# The Political Economy of Household Expenditure in Indonesia

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**Abstract.** The study analyzed the data released by BPS RI from 2010 to 2019. There is a tendency for the growth rate of Indonesian people's spending on food and non-food to be lower than the growth rate of its national disposable income. This shows that Indonesian income has entered the upper-middle-income level. Further, some of the income earned has been saved or invested. A descriptive analysis and double linear regression analysis are used in this study. Data shows that household spending on GDP in Indonesia is more than 50%. This study finds a shift in household expenditure structure between food and non-food consumption. Food expenditure experienced a steep decline from 1999 to 2019. The analysis shows that independent variables encompassing inflation, national disposable income, public saving position and ZIS funds distribution significantly influenced household expenditure.

Keywords: Consumption; Economy; Expenditure; GDP; Household

Abstrak. Penelitian ini menganalisis data yang dirilis BPS RI tahun 2010 hingga 2019 tentang kecenderungan laju pertumbuhan pengeluaran masyarakat Indonesia untuk makanan dan nonmakanan. Data menjelaskan bahwa pengeluaran makana lebih rendah dari pendapatan disposabel nasional. Hal ini menunjukkan bahwa pendapatan masyarakat Indonesia memasuki tingkat pendapatan menengah ke atas. Saat ini, lebih banyak orang yang menginvestasikan pendapatan mereka. Penelitian ini menggunakan analisis deskriptif dan analisis regresi linier berganda dan menunjukkan bahwa pengeluaran rumah tangga terhadap PDB di Indonesia lebih dari 50%. Struktur pengeluaran rumah tangga dari konsumsi makanan bergeser ke bukan makanan. Ditemukan bahwa pengeluaran pangan mengalami penurunan tajam dari tahun 1999 hingga 2019. Hasil analisis menunjukkan bahwa variabel bebas yang meliputi inflasi, pendapatan disposabel nasional, posisi tabungan masyarakat, dan penyaluran dana ZIS berpengaruh signifikan terhadap pengeluaran rumah tangga.

Kata kunci: Konsumsi; Ekonomi; Pengeluaran; PDB; Rumah Tangga

## Introduction

The national economy reflects the nation's people's ability in household spending, aside from echoing the government's expenditure capability. Over the years, Indonesia's national economy's growth has been supported by the strength of its household spending, which on average, contributes above 55% each year. This fact shows that household shopping contribution in Indonesia is the most significant in forming the gross national product (GNP).

Based on Statistics Indonesia (BPS RI), in 1999, household spending on GNP formation was 76,21%. Still, from 2000 until 2019, it tended to fluctuate, and in 2019 the contribution of household spending went down drastically to 53%. This condition shows that household spending affects the fluctuation of economic activity. Next, the contribution of household spending went through a stagnancy with a contribution below 60% in the period between 2008 and 2019. Household consumption still has the most significant allocation out of all the GNP in Indonesia, even if it decreased.



Picture 1. Distribution of Household Consumption year 1999-2019 (percentage)

Source: Statistics Indonesia (BPS RI), 2020.

The composition of household spending component in Indonesia consists of food and nonfood. Nonfood spending includes clothes, housing, health and education, transportation and communication, restaurant and hotel, etc. The proportion of the expenditure on food was 61,09% in 1999 and 39,37% in 2019. The contribution of spending on food experienced a significant decline in the last two decades.

People's spending ability reflects their income level, which measures financial well-being. National income has increased every year. From 1999 until 2019, national income experienced a total increase of IDR10.525,47 trillion. Meanwhile, spending for household consumption experienced a rise of IDR8,127,74 trillion in the same period.



Picture 2. Growth of National Income and Household Consumption Year 2010-2019

Source: Statistics Indonesia (BPS), 2020

Picture 2 shows a pattern in that national income growth wasn't always in line with household spending. During the period, national income increased, and household spending experienced a decline. For example, in 2011, the national growth of national income increased to 15,4% from 5,3%, while household spending was down to 12,5%.

However, in 2017, national growth income decreased to 6,5% from 12%. Meanwhile, the growth of national household spending increased to 8,5% from 8,3% in the previous period. Analysis of household spending behavior of Indonesian people as a macro economy indicator cannot be separated from the effect of a multidimensional factor that could shape the pattern of national household spending. In the national context, the consumption of Indonesian people is affected by economic and non-economic factors such as the government's public policy and the social and political condition.

Meanwhile, an Islamic political expert, Baqir As Sadr, mentioned that *Iqtishadūnā* said that the nation's responsibility (*mas'uliyah al-daulah*) is that of

the government. They must provide social security (*adh dhamān al-ijtima'i*) and allocate job access and cash assistance to every citizen.



Picture 3. Growth of Household Spending Year 2010-2019 (percentage)

Source: Statistics Indonesia (BPS RI), 2020.

In Islamic law, every consumption made by the community must be *halāl* and good food. Then the Muslim community must pay attention to the source of income it receives from a good job. So it is unlawful for Muslims to eat illegal food, and it is forbidden to work in a job containing disobedience. As the word of *Allah Subhānahu Wata'ala* in the *Qur'an Surah Al-Maidah* verse 88, which reads:

"And eat what Allah has given you as a lawful and good provision, and fear Allah in whom you believe."

The pattern change of national household spending shows a fluctuation. Starting in 2012 and have is a trend to be stagnant from 2015 until 2019. This shows that household consumption growth is experiencing a decline, even as household consumption is the most significant source of GNP in Indonesia.

Several factors influenced household spending. One of the economic factors that affect people's spending is the level of income that the people receive. Other than that, several factors besides income level have affected household consumption. Other factors such as inflation, rice price, high education, and people's savings also influence people's consumption.

Based on that review, several problems can be summarized:

- 1. What is the pattern of household spending in Indonesia?
- 2. What are the factors that influenced household spending in Indonesia?

This study discussed factors that influenced household spending in Indonesia using data series on the Indonesia level. The yearly data were used from 1999 to 2019.

Keynes model is a simple way to explain the connection between income and consumption. In this model, MPC values are between 0 and 1. After that, the calculation will determine the distribution of income allocated to consumption and investment/savings.

According to Abdurrahman Al Maliki, in his book *Al-mutslā As-Syiasatu al-Mutsla* (Islamic Political Economy, 2001), the target of political economy in Islam is a tactic in fulfilling all primary needs (*al-hajah al-asasīyah*) and secondary needs (*al-hajat al-kamaliah*) of each citizen that dwell in that region. Even in the expected condition, all primary needs are food, clothing, and shelter. The nation has to fulfil some secondary markets such as health and education. In an emergency like now (Covid-19 pandemic), citizens' rights and needs must be paid utmost attention to before a greater catastrophe occurs.

The household spending pattern can indicate a region's public welfare level. In doing a consumption, a household will first fulfil the most urgent needs: food, clothing, and shelter. After those three needs are fulfilled, a household will always try to satisfy the other needs, such as transportation and communication, until the lifestyle is fulfilled. Besides spending in the form of consumption already stated before, a household also saves for backup funds if something unforeseen happens.

In theory, several factors can influence household spending on a macro scale distinguished into economic, non-economic, and demography factors. Economic factors influencing household spending are income, wealth, savings, and future prediction. Non-economic factors influencing household spending are habit patterns, ethics, and values. Lastly, demography factors that can influence household consumption are the amount and composition of the population (Rahardja and Manurung, 2008). Aside from that, the government's public policy and the social-political situation can influence the pattern of household spending.

Preceding studies about household spending determinants have been done in Indonesia or outside Indonesia. One of the studies to identify factors that influenced household consumption was done by Ezeji and Ajudua (2015) in their research titled Determinant of Aggregate Consumption Expenditure in Nigeria. That research used national income, interest rate, inflation, and exchange rate to influence household consumption with the Ordinary Least Square (OLS) method. That study stated that revenue, interest rate, inflation, and exchange rate influenced household consumption expenditure in Nigeria. Nyamekye and Poku (2017) researched the effect of inflation on Ghana's consumer behaviour. Results of the study stated that inflation positively correlates to household consumption spending. If inflation increases by 1%, it will increase household consumption by 19,2%. As a result of a different study by Nur (2012) in Indonesia, inflation negatively correlates with household consumption in Indonesia. This is caused if there is inflation, it will cause a decline in the consumption of goods and services due to rising prices.

The study by Syed Shah Alam, Rohani Mohd, and Badrul Hisham (2011) reveals that the Islam religion dramatically influences the purchase decision of Muslim consumers in Malaysia. This influence has formed a new behaviour model for Muslim consumers. Their paper uses data from a sample of 232 Muslims in Shah Alam from a middle-income group.

Afandi and Amin (2018) studied the factors influencing consumption in countries with a majority of Muslim and non-Muslim populations. The samples were taken from Indonesia and Singapore. The Indonesian data analysis results show that the consumption variable affects income, the real interest rate affects consumption, and the average exchange rate impacts consumption. In addition, the data used for Singapore also found three unidirectional causality relationships: income affects consumption, the real interest rate impacts consumption, and the average exchange rate impacts consumption, and the average exchange rate affects income.

Wiranthi (2014) studies household consumption determinants in Indonesia. The dependent variable from that research was household consumption expenditures obtained from the value of GDP allocation toward household consumption expenditure, both in the form of food and nonfood consumption, based on a constant price from 2000 until 2014. The Independent variable consists of national income, inflation, interest rate, and global oil price.

Supatniningsih (2018) study showed that the type of household consumption in Makassar City is dominated by expenditure on nonfood. Income, education, number of family members, savings, credit, and employment status of the head of household significantly influence household consumption expenditure in Makassar City. The behaviour of the family household consumption is based on the perspective of Islamic economics. Firstly, purchasing food and nonfood goods is in line with the concept of needs, which is the need for more priority and has paid attention to the religious teachings of Islam. Secondly, the *mashlahah* achieved by fulfilling food and nonfood needs is the acquisition of utility and blessing in consuming food and nonfood. Thirdly, the benefits gained not only in the world but also in the hereafter because, in consumption expenditure, there are still social aspects, such as *zakah*, *infāq* and *shodaqah*, so consumption activities that carried were based on the consumption of religious values.

The study by Sunn'an Muammil and Husen Amran (2017), which analyzed consumption behavior in Ternate, North Maluku, stated that this study analyzed the effect of lifestyle, age, household size environment, and income on household spending in Ternate. This case shows the case in Ternate. Household consumption behavior in Ternate is influenced by lifestyle, age, household size, environment, and income.

Research using the independent variable *zakah* was conducted by Nurlita and Ekawaty (2017) in Probolinggo City. This study uses data from 50 *mustahik* (*zakah* recipients) BAZNAS Probolinggo City with the Proportional Random Sampling method and analyzed using path analysis. The result showed that *zakah* and the number of household members, directly and indirectly, affect the household consumption of *mustahik*.

The hypothesis proposed in this study was as follows:

- 1. Ready to spend income have a positive correlation with household consumption.
- 2. Inflation has a negative correlation to household consumption.
- 3. Changes in rice prices have a negative correlation with household consumption.
- 4. Changes in the position of public savings negatively correlate with household consumption.
- 5. The level of high education has a positive correlation with household consumption.

# Methods

The type of data used in this study is secondary data obtained from Statistics Indonesia and the Bank of Indonesia sourced from a publication or website. Publications made to be data sources are Statistics Indonesia, Gross Domestic Production Based on Spending, Economic Statistics and Indonesian Finance (SEKI), and National Zakah Agency (BAZNAS). This study uses data from 1999 until 2019. In general, the variables used in this study can be summarized in Table 1.

An analysis method used in this study is descriptive analysis and double linear regression analysis. Descriptive analysis used tables and graphics to describe the pattern of household spending in Indonesia. Double linear regression analysis was used to find out the affecting factors of household consumption in Indonesia from the period 1999-to 2019.

Variable	Description	Notation	Unit
Household consumption	Components of household consumption in GDP by expenditure at constant price	KRT	Billion Rupiah
Ready to spend income	Income received by the people from a remuneration of production factor received, both from domestic economic activities and abroad, is deducted by the remuneration of the income received by a non-citizen.	PDN	Billion Rupiah
Inflation	Percentage of increasing prices of some goods and services that in general consumed by a household	INF	Percentage
ZIS fund distribution	Distribution of <i>Zakah</i> , <i>Infāq</i> , and Alms funds	LN_ DANAZIS	Rupiah
Public saving position	Changes of savings owned by third party, not a commercial bank nor rural banks (BPR) in the form of current savings, savings, and deposit.	PSM_PRB	Percentage

Table 1. Variables Used in the Study

In this study, the equation of double linear regression is as follows:  $LN_KRT = b_0 + {}_{b1}LN_PDN + b_2LN_DANAZIS + b_3PSM_PRB + b_4INF + \varepsilon$ Where:

KRT	: Household spending (billion IDR)
PDN	: National disposable income (billion IDR)
DANAZIS	: ZIS fund distribution (IDR)
PSM_PRB	
INF	: Inflation (percentage)

For accuracy, the calculation was done with a computer program made specifically to help with processing statistics data, called Eviews 12, with a significance level on the confidence level of 95% or  $\alpha$  0,05. The goodness of fit test was done by looking at the value of R. The higher R-value shows that the model can explain the problem well (Gujarati, 2003).

#### **Results and Discussion**

Data shows that household spending on GDP in Indonesia is more than 50%. The growth of household spending comes from the expenditure on food and nonfood. Based on Picture 5, the structure of spending on food experienced a shift from 1999 until 2019. In 1999, the spending on food was still higher than 60% of the total household consumption. Starting in 2002, the proportion of food spending went down to 50% and further to 40% in 2012 until 2019.

One of the indicators that can be used in determining the level of public welfare is looking at the share of food spending out of total spending. The lower the share of food expenditure, the more prosperous the people are. The progress of public welfare post-1998 crisis kept improving from 1999-to 2013, even in the financial and monetary crisis that happened in America and Europe and the rising oil price. This shows that household consumption is one of the foundation sources of the Indonesian economy that is relatively strong and stable (Ministry of Trade, 2013).



Picture 4. Structure of Household Spending Year 1999-2019 (percentage)

Sources: Statistics Indonesia (BPS RI), 2020. (Processed)

Nonfood expenditure includes clothing, housing, health, education, transportation, restaurant, and hotel. The proportion of consumption nonfood experienced a growth until it reached above 60% in 2012 until 2019, showing a change in consumption pattern in Indonesian households. The shifting of household spending patterns can be caused by lifestyle changes of the people, and the income received by the people is increasing.

The increase in income that the people receive can be caused the allocation of consumption nonfood to be increased as well. This can be seen from the rise in nonfood consumption higher than food consumption. In Picture 6, there has been a growth in spending on education and health, transportation and communication, and restaurant and hotel in the last five years. The expenditure in these groups is what caused the increase in nonfood.

Leisure spending includes the restaurant and hotels, recreation and culture or spending that are "fun and pleasure" in nature. Leisure experience spikes when there's a slowdown in non-recreation. In this case, there is an indication of where the people reduce their non-leisure shopping to increase their leisure consumption. In other words, the increase in income tends to be allocated to leisure (Statistics Indonesia, 2017). Picture 6 shows an increase in restaurant and hotel consumption growth, which reached 5,96% in 2019. This is supported by the higher room occupancy rate that increased. The occupancy rate in 2000 was still 43% for stared hotels and became 54% in 2019.





Source: Statistics Indonesia, processed

Meanwhile, the high spending growth on restaurants and hotels followed by the consumption for transportation and communication reached 4,78%. The increase in consumption for transportation was supported by the development of the user of various transportation modes. Data on the number of passengers of trains, ships, and aeroplanes in these 19 years experienced rapid growth. The number of train passengers reached 422 million in 2018, ships reached 25 million, and planes reached 94 million in the same year. The growth of those two consumption groups illustrated how the people allocated more of their income to leisure spending and high mobilization.





Source: Statistics Indonesia, 2020. (Processed)

Next, if the people receive a surplus of income from fulfilling all of their needs, the surplus will be allocated into savings. Silvia and Susanti (2019) stated that two essential decisions determine household savings behavior: how big the actual income will be used for consumption and savings.

The tendency or desire to consume can be measured with Average Propensity to Consume (APC), while the desire to save with Average Propensity to Save (APS). Those two indicators function to find the trend of the average consumption and average savings in a country from the ready-to-end income received. Because in general, the disposable income a household receives will be used for consumption, while the rest is for the savings (BPS, 2019).

Based on Table 2, Indonesian people are utilizing their income. Most of it is for consumption. This is proven between 2002 and 2019, the people's tendency to consume (APC) was consistently above 69%, and in 2019 it reached 91%.

Analyzing affecting factors in household spending can be started by forming a model using Ordinary Least Square (OLS) with the Double Linear Regression model. From the result of processed data using Eviews 12, obtained adjusted  $R^2$  is 0,987, which means that the independent variable can explain the change in the household consumption variable by 98 % after the model is formed, followed by the classic assumption test.

After getting the best regression model, the classic assumption test should be performed to ensure the model is free from abnormality, multicollinearity, heteroscedasticity, and autocorrelation. The regression model is an appropriate estimation tool and unbiased if fulfilled BLUE (Best Linear Unbiased Estimator), no multicollinearity, no heteroscedasticity, and autocorrelation. The test to deviation from classic assumption was done with the help of the Eviews 12 program.

Testing of normality in this study will be detected with graphical analysis produced through a formal test, Jarque-Bera. For regression model in this study, it has fulfilled the normality assumption. This can be seen using the Jarque-Bera test, where the probability value of 0,721658 is bigger than alpha 5%, which means the data is expected.

The heteroscedasticity test tests if there's a residual difference of variable from one observation to other observations or illustration of value correlation predicted with Standardized Delete Residual until the model can be free from heteroscedasticity. Based on the result of Breusch-Pagan-Godfrey obtained Prob. The chi-Square value of 0,4155, bigger than alpha 5%, shows that the model is homoscedasticity in nature.

The test of autocorrelation assumption in this model used Durbin Watson test and autocorrelation test. The correlations series using BreuschGodfrey Serial Correlation LM Test, which is available in Eviews 12. The result of the test shows that the value of Prob. Chisquare is 0,1976 higher than alpha 5%. It can be concluded that there is no autocorrelation problem, either positive or negative autocorrelation.

The multicollinearity test aims to verify if there is a correlation between independent variables in the model. The multicollinearity test in this study was done by reviewing the correlation between the independent variable (Correlation Matrix) and using VIF (Variance Inflation Factor) value. The correlation matrix is used to evaluate the correlation value between variables. If the correlation between variables is higher than |0,9|, it indicates multicollinearity in the model used. The matrix correlation test results show that the correlation value between variables

is lesser than |0,9|. Likewise, for the VIF value test, all the variables have a VIF value lower than 5.

The probability value of the p-value from the F test also shows it is lower than the significance level of 5%. It can be concluded that with a confidence level of 95%, between the independent variables (national disposable income, inflation, rice price decline, public savings changes, and high education), at least one independent variable affects the dependent variable (household consumption).

After that, the t partial test shows which independent variables are significant individually. If compared between the *t* partial statistics test of all independent variables with critical value, t  $_{(0,05;18)}$  of 2,100922 on the t distribution table obtained a confidence level of 95%. Four independent variables significantly influenced the dependent variable, which is the variable of national disposable income, inflation, public saving changes, and ZIS fund distribution.

National income significantly influenced household expenditure with a positive correlation. An increased national income of 1 % will increase household spending by 0,2084 %. This is in line with Keynes's theory that payment is the primary factor that influences expenditure. This is also in line with the study of Ezeji and Ajudua (2015) that stated a positive correlation and significance between household spending and income received by the people. The same study by Illahi et al. (2018) and Nur (2012) shows that increased national disposable income has a positive effect and is significant to household spending.

It shows that inflation harm household consumption with a significance of a real level of 5 per cent. The increased inflation of 1 % will reduce household consumption by 0,0064 %. This negative correlation is in line with demand theory that stated the higher the price, the lower is the demand or, in this case, consumption.

This study result is in line with Nur (2012), which stated that inflation negatively affects consumption. If there's inflation, then goods and services will have an increased price and cause reduced consumption by the people on the goods and services. This study's result differs from Nyameke and Poku (2017), with the result being that inflation positively correlates to household consumption.

Another factor that affects household spending is the ZIS fund distribution. If the distribution of ZIS funds increases by 1%, it will increase household consumption expenditure by 0.0386%. The ZIS received by the household can increase the household's consumption. More broadly, if the ZIS received by the household is used for productive purposes as business capital, it will increase the production factor in the form of capital in household business activities. This is in

line with Nurlita and Ekawaty (2017) research, which showed a positive influence of zakah on household consumption.

After that, the amount of public savings shows negative results and significant toward household expenditure on the confidence level of 95%. If the public savings position increases by 1%, it will cause the household expenditure to decrease by 0,8945%. A negative correlation given by the rise of public savings toward household consumption can be explained because there is a shift from the money that is supposed to be used for consumption into savings (BPS, 2017).

## Conclusion

The growth of food expenditure contribution from 1999 until 2019 experienced a steep decline. In 1999, the expenditure on food reached 60% of the total household consumption. Starting in 2002, the proportion of expenditure on food reduced to 50% and below 40% from 2012 until 2019. There is a shift in household expenditure structure between food and non-food consumption. Nonfood expenditure groups experiencing growth are restaurants and hotels, education and health, and transportation and communication. Indonesian citizens tend to use most of their income to spend. Estimation result using double regression analysis shows that independent variables encompassing inflation, national disposable income, ZIS fund distribution, and public savings change significantly influenced household expenditure. Disposable income and ZIS fund distribution positively correlate with household expenditure. Variables that negatively correlate with household expenditure are inflation and changes in public savings.

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