

Research Article

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Determinants of Household Consumption Expenditure in Denpasar City

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Abstract: *Consumption expenditure is one of the indicators used to measure the objective welfare of society. The average per capita household consumption expenditure in Denpasar City has decreased since 2020-2022 but remains the highest compared to other districts in Bali Province. The purpose of this study was to analyze the economic and social aspects in influencing household consumption expenditure in Denpasar City. Based on the results of the analysis using multiple linear regression analysis techniques, it was found that age had a positive but insignificant effect, while income had a positive and significant effect on household consumption expenditure in Denpasar City. The implication of this study is that the income used to increase household consumption expenditure that is consistent is fixed income. For Balinese Hindu families, *rahinan* and *menyama braya* are mandatory consumption expenditures in addition to primary needs that must be met.*

Keywords: *age, income, household, expenditure, Bali.*

Introduction

Consumption expenditure is a very important aspect in economy (Hone&Marisennaya, 2019). As one of the main components of aggregate expenditure, consumption expenditure is an important indicator for the government, businesspeople, and economic analysts in evaluating economic health. Consumption reflects the level of welfare and social life of a society and has a significant impact on overall economic growth (Abdi, *et al*, 2016). In the macroeconomic concept, consumption expenditure can be distinguished as household consumption expenditure and government expenditure. Household consumption is the expenditure on goods and services by resident households for the purpose of final consumption. A household is defined as an individual or group of individuals who live together in a residential building, pool some or all of their income and wealth, and consume goods and services collectively, primarily food and housing (<https://bali.bps.go.id/id>). Household consumption often receives special attention because it is the largest contributor to national income (Illahi, *et al*, 2019). As an analogy, Bank Indonesia noted that in 2023 in the first to fourth quarters, Indonesia's economic growth was still supported by household consumption (www.bi.go.id). Bali is one of the provinces in Indonesia that has an average economic growth exceeding the average national economic growth each year except when the pandemic Covid-19 hit the economy. Bali Central Bureau of Statistics records the average per capita household consumption expenditure presented in Diagram 1.

Diagram 1 illustrates that the average per capita consumption expenditure of Denpasar City and Bali Province has a decreasing trend from 2020 to 2022. However, the average per capita consumption expenditure of Denpasar City from year to year is always above the average per capita consumption expenditure of Bali Province. This decline is indicated to be caused by the Pandemic Covid-19 which resulted in the Implementation of Community Activity Restrictions (PKKM). Bali, which is mostly supported by the tourism sector, has become moribund and many of the workers have been laid off.

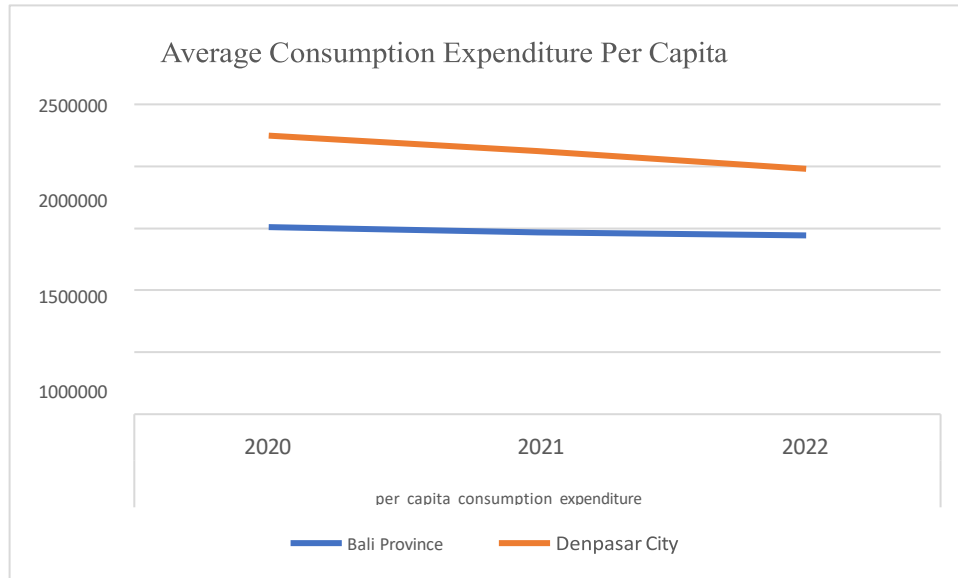


Diagram 1: Average Consumption Expenditure Per Capita
 Source: Bali Central Bureau of Statistics, 2024

Based on data from the Bali Central Bureau of Statistics, household consumption expenditure is classified into two categories: food and non-food consumption expenditure. Recent data shows that despite the decline, the average per capita consumption expenditure of Denpasar City is at the top of the list compared to other districts in Bali Province, followed by Badung Regency and Gianyar Regency. This indicates that as the capital of the province, the people of Denpasar City have a higher complexity of needs. In addition, as the capital of Bali Province, Denpasar City has a more developed economic sector, infrastructure development and more equitable accessibility so that more jobs are available where these conditions have a domino effect on increasing community spending. The following diagram; Diagram 2 presents the average per capita consumption expenditure of districts / cities in Bali Province in 2022.

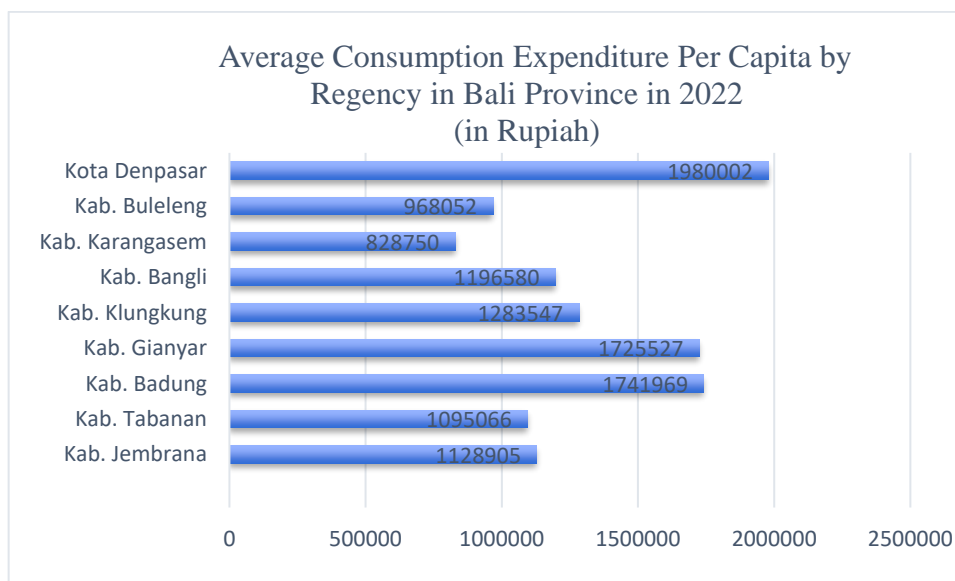


Diagram 2: Average Consumption Expenditure Per Capita by Regency/City in Bali Province in 2022
 Source: Bali Central Bureau of Statistics, 2024

Consumption expenditure refers to the amount of money spent by individuals, households, and community groups in purchasing goods and services. There are many factors that influence consumption expenditure including economic, social, and cultural aspects, such as income (Vidiawan & Tisnawati, 2015; Hone & Marisennayya, 2019; Illahi, et al, 2019; Atmaja, et al, 2022; Soleh, et al, 2023), inflation (Soleh, et al, 2023), interest rates (Illahi, et al, 2019), education (Vidiawan & Tisnawati, 2015; Illahi, et al, 2019; Handayani & Sulistiyono, 2023), age (Davis, 1981; Fareed & Riggs, 1982; Abdel-Ghany & Sharpe, 1997; Gourincha & Parker, 2002; Fernández-Villaverde & Krueger, 2007; Stöver, 2012; Afriana, 2018; Chen, 2022; Chen & Zhao; 2022), type of work (Puspita & Agustina, 2019), as well as happiness (Ahuvia, 2008; Clark, et al, 2008; Guven, 2012; Aknin, et al, 2020; Sasmaz & Sakar, 2020; Zhu, et al, 2021).

This research focus on the influence of social and economic variables such as age and income on household consumption expenditure. It is important to examine the age aspect because as people age, consumption priorities will change. On the other hand, income is an essential factor that affects purchasing power so that it becomes an important factor in household consumption expenditure patterns.

Literature Review

The essential role of household consumption expenditure in a region's economy cannot be underestimated. Consumption expenditure does not mean being consumptive and then impulsive in consuming goods and services. Consumption is one of the economic activities with the aim of fulfilling needs to achieve welfare. The Central Bureau of Statistics has defined household consumption expenditure as expenditure on goods and services by resident households for the purpose of final consumption which is divided into food and non-food consumption expenditure.

Household consumption expenditure is arguably a classic topic in the field of macroeconomic research. It has been the focus of research for decades in various countries. Age is one of the variables used to determine its influence on consumption expenditure. Modigliani's (1954) Life Cycle Theory underpins researchers' thoughts on the effect of age on consumption expenditure. Modigliani argues that individuals tend to plan their consumption over their life cycle, taking into account their income over time. In the early phases of life, such as education, individuals may have consumption that exceeds their income by using savings or borrowing. As they age and enter working life, income tends to increase, and individuals can set aside some income for saving and investment and cover consumption during retirement. Modigliani's Life Cycle Theory can be explained in three main stages, namely the education and preparation stage (young age) explains that at this stage, individuals tend to invest in education and preparation for their careers. Income may be low, and consumption may exceed income, which means individuals will save or borrow to finance their education. The second stage is the productive stage (middle age) which explains that during the productive or career period, income tends to increase. Although consumption is still high, individuals tend to save as they age, as they realize that retirement will soon arrive. The third stage is the retirement or unproductive stage (old age), which explains that when individuals reach the retirement or economically unproductive stage, consumption can remain high or even increase. This is due to the use of savings and investments accumulated during productive years to support living needs in retirement.

Four decades ago, Davis (1981) examined uncertain life span, consumption, and saving in retirement, where the result was that intertemporal substitution in consumption is small enough to suppress consumption with age due to uncertain life span, which can explain most of the decumulative deprivation of the elderly. Fareed & Riggs (1982) examined old and young differences in consumer spending patterns. The findings show that, for consumer units headed by older (65+) and younger (<65) persons, the marginal and average propensity to spend relative to after-tax income are almost the same when estimated with the

mean values of their respective characteristics, such as after-tax income and family size. The statistical model used also shows that, when using the mean values of older units for these characteristics, the younger group will show a higher propensity to spend than the older group. Abdel-Ghany & Sharpe (1997) took the research topic of Consumption patterns among young-old and old-old groups. This study provides results that differences in characteristics, life experiences, needs, and resources between the older elderly and younger elderly can lead to significant differences in spending patterns between these two groups.

Entering the 21st century, the effect of age is still a variable that interests researchers to know its effect on consumption expenditure. Gourinchas & Parker (2002) examined Consumption over the life cycle. This study provides consumption and income profiles by age, insights into evolving consumer behavior over the life cycle, and estimates of discount rates and risk aversion. Consumer behavior changes markedly over the life cycle. Young consumers behave as buffering agents. Around the age of 40, the typical household starts accumulating liquid assets for retirement and their behavior more closely resembles that of a certainty consumer. This change in behavior is largely driven by the life-cycle profile of expected income. Fernández-Villaverde & Krueger, (2007) examined Consumption over the Life Cycle: Facts from Consumer Expenditure Survey Data. They found that consumption expenditure on non-durable and durable goods showed significant spikes over the life cycle, with changes in family size accounting for only half of these spikes. The other half of the spending spike cannot be explained by a complete life-cycle model of the market. Households do not immediately build up their desired stock of durables and continue to increase spending on durables until quite late in the life cycle. In Germany, Britta Stöver (2012) examined the effect of age on consumption. The findings are that the age structure of the population significantly affects aggregate consumption. Germany's aging population changes its consumption behavior due to different habits, needs, and income changes, thus affecting aggregate final demand. The average propensity to consume is lowest for middle-aged people and highest for the very young and very old, which has an impact on spending on consumption in relation to income.

In Indonesia, Afriana (2018) has examined variables that can affect household consumption in Jakarta, namely home ownership status, age of the head of the family and the number of children in the family. Data processing in this study used multiple analysis. The results of this study indicate that home ownership status and the number of children have an influence on the consumption attitude of a household in Jakarta. Moving to East Asia, Chen (2022) took the topic of the impact of population aging on population consumption. The results showed that age structure plays an important role in China's per capita consumption and the current situation in China is that an aging population will hinder population consumption. Chen & Zhao (2022) examined the effect of Chinese population aging on household consumption - based on data from the Chinese family panel study. The results show that population aging boosts the basic living consumption expenditure of most households and inhibits the enjoyment or development consumption expenditure of most households. At the same time, low-level consumer families are more affected by population and income aging than high-level consumer families. Moreover, the impact of population aging on development consumption varies among families with different income levels, especially in terms of medical and health expenditure. The higher the income level of the family, the smaller the impact.

Income is found to be the most determining factor in household consumption expenditure (Browning, et al, 1994; Hone & Marisennayya, 2019). Many theories in macroeconomics underlie the pattern of income interaction with consumption expenditure, one of which is the Engel Curve theory by German economist Ernst Engel. This theory states that the higher the household income, the lower the proportion of income spent on basic goods and services. Conversely, the proportion of income that can be

invested or spent on more luxurious non-staple goods and services will increase. While the percentage of spending on basic necessities such as food may fall, the absolute amount of money spent on food may increase.

In Indonesia, quite a number of researchers have analyzed the relationship between income and household consumption expenditure. Vidiawan and Tisnawati (2015) examined the effect of income, number of family members and education on the consumption of poor households in Batu Kandik Village, Nusa Penida District, Klungkung Regency. The result is that simultaneously income, number of family members and education have a significant effect on the consumption patterns of the poor in Batu Kandik Village, Nusa Penida District, Klungkung Regency. Second, partially income, number of family members and education have a significant effect on the consumption patterns of the poor in Batu Kandik Village, Nusa Penida District, Klungkung Regency. Illahi, et al (2019) examined the determinants of household consumption expenditure in Indonesia. The results found that income has a significant positive effect, while the deposit interest rate and education have a significant negative effect on household consumption expenditure in Indonesia. the effect of income, number of family members and education on the consumption of poor households in Banyuwangi Regency. The results of his research state that income and the number of family members have a positive and significant effect on the consumption expenditure of poor households in Banyuwangi Regency, and the education variable has no effect on the consumption expenditure of poor households in Banyuwangi Regency. Atmaja, et al, (2022) examined the effect of income on household consumption expenditure patterns in Sibolga City in 2022. The results state that income has a positive effect on household consumption expenditure. On the other hand, Handayani & Sulistiyono (2023) took the topic of the effect of income, number of family members and education on the consumption of poor households in Banyuwangi Regency. The results show that income and the number of family members have a positive and significant effect, while education has no effect on the consumption expenditure of poor households in Banyuwangi Regency. Soleh, et al (2023) examined the analysis of the effect of per capita income and inflation on household consumption expenditure in Jambi Province. The results state that per capita income has a significant effect while inflation has no significant effect on household consumption expenditure in Jambi Province.

Based on the theories and the results of previous research, the hypotheses for this study can be built, namely as follows:

1. Age has a positive effect on household consumption expenditure in Denpasar City.
2. Income has a positive effect on household consumption expenditure in Denpasar City.

Method

This study was conducted in Denpasar City by taking the population of Denpasar City residents aged 20-64 years, which based on data on the projected population of Denpasar City in 2023 released by the Central Bureau of Statistics amounted to 486,000 people. The number of samples was determined using the Slovin formula (Ryan, 2013). In this study, a 90 percent confidence level was used (uncertainty level = 10%) because the population data is projected data using the 2020 population census as the base year. The number of samples obtained was 99.89 which was rounded up to 100 respondents. The sampling method used in this study to determine respondents was Stratified Disproportionate Random (Sugiyono, 2012; Hamzah, 2019). This method is used to get a good representation of each group in the population. Of the total population of 486,000 people, those in the young adult age category totaled 292,000 people and the middle adult age category 194,000 people. Based on this sampling method, the sample for young adults (20-44 years old) was 60 people and for middle adulthood (45-64 years old) was 40 people. The data

collection methods used are observation, documentation studies, and questionnaires to obtain primary data analyzed in the research model. The type of data used in this study is quantitative data sourced from direct / primary respondents. Research conducted on the population will clearly use descriptive statistics in its analysis, but if the research is conducted on a sample, the analysis can use descriptive and inferential statistics (Sugiyono, 2012; Hamzah, 2019). This study uses quantitative data analysis techniques, namely multiple linear regression analysis. Multiple linear regression analysis is performed when research or statistical analysis requires understanding the relationship between one dependent variable and two or more independent variables (Krzywinski & Altman, 2015). Multiple linear regression is useful for understanding the extent to which independent variables contribute to variation in the dependent variable (Aiken, et al, 2003).

Results And Discussion

In this section will discuss the characteristics of respondents, the results of statistical analysis, and related discussions.

Characteristics of Respondents

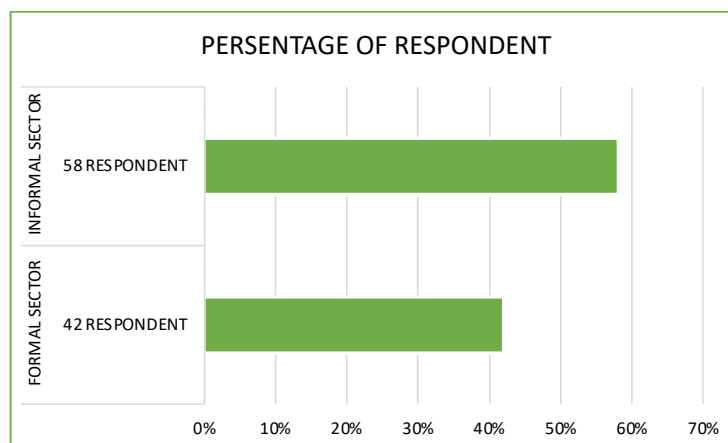


Diagram 3. Characteristic of Respondent Based on Occupation
Souce: Primary Data, 2024

Diagram 3 shows the characteristics of respondents based on occupation. Of the 100 respondents 58 people (58%) are workers in the informal sector and the remaining 42 people (42%) work in the formal sector. Respondents who work in the informal sector are mostly traders and informal sector entrepreneurs, while respondents who work in the formal sector are mostly private employees, civil servants, bank employees and hotel employees. The difference in the type of work of respondents is followed by a variety of income levels per month from each respondent which can be seen in Diagram 4 below.

Diagram 4 shows the characteristics of respondents based on income. To describe it, the income range is divided into 7 categories, namely 1 million rupiah-2.5 million rupiah, above 2.5 million rupiah-5 million rupiah, above 5 million rupiah-7.5 million rupiah, above 7.5 million rupiah-10 million rupiah, above 10 million rupiah-12.5 million rupiah, above 12.5 million rupiah-15 million rupiah, and above 15 million rupiah. Based on the income range category, both respondents who are young adults (29 people/48%) and middle-aged adults (18 people/45%) the majority have incomes above 2.5 million rupiah-5 million rupiah per month.

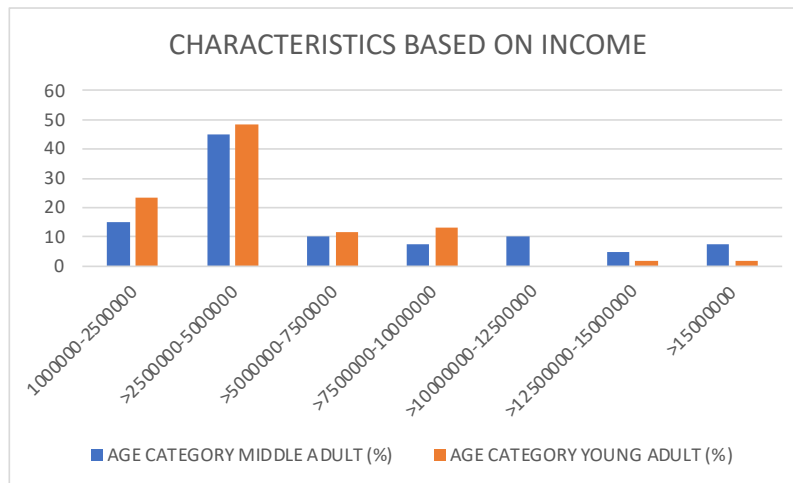


Diagram 4. Characteristics of Respondent Based on Income
Source: Primary Data, 2024

Respondents with young adult age who have income above 5 million rupiah-7.5 million rupiah are 7 people (12%), those with income above 7.5 million rupiah-10 million rupiah are 8 people (13%). Furthermore, those with an income above 12.5 million rupiah-15 million rupiah amounted to 1 person (2%) and those with an income above 15 million rupiah amounted to 1 person (2%). In this age category, there are 14 people / 15% of the total number of respondents who earn 1 million rupiah-2.5 million rupiah.

In respondents whose age is classified as middle adulthood, there are 6 people (15%) who earn 1 million rupiah-2.5 million rupiah, 4 people (10%) earning above 5 million rupiah-7.5 million rupiah and 3 people (7.5%) earning above 7.5 million rupiah-10 million rupiah. In the 2-digit income category, there were 4 people (10%) whose income was above 10 million rupiah-12.5 million rupiah, then those who had an income above 12.5 million rupiah-15 million rupiah amounted to 2 people (5%) and those with an income above 15 million rupiah amounted to 3 people (7.5%).

Based on Diagram 4, it can also be explained that in the middle adult age category, the distribution of income from above 5 million rupiah - above 15 million rupiah is more evenly distributed when compared to the distribution of income in the same range for respondents in the young adult age category. The amount of income is often associated with people's consumption patterns. The distribution of consumption expenditure of the Denpasar City community, which in this study is represented by 100 respondents, can be seen in Diagram 5 below.

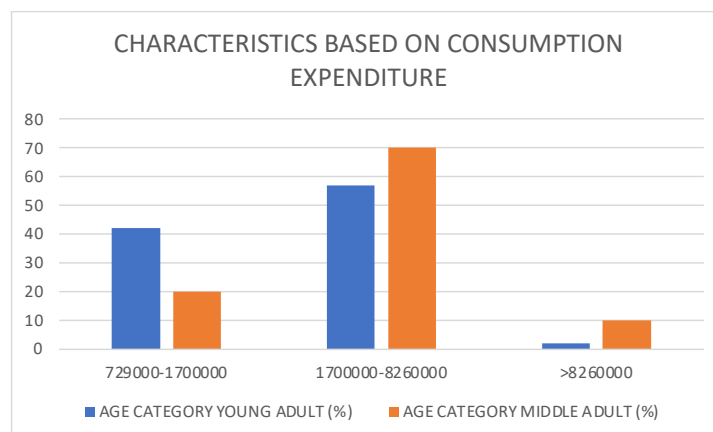


Diagram 5. Characteristics of Respondent Based on Consumption Expenditure
Source: Primary Data, 2024

Diagram 5 shows the distribution of respondents based on consumption expenditure. It can be seen that the majority of respondents in the young adult age category (34 people or equivalent to 57%) and middle adulthood (28 people or equivalent to 70%) have consumption expenditure of IDR 1.7 million-8.26 million per month. 42% (25 people) of respondents in the young adult age category have consumption expenditure in the range of 729 thousand rupiah-1.7 million rupiah per month, while 20% (8 people) of respondents in the middle adult age category have consumption expenditure in this range. The remaining 10% (4 people) of the middle adult age category have consumption expenditure above 8.26 million rupiah per month and only 2% (1 person) of respondents in the young adult age category have consumption expenditure above 8.26 million rupiah.

The grouping of the level of consumption expenditure per month in the range of 729 thousand rupiah-1.7 million rupiah, 1.7 million rupiah-8.26 million rupiah, and above 8.26 million is the definition of the World Bank in classifying the prospective middle class and middle class in Indonesia which is sourced from the Survey and indicators of the Indonesian Central Statistics Agency, namely the 2021 National Socio-Economic Survey (Susenas), the 2021 National Labor Force Survey (Sakernas), and the poverty line throughout 2011-2017, and 2021.

Based on the definition of the World Bank and the distribution of respondents based on their consumption expenditure per month, the majority of respondents belong to the prospective middle class and middle class. In the young adult age category, there are more respondents who belong to the prospective middle class than respondents who are in middle adulthood. When viewed from the age aspect, in the next few years the prospective middle class may be able to move up to the middle class, but provided that economic growth is good and accompanied by strengthening the purchasing power of the prospective middle class and middle class considering the majority of people in Denpasar City are in these 2 classes. This is not something extraordinary considering the latest data from BPS Indonesia shows that 47.3% of Indonesia's population is in the prospective middle class and 20.5% in the middle class so that in total there are 67.8% of Indonesian people who are prospective middle class and middle class which makes these 2 classes the majority in Indonesia.

Descriptive Statistic

Table 1. Statistic Descriptive

	Mean	Std. Deviation	N
Y	6	0,29494	100
X1	39,57	10,86581	100
X2	6,6543	3,1084	100

Source: Primary Data, 2024

Based on Table 1, the household consumption expenditure variable (Y) has a mean value of 6.4033, meaning that the average consumption expenditure of the people of Denpasar City is 6.4033 million rupiah per month. Furthermore, the age variable (X1) has a mean value of 39.5700 which means that the average age of respondents is 39.57 years. The income variable (X2) has a mean value of 6.6543 which means that the average income of respondents is 6.6543 million rupiah.

Table 1 also shows the standard deviation value of each variable. The standard deviation value of the variable household consumption expenditure in Denpasar City, age, and income is smaller than the

mean value. This indicates that the data variation is not wide and is getting closer/accurate to the mean which also means that the mean value is a good representation of the overall data.

Classical Assumptions Test

Table 2. Normality Test

		Unstandardized Residual
N		100
Normal Parameters a,b	Mean	0.0000000
	Std .Deviation	0.13892712
Most Extreme Differences	Absolute	0.053
	Positive	0.049
	Negative	-0.053
Kolmogorov- Smirnov Z		0,528
Asymp. Sig. (2-tailed)		0,943

Source: Primary Data, 2024

The Kolmogorov-Smirnov test is one way to test whether the data used is normally distributed or not. The basis for decision making used is if the significance value > 0.05 then the data is normally distributed, otherwise if the significance value < 0.05 then the data is not normally distributed. Based on Table 2, the value of Asymp. Sig. (2-tailed) is $0.943 > 0.05$, so it can be concluded that the data in this study are normally distributed.

Heteroscedasticity Test

Heteroscedasticity refers to a situation where the variance of errors or residuals in a regression model is not constant across the range of values of the independent variables. In a linear regression model, one of the basic assumptions that must be met is that the error must be homoskedastic, meaning that the variance of the error must be constant (unchanged) across the values of the independent variables.

If this assumption is violated and heteroscedasticity occurs, then the results of the regression analysis, especially the coefficient estimates, can be inefficient and unreliable. In addition, the standard errors of the regression coefficients can be biased, leading to incorrect hypothesis tests and erroneous model acceptance. One way to detect the presence of heteroscedasticity is by using a scatterplot between the residuals (errors) and the predicted values generated by the regression model.

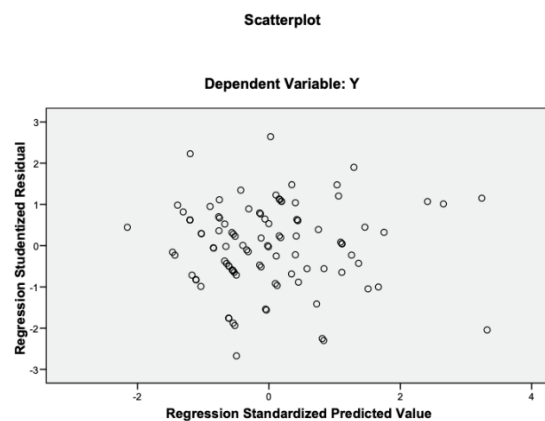


Figure 1. Scattterplot

Source: SPSS Analysis, 2024

Based on Figure 1, it can be seen that the points spread above, below, and around 0 and the distribution of points does not form a pattern. So it can be concluded that there are no symptoms of heteroscedasticity in this research model.

Autocorrelation Test

The purpose of the autocorrelation test is to determine whether there is a systematic relationship between model errors at one time and model errors at another time. In this study the run test is used to test for autocorrelation symptoms.

Table 3. Autocorrelation Test

	Unstandardized Residual
Test Value a	0,00643
Cases < Test Value	50
Cases ≥ Test Value	50
Total Cases	100
Number of Runs	49
Z	-0,402
Asymp. Sig. (2-tailed)	0,688

Source: SPSS Analysis, 2024

The Run Test is one of the tests used to see whether there are symptoms of autocorrelation in the research model or not. The basis for decision making is if the value of Asymp. Sig. (2-tailed) > 0.05 then there are no autocorrelation symptoms. Conversely, if the value of Asymp. Sig. (2-tailed) < 0.05 then there are symptoms of autocorrelation. Based on Table 3, the Asymp. Sig. (2-tailed) is 0.688 > 0.05, so it can be concluded that there are no autocorrelation symptoms in the research model.

Multicollinearity Test

The multicollinearity test is carried out with the aim of knowing whether in a regression model there is a correlation between independent variables. The basis for decision making is if the Variance Inflation Factor (VIF) value is < 10 and the Tolerance value is > 0.1.

Table 4. Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	0,877	0,305		2,872	0,005		
X1	0,001	0,001	0,043	0,858	0,393	0,905	1,105
X2	0,823	0,048	0,868	17,267	0,000	0,905	1,105

Source: SPSS Analysis, 2024

Based on Table 4, it can be seen that the VIF and Tolerance values for the age (X1) and income (X2) variables are 0.905 for the Tolerance value and 1.105 for the VIF value, respectively, so it can be interpreted that there are no multicollinearity symptoms in this research model.

F Test

The F test is carried out with the aim of knowing the effect of all independent variables together (simultaneously) on the dependent variable. Anova statistical testing is a form of hypothesis testing where it can draw conclusions based on the data or statistical groups that are concluded. The decision making is

by looking at the significance value (Sig.) in the table. If the value of Sig. <0.05, it is concluded that the variables of age (X1) and income (X2) simultaneously have a significant influence on household consumption expenditure in Denpasar City. Conversely, if the value of Sig. > 0.05, it is concluded that the variables of age (X1) and income (X2) simultaneously have an influence but not significant on household consumption expenditure in Denpasar City.

Table 5. F Test

	Model	Sum of Squares	df	Mean square	F	Sig.
1	Regression	6,701	2	3,351	170,093	0.000
	Residual	1,911	97	0,02		
	Total	8,612	99			

Source: SPSS Analysis, 2024

Based on Table 5, the Significance value (Sig.) is 0.000 <0.05. This means that age (X1) and income (X2) simultaneously have a significant influence on household consumption expenditure in Denpasar City.

t Test

Because the data analyzed in this study are ordinal data, the coefficient value used is the standardized coefficients beta value. Based on Table 5.6, the formulation that can be formed is as follows.

$$Y = 0.043X1 + 0.868 X2$$

The coefficient of the age variable (X1) is 0.043, this means that if the respondent's age increases by 1 year and income does not change, then household consumption expenditure in Denpasar City will increase by 0.043 million rupiah.

The coefficient of the income variable (X2) is 0.868, which means that if income increases by 1 million rupiah, then household consumption expenditure in Denpasar City increases by 0.868 million rupiah, assuming the respondent is still at the same age.

The t test was conducted with the aim of knowing the effect of age (X1) and income (X2) partially on household consumption expenditure in Denpasar City (Y). decision making is done by looking at the significance value in the Coefficients table. In this study the confidence level used is 95% and the significance level is 5% (0.05) so that the basis for decision making is if the significance value of the t test <0.05 then H0 is rejected and Ha is accepted. This means that there is a significant influence between the independent variable on the dependent variable. Conversely, if the significance value of the t test > 0.05 then H0 is accepted and Ha is rejected. This means that there is an influence but not significant between the independent variable and the dependent variable.

Table 6. t Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0,877	0,305		2,872	0,005
X1	0,001	0,001	0,043	0,858	0,393
X2	0,823	0,048	0,868	17,267	0.000

Source: SPSS Analysis, 2024

Age (X1) has a significance value (Sig.) of $0.393 > 0.05$. This means that age has a positive effect but not significant on household consumption expenditure in Denpasar City. Furthermore, income (X2) has a significance value (Sig.) of $0.000 < 0.05$. This means that income has a positive and significant effect on household consumption expenditure in Denpasar City.

Coefficients of Determination

In quantitative research using multiple regression analysis, the value of the coefficient of multiple determination if the independent variable used is more than 1 is indicated by Adjusted R Square.

Tabel 7. Coefficients of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,882	0,778	0,774	0,14035	1,597

Source: SPSS Analysis, 2024

Table 7 shows that the adjusted R Square value for this research model is 0.774 or 77.4%. This value implies that 77.4% of the age and income variables can explain the variation of household consumption expenditure in Denpasar City. The remaining 22.6% is explained by other variables outside the research model.

The Effect of Age on Household Consumption Expenditure in Denpasar City

Based on Table 6, age (X1) has a significance value of $0.393 > 0.05$. This means that age has a positive but insignificant effect on household consumption expenditure in Denpasar City. This indicates that changes in household consumption expenditure in Denpasar City are not always linear with age. Based on the age of the respondents used in this study, namely young adulthood (20-44 years) and middle adulthood (45-64 years), household consumption expenditure has different priorities according to their age level. Franco Modigliani's Life Cycle Theory explains that individuals tend to plan consumption over their life cycle by taking into account their income over time. Respondents in this study divided into the first stage (young age) for young adults and the second stage / productive stage (middle age) for middle adults. Each stage in the life cycle has a different consumption pattern, which does not mean that when entering the middle age stage, individuals will reduce consumption (in the context of consumption value) but instead switch to consumption according to priorities in each life cycle. Based on the results of the study, it was found that respondents who are in young adulthood (young age) in the range of 20-26 years, their consumption patterns tend to be tertiary needs, fulfillment of desires and fulfillment of hobbies for personal enjoyment such as traveling, lifestyle, buying action figures, hanging out, skincare and makeup, in addition to primary needs and religious ceremonies (in Balinese Hindu families) such as *rahinan* which comes once every 15 days, once a month, once every 6 months, and once a year (*rahinan alit* and *rahinan gede*). This is done because some of them consider that there are no other dependents and other responsibilities (children) that must be fulfilled (when they became respondents they did not have children).

For respondents who are in young adulthood above 26 years - 44 years show a more complex consumption pattern. In this phase, respondents tend to reduce consumption based on desire because they have begun to focus on obligations for children's education and health. In addition, there is consumption for the purchase of assets, namely houses, cars, because at this stage they ventured to take out mortgage installments because they felt there would be career improvements in the future. For respondents who are classified as prospective middle class, consumption based on desire is reduced in this phase because they

choose to save their money so that it can become capital for children's education, health, and buying a car. For housing, they choose to board. In the phase above 26 years - 44 years, it can be seen that the motivation for respondents to consume based on desire is different from respondents at the age of 20-26 years, namely to make children and family happy. For Balinese Hindu households, there is a uniqueness that in this phase of 26-44 years, consumption for *rahinan alit* and *rahinan gede* is more inclined than in respondents aged 20-26 years. This is because at this age they feel fully mature and independent. The responsibility for *rahinan*, especially *rahinan gede*, which was once considered the responsibility of their parents, now in this phase they began to play a greater role in this responsibility.

Different consumption expenditure patterns are also found among respondents in the middle age category. Entering the age phase of 45-64 years, respondents have consumption patterns that lean towards consumption for old age/retirement welfare. From the answers of respondents in the age range of 45-50 years, consumption is still at the stage of children's education, housing installments, and liquid assets. In the age range above 50 years, some respondents focus on health and the welfare of their old age, this can be seen from respondents' answers about ownership of health insurance. In Balinese Hindu families, consumption other than primary needs, namely for religious needs remains a focus in addition to health insurance ownership. Another distinguishing consumption in Balinese Hindu families at this age phase is that they include equalizing their consumption expenditure, which means that consumption for this activity is quite large for them at this age phase. This implies that entering retirement age, some of these respondents fill their time by returning to the community as a *krama adat* in Bali. In addition, at this age phase, their children tend to be at a productive age in work so the time for *menyama-braya* is automatically reduced, so it is the parents who are still more dominant in taking this role. For respondents in the middle age stage who are self-employed, they still tend to be productive where this can be seen from their consumption patterns which tend to increase the volume of their business.

Based on the results of statistical analysis and respondents' answers, the results of this study show differences in the characteristics of household consumption expenditure in Denpasar City related to young adulthood and middle adulthood. Consumption tendencies in these age phases depend on family size, expectations of future careers, life experiences, needs, wants, and professions.

The Effect of Income on Household Consumption Expenditure in Denpasar City

Based on Table 6, the income variable (X2) has a significance value of $0.000 < 0.05$. This means that income has a positive and significant effect on household consumption expenditure in Denpasar City. The significant effect in this case means that the relationship between income and consumption expenditure is elastic, the slightest change in income will directly change consumption expenditure. These results indicate that changes in household consumption expenditure in Denpasar City are linear with changes in income. An increase in income provides an opportunity for individuals to access complex needs (especially the fulfillment of tertiary needs) and desires, resulting in an increase in consumption expenditure. What needs to be underlined is that the question asked to respondents regarding income is their regular income, not transient income. Thus, the results of this study also provide the result that the income used to increase household consumption expenditure in Denpasar City is consistently fixed income. Transient income is not the subject of study in this study so that further / more in-depth research needs to be done regarding the effect of transient income on household consumption expenditure.

For households in Denpasar City whose individuals are classified as young adults and middle-aged adults alike answered that there are many side consumption in addition to primary and secondary needs that must be met. The majority of answers are the fulfillment of vacation, hang out, skin care, hobbies,

installments, assets, social needs (*menyama braya*), religious ceremonies (*rahinan alit* and *rahinan gede*), health insurance. Especially for Balinese Hindu households, at any level of consumption expenditure for religious and social ceremonies (*rahinan gede*, *rahinan alit*, and *menyama braya*) still exists because it is mandatory and the belief that the fortune and grace obtained in this world is the will of the ancestors and *Ida Sang Hyang Widhi Wasa* so that they must express gratitude by doing it. Generally in Bali and in particularly in Denpasar, where the residents are *krama adat banjar*, there is a compulsory contribution that must be paid when there are other residents who experience sorrow or joy. Therefore, respondents answered that this is something that encourages them to make expenditures other than their needs. However, the percentage of religious and social expenditure is not the focus of this research, so a deeper study needs to be done on this matter.

This study confirms the Engel Curve theory that the higher the household income, the lower the proportion of income spent on basic goods and services. Conversely, the proportion of income that can be invested or spent on more luxurious non-staple goods and services increases. While the percentage of expenditure on basic necessities such as food may fall, the absolute amount of money spent on food may increase. On the other hand, when viewed from their consumption behavior, respondents who are in early young adulthood are indicated to have impulsive/irrational shopping behavior. Some respondents in this age range answered shopping and traveling as things that encourage consumption expenditure other than their needs. Respondents at this age are quickly influenced by advertising promotions, friends' posts, and influencer posts so they feel they have to follow the current trend (demonstration effect). Some respondents who shop online, shopping, even answered that they did not save and chose to spend their income on consumption to fulfill their needs and desires. This indicates their confidence in the consistency of the income received. Another thing is the pay later facility that makes it easier for respondents to be able to reach products that were previously not affordable to them.

Another result that can be revealed from this study is that the majority of respondents prefer to save their excess funds (other than for consumption) in the form of savings. Very few; 12 out of 100 respondents; answered that they save their funds in the form of investment. From the respondents' answers, it is known that the reasons are mostly because they do not understand, they are afraid of losing their money, they are afraid of being cheated, and they feel that they do not have enough funds to invest. The 12 respondents who answered that they invested in the capital market were in the age range of 20-29 years, which is included in the young adult age group. In the middle adult age group, they tend to choose deposit products to store their excess funds in the long term. Gold is also an option to secure funds owned. In Balinese Hindu households in the young adult and middle adult age groups, those who answered *rahinan gede*, *rahinan alit*, and *menyama braya* as reasons for making consumption expenditures other than their needs, did not invest on the grounds of insufficient funds. Respondents' answers regarding the reasons for not investing do not necessarily mean that households in Denpasar City lack financial literacy. This can be due to the characteristics of the households who are respondents in this study such as age group, type of work, income level of the majority of respondents, and consumption preferences.

Based on the results of this study from the results of statistical analysis and in the field, there is conformity regarding the significant effect of income on household consumption expenditure in Denpasar City. The consumption behavior of young adult and middle adult households of the majority of respondents indicates confidence in their long-term income, which means that their current consumption is not only carried out based on the amount of their current income but also based on their expectations of the income that will be received in the future.

Conclusion

The following are things that can be concluded from the results and discussion.

1. Age has a positive but insignificant effect on household consumption expenditure in Denpasar City. This shows that changes in household consumption expenditure in Denpasar City are not always linear with increasing age. Based on the age of respondents used in this study, namely young adults (20-44 years) and middle adults (45-64 years), household consumption expenditure has different priorities according to their age level. Franco Modigliani's Life Cycle Theory explains that individuals tend to plan consumption during their life cycle by taking into account their income over time. Respondents in this study entered the first stage (young age) for young adults and the second stage / productive stage (middle age) for middle adults. Each stage in this life cycle has a different consumption pattern, it does not mean that when entering the middle age stage, individuals will reduce consumption (in the context of their consumption value) but instead switch to consumption according to priorities in each life cycle.
2. Income has a positive and significant effect on household consumption expenditure in Denpasar City. Significant influence in this case means that the relationship between income and consumption expenditure is elastic, if there is a slight change in income, consumption expenditure will immediately change. This result shows that changes in household consumption expenditure in Denpasar City are linear with changes in income. Increased income provides opportunities for individuals to access complex needs (especially the fulfillment of tertiary needs) and their desires so that there is an increase in consumption expenditure. What needs to be underlined is that the questions asked to respondents regarding income are their fixed income, not transient/temporary income. Thus, the results of this study also provide results that the income used to increase household consumption expenditure in Denpasar City which is consistent is fixed income. Temporary income is not the subject of study in this study so that further/more in-depth research is needed regarding the effects of transient income on household consumption expenditure.

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