=	5
corr(u_i, Xb) = -0.1454		F(7,273)	=	49.68
		Prob > F	=	0.0000

LEV	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
LAG_LEV	-.0534051	.0388694	-1.37	0.171	-.1299269 .0231167
SIZE	.0389746	.0267998	1.45	0.147	-.013786 .0917352
GROW	.1797123	.0600531	2.99	0.003	.0614863 .2979382
PROF	1.533778	.0858036	17.88	0.000	1.364858 1.702699
CT	.0001915	.00271	0.07	0.944	-.0051437 .0055266
COR	.1708057	.2992232	0.57	0.569	-.4182726 .7598839
POL	-.0603287	.1000511	-0.60	0.547	-.2572984 .1366411
_cons	-.6749863	.5843702	-1.16	0.249	-1.825431 .4754583

sigma_u	.14596626
sigma_e	.11717393
rho	.6081237 (fraction of variance due to u_i)

F test that all u_i=0:	F(69, 273) =	5.21	Prob > F = 0.0000
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Variable	active
LAG_LEV	-.05340512
SIZE	.03897458
GROW	.17971227***
PROF	1.5337784***
CT	.00019146
COR	.17080568
POL	-.06032866
_cons	-.67498634

legend: * p<.1; ** p<.05; *** p<.01