

Research Article

Analyzing the Household Income and Consumption Expenditure: Reality of Rising Cost of Living in Malaysia

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Published 31 July 2024

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Selection and Peer-review under
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 2023 Conference Committee.

Abstract.

Malaysia has been experiencing rapid socioeconomic transition over many years and achieved remarkable socioeconomic development and economic growth in the last few decades. Basically, such growth and development brought significant improvements in the level of income of low- and middle-income households. However, the cost of living in Malaysia has increasingly become a serious economic issue due to the increase in inflation. This paper addresses the question of how the cost of living can affect household income and expenditure. The finding of this research is threefold. Firstly, the income gap between households is increasing every year. This implies that the program to increase the income of the lower-income group should be given priority so that national development can be felt by all levels of society to achieve the goal of inclusive national development. Secondly, the monthly income average of households shows a steady increase. However, B40 earnings growth needs to be improving greater as an effort to reduce the income gap between the highest with low- and medium-income groups. Thirdly, income growth for each household group is still greater than inflation. This shows that on average households can still cope with the burden of rising costs and thus deal with the cost of living depending on how they model their spending patterns. This study highlights that to address the cost of living problem, the policy or program planned by the government should touch three important elements of income, price, and spending patterns. Also, this study highlights that to address the cost of living problem, a holistic approach is essential. This study also proposes that each of the economic agents, the government, the private sector, and the households have their roles in economics to develop better economic welfare among society.

Keywords: cost of living, income, low-income, middle income, living standard, spending patterns

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1. Introduction

Addressing the rising cost of living has been one of Malaysia's key initiatives in helping reduce the burden of living costs borne by the household, especially low-income households. Households feel the burden of living costs when their income cannot afford to spend on maintaining their lifestyle. The cost of living becomes a burden on households when their income does not cover the expense of maintaining a certain lifestyle. A major factor that often contributes to the rising cost of living is the rising price factor. This was due to rising production costs faced by manufacturers, rationalization of government subsidies, and depreciation of domestic currencies as a result of shocks abroad. Another factor to be taken into account is that the household income factor is said to be inconsistent with rising prices of goods and services.

Recognizing the fact that cost of living has become a very important issue in today's society, research should be conducted so that programs or policies that the government intends to formulate will have a significant impact. Such studies will determine whether factors that are considered to be the real cause of the rising cost of living. Since 2009, the government has been focusing on the rising cost of living, especially among the B40 group. In this regard, addressing the rising cost of living has become one of the government's initiatives under the National Key Result Areas (NKRA) that are monitored by Performance Delivery and Management Unit (PEMANDU) under Prime Minister Department.

The three most important elements to consider when discussing the cost of living are income, prices, and household spending patterns. The income generated by households comes from various sources such as wages, rent, and profit from business and investment. If these sources of income do not increase or increase at a slower rate, households will be burdened if their spending increases or increases faster than income increases. The burden of households will be more felt if the prices of goods and services increase at the same time. Household spending patterns also play a role in determining whether households are burdened with the cost of living. Spending beyond affordability and huge debt obligations is part of the reason why households are burdened with the cost of living, especially in the face of rising prices for goods and services.

Several macroeconomic variables have been used to investigate the determinant of the cost of living from past studies. Several popular macroeconomic variables used were real per capita income, population, and housing price. There are a few studies that look at cost of living with households (Kurre, 2000; Almas & Johnsen, 2012; Latimaha

et al., 2017). In Pennsylvania, there is a positive relationship between household growth and the cost of living (Kurre, 2000). While in Malaysia there is a negative relationship between household growth and cost of living (Latimaha et al, 2017). Meanwhile, in China, Almas and Johnsen (2012) found that rural households face a high cost of the living problem compared with households in the urban.

The cost of living is closely related to income and consumption expenditure. Some recent studies look at the relationship between these problems (Brewer & O'Dea, 2012; Argente & Lee, 2015; Palmer et al., 2016; Stoyanova & Tonkin, 2018). To see the relationship between income and cost of living, Argente, and Lee (2015) find a huge gap between income groups and the cost of living during the recession. In Cambodia, Palmer et al (2016) found that the rising cost of living has led to the rising number of poor people. Besides that, Stoyanova and Tonkin (2018) found an imbalance in spending on low-income households in the UK. Furthermore, in the UK, Brewer, and O'Dea (2012) found that there was an imbalance in livings standards and found that lower living standards were related to consumption, rather than income.

Therefore, this paper tries to evaluate the reality of the rising cost of living in Malaysia. This paper will analyze Malaysian household income and consumption expenditure patterns and trends. This paper is discussed as follows. The next section discusses the methodology. The last two sections discuss the findings and conclude the study.

2. Method

The description of the cost of living involved the analysis of income trends, the pattern of household spending as well as the analysis of the price trends of goods and services. Household income and expenditure data, and price data of goods and services are obtained from the Department of Statistics, Malaysia. The data used are HIS various years, for example, HIS 1989, HIS 1995, HIS 1999, HIS 2004, HIS 2009, HIS 2012 and HIS 2014. For HES, HES 2009 and HES 2014 are utilized. To analyze household income and expenditure, discussions will be conducted through the visualization of tables and diagrams.

The rising cost of living through household income can be explored and identified using the following ways. Firstly, the range of income between the household groups ie the B40, M40, and T20 groups were analyzed by year. Second, the trend of the income range is identified using the diagram to show how much income increases for each income group. Third, the monthly gross average income is analyzed based on

income groups B40, M40, and T20 as well as consumer price indices within the five-year interval ranging from 1984 to 2014 and shown in the form of diagrams. Fourth, the percentage of income growth can be demonstrated by summarizing and comparing the growth of household income B40, M40 and T20. The percentage of income growth was analyzed for a range of 10 years from 1979-1989, 1989-1999 and 1999-2009 and a 5-year range from 2009-2014. Fifth, revenue analysis is done by comparing the annual income growth rates for all three income groups with the inflation rate from 1989 to 2014.

Subsequently, to show the rising cost of living, the study will use the second approach of identifying the monthly household expenditure components. The study will review and compare household spending profiles between 2009 and 2014 by category of income groups and Malaysia as a whole. The study will identify the highest components of monthly expenditure by household groups for 2009 and 2014. The study will also analyze monthly household expenditures according to urban and rural strata.

Then, the study will identify the trend and price hike of goods and services from 1990 to 2014 using the following approach. First, the study will examine the trend of changes in the overall price of the group of goods and prices of the three main categories of goods and services spaced by households from 1990 to 2005 based on the base year 1990. Secondly, studies will examine the major categories of goods and services group spent by households for that year. The main categories of the expenditure groups are food groups, housing and utility groups, and transport groups. This study will analyze household expenditure by showing the highest trend of the 5 component price of food items for the years 1990-2005 and 2005-2015. Subsequently, the study will identify the trend of the price of goods components in the housing and utility groups for 1990-2015. Next, the study will show the trend of home prices based on the Malaysian home price index. Finally, in this section, the study will examine the trend of transport component prices for 1990-2015

3. Result and Discussion

This section explains and explores the cost of living expenses faced by households especially low-income households.

3.1. Analysis of Household Income

This analysis is based on HIS 1989 up to HIS 2014 released by the Department of Statistics Malaysia. Household income is discussed in the context of income groups B40, M40 and T20. Households are categorized into B40 income groups when the income earned is in the range of 0 to 40 percent the lowest of the total household income distribution in Malaysia. Households were categorized as households in the B40 income group in 1989 if households earned less than RM680. Households in the M40 group are households with income ranging from RM680 to RM1,599. The T20 group household income was higher than RM1,599.

Malaysia’s household income has generally been sustained since 1984. Specifically, the average monthly gross household income of the T20 shows an absolute increase significantly compared to the increase in M40 and B40 earnings. This has led to a growing revenue gap. By referring to the Figure1, in 1989, the income gap between T20 and M40 was RM1,888, while the income gap between T20 and B40 was RM2,501. In 1999, both income gaps widened to RM4,064 between T20 and M40 and RM5,403 between T20 and B40 respectively. The income gap has widened in 2014, to RM8,643 between T20 and M40 and RM11,768 between T20 and B40.

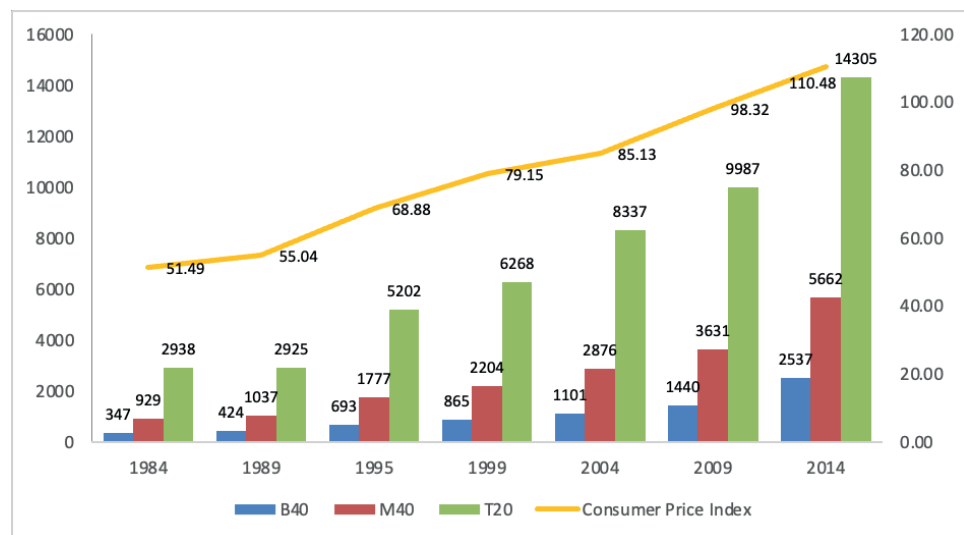


Figure 1: Average monthly gross household income by income groups (B40, M40 and T20). Source: Household Income Survey 2014, Department of Statistics, Malaysia.

However, in the context of household income growth, B40 earnings show a larger percentage of growth in recent years. Table 1 summarizes and compares household income growth of B40, M40 and T20 by 10 years from 1979-1989, 1989-1999 and 1999-2009 and 5 years range from 2009-2014. The average monthly gross household income of B40 in 1989 was RM424, an increase to RM865 in 1999, an increase of 104 percent.

In the next ten years (2009), the average income of B40 increased to RM1,440, an increase equivalent to 66 percent. In 2014, the average income of B40 was RM2,537, a growth of 76 percent over the last five years. M40 and T20 earnings also generally show a parallel improvement trend. T20 earnings showed a larger growth of M40 and B40 earnings during 1989-1999. However, B40's revenue growth was larger than the M40 and T20 earnings growth since 1999.

In discussing the burden of the rising cost of living, it often arises anxiety about higher prices than income increases. Based on Figure 1, the consumer price index (2010 = 100) also shows a consistent improvement trend based on the axial reference to the right of the diagram. To illustrate this situation, Table 1 compares the annual income growth rate for all three income groups with the inflation rate from 1989 to 2014.

TABLE 1: Growth in income of household groups B40, M40 and T20.

	1979-1989		1989-1999		1999-2009		2009-2014	
	\bar{y}	$\Delta\%$	\bar{y}	$\Delta\%$	\bar{y}	$\Delta\%$	\bar{y}	$\Delta\%$
B40	424	111%	865	104%	1,440	66%	2,537	76%
M40	1,037	87%	2,204	113%	3,631	65%	5,662	56%
T20	2,925	56%	6,268	114%	9,987	59%	14,305	43%

Source: Authors' own research.

Based on Figure 2, the inflation rate was found to be an average lower than the three average annual growth rates of household income except in 1999 where the growth rate of each income group is negative. The linear trend line for the three income and inflation groups further reinforced the findings that annual growth rates for all three income groups showed a higher increase than inflation rates. The linear trend line for the three income groups shows a positive slope while the linear line for inflation shows a negative slope.

Through the comparison of the three linear trends of income groups, the trend for B40 earnings shows higher trends (steeper slope) compared to the M40 and T20 earnings trends. This further reinforces the fact that B40's household income grew larger than the M40 and T20 household income, especially since last year. Alternatively, an annual growth analysis based on a compounded annual growth rate (CAGR) method also gives the same insights as shown in Figure 3.

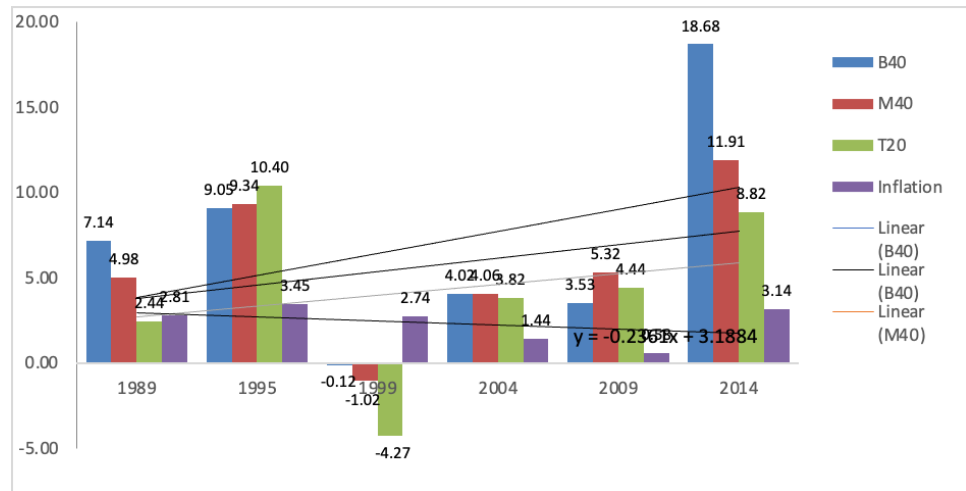


Figure 2: Annual average growth rate of income and inflation rate. Source: Household Income Survey 2014, Department of Statistics, Malaysia.

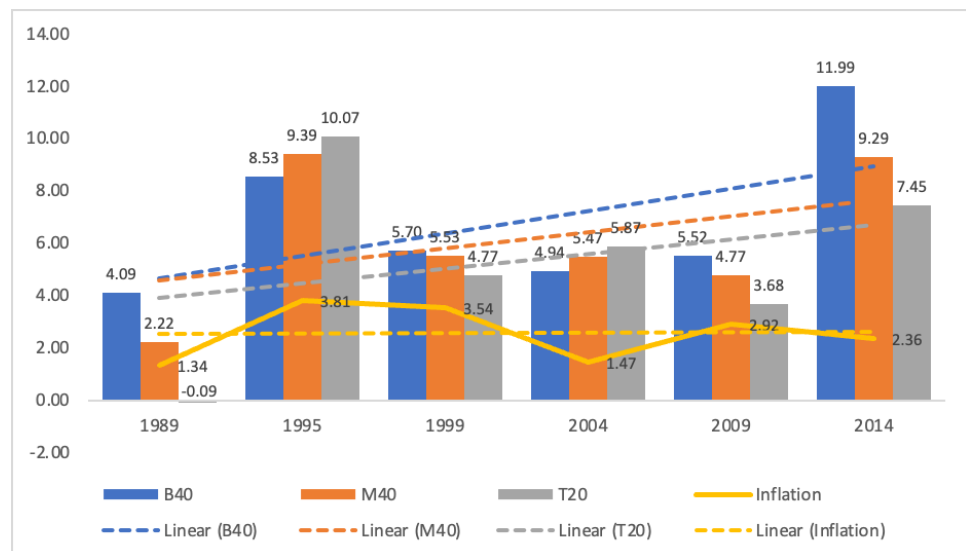


Figure 3: Compound annual growth rate for income and inflation rate. Source: Household Income Survey 2014, Department of Statistics, Malaysia.

3.2. Analysis of Household Expenditure

In this section, the analysis based on HES 2009 and HES 2014 released by the Department of Statistics, Malaysia. Figure 4 compares household expenditure profiles between 2009 and 2014 by category of income groups and Malaysia as a whole. In the context of Malaysia as a whole, the main component of household spending is food and non-alcoholic beverages; housing, water, electricity, gas and fuel; and transportation in 2009 and 2014 did not show significant changes. In both years, the three major household expenditure components accounted for about 57 percent of the total household expenditure. Expenditure on food components and non-alcoholic beverages showed a decline

from 20.3 percent in 2009 to 18.9 percent in 2014. Expenditure on housing, water, electricity, gas, and fuel components showed an insignificant increase of 22.6 percent in 2009 to 23.9 percent in 2014. Meanwhile, transportation component expenditure declined marginally from 14.9 percent in 2009 to 14.6 percent in 2014.

Based on the same figure, the percentage of expenditure on the three major components of the B40 income group decreased from 70.1 percent in 2009 to 62.6 percent in 2014. Percentage decline occurred on food and non-alcoholic components (from 33% in 2009 to 26.5% 2014) and components of housing, water, electricity, gas, and fuel (from 30.1% in 2009 to 23.6% in 2014). However, the transportation component's expenditure increased significantly from 7 percent in 2009 to 12.5 percent in 2014.

The decline in the percentage of expenditure on food and non-alcoholic beverages reflects that B40's household income has increased in 2014 were spending on food and non-alcoholic beverages have taken a smaller share of household income. Besides, B40's household spending on restaurant and hotel components also shows a percentage increase from 7 percent in 2009 to 12.5 percent in 2014. This situation illustrates that the B40's household is improving its standard of living by dining and staying outside. However, if the restaurant and hotel components are experiencing a substantial increase in prices, B40 households will feel a burden of price hikes if they do not change their spending patterns in maintaining the standard of living.

For the three main expenditure components, the percentage of M40's income group expenditure has not changed much from 2009 to 2014 of about 57 percent. Expenditure on food and non-alcoholic components increased 1.8 percent from 18.3 percent (2009) to 20.1 percent (2014). Housing and water expenditure components, electricity, gas, and other fuels were almost unchanged while transportation spending components declined by 1.5 percent from 16.6 percent (2009) to 15.1 percent (2014).

For the T20 earnings group, the components of food and non-alcoholic beverages show the smallest percentage compared to the same component expenditure for B40 and M40. Expenditure on these components only increased by 1 percent from 12.1 percent (2009) to 13.1 percent (2014). However, the components of housing, water, electricity, gas, and other fuel components showed a higher increase of 3.8 percent from 21.5 percent (2009) to 25.3 percent (2014). Meanwhile, the T20 transportation expenditure component was almost unchanged at around 15 percent in both years.

In addition to the three major household expenditure components discussed, spending on restaurants and hotels showed a rising trend. This is shown not only by the T20 and M40 income groups but also by the B40 income group. In 2014, the percentage of expenditure on this component is about the same 12 percent for all three income

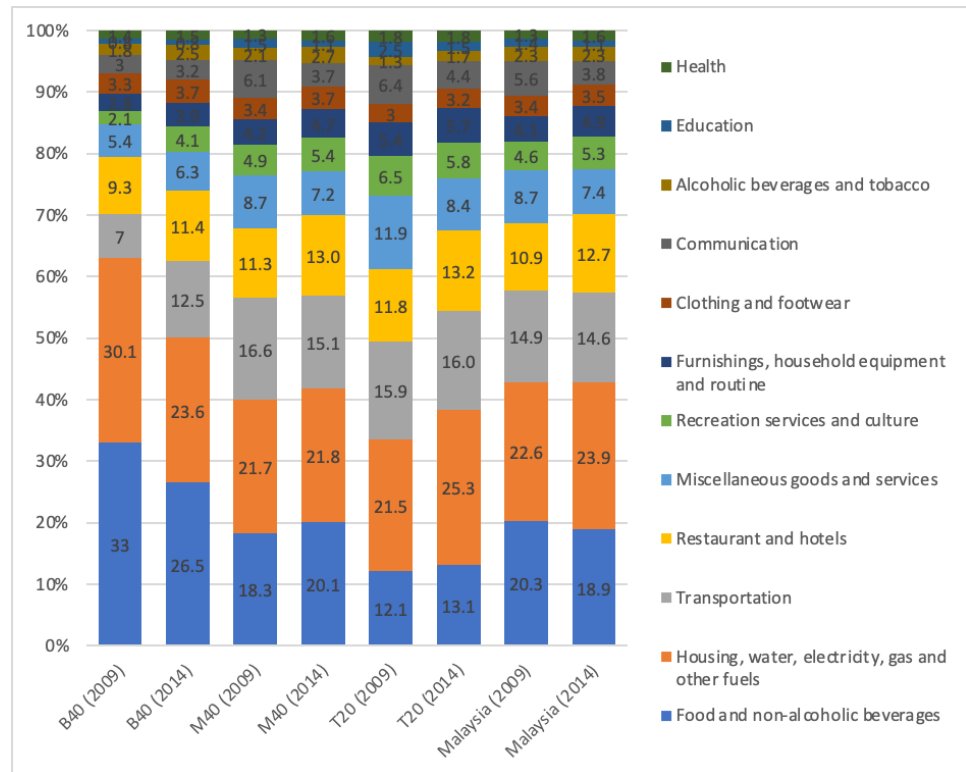


Figure 4: Household expenditure profiles of 2009 and 2014 by category of income groups. Source: Authors' own research.

groups. This explains that the current trends see many households spending time eating and staying outdoors.

In terms of household strata in Figure 5, the share of income spent by rural and urban households on the three main goods components did not show the significant change between 2009 and 2014. During that period, rural households spent 26-27 percent income for food, 19-20 percent for housing and utilities, and 15-16 percent on transportation. Expenditure on three components of main goods by rural households exceeds 60 percent of income. While urban households spend about 17-18 percent for food, 24-25 percent for housing and utilities, and 14-15 percent on transportation. Spending by urban households on these three components is less than 60 percent. In comparison, rural households spend a higher share of food on food, while urban households spend a higher share of housing and utilities.

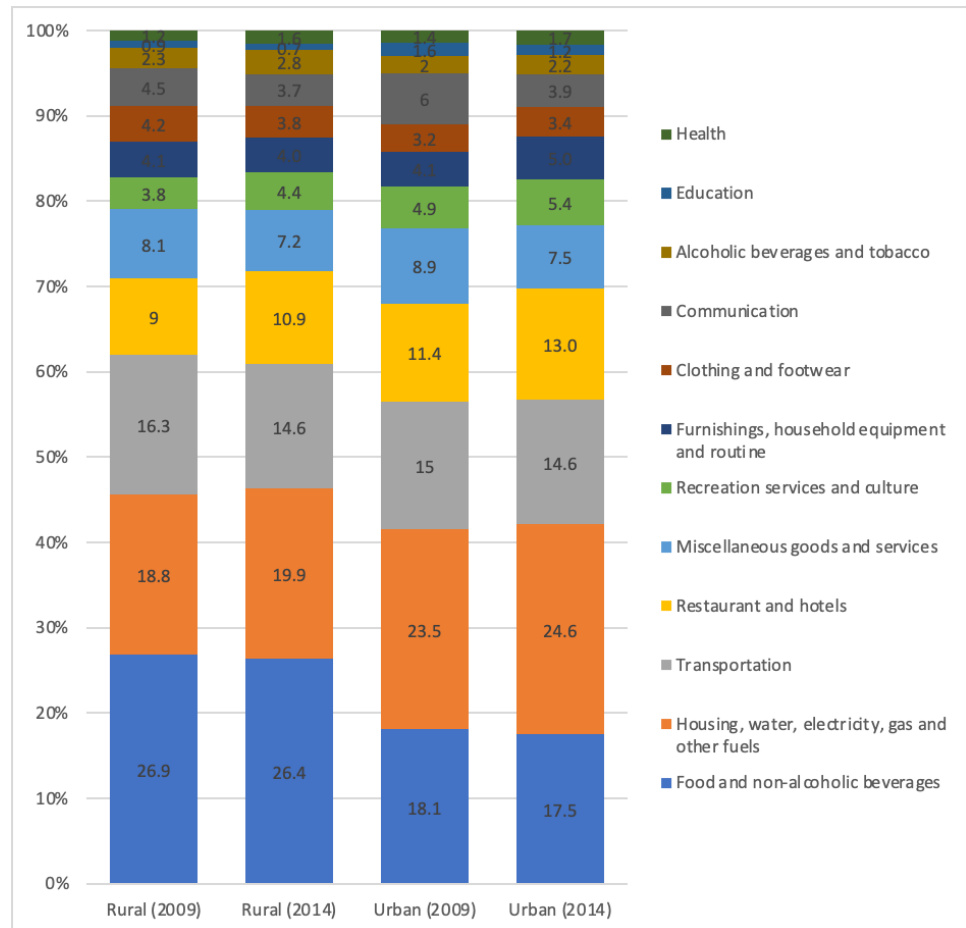


Figure 5: Household expenditure profiles of 2009 and 2014 by urban and rural strata category. Source: Authors’ own research.

4. Discussion

The analysis leads to several discussions. First, the income gap between T20 and M40 households and between T20 and B40 households is increasing. This implies that low-income group raising programs need to be given priority so that national development can be felt by all walks of life in pursuit of inclusive national development goals.

Second, household average monthly income shows a steady increase. Growth of B40 income shows an increase beyond the growth of M40 and T20 income. B40 income growth, however, needs to be greater in order to bridge the income gap between the highest income group and the low and medium-income groups.

Third, income growth for each household group is still greater than inflation. This shows that on average households can still cope with the burden of rising costs and thus deal with the cost of living depending on how they model their spending patterns. However, according to a study by Bank Negara Malaysia (2015), households experience inflation rates differently due to differences in spending patterns and price fluctuations.

Spending patterns are affected by household income, demographics, family structure, and residential area.

Therefore, policy formulation should take into account that income rise receives by households can keep up with the rising cost of living. Besides, the government should introduce early financial education in schools, for example from elementary school. This will encourage households to have more financial responsibility and they can better manage their income and spending. Government is advised to not continue reducing and removing subsidies, such as petrol, cooking oil and electricity subsidies among others at the same time. Subsidies should be given to the more targeted group, not based on the household gross income but household per capita income. As for household, households need to be able to differentiate between needs and wants and must live below their means, not within their means. The household must learn what necessity is and what luxury is in order to distinguish between the cost of living and cost of lifestyle. Managing finance better is important now than ever

5. Conclusions

Studies have found that, in order to address cost of living, policies or programs should be designed to touch on three important elements namely income, prices and spending patterns. In dealing with the high cost of living, a holistic approach is essential. All economic agents, both governmental and private, have their own role in reducing the burden of rising living costs. The government provides initiatives for households and the private sector to increase incomes. The private sector should play a part in imposing reasonable prices and adopting social responsibility. Households need to understand and differentiate between their needs and needs while controlling their spending so that they do not have to incur a heavy debt, instead they should focus on increasing household savings.

The government provides various initiatives for households and the private sector to increase income and price control. Private sectors need to play a role by imposing affordable prices while practicing social responsibilities. Households also need to understand and distinguish between needs and wants while also controlling spending so as not to bear the burden of their burdens.

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