UNIVERSITI PUTRA MALAYSIA

**THE BEHAVIOUR OF THE CURRENT ACCOUNT
BALANCES OF ASEAN-5 MEMBERS**

HAMIZUN BIN ISMAIL

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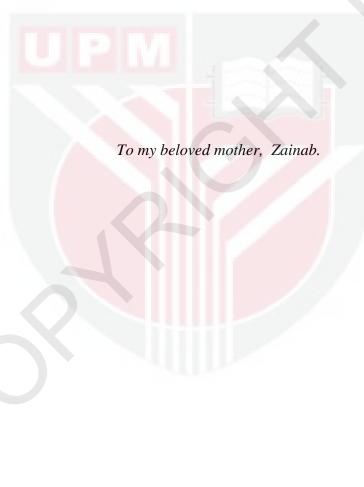# BALANCES OF ASEAN-5 MEMBERS

By

HAMIZUN BIN ISMAIL

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

June 2007

DEDICATION

To my beloved mother, Zainab.

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

THE BEHAVIOUR OF THE CURRENT ACCOUNT BALANCES OF ASEAN-5 MEMBERS

By

HAMIZUN BIN ISMAIL

June 2007

Chairman: Ahmad Zubaidi Baharumshah, PhD

Faculty: Economics and Management

Current account conveys information about the actions and expectations of all market participants in an open economy; it reflects the stance of macroeconomic policies and provides information about the behaviour of economic agents. Therefore, the needs for greater understanding about the behaviour of the current account are becoming increasingly vital, as institutional structures dealing with macroeconomic policies cannot simply be copied from one country to another. This dissertation empirically examined the movement of the current account balances for the ASEAN-5 countries, namely Indonesia, Malaysia, Philippines, Singapore and Thailand, under four main issues: the intertemporal optimization approach to the current account, the twin-deficits hypothesis, the relationship between current account and investment, and the temporary and permanent

shocks of the current account balance and the real exchange rate. Several important results emerged from this study. First, the present value model effectively captures the magnitudes and directions of the current account balances for four out of five ASEAN-5 countries over the period of the study, thus favored the proposition that the countries' expectations about future movement in net output are reflected by today's current account. Second, the data supported the twin deficit hypothesis for the ASEAN-5 countries except Indonesia, and that the budget deficit plays a weakly exogenous role with respect to the current account deficit. This is an important finding because it implies that fiscal policy is effective in influencing current account balance. Third, our finding indicated that the ASEAN-5 have relied on domestic savings to finance their investment, thus agreeing with the proposition that developing countries only participate partially in the world's capital market, as a result of the lack of sophisticated domestic capital market in the developing countries. Forth, our finding suggested that the temporary shock depreciates the currency so much that the current account improves over the short term, while over the longer term, the current account effect fades away as the exchange rates stabilize.

GELAGAT IMBANGAN AKAUN SEMASA NEGARA-NEGARA ASEAN-5

Oleh

HAMIZUN BIN ISMAIL

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Akaun semasa negara mengandungi maklumat tentang kelakuan serta jangkaan agen-agen pasaran dalam ekonomi terbuka; ia memberi gambaran tentang pendekatan polisi makroekonomi dan kelakuan agen-agen ekonomi. Justeru itu, kefahaman tentang gelagat akaun semasa menjadi semakin penting sebab struktur-struktur institusi yang berkaitan dengan polisi-polisi makroekonomi sesebuah negara tidak boleh berlaksana dengan semata-mata meniru struktur-struktur institusi negara-negara lain. Tesis ini meneliti pergerakan baki akaun semasa negara-negara ASEAN-5, iaitu Indonesia, Malaysia, Philippines, Singapore dan Thailand, di bawah empat isu besar: pendekatan pengoptimuman *inter-temporal*, hipotesis defisit berkembar, hubungan antara akaun semasa dengan pelaburan, dan kejutan-kejutan kekal serta kejutan-kejutan sementara

dalam pergerakan imbangan akaun semasa dan kadar pertukaran asing. Beberapa keputusan penting terhasil daripada kajian ini. Pertama, model nilai kini mampu menggarap magnitud dan arah pergerakan imbangan akaun semasa empat daripada lima negara-negara ASEAN-5 dalam selang masa yang dikaji, dengan itu menyokong usul yang mencadangkan bahwa jangkaan tentang pergerakan dalam keluaran bersih hadapan sesebuah negara pada masa-masa hadapan digambarkan oleh imbangan akaun semasa pada masa sekarang. Kedua, data yang dikaji menyokong hipotesis defisit berkembar bagi negara-negara ASEAN-5 kecuali Indonesia, dan juga penyataan bahwa defisit belanjawan memainkan peranan eksogen tahap lemah terhadap deficit akaun semasa. Ini merupakan satu kesimpulan penting sebab ianya mengimplikasikan bahwa polisi fiskal berkesan dalam mempengaruhi imbangan akaun semasa. Ketiga, hasil kajian ini menunjukkan bahwa negara-negara ASEAN-5 memang bergantung kepada simpanan domestik dalam membiayai pelaburan negara masing-masing, justeru itu menyokong usul yang menyatakan bahwa penglibatan negara-negara membangun dalam pasaran modal dunia tidak mencapai tahap sepenuhnya ekoran daripada kekurangan-kekurangan yang membendung pasaran modal domestik negara-negara membangun. Keempat, hasil kajian ini menunjukkan bahwa kejutan sementara mengakibatkan penyusutan dalam pertukaran asing sehingga pada tahap yang menyebabkan akaun semasa meningkat dalam jangka pendek, tetapi dalam jangka panjang, kesan ke atas akaun semasa itu akan mengurang seiring dengan penstabilan kadar pertukaran asing.

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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:

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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.

HAMIZUN BIN ISMAIL

Date: 13 August 2007

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CHAPTER I

INTRODUCTION

Background of the Research

Current account is a variable that is both a broad reflection of the stance of macroeconomic policies and a source of information about the behaviour of economic agents. It reflects not only changes in a country's trade flows, but also the difference between a country's saving and investment. Furthermore, the current-account balance can also be described as the addition to a country's claims on the rest of the world. Hence, movements in current account convey information about the actions and expectations of all market participants in an open economy.

More generally, the current account balance can also be viewed as a barometer of a country's economic performance. There are numerous studies which emphasize on the link between the current-account balances and main macroeconomic aggregates such as domestic growth, public savings, aid flows, currency depreciation, and terms of trade (Calderon et al, 2001). In particular, current account deficits have been considered to be one of the important variables used in predicting crises. The potential role of current-account deficits as a source of disruptive tensions in the financial markets has been repeatedly emphasized in

the literature. For instance, a 'fundamentals' approach proposes that a crisis occurs when the economy is in a state of distress with a deteriorating current account, a growth slowdown, the bursting of stock and real estate price bubble, and short-term foreign debt reaching dangerous levels (Kaminsky and Schmukler, 1999). Miyakoshi (2000) and Ryan (2000), among others, found that current account deficits were one of the main causes that had triggered the Asian currency crisis of 1997. Similar conclusion is made by Bustelo (2000) who suggested that large current account deficits for the year 1993 and 1994 was an important indicator prior to the Mexican crisis of 1994. In contrast, Puri et al. (2002) provided evidences of current account balance having no direct relationship with the currency crisis in South Korea. Moreover, Bustelo (2000) surveyed nine important empirical studies on indicator of financial or currency crises published from 1996 to 2000, and noted that the current-account deficits turned out to be a significant variable only in three of the studies. In a more comprehensive study, Edwards (2001) concluded that large current-account deficits increase the probability of a currency crisis, but not necessarily that every large deficit leads to a crisis.

A current account deficit is a normal phenomenon in open economies as temporary current account deficit reflects reallocation of capital to the country where capital is most productive. Therefore, a current account deficit can possibly bring along the benefits of the associated foreign capital inflow. To elaborate this,

consider a country who is facing an investment boom. An investment boom occurs as a result of either the discovery of new natural resources, or the technological progress leading to new products that can be profitably developed and produced. It can also occur due to structural economic reforms such as trade liberalization or capital market liberalization, and macroeconomic stabilization policies that lead to expectation of high future economic growth and high profitability of new investments. Regardless of the causes, an investment boom has to be financed with some savings. If the national savings of the country are not sufficient to finance all new profitable investment projects, then it is optimal for the country to run a current account deficit, i.e. to rely on foreign savings to finance the excess of investment over national savings. Such a current account deficit will imply the accumulation of new foreign debt, i.e. a capital inflow as foreign funds will be borrowed to finance domestic investment. Over time, the goods produced by the new capital will lead to increased country exports that will generate the trade and current account surpluses that are necessary to eventually repay the foreign debt and interest on it. Thus in general a persistent current account deficit and foreign debt accumulation generated by a boom in investment should not be considered with too much concern and it might actually increase the rate of growth of an economy where domestic savings are not sufficient to finance all profitable investment projects. For example, Fountas and Wu (1999) pointed out that the U.S. current account deficits have been increasing in the 1990s, and the inflow of foreign capital to the U.S. has helped finance its investment boom,

with interest rates below what they otherwise might have been. To the extent that this investment increase supports a higher standard of living, the U.S. will be able to service its international debts without reducing consumption.

However, large and persistent current account deficits are detrimental to economic welfare, thus raise the issue of sustainability of the deficits. A country that continually runs a current-account deficit will become ever more indebted to foreigners. The sustainability of the current account deficits depends on certain characteristics such as measures of determining when a deficit is a large deficit, the financing of a deficit, and whether the deficits are used for investment or for consumption (Edwards, 2001). So long as these borrowings are invested wisely the deficits need not be a problem, since future economic growth should allow the debt to be serviced. On the other hand, if the foreign resources are badly employed, or if the current-account deficit grows too fast, a country may not be able to meet its obligations to foreign creditors. Hence, a large current-account deficit that fuels consumption or a property-price bubble may be a problem.

How do we judge that a country's current account deficit remains sustainable? Under the least restrictive interpretation the current-account deficit is sustainable if the country is solvent in the sense that it must be able to generate sufficient trade surpluses in the future to repay its debt (Guest and McDonald, 1999). In other words, a country is solvent to the extent that the discounted value of the

expected stock of its foreign debt in the infinitely distant future is non-positive. Corsetti et al. (1999) argued that in practice, the solvency criterion is not particularly stringent, because the intertemporal budget constraint of a country imposes only very mild restrictions on the evolution of a country's current account and foreign debt. Any path of the current account such that the present discounted value of the current and future trade surpluses is equal to the current external debt position is consistent with solvency. A country could run very large and persistent current-account deficits and remain solvent, as long as it can generate trade surpluses of the appropriate size at some time in the future. As an alternative, they suggested that the issue of sustainable current account deficit to be evaluated by analyzing the path of the current account balance to see whether it fairly closely follows certain path that is considered optimum. Generally, the optimal path is obtained from a model that is suited to the actual current account data.

One of the approaches to estimate such model is the consumption-smoothing approach, which focuses on the long-run savings and investment decisions of private agents. Under this approach, the current-account position of a country is determined by its savings-investment gap, which ultimately depends on the willingness of foreigners to hold its liabilities (Knight and Scacciavillani, 1998). Countries with a higher savings ratio will tend to be net capital exporters and run sustained current account surpluses, while countries with a lower savings ratio

will tend to import capital and therefore run current-account deficits. For this reason, current account can also be looked from the perspective of saving and investment.

The relationship between saving and investment has been sharply enthusiastically debated following the controversial finding of Feldstein and Horioka (1980). In this study, they proposed the perfect capital mobility hypothesis which stipulates that the capital mobility is perfect across national boundaries when investment and saving are uncorrelated. The controversy arose when they tested this hypothesis on 21 OECD countries (for the period from 1960 to 1974) and found that investment and saving are highly correlated. The conclusion that capital might not be internationally mobile in highly open economies such as the OECD countries remained to be known as the Feldstein-Horioka puzzle. Consequently, Feldstein-Horioka findings have been extensively challenged from both technical and theoretical grounds.

One of the alternative view in explaining the Feldstein-Horioka puzzle is the intertemporal current-account solvency argument, as highlighted in numerous studies such as Taylor (2002), Liu and Tanner (2001), Jansen (2000), Coiteux and Olivier (2000), Levy (1999), Coakley et al. (1999), and Coakley and Kulasi (1997). The main idea behind their arguments is that the solvency constraint requires that the current account balances be stationary since debt cannot explode.

Since current account balance equals saving minus investment, cointegrating relationship between saving and investment will imply that the current account balance is stationary, and hence the non-violation of budget constraint. In other words, a high saving-investment correlation may simply result from the fact that a country is in intertemporal balance externally and domestically. As long as the intertemporal budget constraint is not violated, the long-run saving and investment would be correlated, regardless of the degree of capital mobilility. A good example supporting this view is the study by Coakley et al. (1996) who tested the hypothesis that current account balances are non-stationary for 23 OECD countries. Their results strongly rejected the hypothesis, thus implied that saving and investment cointegrate irrespective of the degree of capital mobility. In other words, the high saving-investment correlation from the Feldstein-Horioka's regression should be interpreted as a manifestation of the intertemporal budget constraint rather than evidence of low capital mobility.

In short, the behaviour of the current account movements is one of the most widely debated topics not only among economists but also among policymakers in developed and developing countries. Essentially, the topic has been in the economic spotlight because of its important policy implications concerning the long-term viability of a country's economic progress. For instance, in an open market economy, where the goal of macroeconomic policy is to maintain the internal and external balance of the macroeconomic system through a