

# **UNIVERSITI PUTRA MALAYSIA**

# EFFECTS OF CAPITAL FLIGHT ON ECONOMIC GROWTH IN SELECTED ASEAN ECONOMIES

SIAH KIM LAN FEP 2009 8



# EFFECTS OF CAPITAL FLIGHT ON ECONOMIC GROWTH IN SELECTED ASEAN ECONOMIES

By

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EFFECTS OF CAPITAL FLIGHT ON ECONOMIC GROWTH IN SELECTED

ASEAN ECONOMIES

Bv

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Prior to the Asian financial crises, Indonesia, Malaysia, the Philippines and Thailand had

experienced strong and impressive real economic growth rate from the 1970s to until

beginning of 1997. Conventional wisdom hold that with the region's impressive

economic growth associated with higher interest returns and lower risk would expect

capital to stay in the countries but not flee. However, it was quite surprising that even

during periods of high economic growth rate; there was capital flight in these selected

ASEAN economies. The lost of capital through capital flight will intensify capital

scarcity problem as it restricts the capacity and the ability to finance domestic

investment where resources are most needed to generate economic growth and

development particularly after the Asian financial crisis of 1997.

Although there are no universally accepted and indisputable definitions of capital flight,

however, it is generally agreed that capital flight is the outflow of capital that is conflict

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with national interests, goals and objective. For the empirical work, the ARDL 'Bounds test' approach to cointegration was conducted with annual time series data from 1972 to 2005 to determine factors affecting capital flight from Indonesia, Malaysia, the Philippines and Thailand using World Bank measure, Morgan Guaranty Trust measure and Dooley Derived measure. By using the three alternative measures of capital flight, yields broadly similar results. On one hand, the results indicate that higher capital flight is associated with higher external debt, higher budget deficit as well as higher political instability that proxy by Political rights. On the other hand, the elasticities indicate that higher capital flight is associated with lower Interest rates differential (United States Treasury Bill rate minus domestic deposit rate), and lower accumulation of international reserve. However, the estimated results reveal that only higher capital flight is associated with higher Interest rates differential in Thailand case.

Although there are large and growing researches for the determinants of economic growth, there has scarcely been any study concerning the impact of capital flight on economic growth. The empirical results support the contention that capital flight played a crucial role in influencing the four selected ASEAN economic growths. Furthermore, there has been no systematic investigation of the impact of political instability on capital flight and economic growth, particularly the ASEAN countries. The empirical results clearly show that political stability plays an important role in affecting capital flows and in determining economic growth in these four Southeast Asia economies. For a flight relief or even reversal of capital flight to occur as well as to stimulate economic growth, steps includes economic policies, political stability and institutional developments should be taken to prevent the causes of capital flight to ensure sufficient capital



resources required for recovery from the current recession in the short-run and accomplish a more sustainable impressive economic growth in the long run. Indeed, the more preferred and effective strategy would be to implement balanced policy measures but not just bias on one or just certain aspects of macroeconomic fundamentals, perhaps, the adaptation of appropriate policy to suit varying circumstances of the economy is more important. Any policy announcements by the government should be in line with the long-term objectives of the country.



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

KESAN PELARIAN MODAL KE ATAS PERTUMBUHAN EKONOMI DI EMPAT NEGARA ASEAN YANG TERPILIH

Oleh

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**Ogos 2009** 

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berasa kagum dengan keempat-empat negara ASEAN yang mengalami kadar pertumbuhan ekonomi yang kukuh dan hebat berserta dengan pulangan kadar bunga

Krisis berlaku di luar jangkaan umum selepas tiga dekad pada ketika seluruh dunia

yang lebih tinggi dan risiko yang lebih rendah. Apabila krisis kewangan negara Asia

meletus pada tahun 1997, semua parti terperanjat mendapati negara-negara ASEAN

telah terjerumus ke dalam masalah seperti perlarian modal dari negara-negara ASEAN.

Secara empirik, ARDL 'Bounds tests' ke kointegration telah dilaksanakan dengan data

tahunan dari 1972 sehingga ke 2005 untuk menentukan factor-faktor yang

mempengaruhi perlarian modal dari negara Indonesia, Malaysia, Filipina dan Negara

Thai dengan menggunakan kaedah World Bank, kaedah Morgan Guaranty Trust dan

kaedah Dooley. Dengan menggunakan ketiga-tiga kaedah perlarian modal menghasilkan

keputusan yang agak seragam. Keputusan yang diperolehi menunjukkan tahap perlarian

modal meningkat dengan hutang luar yang tinggi dan ketidakstabilan politik. Selain

daripada itu, keputusan kajian juga menunjukkan tahap perlarian modal meningkat

dengan perbezaan kadar bunga yang lebih rendah (perbezaan antara Bill Treasuri Amerika Syarikat dengan kadar deposit tempatan), kurangan bajet yang tinggi dan juga penimbunan rizab antarabangsa yang rendah. Di sebaliknya, keputusan elastisities di Negara Thai menunjukkan tahap kapital flight meningkat dengan perbezaan kadar bunga yang lebih tinggi.

Banyak penyelidikan berkaitan dengan factor-faktor mempengaruhi perlarian modal, tetapi kurang penyelidikan tentang kesan perlarian modal terhadap pertumbuhan ekonomi. Keputusan empirik menyokong pendapat bahawa perlarian modal memainkan peranan dalam pertumbuhan ekonomi di keempat-empat negara ASEAN. Tambahan pula, tiada penyelidikan secara sistematik tentang kesan kestabilan politik pada perlarian modal dan pertumbuhan ekonomi, terutamanya dalam lingkungan keempat-empat negara ASEAN. Keputusan empirikal jelas menunjukkan bahawa kestabilan politik memang berperanan penting dalam mempengaruhi pengaliran modal dan mempengaruhi pertumbuhan ekonomi di keempat-empat negara ASEAN. Oleh yang demikian, demi memulihkan keadaan perlarian modal serta memajukan pertumbuhan ekonomi, langkahlangkah termasuk polisi ekonomi, kestabilan politik dan pembangunan institusional haruslah diambil untuk mengelakkan berlakunya perlarian modal demi memastikan kecukupan sumber-sumber modal yang amat diperlukan. Sebenarnya, strategi yang lebih digemari dan berkesan adalah memperkenalkan polisi seimbang dan bukan hanya tertumpu pada satu atau suatu aspek asas makroekonomi, mungkin, menggunakan polisi yang bersesuaian dengan suasana yang tertentu adalah lebih berkesan. Sebarang pengumuman polisi sepatutnya selaras dengan objektif jangka masa panjang kerajaan.



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I certify that A Thesis Examination Committee has met on 5th August 2009 to conduct the final examination of Siah Kim Lan on her thesis entitled 'Effects of capital Flight on Economic Growth in Selected ASEAN Economies' in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Degree of Doctor of Philosophy.

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# **DECLARATION**

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently submitted for any other degree at Universiti Putra Malaysia or at any other institution.

\_\_\_\_

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# LIST OF ABBREVIATIONS

ADF Augmented Dickey Fuller

AIC Akaike Information Criterion

AR Autoregressive

ARCH Autoregressive Conditional Hetero

ASEAN Association of Southeast Asian Nations

ASEAN-Four Includes only Indonesia, Malaysia, the Philippines, and Thailand.

BD Budget deficit as a percentage of GDP

BOP Balance of Payment

CIF the cif/fob factor, an adjustment for the cost of freight and

insurance.

CAD Current account deficit

CPI Comsumer Price Index

DINT Interest rates differential

DUM 1997/1998 Asian financial crisis

DX Total export discrepancies with trade partners

DM Total import discrepancies with trade partners

ED The change of total external debt as a percentage of GDP

ECM Error Correction Model

E&O Errors and Omissions, representing unrecorded capital outflow

GDP Gross Domestic Product

GE The share of government expenditure to gross domestic product.

GW Gross domestic product growth rate



OPEN Trade Openness

I Investment income

i Market interest rate

JB Jarque-Bera

IMF International Monetary Fund

ITBT Income from Tourism and Border Transaction

FD Financial development

KF Capital Flight

KF<sub>C</sub> Cuddington's measure for capital flight

KF<sub>Cline</sub> Capital Flight based on Cline (1987) measurement

KFD Capital Flight Dooley Derived measure

KFM Capital Flight Morgan Guaranteed trust measure

KF<sub>MIS</sub> net capital flight arising from trade misinvoicing

KFWB Capital Flight World Bank measure

LM Lagrange Multiplier

M The country's recorded imports from trade partners

MIS<sub>X</sub> Trade misinvoicing from export discrepancies

MIS<sub>M</sub> Trade misinvoicing from import discrepancies

MIS<sub>t</sub> Total trade misinvoicing

NFDI Net foreign direct investment

OLS Ordinary least square

P<sup>d</sup> Domestic CPI

PX Value of trading partner's imports from the country



PM Value of the same trading partner's exports to the country

P\* United States CPI

PR Political rights

RII Reinvested Investment Income

RES The accumulation of international reserves as a percentage of GDP

RESET Regression Equation Specification Error Test

SEA Stock of external assets

SFA<sub>B</sub> Short-term foreign asset of the banking system

SKO<sub>NB</sub> Short-term capital outflows by the non-bank private sector

VAR Vector Autoregression

VECM Vector error correction model

X The country's recorded exports to trade partners



#### **CHAPTER 1**

#### 1 INTRODUCTION

After the 1980s debt crises, less attention have been paid to capital flight as many developing countries started to experience reversal of flight episodes of a great magnitude [see Calvo et al. (1993); Drabek and Griffith-Jones (1999); Ffrench-Davis and Griffith-Jones (1995 and 2003); Griffith-Jones et al. (2001)]. However, since the Asian financial crisis sparked by the collapse of the Thai baht in July, 1997, capital flight has been a hot issue as there has been a resurgence of capital flight in developing countries, particularly it has become a severe threat to the Association of Southeast Asian Nations' (ASEAN) economies.

After more than 40 years of development, several countries in the ASEAN prove to be among the most successful nations than other regional organisations of the developing countries. The four selected ASEAN countries in this study comprise the major economies in ASEAN, specifically Indonesia, Malaysia, the Philippines and Thailand. Singapore is excluded in the study as she was not a serious victim of the Asian economic and financial crisis in the year 1997. Prior to the Asian financial crises, the four selected ASEAN countries (perhaps with the exception of the Philippines) had registered strong and impressive real economic growth rate from the 1970s to until beginning of 1997. In the 1990s, the major impetus for the ASEAN region's strong economic growth was contributed by the sound macroeconomic fundamental such as small fiscal deficit, stable exchange rates, high saving rates, and highly regarded work force attracted private capital flows into these four selected



ASEAN countries at accelerating rates. Besides, other domestic factors such as the widespread liberalization of financial markets and the credit-worthiness of these countries as well as the external factors including falling in global interest rates and asset yields in industrial countries in the ASEAN financial markets jointly played a pivotal role contributing to the initial impetus for the surges of private capital inflows to these countries.

ASEAN nation use foreign capital as the source of additional funds to cover the shortage of investment funds and to achieve their economic development. The most important form of introducing foreign capital among all ASEAN countries were long-term borrowings (except Malaysia), followed by foreign direct investment. Foreign direct investment filled the largest share of the composition of capital flows into the private sector and expanded promptly after the second half of the 1980s. The expansion of FDI inflows at first into Thailand and Malaysia, and then shifted to Indonesia and the Philippines from the early to middle of 1990s. Meanwhile, the increase creditworthiness of Asian business enterprises attracted capital inflows in the form of banking loans in the 1990s. Indirect investment such as portfolio investment in equities and bonds also played a significant role in the introduction of foreign capital. The greater lending to the private sector and the diversification of capital flows made inflows of a large amount of short-term funds into the region, especially by the United States, Europe and Japan money managers between 1993 and 1996<sup>1</sup>. Among the five Asian economies that was most affected by the crisis,

<sup>&</sup>lt;sup>1</sup> However, the lack of the proper control and monitoring have caused a significant portion of the money used for speculation (particularly in property sector) and other less productive investment activities. The large amount of short-term borrowings associated with profit repatriation by multinational corporations and high merchandise imports had led to serious current account deficit problem among the ASEAN countries. In 1996, Thailand was recorded as the highest level of current account deficit (USD14.4 billion), followed by Indonesia (USD7.6 billion), Malaysia (USD4.8

