

#### **UNIVERSITI PUTRA MALAYSIA**

## THE ROLE OF PRIVATE CAPITAL FLOWS ON GROSS DOMESTIC PRODUCT OF LOW, MIDDLE AND HIGH INCOME GROUP COUNTRIES

**CHOONG CHEE KEONG** 

FEP 2007 18



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#### CHOONG CHEE KEONG

#### DOCTOR OF PHILOSOPHY UNIVERSITI PUTRA MALAYSIA

2007



## THE ROLE OF PRIVATE CAPITAL FLOWS ON GROSS DOMESTIC PRODUCT OF LOW, MIDDLE AND HIGH INCOME GROUP COUNTRIES

By

**CHOONG CHEE KEONG** 

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirement for the Degree of Doctor of Philosophy

September 2007



#### **DEDICATION**

This thesis is specially dedicated to my parents, my lovely wife, daughter and son,
for their love, courage and endless devotion



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

THE ROLE OF PRIVATE CAPITAL FLOWS ON GROSS DOMESTIC PRODUCT OF LOW, MIDDLE AND HIGH INCOME GROUP COUNTRIES

By

#### **CHOONG CHEE KEONG**

#### September 2007

Chairman: Associate Professor Zulkornain Yusop, PhD

Faculty: Economics and Management

There were many critics saying that private capital flows created financial volatility in the local financial market leading to volatile economic activity. Developing countries, therefore, face the challenge of designing economic policies and institutions to an increasingly integrated financial environment that secure the most benefits from capital inflows while reducing their vulnerability to sudden reversals. This dissertation addresses the role of different types of private capital, namely foreign direct investment (FDI), total foreign debt and portfolio investment in the global economy with particular reference to their effects on economic development in developing countries. The dissertation also aims to investigate to what extent the effectiveness of these private capital flows depends on the quality of financial system in the host countries. In addition, the path (or shock) of these capital flows in developing countries is also examined to provide meaningful

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policy implications. For example, if the private capital flows are characterized by a stationary (non-stationary, or contain a unit root), then it implies that shocks to private capital flows are temporary (permanent). To achieve these objectives, both panel unit root tests and generalised method of moments (GMM) panel data analysis are applied, covering 71 developed and developing countries over the period of 1988-2002.

The empirical results indicate that: First, using three types of panel unit root tests, this study concludes that shocks to portfolio investment and foreign direct investment are temporary while total debt series is permanent in developing countries from year 1988 to 2002. Furthermore, the shock of East Asian financial crisis had significant impact in influencing the time path of these private capital flows.

Second, while FDI and portfolio investment has positive and significant impact on economic growth in the countries under study depending on the stage of economic development, foreign debt have negative and significant impact in all countries under study. These findings are consistent and confirmed by using different types of financial development and stock market indicators. It seems that unfettered capital flows do not necessarily promote growth. In fact, some data suggest that foreign debt is deleterious to expansion under certain conditions.

Third, the findings are in line with previous studies in the literature on private capital flows, quality of institutions and economic growth, which suggest that the



consideration of institutional and financial absorptive capacity produces most of the significant results. The dissertation, therefore, suggests that for countries to benefit more from all types private capital flows, they have to achieve certain development level of domestic financial and banking sector, favouring the hypothesis that well-functioning domestic financial institutions in a recipient country is able to benefit more from private capital flows.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PERANAN ALIRAN MODAL SWASTA TERHADAP KELUARAN DALAM NEGARA KASAR DI NEGARA-NEGARA BERPENDAPATAN RENDAH, SEDERHANA DAN TINGGI

Oleh

**CHOONG CHEE KEONG** 

September 2007

Pengerusi: Profesor Madya Zulkornain Yusop, PhD

Fakulti: Ekonomi dan Pengurusan

Ramai pengkritik-pengkritik telah mengatakan bahawa aliran modal swasta telah menimbulkan ketidakstabilan di pasaran kewangan tempatan and seterusnya menyebabkan ekonomi aktiviti yang sentiasa bergolak. Oleh itu, negara-negara sedang membangun menghadapi cabaran dalam merekabentuk institusi dan polisi ekonomi di dalam alam sekitar kewangan yang semakin bersepadu supaya berkeupayaan untuk mendapatkan manfaat daripada aliran modal swasta sementara mengurangkan risikonya. Tesis ini mengutarakan peranan yang dimainkan oleh pelbagai aliran modal swasta, iaitu pelaburan langsung asing, hutang asing dan pelaburan portfolio di arena global terutamanya kesan-kesannya terhadap pembangunan ekonomi di negara-negara sedang membangun. Tesis ini juga meninjau sejauh mana keberkesanan pelbagai aliran modal swasta ini bergantung kepada kualiti sistem kewangan di negara-negara tersebut. Selain

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daripada itu, kejutan (shock) bagi pelbagai aliran modal swasta di negara-negara sedang membangun juga ditentukan supaya dapat memberi cadangan polisi yang bermakna. Untuk mencapai objektif-objektif ini, kedua-dua analisis data berpanel iaitu ujian akar unit berpanel (panel unit root test) dan kaedah generalisasi masa (generalised method of moments) telah digunakan yang melibatkan 71 negara-negara membangun and sedang membangun mencangkupi jangka masa 1988-2002.

Keputusan empirikal menunjukkan: Pertama, dengan menggunakan tiga jenis ujian akar unit berpanel, kajian ini menyimpulkan kejutan bagi pelaburan portfolio dan pelaburan langsung asing adalah sementara manakala hutang asing adalah tetap di negara-negara sedang membangun. Tambahan pula, kejutan bagi krisis kewangan Asia Timur mempunyai kesan yang penting dalam mempengaruhi lintasan bagi pelbagai aliran modal swasta.

Kedua, sementara pelaburan langsung asing dan pelaburan portfolio mempunyai kesan positif yang penting terhadap pertumbuhan ekonomi di kesemua negarangara yang dikaji, hutang luar pula mempunyai kesan negatif terhadap pertumbuhan ekonomi. Keputusan ini telah diyakinkan dengan menggunakan pelbagai petunjuk bagi sector-sektor kewangan dan pasaran. Ini bermakna aliran modal swasta yang tidak terkawal tidak semestinya mendatangkan faedah. Sebaliknya, pelaburan-pelaburan tersebut telah melembapkan proses perkembangan ekonomi di bawah keadaan-keadaan tertentu.

Ketiga, keputusan kajian ini selaras dengan keputusan kajian sebelumnya, iaitu

pertimbangan kapasiti serapan institusi kewangan dalam kajian telah menyumbangkan kepada keputusan yang penting. Oleh itu, kajian tesis ini mencadangkan bahawa negara-negara yang ingin mendapat manfaat maksima daripada pelbagai aliran modal swasta, kemajuan sistem perbankan dan kewangan mereka adalah penting.



#### **ACKNOWLEDGEMENTS**

The completion of this dissertation would not have been possible without the assistance of a wonderful and understanding dissertation committee chair and members. I have been a truly grateful to be able to work closely with Associate Professor Dr. Zulkornain Yusop, Professor Dr. Ahmad Zubaidi Baharumshah and Professor Dr. Muzafar Shah Habibullah for their enthusiastic supports and many readings of and comments on this research. They provided invaluable guidance and very helpful comments on the numerous drafts and revisions. I would like to thank my committee members for their patience and support during the making of this research. Their understanding and guidance have provided me the moral support to complete my dissertation.

Special thanks to members of my examination committee, namely Dr. Zaleha Mohd. Noor (chairperson), Professor Dr. Rugayah bt Mohamed (external examiner), Associate Professor Dr. Tan Hui Boon (internal examiner) and Dr. Taufiq Hassan (internal examiner) for very helpful comments or suggestions in a previous version of this thesis.

Besides, I would like to thank Dr. Law Siong Hook for guiding and helping me in the regressions. I was very fortunate to work with him and benefit from his insight. I also want to thank to everyone in the departmental administrative, the computer support and library support staff.

Last but not least, my highest regards go to my parents who have provided me with



the unconditional moral support to be what I wanted to be and to achieve what I wanted to achieve in this life. They have taught me life's most important lessons and always with me during good, bad and worst life cycles. Their inspiration, encouragement, and words of wisdom taught me never ever to give up. I am therefore graceful for my parents, Choong Teck Yong and Lee Jin Mui for giving me the strength to pursue my life's dream. I would like to thank also my brothers and sisters for their moral supports. Also, I would like to thank and show my gratitude to my lovely wife, Siew Yong, who has given me much love, understanding and patience. She is a wonderful partner in my life. Her insight and support take me always to the horizon of my purpose and allow me to look beyond. She has been a new inspiration in my life, making me appreciate it in a much more intense way.



I certify that an Examination Committee has met on 7th September 2007 to conduct the final examination of Choong Chee Keong on his PhD in Financial Economics thesis entitled "The Role of Private Capital Flows on GDP of Low, Middle and High Income Group Countries" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

#### Zaleha Mohd Noor, PhD

Faculty of Economics and Management Universiti Putra Malaysia (Chairman)

#### Tan Hui Boon, PhD

Associate Professor Faculty of Economics and Management Universiti Putra Malaysia (Internal Examiner)

#### Taufiq Hassan, PhD

Faculty of Economics and Management Universiti Putra Malaysia (Internal Examiner)

#### Rugayah bte Mohamed, PhD

Professor Faculty of Management and Human Resource Development Universiti Teknologi Malaysia (External Examiner)

#### HASANAH MOHD. GHAZALI, PhD

Professor/Deputy Dean School of Graduate Studies Universiti Putra Malaysia

Date:



This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

#### Zulkornain Yusop, PhD

Associate Professor Faculty of Economics and Management Universiti Putra Malaysia (Chairman)

#### Ahmad Zubaidi Baharumshah, PhD

Professor Faculty of Economics and Management Universiti Putra Malaysia (Member)

#### Muzafar Shah Habibullah, PhD

Professor Faculty of Economics and Management Universiti Putra Malaysia (Member)

#### AINI IDERIS, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date: 13 December 2007



#### **DECLARATION**

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

CHOONG CHEE KEONG

Date: 8 October 2007



#### TABLE OF CONTENTS

				Page
DEDICATION ABSTRACT ABSTRAK ACKNOWLEDGEMENTS APPROVAL DECLARATION LIST OF TABLES LIST OF FIGURES				ii iii vi ix xi xiii xviii xviii
CHAPTER				
1		_	ITAL FLOWS TO DEVELOPING	
			SOME RECENT ISSUES	1 1
	1.0 1.1	Introduc	tion Statement	1.1 1.11
	1.1		res of the Study	1.11
	1.3		ance of the Study	1.14
	1.4	_	ation of the Study	1.17
2	LITE	RATURE	REVIEW	
	2.1	Introduc	tion: Private Capital Flows and Economic	
		Growth		2.1
		2.1.1	Private Capital Flows to Developing	
		2.1.2	Countries: Push versus Pull Factors	2.1
		2.1.2	Types of Private Capital Flows: Benefits and	
		2.1.3	Risks Private Capital Flows: Are Shocks Permanen	2.5
		2.1.3	Temporary?	2.12
		2.1.4	The Channels of FDI on Economic Growth	2.12
		2.1.1	2.1.4.1 Multinational Corporation (MNC	
			Technology Diffusion and	//
			Productivity	2.17
			2.1.4.2 FDI and Trade Policy	2.22
			2.1.4.3 FDI and Macroeconomic Variables	2.25
		2.1.5	Private Capital Flows, Economic Growth and	
			Financial Development	2.36
	2.2		tion: Financial Development and Economic	2 4 4
		Growth		3.44
		2.2.1	The linkages of Financial Development and	



			Economic Growth	3.44
		2.2.2	A Selection of Financial Development	
			Indicators	3.48
		2.2.3	Finance-led Growth, Growth-led Finance of	r
			Feedback Causality	3.55
		2.2.4	Empirical Approaches to the Finance-Grow	'th
			Hypothesis	3.62
		2.2.5	Finance and Sources of Growth	3.69
3			NTERMEDIARY DEVELOPMENT AND	
		OME GRO		
	3.0	Introdu		3.1
	3.1		ial Development and Economic Performance i	
		Differe	ent Income Groups	3.4
4	THE	ORETICA	AL FRAMEWORK AND METHODOLOG	SY
	4.1	The Rel	ationship between Private Capital Flows	
			ancial Development: A Theoretical Model	4.1
	4.2		Capital, Economic Growth and Financial	
			oment: An Empirical Framework	4.6
	4.3		nit Root Tests: A Review	4.9
	4.4	Panel U	nit Root Tests: Testing Approaches	4.15
		4.4.1	Panel Unit Root Test (Im, Pesaran	
			and Shin, 1997, 2003)	4.17
		4.4.2	Fisher-Type Using ADF Tests	
			(Maddala and Wu, 1999; and Choi,	
			2001)	4.19
	4.5	General	ized Method of Moments (GMM) Panel Data	
		Analysis	s: A Review	4.20
		4.5.1	Generalized Method of Moment (GMM):	
			Arellano and Bond (1991)	4.22
		4.5.2	Advantages of GMM	4.26
	4.6	The Sele	ection of Dependent and Explanatory	
		Variable	es	4.28
		4.6.1	The ratio of gross domestic saving to	
			gross domestic product (GDP)	4.28
		4.6.2	Capital and Labour Variables	4.29
		4.6.3	Inflation	4.30
		4.6.4	Private Capital Flows	4.31
		4.6.5	Financial Development Indicators	4.32
		4.6.6	Stock Market Indicators	4.33
	4.7	Data So	ources	4.33



5	PRIV	PRIVATE CAPITAL FLOWS IN DEVELOPING				
	COU	COUNTRIES: VOLATILITY AND THE LEVEL OF				
	REV	REVERSIBILITY				
	5.0	Introduction	5.1			
	5.1	Methodology and Hypothesis	5.3			
	5.2	Results and Interpretation	5.7			
	5.2	Conclusion and Policy Implications	5.17			
6	THE	ROLE OF PRIVATE CAPITAL FLOWS ON				
	ECO	NOMIC GROWTH IN DIFFERENT INCOME				
	GRO	OUPS				
	6.0	Introduction	6.1			
	6.1	Testing the Order of Integration	6.2			
	6.2	The impact of Different Private Capital Flows on				
		Economic Growth in Developing Countries				
		(1988-2002): The role of Domestic Financial Sector	6.8			
	6.3	Foreign Direct Investment (FDI), Financial				
		Development and Economic Growth in Different				
		Income Groups	6.17			
	6.4	Foreign Debt, Financial Development and Economic				
		Growth in Different Income Groups	6.21			
	6.5	Portfolio Investment, Financial Development and				
		Economic Growth in Different Income Groups	6.23			
	6.6	Further Analysis of the Relationship between Private				
		Capital Flows, Financial Development and Income				
		Groups	6.27			
	6.7	Conclusions and Discussions	6.40			
7		VATE CAPITAL FLOWS, STOCK MARKET AND				
		NOMIC GROWTH IN DEVELOPED AND				
		ELOPING COUNTRIES				
	7.0	Introduction	7.1			
	7.1	Private Capital Flows, Stock Market Indicators and				
		Economic Growth in Developed Countries,				
		1988-2002	7.3			
	7.2	Private Capital Flows, Stock Market Indicators and				
		Economic Growth in Developing Countries,				
		1988-2002	7.10			
	7.3	Discussions and Policy Implications	7.17			



8	SUM	SUMMARY, CONCLUSIONS AND POLICY			
	IMP1	LICATIONS			
	8.0	Introduction	8.1		
	8.1	Summary and Conclusions	8.1		
	8.2	Policy Recommendations	8.11		
	8.3	Limitations	8.13		
	8.4	Direction for Future Research	8.14		
REFE	RENCE	S	R.1		
APPENDIX BIODATA OF THE AUTHOR			A.1		
			B.1		
LIST OF PUBLICATIONS			P.1		



#### LIST OF TABLES

Table		Page
1.1	Net Private Capital Flows to Developing Countries, 1970-2003 (US\$ Billion)	1.5
1.2	Net FDI Inflows to Developing Countries, 1970-2003 (US\$ Billion)	1.6
1.3	Net Inward Portfolio Equity Flows to Developing Countries, 1970-2003 (US\$ Billion)	1.6
1.4	Total External Debt to Developing Countries by Region, 1970-2003 (US\$ Billion)	1.7
1.5	Medium and Long Term External Debt to Developing Countries by Region: 1970-2003 (US\$ Billion)	1.7
1.6	Short Term External Debt to Developing Countries by Region: 1970-2003 (US\$ Billion)	1.8
1.7	Net Inward Portfolio Bond Flows to Developing Countries by Region, 1970-2001 (US\$ Billion)	1.8
2.1	International Private Capital Flows and Economic Growth	2.29
2.2	International Capital Flows, Financial Development and Economic Growth	2.42
2.3	Summary of the Relationship between Financial Development and Economic Growth through Different Channels	2.74
3.1	Country Groupings	3.6
3.2	Financial Intermediary Development and Economic Growth Across Countries	3.10
4.1	Data Sources and Definitions	4.35
4.2	World Bank's Income Group Classifications 2005	4.38
5.1	The shock of Private Capital Flows in a Panel of 89 Countries, 1988-2002	5.9
5.2	Countries Used	5.12



5.3	The shock of Debt Flow, by Income Groups	5.14
5.4	The shock of Portfolio Investment Flow, by Income Groups	5.15
5.5	The shock of FDI Flow, by Income Groups	5.16
6.1	The Results of Various Panel Unit Root Tests in Developing Countries: Whole Period (1988-2002)	6.5
6.2	The Results of Various Panel Unit Root Tests in Developing Countries: Pre-Crisis Period (1988-1996)	6.6
6.3	The Results of Various Panel Unit Root Tests in Developing Countries: Post-Crisis Period (1997-2002)	6.7
6.4	Private Capital Flows, Financial Development and Economic Growth in Developing Countries, 1988-2002.	6.10
6.5	FDI, Financial Development and the Income Groups, 1988-2002	6.19
6.6	Debt, Financial Development and the Income Groups, 1988-2002	6.22
6.7	Portfolio Investment, Financial Development and the Income Groups, 1988-2002	6.24
6.8	Private Capital Flows, Financial Development (PCGDP) and the Economic Growth in Developing Countries, 1988-2002	6.28
6.9	Private Capital Flows, Financial Development (DBAGDP) and the Economic Growth in Developing Countries, 1988-2002	6.30
6.10	FDI, Financial Development (PCGDP) and the Income Groups, 1988-2002	6.34
6.11	FDI, Financial Development (DBAGDP) and the Income Groups, 1988-2002	6.35
6.12	Debt, Financial Development (PCGDP) and the Income Groups, 1988-2002	6.37
6.13	Debt, Financial Development (DBAGDP) and the Income Groups, 1988-2002	6.38
6.14	Portfolio Investment, Financial Development (PCGDP) and the Income Groups, 1988-2002	6.40



5.15	Portfolio Investment, Financial Development (DBAGDP) and the Income Groups, 1988-2002	6.41
7.1	Countries Used	7.3
7.2	Private Capital Flows, Stock Market Indicator (STKCAP) and Econom Growth in Developed Countries, 1988-2002	nic 7.5
7.3	Private Capital Flows, Stock Market Indicator (STKTRADED) and Economic Growth in Developed Countries, 1988-2002	7.8
7.4	Private Capital Flows, Stock Market Indicator (STKCAP) and Econor Growth in Developing Countries, 1988-2002	nic 7.12
7.5	Private Capital Flows, Stock Market Indicator (STKTRADED) and Economic Growth in Developing Countries, 1988-2002	7.14



#### LIST OF FIGURES

Figur	Figure		
1.1	Foreign Aids to Developing Countries by Region, 1969-2001	1.3	
1.2	Net Private Capital Flows to Developing Countries by Region, 1970-2003	1.3	
1.3	Net Inward Portfolio Equity Flows to Developing Countries by Region, 1985-2003 (US\$ Billion)	1.9	
3.1	Central Bank Assets to GDP Ratio (CBAGDP) Across Income Groups, 1988-2002	3.7	
3.2	Deposit Money Bank Assets to GDP Ratio (DBAGDP) Across Income Groups, 1988-2002	3.7	
3.3	Private Credit by Deposit Money Banks to GDP Ratio (DBAGDP) Across Income Groups, 1988-2002	3.8	
3.4	Economic Growth and Financial Intermediary Development, 1988-2002	3.12	



#### **CHAPTER 1**

### PRIVATE CAPITAL FLOWS TO DEVELOPING COUNTRIES: SOME RECENT ISSUES

#### 1.0 Introduction

The change in the nature of competition and the increasing pressure of financial liberalization and globalization make private capital flow as one of the most critical determinants of competitive advantage in developing countries. Until the early 1990s, most developing countries were not able to attract enough private capital flows from the international private capital markets. These countries instead heavily dependent on official capital flows, which are mostly consists of foreign development aids. In Figure 1.1, it is found that there is an increasing trend of foreign aid in East Asia and Pacific (EAP), Europe and Central Asia (ECA), Latin America and Caribbean (LAC), Middle East and North Africa (MNA), South Asia (SAS) and Sub-Saharan Africa (SSA) until early 1990s. The phenomenon, however, was changed substantially as the inflow started to decrease after early 1990s.

As the Figure 1.2 illustrates, there has been a strong upward trend in capital flows since the 1970s, especially after early 1990s in all the regions. The dollar value of inflows increased substantially between the early 1980s and early 1990s. As the largest region in absorbing the private capital flows, Latin America and Caribbean achieved its peak at close to \$130 billion, followed by East Asia and Pacific,



Europe and Central Asia, Sub-Saharan Africa, Middle East and North America and South Asia. At the same time, the figure shows that capital inflows in these regions are distinctly cyclical: A boom in private capital flows to developing countries in these regions in the 1970s was followed by a sharp reversal in the 1980s. Another much larger boom and reversal occurred in the 1990s, especially after 1997.

In the early 1990s, private capital flows undersized the foreign aids (official development flows) in terms of relative importance. They are now four to six times the size of official flows (Figure 1.1 and Figure 1.2). This recent trend in private capital flows to developing countries is mainly driven by the perception that private capital flows are increasingly an important source of financing of large current account imbalances, significantly dwarfing official development flows in terms of relative importance. Moreover, this situation is also caused by a huge increase in bank loan to developing countries in these regions resulting from the recycling of the balance of payment surpluses of oil-exporting countries (Lensink and White, 1998). In his study, Bruno (1993) shows that almost half of all aggregate external financing of developing countries came from private sources and went to private destinations in the early 1990s. Moreover, World Bank (1997, pp. 9) estimates that private capital flows are five times the size of official development flows.

