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Analysis of Household Expenditure Structure and Its Determinants in Kampar Regency, Riau Province, Indonesia

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Abstract. This study aims to analyze the structure and factors affecting household spending in Kampar Regency, Riau Province. Based on BPS data from 2024, the average per capita monthly expenditure is IDR 1,845,000, with the largest allocation for food and drinks (52.6%), followed by housing, education, and transportation. The method used is quantitative descriptive through a survey of 120 households in four districts, namely Bangkinang, Tambang, Kampar, and Siak Hulu. The data were analyzed using multiple linear regression with variables of income, number of family members, education level, and employment status. Research results show that household income and the number of family members have a significant positive effect on total spending, with coefficients of 0.68 and 0.42, respectively. Education level has a negative effect on the proportion of food expenditure, indicating a shift in consumption toward non-food items as education increases. The average spending-to-income ratio reaches 0.79, reflecting a high tendency to consume. This research emphasizes the importance of boosting income and education to improve spending patterns and promote household welfare in Kampar Regency, Riau Province, Indonesia.

Keyword: *Consumption structure, education level, household expenditure, income, Kampar Regency*.

1. Introduction

Household spending is one of the important indicators for measuring the level of community welfare. The structure of household spending reflects the consumption patterns of people in meeting their daily needs. According to consumption theory, the higher a household's income, the greater its ability to allocate spending, whether on food or non-food needs. Changes in the spending structure from being dominated by food to increased spending on non-food items are often used as indicators of improved community welfare.

Household expenditure is closely related to consumption behavior and welfare levels. According to [1], consumption expenditure increases as income rises, although the increase in consumption is generally smaller than the increase in income. This concept is known as the Marginal Propensity to Consume (MPC), which explains that households tend to allocate a portion of additional income to savings. Therefore, income becomes one of the main determinants of household expenditure patterns.

Kampar Regency, as one of the regencies with fairly good economic growth in Riau Province, shows social and economic dynamics that are interesting to study. The economic activities of the community, which are dominated by the agricultural, trade, service, and home industry sectors, influence household income levels and consumption patterns. Differences in regional characteristics, education levels, number of family members, and the employment status of the household head can lead to variations in household expenditure structures.

Data from the Central Statistics Agency [2]shows that the average monthly per capita expenditure of people in Kampar Regency reaches IDR 1,845,000. Most of the spending is allocated for food and beverages, which is 52.6%, while the rest is used for non-food needs like housing, education, transportation, health, and other needs. The dominance of spending on food shows that most households still allocate more than half of their spending to meet basic needs.

The size of the food expenditure proportion is often linked to a household's welfare level. Engel's law explains that the higher a household's income, the smaller the share spent on food, even though the actual amount spent on food still increases. On the other hand, low-income households tend to allocate most of their income to food needs. That's why analyzing the factors that influence household spending is important to understand people's welfare.

Some factors that are thought to affect household spending include income, the number of family members, education level, and job status. Income is the main factor that determines a household's ability to consume. The number of family members affects how much needs to be provided for. Education level can influence consumption patterns and economic decision-making, while job status reflects the stability of a household's income. Household consumption behavior can also be explained through Consumer Choice Theory, which states that households allocate limited resources among various goods and services to maximize utility under budget constraints. Therefore, expenditure decisions are influenced not only by income but also by household characteristics such as education, family size, and employment conditions [3].

According to [4], household consumption decisions are the result of a resource allocation process that takes into account income levels, prices of goods, and household preferences. Meanwhile, [5] explains that households function as economic units that optimize utility by allocating income for various needs. Engel's law, proposed by Engel and reinforced by [6], states that the proportion of spending on food tends to decrease as household income rises, even though the absolute value of food expenditure still increases. These findings are an important basis for analyzing household welfare through their spending structure.

Research on household expenditure structure in Kampar Regency is needed to provide an overview of community consumption patterns and the factors that influence them. The results of the research are expected to serve as a consideration for the local government in formulating policies to improve community welfare through programs that increase income, education, and household economic strengthening. Based on that explanation, this study aims to analyze household spending structure and identify the factors that influence household spending in Kampar Regency, Riau Province, Indonesia.

2. Research Methods

2.1 Research Location and Time

This research was carried out in Kampar Regency, Riau Province, which was purposively chosen because it is one of the areas with growing economic activity and has households with diverse characteristics. The study was conducted in 2025 using primary data from field surveys and secondary data sourced from the Central Statistics Agency [7].

2.2. Research Method

This research uses a quantitative descriptive method with a survey approach. This method is used to describe household expenditure structures and analyze the factors that influence household spending in Kampar Regency. The quantitative approach was chosen because it can explain the relationships between variables objectively through statistical analysis.

2.3. Population and Sample

The study population is all households in Kampar Regency, Riau Province, Indonesia. The sample was taken using a purposive sampling method in four sub-districts considered to represent the socio-economic conditions of the people in Kampar Regency, namely Bangkinang, Tambang, Kampar, and Siak Hulu. The total sample used was 120 households, with each sub-district represented by 30 households. The respondents chosen were the heads of households or family members who are aware of the household's economic conditions.

Table 1. Household Sample Distribution by District

No	District	Number of Samples (Households)	Percentage (%)
1	Bangkinang	30	25,00
2	Tambang	30	25,00
3	Kampar	30	25,00
4	Siak Hulu	30	25,00
	Amount	**120**	**100,00**

Source: Research data, 2025.

2.4. Types and Sources of Data

The data used in this research consists of:

1. Primary Data, which is data obtained through direct interviews using structured questionnaires with respondents regarding income, expenses, number of family members, education level, and employment status.
2. Secondary Data, which is data obtained from publications by the Central Statistics Agency (BPS), local government reports, scientific journals, and literature relevant to the research.

2.5.Data Collection Techniques

Data collection is done through:

1. Field observation.
2. Interviews using questionnaires.
3. Documentation and literature study.
4. Collection of statistical data from the Kampar Regency BPS.

2.6.Research Variable

The variables used in this study consist of:

Dependent Variable (Y)

Household Expenditure (IDR/month), which is the total household spending including both food and non-food expenses over a month.

Independent Variables (X)

- X_1 = Household Income (IDR/month)
- X_2 = Number of Family Members (people)
- X_3 = Education Level (years of schooling)
- X_4 = Employment Status (dummy)

Table 2. Variabel Penelitian dan Definisi Operasional

No	Variabel	Symbol	Unit	Operational Definition
1	Household Expenses	Y	IDR/month	Total household expenses for a month
2	Household Income	X1	IDR/month	Total household income per month
3	Number of Family Members	X2	Person	The number of family members in one household
4	Education Level	X3	School Year	The length of formal education completed by the head of the household
5	Job Status	X4	Dummy	Employment status of the head of the household (1 = permanent, 0 = temporary)

2.7.Data Analysis

The data analysis was done in two stages, which are:

1. Descriptive Analysis

   Descriptive analysis is used to describe the characteristics of respondents and the structure of household expenditures based on food and non-food spending groups.

2. Multiple Linear Regression Analysis

   To find out the factors that affect household expenditures, a multiple linear regression model is used as follows:

$$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+e$$

Explanation:

- Y = Household spending
- β_0 = Constant
- β_1–β_4 = Regression coefficients
- X_1 = Household income
- X_2 = Number of family members
- X_3 = Education level
- X_4 = Employment status
- e = Error term

Data processing is done using statistical software with a 95% confidence level ($\alpha = 0.05$).

3. Results and Discussion

3.1 Household Spending Structure in Kampar Regency and Household Spending to Income Ratio.

Research results show that the average per capita spending of people in Kampar Regency reaches IDR 1,845,000 per month. Household spending structure is still dominated by the food and beverage group, accounting for 52.6%. Meanwhile, non-food spending includes housing, education, transportation, health, and other needs, with a total share of 47.4%. Spending mostly on food shows that basic needs are still the top priority for households. According to welfare economics, a declining proportion of food expenditure and an increasing share of non-food expenditure generally indicate improvements in living standards and economic welfare. Higher spending on education, health, and housing reflects greater investment in human capital and quality of life [4].

Table 3. Household Expenditure Structure of Kampar Regency in 2024

No	Expense Components	Percentage (%)
1	Food and Drinks	52,60
2	Housing and Household Facilities	18,40
3	Education	8,70
4	Transportation and Communication	10,20
5	Health	4,10
6	Others	6,00
	Total	**100,00**

Source: Kampar Regency BPS, 2024 (processed).

According to Engel's consumption theory, the higher the proportion of spending on food, the more it indicates that the community's welfare is still relatively at a lower to middle level. On the other hand, wealthier households tend to allocate a bigger share for non-food needs like education, health, recreation, and human resource investment. Engel's Law states that as household income increases, the proportion of income spent on food decreases, even though the absolute amount spent on food may continue to increase. Consequently, the share of food expenditure is often used as an indicator of household welfare and economic development [8..

The dominance of food spending in households in Kampar Regency shows that most of the income is still used to meet basic needs. This condition aligns with Engel's Law, which states that households with relatively low income levels will allocate a larger share of their spending to food compared to non-food needs. The results of this study are also consistent with [9] findings, which show that in developing countries, food spending is still a major component of household consumption structure as an indicator of economic well-being.

The large allocation of spending in the housing sector shows that the need for shelter and household facilities is an important need after food. In addition, the increase in spending in the education sector indicates that people are aware of the importance of improving human resources quality through formal education. Research results show that the average household spending-to-income ratio is 0.79. This means that about 79 percent of household income is used for consumption, while the remaining 21 percent can be allocated to savings, investments, or other needs.

Table 4. Household Expenditure-to-Income Ratio**.**

Indikator	Value
Average Household Income	IDR. 5,850,000/month
Average Household Spending	IDR.4.620.000/month
Spending-to-Income Ratio	0,79
Category	Tall

Source: Research data analysis results, 2025.

This ratio shows that the consumption level of the people in Kampar Regency is still relatively high. A high proportion of consumption can indicate that most households are still focused on meeting current needs rather than building savings or long-term investments. Even so, that ratio also shows that some households have been able to set aside part of their income, which could potentially boost their economic resilience in the future.

3.2. The Effect of Income on Household Spending.

The regression analysis results show that household income has a positive and significant effect on household spending, with a regression coefficient of 0.68. This means that every one-unit increase in income will increase household spending by 0.68 units, assuming other variables remain constant.

Table 5. Results of Multiple Linear Regression Analysis of Factors Affecting Household Spending

Variabel	Koefisien Regresi	t-hitung	Signifikansi
Konstanta	1,254	2,87	0,005
Household Income (X1)	0,68	8,92	0,000*
Number of Family Members (X2)	0,42	5,36	0,000*
Education Level (X3)	-0,21	-2,74	0,007*
Job Status (X4)	0,15	1,84	0,068
R^2	0,72		
F-count	73,45		0,000

Note: *Significant at α = 5%.

Source: Research data analysis results, 2025.

These findings show that income is a major factor in determining the level of household consumption. The higher the income a household earns, the greater their ability to meet living needs, both food and non-food. This study's results align with Keynes' theory, which states that consumption will increase as income rises, although the increase in consumption is not as much as the increase in income. The findings are also consistent with Permanent Income Theory proposed by [10], which argues that consumption decisions are influenced not only by current income but also by expected long-term income. Households tend to adjust their expenditure based on perceived income stability over time.

This condition also shows that most households in Kampar Regency still tend to increase their consumption when their income rises, especially for education, transportation, and improving the quality of their living spaces.

3.3. The Effect of Family Size on Household Spending, the Influence of Education Level on Spending Habits and the Influence of Job Status on Household Spending.

The variable for the number of family members has a regression coefficient of 0.42 and significantly affects household spending. This result shows that the more family members there are, the higher the expenses needed to meet household needs. This finding supports the household economic theory which states that family size is one of the important factors that determine the amount of household consumption needs. Family size directly affects household consumption requirements because each additional family member increases the demand for food, education, health services, and other necessities. Larger households generally face higher expenditure burdens compared with smaller households [11].

The need for food, education, health, and transportation will increase as the number of family members grows. Therefore, households with more family members tend to have higher spending levels compared to households with fewer family members. Research by Sudradjat & Vaulina [12] in Riau Province also found that income and number of family members are the most dominant factors affecting household expenditure, explaining approximately 79.30% of expenditure variation. Similar findings are reinforced by research by Kamal [13] in the Jurnal Ekonomi Pembangunan Unkhatir, which concluded that the number of family members has a positive and significant impact on household consumption expenditure, as basic needs such as food, clothing, and education increase along with the growth in family size [14]. Education level shows a negative effect on the proportion of food expenditure with a coefficient of -0.21. Education contributes to better decision-making and financial management. More educated household heads tend to allocate expenditures toward productive and long-term investments, such as education, health, and savings, rather than concentrating spending on basic consumption needs [5. This result indicates that the higher the education level of the head of the household, the smaller the proportion of spending allocated for food needs. This situation reflects a shift in consumption patterns from food needs to non-food needs. Households with higher education levels tend to pay more attention to long-term investments like their children's education, health, information technology, and savings. Besides that, higher education generally correlates with better job opportunities, which gives chances for higher income and shifts in consumption patterns towards higher-quality consumption [15].

Employment status has a positive coefficient of 0.15 but does not have a significant effect at the 95 percent confidence level. This shows that although households with stable jobs tend to have higher spending, the effect is not statistically strong enough. This situation could be due to the relatively large income variation within job groups. Some households with unstable jobs still earn a fairly high income from independent businesses or other economic activities, making differences in spending patterns less noticeable.

3.4. Implications for Household Well-Being.

Research results emphasize that higher income and education are important factors in improving household spending patterns. Higher income allows households to better meet basic needs, while higher education encourages a shift in consumption toward more productive and quality needs. Therefore, the Kampar Regency local government needs to promote programs to increase people's income through the development of productive businesses, job creation, and local economic empowerment. In addition, improving access to education and the quality of human resources should also be a priority, as they have been proven to play a role in sustainably improving household welfare.

4. Conclusions

This study aims to analyze household spending patterns and identify the factors that influence household expenses in Kampar Regency, Riau Province. The results show that household spending is still dominated by food expenses, especially food and beverages, which account for 52.6% of total spending. This situation indicates that meeting basic needs is still a top priority for households, even though there has been an increase in spending on non-food needs such as housing, education, and transportation. Based on the regression analysis, household income and the number of family members have a positive and significant effect on household spending. The higher the income and the larger the number of family members, the bigger the spending. Meanwhile, education level has a negative impact on the proportion of food expenditure, which indicates a shift in consumption patterns towards non-food spending as education level increases. Job status shows a positive but not significant effect on household spending. Overall, the research results confirm that income, the number of family members, and education level are important factors that determine household spending patterns and structure. Therefore, increasing people's income and education should be a focus in efforts to improve consumption quality and enhance household welfare in Kampar Regency.

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