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EXPENDITURE PATTERNS OF INDONESIAN HOUSEHOLDS
Before and After the 1997 Economic Crisis

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ABSTRACT

Indonesia is a developing country located in the Southeast Asian region and the fourth largest country in the world. Indonesia had a positive economic development, notably since the mid-1960s and this continued until the economic crisis in 1997. Development in the economic sector brings development in the social sector. Household expenditure is one of the social indicators used in a range of studies, particularly in the developing countries, as a common measure to assess living standards and poverty. Theories of consumption illustrate that when the economy surges, expenditure and income rise; and when the economy retrenches, expenditure and income fall. Therefore, changes in Indonesian economic development would be reflected in changes in the expenditure of Indonesian households. Furthermore, patterns of household expenditure can be used to symbolise the level of economic welfare of households, particularly in their buying capacity to meet their needs for living.

In mid-1997, an economic crisis hit Indonesia and this negatively affected the country. Some of the major economic and social indicators showed that the rupiah (the Indonesian currency) fluctuated, the consumer price index climbed, poverty increased, unemployment rose and the price of rice (Indonesia's staple food) increased. By 1999, nearly two years after the 1997 crisis, the Indonesian economy began to demonstrate some signs of recovery, which was indicated by strengthened macroeconomic indicators. From 1999 onwards, GDP grew positively, inflation (CPI) went down, the exchange rate strengthened and food prices went down.

Given the fact that Indonesia experienced an economic crisis in 1997, the general aim of this study was to investigate the impact of the 1997 Indonesian economic crisis on the economic welfare of households in Indonesia, with regard to their expenditure. There were three years (1996, 1999 and 2002) observed to represent the period before the economic crisis in 1997 (before 1997), the period initial adjustment of post crisis (1998-2000) and the period further adjustment of post crisis (after 2001).

Five objectives were set out for the study as follows:

- To examine changes in the Indonesian economy before and after the economic crisis in 1997.
- To review the socio-demographic characteristics of Indonesian households.
- To investigate changes in expenditure patterns of Indonesian households, in order to measure their buying capacity before and after the economic crisis in 1997.
- To investigate changes in household expenditure patterns on different foods and non-food items, before and after the 1997 economic crisis in Indonesia.
- To develop a typology of Indonesian households based on their expenditures.

The data employed for analysis was from the SUSENAS (the national socio-economic survey) at household level conducted by the Indonesian Central Agency for Statistics (CBS). Univariate, bivariate and multivariate analytical methods were performed for the data analysis.

The results showed that the economic crisis in 1997 led to the decline of the purchasing power of households in Indonesia. In the further adjustment of the post crisis (in 2002), their buying capacity level had improved, however, it had not reached their higher level before the crisis (in 1996). Food is a *necessity* expenditure compared to non-food. Indonesian households consumed more than 50 percent of their total expenditure on food, relative to non-food, indicating that the majority of Indonesian households are relatively poor. Necessity items included cereals and vegetables for food and housing, goods-services, health and clothing-footwear for non-food. Luxury items included meats, fruits, prepared food-drink for food and education, durable goods, tax-insurance and social activity for non-food. There were six types of Indonesian households identified, based on similarities in their expenditure. They were labelled from the 'very poor' type (T1) to the 'very wealthy' type (T6). These six types of households demonstrated different stages of expenditure patterns, moving from *basic* through to *high non-basic* expenditure. The very poor type represented about 70 percent of households in Indonesia. In conclusion, the Indonesian economic crisis in 1997 had a negative impact on households in Indonesia with regard to their household expenditures.

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LIST OF ABBREVIATIONS

ADB	:	Asian Development Bank.
CBS	:	Central Bureau of Statistics of Indonesia.
CPI	:	Consumer Price Index.
FHI	:	Family Health International.
GDP	:	Gross Domestic Product
LOC	:	Library of Congress of the USA.
SAKERNAS	:	Survei Angkatan Kerja Nasional (the National Labour Force Survey).
SP	:	Sensus Penduduk (Population Census).
SUPAS	:	Survei Penduduk Antas Sensus (the Intra-Census Population Survey).
SUSENAS	:	National Socio-Economic Survey of Indonesia.
UN	:	United Nations.
WB	:	The World Bank.

Chapter 1

INTRODUCTION

1.1 Introduction

Indonesia is a developing country located in the Southeast Asian region. It is the fourth largest country in the world after China, India and the USA. In the year 2000, the population was 206 million. Indonesia has succeeded in developing its economy, notably since the mid-1960s and this continued up to the economic crisis in 1997. During this period, GDP grew at an average rate of 6.5 percent per year (1997; Schwarz, 1999; Hill, 2000).

Development in the economic sector brings development in the social sector. Economic indicators have no importance without improvement in social indicators (Hill, 2000). Some indicators of social development include the structures of demography, transportation, communication, marketing (Rae, 1999), household expenditure (Widjajanti & Li, 1996; Rae, 1999; Liu & Chern, 2001; Zhang, 2002; Agbola, 2003), poverty, the development gap, the level of nutrients, the level of wages, education and health (Hill, 2000), employment (Asra, 2000) and agricultural productivity (Hendriks & Lyne, 2003).

Among the social indicators mentioned above, household expenditure is used in a range of studies, especially in the developing countries, as a common measure to assess living standards and poverty (Deaton & Grosh, 2000). Examples of these studies are: Hazell and Roell (1983) in Malaysia and Nigeria; Fritsch (1996) in Ethiopia; Widjajanti and Li (1996) in Indonesia; Delgado, *et al.* (1998) in Senegal and Sudan; Webb & Lapping (2002) in Egypt and Ghana; Ishida, *et al.* (2003) in Malaysia; and Wong and Wong (2004) in Hong Kong. Household expenditure was used in Indonesia by Beegle, *et al.* (1999) to investigate the impact of economic crisis upon households, with regard to their economic welfare and by McKenzie (2001) in Mexico.

The relationship between economic development and household expenditure can be viewed from theories of consumption. These theories illustrate that expenditure and income move together over the business cycle. When the economy surges, expenditure and income rise; and when the economy goes down, expenditure and income fall (Mankiw, 2003). Therefore, it could be expected that changes in Indonesian economic development would be reflected in changes in the expenditure of Indonesian households.

Patterns of household expenditure can be used to symbolise the level of economic welfare of households (Erdogan, 1997; Deaton & Grosh, 2000; Sassani, 2004). Household expenditure represents the amount and types of items that are purchased by households (Sassani, 2004). The expenditure value describes the economic capability of households to buy expenditure items (Erdogan, 1997), whilst the expenditure items reflect dimensions of living standards within households (Deaton & Grosh, 2000). Therefore, patterns of household expenditure can describe the economic resources of households including the purchasing power of households to meet their needs for living.

1.2 Background and problem statement

For the last three decades, Indonesia has succeeded in developing its economy. From the mid-1960s, up to the economic crisis in 1997, the country grew at an average rate of 6.5 percent per year (Booth, 1997; Schwarz, 1999; Hill, 2000). During this successful economic development, some yardsticks of social development can be noted including: poverty alleviation for Indonesians that dropped from around 60 percent in 1970 to 15 percent in 1990; the county's movement from the world's largest rice importer to becoming self-sufficient in rice (the major staple food for Indonesians) within a decade (1974-1984); and the improvement of infrastructures such as electricity, telephone lines, paved roads, schools and health centres, from 1975-1990 (Schwarz, 1999). The improvement of income in terms of trade, the soaring world prices of oil (1973-1981), the growing investment and a series of policy reforms all contributed to this high level of growth within the economy (Booth, 1997; Schwarz, 1999; Hill, 2000).

In mid-1997, an economic crisis attacked Indonesia and this negatively affected the country. The rupiah (the Indonesian currency) fluctuated from 2,400 rupiah at the end of

1997 to about 15,000 rupiah per US$ in January 1998, and then it stabilised, between 8,000 and 10,000, by the end of 1998 (ADB, 1998a; Beegle, *et al.*, 1999) (NZ$ 1= 6,251 rupiah, US$ 1= 9,200 rupiah; 1 February 2006). The consumer price index climbed from 11.6 percent in December 1997 to 58.5 percent in 1998 (ADB, 2000). Poverty increased from 25 percent during 1980-1990 to 39 percent by the end of June 1998 (ADB, 1998a; 2001a). Unemployment rose by 5.5 percent in 1998, relative to 1997 (ADB, 2001b). In addition, the price of rice rose higher than it was before the crisis, which was partly due to the *El-Nino* long drought during the same periods (Wasito, *et al.*, 2001).

By 1999, nearly two years after the 1997 crisis, the Indonesian economy began to demonstrate some signs of recovery which was indicated by strengthened macroeconomic indicators (ADB, 2000; Soekirman, 2001). From 1999 onwards, the GDP grew positively, inflation (CPI) went down, the exchange rate strengthened and food prices were back to those levels before the crisis figures. GDP became positive 0.8 percent in 1999, after a negative 13.1 percent a year earlier (ADB, 2000). GDP continued to grow steadily and reached 4.1 percent in 2003 (ADB, 2004a). Inflation rates plummeted negatively in 1999, but then returned positively from 2000 onwards. In 1999, the rupiah stabilised around 6,800 – 9,500 rupiah per US dollar, which was stronger than it was at the crisis level (ADB, 2000).

Economic development brings social development. One indicator of social development is household expenditure (Hill, 2000). Given the fact that Indonesia experienced an economic crisis in 1997, this study focuses on investigating the impact of the 1997 economic crisis on the economic welfare of households in Indonesia, in terms of their expenditure.

1.3 General aim and objectives of the study

Various studies have been conducted to analyse household expenditure in Indonesia (Chernichovsky & Meesok, 1984; Hakim, 1994; Rae, 1996; Widjajanti & Li, 1996; Suryahadi & Sumarto, 1999; Wasito, *et al.*, 2001; Hutasuhut, *et al.*, 2002; Sassani, 2004). However, only few of them have studied changes in expenditure patterns of

Indonesian households, notably before and after the economic crisis in 1997. As a result, little information exists on this particular subject.

The general aim of this study is to asses the impact of the 1997 Indonesian economic crisis on the economic welfare of households in Indonesia, with regard to their expenditures before and after the economic downturn. This study specifically investigates changes in the patterns of household expenditure over the three years observed: 1996, 1999 and 2002.

In order to accomplish the general aim of the study above, five objectives for the study were set out as follows:

- To examine changes in the Indonesian economy before and after the economic crisis in 1997.
- To review the socio-demographic characteristics of Indonesian households.
- To investigate changes in expenditure patterns of Indonesian households, in order to measure their buying capacity before and after the economic crisis in 1997.
- To investigate changes in household expenditure patterns on different foods and non-food items before and after the 1997 economic crisis in Indonesia.
- To develop a typology of Indonesian households based on their expenditures.

1.4 Overall methodology of the study

This study used secondary data sets of existing statistics for data analysis, due to limitations of resources, such as time and money. The household data from the SUSENAS (the National Socio-Economic Survey) conducted by the National Agency for Statistics (CBS) in Indonesia, were chosen for the study. The SUSENAS is a national survey that collects information about various welfare aspects at household level in Indonesia. There were three data sets (1996, 1999 and 2002) that were employed in the study, to cover the period before and after the 1997 Indonesian economic crisis. The 1996 data set represented the period before the crisis (before 1997), the 1999 data set represented the period post-crisis – initial adjustment (1998-2000) and the 2002 data set represented the period post-crisis – further adjustment (after 2001).

The methodology of this study was quantitative. Interpretation of the study was drawn, mainly based on numerical figures. The three data sets from the 1996, 1999 and 2002 SUSENAS categorised the study into a longitudinal and time-series study. The data was managed and analysed using computer-based processing and statistical methods.

Three major analytical techniques of univariate, bivariate and multivariate were performed in the statistical analysis. Univariate analysis is a descriptive analysis and it was used in this study to summarise and build a description of data. Two bivariate analyses (the Chi-square test and the one-way analysis of variance between group test) were conducted to examine the relationships between two variables (independent and dependent variables). A cluster analysis of multivariate was employed to develop a typology of Indonesian households. The SPSS V. 12.0.1 and the SAS® system V. 8.2. were used in the statistical analysis.

1.5 Importance of the study

The results of the study contribute to an understanding of what was the impact of the 1997 economic crisis on households in Indonesia. This study investigated the impact of the 1997 economic crisis, particularly, on the economic welfare of households, with regard to their expenditure, before and after the crisis. Based on expenditure patterns, the study would supplement information within the level of economic welfare, particularly the purchasing power of Indonesian households, from the period before and after the economic crisis in 1997. The information also includes whether the level of the buying capacity, of households after the economic crisis (in 2002) had reached their level before the crisis (in 1996). The results of this study would also enrich information, regarding expenditure patterns of households in Indonesia that currently exists.

The typology of households, developed in the study would help identify household types in Indonesia, based on their expenditure. Identification of household types with similar characteristics would hopefully be useful to assist national and international policy makers and users, both public and private, in designing programmes and aids to better target recipients.

1.6 Outline of the thesis

This thesis is written in six chapters. This Chapter is the introduction and it covers the general background of the study, the research problem, the aim and objectives of the study, the overall methodology and the importance of the study. Background information about various aspects of Indonesia (general information, politics, economics and social) is provided in Chapter two. Chapter three reviews literature on theories and existing studies, regarding household expenditure. The methodological steps of this research are discussed in Chapter four. The results of data analysis are presented in Chapter five. Finally, Chapter six discusses the results of the study, draws some conclusions and provides recommendations for future research.