CHAPTER ONE

INTRODUCTION

Introduction

The actual economy or a potential economy of a country is the total sum of GDP and a second economy. The second economy consists of various activities that escape GDP coverage. This study provides empirical estimates on a portion of the second economy which is the underground economy (UE) that escape taxes in Malaysia. UE is a natural phenomenon but the impact of a substantial size is tax loss. Its characteristics and economic association must be identified to suppress its growth.

1.1 Second Economy and Underground Economy (UE)

1.1.1 Definition

The potential economy of a country should constitute income of activities that follow all laws and regulations and also activities that evade them. However, the GDP representing the official economy or the national economic performance only measures most lawful activities. As GDP normally excludes activities that evade laws and regulations due to their hidden nature, it does not reflect the actual economy of a country. The exclusion of these activities has led to the conceptualization of an economic gap between GDP and the potential economy.

Despite the notion that the entire economic gap has been extensively discussed as a "second economy", there is no precise agreement to its definition and estimation. Among terminologies used to express this economic gap are hidden economy, informal economy, black economy, unobserved economy, parallel economy, shadow economy and UE. The broadest definition refers to their common characteristics; activities that circumvents or otherwise elude government regulation, taxation or observation, all of which should be reported or measured but are not.

As priori studies have used various terminologies and activities measured are unclear, discussing the economic gap of past findings using different terms could be confusing. To facilitate discussion, this study uses "second economy" to mean the entire economic gap and to represent the various terms used in past studies.

The "second economy" could consist of non-monetary activities of household, informal sectors and activities of monetary sector. Income of the latter are often measurable through observable economic traces, if had not been covered by GDP are the "missing" value added economy.

This study estimates a portion of the "second economy" which is the UE that consist of income of legal activities that escape taxes (irregular economy) and income of prohibited or illicit activities which naturally escape taxes to avoid detection (illegal economy). The potential economy and classification of economic components of the second economy are summarized in Table 1.1.

Table 1.1: Potential economy – GDP and components of "second economy"

POTENTIAL ECONOMY	
GDP	SECOND ECONOMY[1]
• Economic activities that follow all regulations. • Legal economic activities reported to tax authority	i. Prohibited or illicit activities[2] - naturally illegal income are not declared to tax authority as people want to conceal their activities to avoid detection. Examples are drug trafficking, smuggling, bribery and gambling. ii. Legal economic activities[3] - legal income not reported to tax authority to reduce liability. They do not want to share their income with the public fund, for private benefit. Examples are profits of business, salaries and rental income.
	iii. Informal market activities[4] - low income earners which may not captured in the official statistics and are often not covered by taxation. Examples are causal worker and agricultural output by smallholders. iv. Household non-market activities[5] - work carried out by family members, but not included as value-added economy, such as the care of the sick, young and aged.

Source: Adopts the concepts made by Carter (1984); Schneider and Enste (2000); and Hesam (2003) with some modification.
Second economy[1] consists of income derived from monetary sectors [2,3,4] and non-monetary sectors[5]. Second economy[2,3] consists of income of UE that escaped taxes.

1.1.2 Size and trend

Economists believe that the "second economy" is inherent to all countries. Its presence in small size is acceptable but a large size is of great concern as it causes serious negative impacts, Kesner-Skreb (1997). Size of the second economy varies across country's economic performance.

Prior to the year 2000, the size of the "second economy" relative to GDP was in an upward trend but most developing, transition and developed countries showed a downward trend in the 2000 decade. Malaysian second economy also exhibited a downward trend, the size relative to GDP was from 31.3% (1999) to 30.9% (2006), (Schneider, F. A. Buehn, & C.E. Montenegro, 2010).

1.1.3 Positive and negative effects

The "second economy" has considerable positive and negative effects. Its positive economic contribution is the employment creation and society welfare as survival lines for the unfortunate, especially during an economic downturn. However, benefits of life line and redeployed profits in the mainstream economy are only of short term. Critics of the "second economy" emphasized that in long run any positive effects would be outweighed by its negative impacts. Its societal-economic impact is costly at it deteriorates public finances, causes policy crises and distort country's economic structure. They include; inefficient goods and labor markets; distorted statistics; deprived workers' rights and guarantees; and diverted finances through tax non compliance.

1.1.4 Determinants

Literature studies have indicated that UE is a latent variable but its evidence can be captured in some observable economic traces which are the determinants or proxy indicators of UE. The common determinants are; immigrants and criminal markets (Becker (1968, 1974, 1994)); tax burden, tax system and tax morality (Giles and Tedds, 2002; Schneider and Enste, 2000; Cebula, 1997; Johnson et. al., 1998); bad equilibrium consisting of heavy regulatory and weak rules (Kaufman

& Schleifer, 1997; Kesner-Skreb, 1997); high unemployment rate due to extensive regulations of legal employment (Enste, 2003); occupational "opportunity" (Pestieu and Possen, 1991); CPI (Ahiabu, 2006); and societal attitudes such as public disenchantment with the state, corruption and nepotism (Friedman et. al., 2000) had either individually or collectively caused UE size to grow. According to Tanzi, 1980; Tucker, 1982; and Slemrod, 2007, legal activities that escape taxation appear to be the fastest growing "second economy" largely because of the tax system.

1.1.5 Indicators

The common proxy indicator is tax non-compliance because participants of UE evade tax rules. They do not report income to tax authority either to reduce liability for private benefit or to avoid detection of illicit activities.

Other proxy indicators include unemployment and labor force pattern (Besley, Preston and Ridge, 1997; and Enste, 2003); GDP growth (Adam and Ginsburgh, 1985); Giles and Tedds, 2002); CPI growth (Ahiabu, 2006); income characteristics (Gupta, 1992; Bloomquist, 2003), Dubin & Wilde, 1988); savings-investment gap (Rusenova, 2003); private consumption (Gupta, 1992); corruption incidences (North, 1990; Levenson & Maloney, 1996; Friedman et. al. 2000); electricity consumption (Lizzeri, 1979; Kaufman & Kaliberda, 1996) and; high circulation of cash or currency notes in large denomination (Bawly, 1982).

1.2 Gap of study and problem statement

There have been extensive studies on the ''second economy'' on transition, developed countries and some developing countries. To the best of my knowledge Malaysia lacks empirical studies; formal investigations on its insights are relatively recent and many issues remain unresolved and under explored. Estimates of Malaysia by local researchers based on different data, methodology and period between 1971 and 2000 showed a range between 0.2% and 85%, (Table 2.5). The wide range estimates are not in time series and outdated. They do not show any structural economic components, growth trend and economic association. It is important to review and draw more insights into issues of UE for strategic policy measures and effective implementation, in view of its negative economic and societal impact. Over the period of 1960-2008, tax revenue in Malaysia rose to almost 115 folds. Is this tax growth adequate? Anecdotal evidences of a flourishing UE are frequently mentioned in the news.

1.3 Aim and objectives of study

The aim of this study is to provide more insights into the UE that escape taxes in Malaysia and to establish empirical evidence according to five main objectives:

i. To explore economic incidences of observable traces of UE;
ii. To estimate the size and growth of UE and its components by; irregular and illegal economy; direct and indirect tax non compliance; and institutional and individual participation.
iii. To identify the characteristics of UE by; economic industries, business sectors, income level and income distribution;
iv. To examine economic association of UE estimates with priori proxies (determinants or indicators); CPI, taxes, "negative indexes" (unemployment rate, crime rate and bribery index), economic crises federal expenditure, GDP per capita, electricity consumption and cash in circulation.
v. To evaluate government interactions as remedial efforts; tax system and federal expenditure.

1.4 Importance of study

The societal and economic impacts of UE on taxes are of great government concerns. About 70% of Malaysia's federal fund constitutes taxes. A large UE size implies a serious tax loss as it limits tax revenue because there will be more unreported income that is beyond the reach of tax authorities. To compensate for taxes, government would turn to loans (servicing more debt), withdrawing subsidies and taking austerity steps. These could drive away confidence of public and investors, and causing a further imbalance of federal account, a vicious circle

to a further UE. The anecdotal evidence of UE in Malaysia needs to be examined empirically for effective policies and strategic implementation.

1.5   Approach of study

The statistical techniques employed are descriptive statistics and double log regression. The approach of this study begins with exploration of the economic incidences to provide initial views on the indicators and determinants of UE in Malaysia. The characteristics and estimate of the size and growth of UE is based on time series tax and commercial crime data using tax non compliance ratio by comparing the voluntary tax reports and enforcement data of direct tax, indirect tax and commercial crimes. Enforcement data of direct tax represents the unreported legal income of tax payers "in the captured tax base". Enforcement data of indirect tax and commercial crimes represents the unreported illegal income of potential tax payers who are "outside the captured tax base".   The estimates were then evaluated in a multi economic model, the correlation coefficients derived from regression techniques are proposed for policy measures.

1.6   Organisation of study

This study is organized into eight chapters. The second chapter traces the works of literature on UE concerning the definition, theoretical framework, past methods, size, trend, impacts, determinants and proxy indicators. The third chapter illustrates the methodology employed, describes how data was gathered and analyzed, discusses the limitation and makes implicit assumptions, and

formulates hypothesis. The fourth chapter describes the economic traces of UE to provide initial view of its anecdotal evidence in Malaysia. The fifth chapter discusses the characteristics of UE based on characteristics of unreported direct taxable income by economic industries, business sectors, professions, individual age, income background and states' wealth. The sixth chapter shows estimates of the size and growth of UE, and derivative estimates of tax loss. The seventh chapter examines economic variable association between UE and taxes, CPI, economic crises, crime index, electricity consumption, GDP per capita, cash in circulation and federal expenditure. The eighth chapter summarizes the empirical findings, offers recommendations to suppress the UE, propose continuous and related studies and finally concludes.