

The Role of Gender as Moderating Variable in the Correlation between Saving and Spending Behavior: A Survey on Millennial Workers in Indonesia

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ABSTRACT

As a part of their daily financial activities, an individual has his/her own saving and spending behavior in which this study tries to describe. The data are gathered using survey method by questionnaire among millennials (those who are born during 1981-1996). 59 (fifty-nine) respondents from some cities in Indonesia gathered in this study are focused on the young workers, both full-time and part-time workers, in which most of the respondents (around 93%) are full time workers and/or doing their entrepreneurial job. This study explores the influence of saving behavior on spending among millennial workers in Indonesia, with gender as a moderating variable. The research was conducted by distributing questionnaires and analyzing data using SPSS Ver.25. The results indicate that saving has a significant positive impact on spending, where an increase in saving is associated with a higher tendency to spend. Gender plays a moderating role in this relationship, revealing variations in spending patterns based on gender differences. Based on these findings, it is recommended to consider gender's role in understanding variations in financial behavior, particularly concerning saving and spending habits among millennials. Additionally, it is essential for policymakers and financial practitioners to develop financial literacy programs tailored to the unique needs of each group.

Keywords: Saving behavior, Spending behavior, Millennials, Workers, Gender.

Received 15 April 2024 | Revised 16 November 2024 | Accepted 7 January 2025.

1. INTRODUCTION

Conducting a working activity is a way to fulfill the various needs that are constantly faced by everyone in his/her life. People might conduct work in various sectors/types. For example, in Indonesia, people might have some occupation such as being civil servants, having a work as private employees, doing business as entrepreneurs, being students or housewives, and others. Currently, in Indonesia, people who are included in the workforce is estimated around 143.72 million people, in which it is dominated by the millennial generation at 25.78% (Central Statistics Agency, 2023). The millennial generation consists of those born between 1981 until 1996 and is currently one of the generations of productive age who could accelerate Indonesia's economic growth (Central Statistics Agency, 2023).

Millennial generation has several characteristics according to a study by Peramesti and Kusmana (2018) which may include: they can access information technology quickly as social media is being a part of their daily lives and they have more courage to innovate, so they create start-ups or start businesses. As some millennials are already working and have income, in the

scope of financial management, they are assumed to be able to manage their finances by paying attention to spending and saving. Saving and spending could be considered as inseparable activities from daily behavior, especially among young workers as they have the management towards money considering that they are financially more independent compared to the younger generation as have got their own salary. Study by Krugman and Wells (2006) and Kolmakov, et al. (2021) as cited in Jumena (2022) stated that income, expenses/spending, and savings are considered as three variables as a general concept in the consumption and saving equation. However, some issues regarding saving and spending such as low level of saving and spending could be occurred in which it needs to be mitigated by the adequacy of knowledge of how to manage their spending and saving and how to create budgets for future activities (Arsath, et. al, 2021)

In addition, some previous studies regarding saving and spending activities had been conducted using various perspectives, various groups of respondents and gave various results. For instance, study by Arshath, et. al (2021) that explore some factors on spending and saving pattern using university students as respondents found that both socio-economic profile and demographic factor of the respondents did not have any impact and association on their spending and saving pattern. Another study to illustrate saving and spending habit could be found from a study by Jeevita and Priya (2019) in which the study presents the facts that most of college students in Coimbatore, India spend money on beauty care and recharge, while their saving activity mostly done for the purpose of future needs and luxury items.

Some previous studies on saving and spending activities have also been conducted separately. A study on saving activities by Tam and Dholakia (2014), for instance, compares the proposed cyclical and linear savings method. The study found that the individual using the proposed cyclical and linear savings method was able to save 74% higher on average and has an ability to save more money as much as 78% more money in average. Meanwhile, regarding spending, the study by Sorooshian and Seng Teck (2014) as cited in Kumar, et. al. (2022) specifically explored the spending behavior among university students in Malaysia, triggered by the phenomenon of increasing number in insolvencies among the youth. The cause could be explained from the habit of young generation which tend to spend more money on some disbursement such as online shopping, convenience, travel, socializing, and online gaming compared to spending regarding homes and cars which done by previous generations in which it led to spending behavior as the young generation tries to follow trends and buy anything without re-thinking regarding the benefits of spending (Kumar, 2022).

Another study from a different demographic by Birari and Patil (2014) explains that thrifty shopping behavior has drastically changed from a frugal shopping style to a higher purchasing power among the younger generation in Aurangabad, India. It was explained that young people spend more money on goods with high brand value (branded items). This study also stated that men and women in the younger generation have different spending patterns, especially when making purchases related to ready-to-eat food, electronic goods, investment, and transportation.

Spending and saving patterns occurring in the millennial generation could be explored further as this generation has unique characteristics and can manage their financial activity regarding the source of funds from working. Specifically in Indonesia, based on a survey in Indonesia Millennial Report 2024, millennials generation is shown as the second largest generation in Indonesia with 25.87% of the total population or 69.38 million people. The behavior regarding millennials is important to be explored as they are now entering the productive age and

consequently, they become a key driver in the country's economic growth. By understanding millennials regarding lifestyle, perspective, and values to their goals and challenges in life will help us uncover the true path to Indonesia's golden era (Indonesia Millennial Report, 2024).

In relation to this study model, the researcher aims to examine whether individuals' spending behavior is influenced by their saving behavior and how it relates to their gender. Modigliani and Brumberg's (1954) theory explains that an individual's saving habits affect their spending habits. Friedman (1957) further elaborates that individual spending is not only dependent on current income but also on anticipated future income. People with larger savings tend to have higher spending levels because they have financial reserves to support expenditures, even if current income fluctuates. Additionally, research by Lusardi and Mitchell (2007) suggests that individuals with savings tend to have better control over their spending. Those who save consistently are more likely to allocate more for non-essential expenses because they have sufficient financial reserves.

In addition, regarding saving behavior which may influence individual spending habits, another factor examined in this study is the impact of gender on purchasing behavior. Research by Farrell, Fry, and Risse (2016) found that women tend to spend more on health-related and family necessities, while men are more likely to spend on entertainment and recreational activities. They also noted that spending behavior differences between men and women become more pronounced in older age groups. Furthermore, research by Croson and Gneezy (2019) explains that there are gender differences in financial decision-making, including spending. They found that women tend to be more cautious and consider long-term factors in their spending, especially on family and children, compared to men.

Based on the background, considering that understanding saving and spending behavior are useful to provide the better financial literacy as well as the millennials are the significant part of Indonesian citizen, this study illustrates the saving and spending behavior among millennial workers in Indonesia in purpose to understand their pattern to save and spend their money that might has further influence in entire national economic. This study aims to examine whether there is an influence between saving activities and daily spending activities, with gender as a mediator, among millennial workers in Indonesia.

This study provides an important contribution regarding understanding of the financial behavior of millennial workers in Indonesia, especially the moderating role of gender on correlation of savings and spending. In general, focusing on millennials as the dominant generation of young workers, this study reveals their preferences for modern savings methods and how gender factors influence financial management. Furthermore, the findings from this study might provide new insights into differences in financial behavior based on gender and enrich the literature on financial management of the millennial generation, while also offering guidance for banks and policymakers to develop services that might suit their needs.

2. LITERATURE REVIEW

2.1 Financial Behavior

Herawati et al. (2018) explained that financial behavior could be interpreted in two ways. First, it is related to the way how individuals personally carry out financial management (related to saving, spending, and investment) or second, how the function of financial managers is in managing financial assets in a company to allocate funds to maximize existing profits. Two theories underlie the development of financial behavior theory explained by Dewi (2020) are

Theory of Planned Behavior (TPB) and trans-theoretical theory (TTM). TPB is a theory used to understand how the individual's intentions determine individual behavior patterns (Fishbein and Ajzen, 1975). Meanwhile, TTM is a theory used to explain behavior changes characterized by appropriate intervention. TTM shows that financial behavior is characterized by negative and positive financial behavior (Dewi et al., 2020)

2.2 Personal Finance

Personal finance could be referred to as the science that emphasizes not only mathematics, finance, economics, education, entrepreneurship, and information technology (IT) but also relates some complex factors within the individual (Hira, 2009). Schuchardt. et al. (2007) explain that personal finance is related to consumers/consumption and how it is managed entirely. Hira (2009) later explains that personal finance education aims to equip individuals and families with knowledge and skills to make financial decisions guided by informed financial choices. A study by Sabri and McDonald (2020) which explore the saving behavior and financial problems among Malaysian college student stated that having the adequate understanding towards financial literacy may influence savings and specific kinds of financial problems will be useful in efforts to design more effective financial education programs to prepare the youth (in Malaysia) to be effective personal financial managers when they become the employees as well as starting their own families.

2.3 Saving and Spending Activity

Savings which can be defined as income that is not consumed according to the study by Lee & Hanna (2015) as cited in Jumena (2022) might be done by individual toward his/her excess cash. According to the study by Jeevitha and Priya (2019) the need of saving is done by individuals as a treatment to make a financial cushion to mitigate the risk of economic shocks. In addition, external factors which influence people to undertake saving activity might relate to several reasons such as macroeconomic (including income tax, interest rate and inflation), demography (education, gender, age, number of children, etc), financial services, saving product marketing, and geography factors (Jumena, 2022). On the other hand, the definition of spending activity could be related to any kind of act to distribute money in purpose to satisfy needs (Kumar, et.al., 2022). It can also be defined as the activity of using or utilizing goods and services to fulfill personal needs (Kusairi et al., 2019 as cited in Jumena, 2022). Lastly, spending behavior might relate to any kind of regular purchases that are necessary for life or for the purchases that are laborious to administer (Jain and Sehgal, 2023).

2.4 Millennials Workers

This study describes the saving and spending behavior among workers in the millennial age in which it can refer to those who were born in or after the 1980s and who entered the labor market in the 2000s according to the study by Pyöriä, et.al. (2017). Another study by Kaifi et al. (2012) as cited in Smith and Nichols (2015) describes millennials generations as every individual born between 1980 and 2000 in which the term “millennials” is given based on the reason that they are close to the new millennium era and being raised in a more digital age. Meanwhile, study by Bolton, et. al. (2013) defines millennials as those who were born between 1981 and 1999. In this study, the term millennials are considered for those who were born between 1981 – 1996 as that year span fulfilled the definition of the age scope of millennials¹. People in the millennials range of age currently are assumed in the labor market. It also can be assumed that most of the millennials are currently having their occupation that gives them financial support in their daily lives. Some studies from Pyöriä, et.al. (2017) explained that

¹ This range of age is also used by Indonesia Millennial Report in 2024

young people in the millennial's generation do not value traditional wage employment and have an expectation to be able to under a new management culture in which they are able to contribute to innovation at the workplace level, and to make adjusted work as well as leisure in novel ways. Based on those reasons, in this study, millennials are chosen as the object as they have already generated their own revenue by receiving salary from work or from the other sources, so they have their own authority towards their financial activities.

3. RESEARCH FRAMEWORK

3.1 The correlation of Saving Behavior on Spending Behavior

Saving is an important factor influencing spending behavior among millennial workers in Indonesia, as this generation faces economic challenges such as job uncertainty and various needs in adulthood. In this context, saving serves not only as a safeguard against emergencies but also as a strategy for managing expenses wisely. Lusardi and Mitchell (2013) explain that financial literacy in saving impacts future spending, as adequate savings provide financial security, influencing long-term spending decisions. Xiao and Porto (2017) further highlight that in household contexts, having savings significantly affects spending strategies, especially when facing economic uncertainty. Research by Sheehan and Xia (2018) shows that good saving habits help curb impulsive spending and focus more on planned allocations for long-term needs. Based on this, the first hypothesis of this study is:

H1 : Saving behavior has a positive influence on the spending behavior of millennial workers in Indonesia.

3.2 The moderating role of gender on the relationship between saving and spending behavior.

Self-control theory, as proposed by Baumeister (1998), suggests that gender differences in self-control can also influence spending behavior. Similarly, behavioral economics theory indicates that psychological differences between men and women affect their spending habits. A study by Palan (2014) found an association between gender and spending patterns, where men tend to spend more on status-related goods, while women allocate more for household needs and personal care. Research by Sussman and Olivola (2022) also shows that gender impacts financial decisions, with women more likely to spend on personal care and men on technology. Dalton and Huang (2020) explain that social identity and gender roles shape consumption patterns, with women more inclined to spend on family and daily needs, whereas men's spending often reflects their social identity or status. Based on these findings, the second hypothesis of this study is:

H2: Gender moderates the relationship between saving activities and the spending behavior of millennial workers in Indonesia.

The research framework in this discussion is as follows:

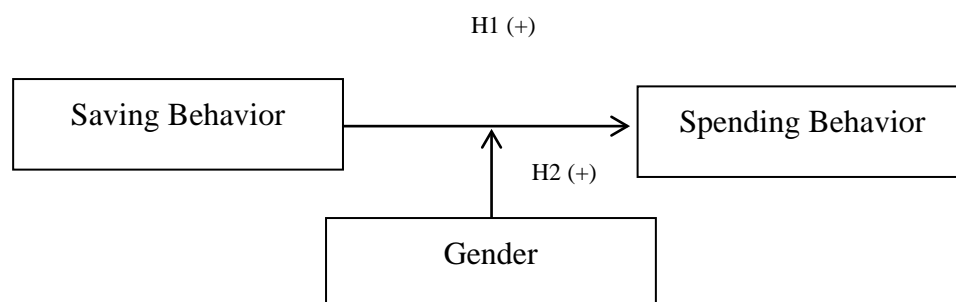


Figure 1. Research Framework

4. RESEARCH METHOD

This study is conducted by using a survey method. The research instrument is developed from the previous study by Furnham (1999) in which the previous study focused on the students as respondents, while in this study the respondents are gathered from working millennials. The research instrument uses a questionnaire that is divided into several sections: the section that examines respondents' characteristics (demographics), the revenue section, the savings section, and the expenditure section. Questionnaire items used in the research instruments in this study contain closed and open questions.

The sampling technique employed is a non-probability sampling method, more spesific the sampling used was a purposive sampling method in which the respondents are chosen based on several criteria. In the purposive sampling technique, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Bernard, 2002 as cited in Etikan, 2016). The objects of this research were determined using the following criteria: 1) those who lives in Indonesia, 2) Those who were born between 1981 until 1996 and, 3) those who are conducting a work. Furthermore, in this study, as a consistency to previous study by Furnham (1999), the scope of spending is limited to personal spending assuming that the most of spending is not in purpose to other people but for himself or herself within the scope of leisure spending only. In addition, the currency used in the survey is on Indonesian Rupiah (IDR).

To ensure a valid regression model, several classical assumption tests were conducted, including the Kolmogorov-Smirnov test to confirm that the model's residuals are normally distributed, the Breusch-Pagan test to identify any non-constant variance in residuals (heteroskedasticity), and the Variance Inflation Factor (VIF) to confirm no multicollinearity among independent variables. To address the research hypotheses, data were analyzed using moderated regression analysis (MRA) to test whether the saving variable has a significant effect on spending and how gender moderates the relationship between the two. The testing was conducted using SPSS software version 25. The regression equation used is as follows:

$$\text{Spending} = \beta_0 + \beta_1 \times \text{Saving} + \beta_2 \times \text{Gender} + \beta_3 \times (\text{Saving} \times \text{Gender}) + \epsilon$$

Where:

β_0 : The intercept,

β_1 : The regression coefficient for the saving variable,

β_2 : The regression coefficient for the spending variable

β_3 : The coefficient for the interaction variable between saving and gender.

ϵ : Error term or residual.

5. RESULT AND ANALYSIS

5.1 Descriptive Analysis

In this study, survey method is conducted by purposive sampling in which the respondents are determined based on several criteria: the respondents conducting working activities and born between 1981 – 1996 (millennials generation). A total of 59 (fifty-nine) working millennials as respondents filled out the questionnaire that illustrates respondents' behavior both in saving and spending (the total number of respondents is denoted by N, in which in this study the compilation data showed the amount of N=59). The characteristics of respondents are shown in the following Table 1.

Table 1 – Characteristics of respondents

Characteristics	n	(%)			
AGE (Years Old)			Bangka Island	1	1.69%
26 – 30	10	17.86%	GENDER		
31 – 35	23	38.98%	Male	19	32.2%
36 – 40	18	30.51%	Female	40	67.8%
Above 40 (max. 43)	5	8.48%	CURRENT ACTIVITIES		
RESIDENCE (Province)			Working / Own a full-time business (including full-time freelancers)	55	93.22%
Banten	2	3.39%	Running a part-time job/business (at the same time as school/college)	4	6.78%
DKI Jakarta	8	13.56%	CURRENT OCCUPATION		
Jambi	1	1.69%	Private Company employees	40	67.80%
West Java	8	13.56%	Government Employees	5	8.74%
Central Java	19	32.20%	Entrepreneur	8	13.56%
North Sumatra	10	16.95%	Others	6	10.17%
Yogyakarta	7	11.86%			
East Java	1	1.69%			
North Kalimantan	2	3.39%			

Source: Primary data, 2024; N = 59

From the table, based on age, most respondents are in the range of 31-35 years old (38.98% of respondents). Meanwhile, based on residence, most respondents live in Central Java (around 32% of respondents). Based on gender, the respondents are dominated by female millennials workers in which it represents more than a half of respondents (67.8%). In addition, most respondents do their daily work and business (around 93%) in which their occupation is dominated by private sector (around 67.80%).

5.2 The Descriptive of Respondents' Revenue, Saving Behavior and Spending Behavior among Working Millennials

Based on Table 2, the most respondents (89.83%) reported a regular income, primarily from full-time employment (74.58%), while 10.17% work in stable part-time jobs. Among those with regular income, 71.19% earn over IDR 3.5 million monthly. Additionally, 50.85% receive

a feast day allowance, with 11.86% receiving around IDR 3 million on such occasions. Birthday gifts are less common; only 5.08% still receive birthday money (typically around IDR 500,000). Financial independence from parents is notable, with just 6.78% receiving support after their own funds are exhausted, indicating that most respondents have established their own primary income sources.

Table 3 shows that most respondents (79.66%) actively save, with 64.41% using bank accounts and 35.59% saving cash at non-bank. Regular saving is common, with 64.41% saving consistently and 62.71% setting aside 25% of their income, mainly for emergencies (59.78%). While 81.36% own bank accounts, most opened them for job-related reasons (36.45%) or security (30.84%), and 84.75% are not interested in opening more accounts, though 33.90% have switched banks for better offers. Additionally, most banking is done through mobile, indicating a preference for digital finance management.

Based on Table 4, the essential needs is primarily covered by daily spending: 81.36% allocate funds to food and soft drinks, 66.10% to clothing and footwear, and 62.71% to personal care items such as cosmetics and salon treatments. Cash withdrawals are typically made once or twice a month (40.68%), indicating controlled spending patterns. Discretionary spending, such as books, entertainment subscriptions, local transit fares, electronics, and gym fees, is less common. This pattern reflects a focus on daily necessities over leisure or luxury items, with occasional expenditure on gifts for others (55.93%) and other varied needs (52.54%).

Table 2 – Description of Respondents' Revenue

Questions	N	(%)	as present on Christmas, Idul Fitri, Chinese New Year, etc.?		
Do you have regular income sources?			NO	29	49.15%
NO	6	10.17%	YES	30	50.85%
YES	53	89.83%	If YES, how much do you receive? (In IDR), If NO, answer 0		
If YES, please say which of the following sources you choose			0	29	49.15%
Part time-jobs	6	10.17%	1 – 1.000.000	5	8.47%
Full-time jobs	44	74.58%	1.000.001 – 2.000.000	2	3.39%
Another irregular jobs	3	5.08%	2.000.001 – 3.000.000	7	11.86%
I don't have regular source	6	10.17%	3.000.001 – 4.000.000	6	10.16%
of income (NO)			4.000.001 – 5.000.000	2	3.39%
If YES, how much do you receive in a month? (In IDR)			5.000.001 – 6.000.001	3	5.17%
< 1.500.000	3	5.08%	6.000.001 – 7.000.000	1	1.69%
1.500.001 – 2.500.000	2	3.39%	7.000.001 – 8.000.000	1	1.69%
2.500.001 – 3.500.000	6	10.17%	More than 8.000.000	3	5.17%
> 3.500.000	42	71.19%	Would your parents give you more money if you had spent it all?		
I do not get any salary	6	10.17%	NO	55	93.22%
Are you usually given money (from family or feast day allowance)			YES	4	6.78%

Source: Primary Data, 2024, N = 59

Table 3 – Saving Behavior among Millennials Workers

Questions	N	(%)	For emergencies	55	59.78%
Do you have any money saved?			To have more money	27	29.35%
NO	12	20.34%	Do you personally have a bank account?		
YES	47	79.66%	NO	11	18.64%
Have savings funds in your own bank account (with checkbook) amounting to (In IDR):			YES	48	81.36%
0	13	22.03%	Reasons for respondents who do not have a personal account		
1-100.000	0	0.00%	Haven't had time to	9	81.8%
100.001-500.000	3	5.08%	create a personal account		
500.001-1.000.000	5	8.47%	yet		
> 1.000.000	38	64.41%	I never want to queue	2	18.2%
Do you save regularly?			long to get bank services		
NO	21	35.59%	Why did you open a bank account? (Answers could be more than one)		
YES	38	64.41%	Because of special offers	7	6.54%
If YES, what proportion of what you receive or earn do you generally try to save?			made by banks		
25% from income	37	62.71%	Because I got a job that	39	36.45%
50% from income	10	16.95%	required me to have one		
None	12	20.34%	To get the interest	6	5.61%
If you do save, why do you save? (Answers could be more than one)			income		
For something special I want to buy	7	7.61%	To keep my money save	33	30.84%
			Have you ever changed from one bank to another?		
			NO	20	33.90%
			YES	39	66.10%

Source: Primary Data, 2024, N = 59

Table 4 – Spending Behavior among Millennials Workers

Questions	n	%		
How often do you withdraw cash from your account?				
Less than once a month	2	3.39%		
Once up twice a month	24	40.68%		
Once a week	22	37.29%		
Never	11	18.64%		
Choose the type of item/activity that spent your money in the last 4 weeks!	NO	%	YES	%
Snack dan Drinks -- Candies, chocolate, ice cream, etc	11	18.64%	48	81.36%
Reading for leisure -- Comic, Magazine, Novel	48	81.36%	11	18.64%
Reading for knowledge and self-development	43	72.88%	16	27.12%

Cigarette	48	81.36%	11	18.64%
Entertainment Apps (Spotify, Netflix, Game, etc.)	32	54.24%	27	45.76%
Concerts	49	83.05%	10	16.95%
Local transport (bus, train, etc.)	36	61.02%	23	38.98%
Clothes and Shoes	20	33.90%	39	66.10%
Self-care (cosmetics, salon, face and body treatment, etc.)	22	37.29%	37	62.71%
Office supplies and equipment	46	77.97%	13	22.03%
Gym and another sport club member	46	77.97%	13	22.03%
Cinema	42	71.19%	17	28.81%
Pets	47	79.66%	12	20.34%
In-home workout appliances	54	91.53%	5	8.47%
Electronic devices	37	62.71%	22	37.29%
Gift to others	26	44.07%	33	55.93%
Other disbursements	28	47.46%	31	52.54%

Source: Primary Data, 2024, N = 59

5.3 Test results

Before testing the moderation effect, classical assumption tests were conducted, including normality, heteroskedasticity, and multicollinearity tests. In the normality test using the one-sample Kolmogorov-Smirnov test on the residuals, the test statistic was 0.174 with an Asymp. Sig. (2-tailed) value of 0.070. Since the significance level is $0.070 > 0.05$, the data in this study is considered normally distributed. For the heteroskedasticity test, the Breusch-Pagan test was used, yielding non-significant coefficients for the saving variable ($p = 0.859$) and the gender variable ($p = 0.650$). These results indicate that there is no significant heteroskedasticity in the model, satisfying the homoskedasticity assumption. In the multicollinearity test, the Variance Inflation Factor (VIF) for both the saving and gender variables was 1.028, which is well below the threshold of 10. The Tolerance values for both variables were also high (0.973), indicating no multicollinearity. Therefore, this study passed the classical assumption tests and can proceed to the MRA regression model testing. The F-test (ANOVA) was conducted to ensure that the model significantly explains the dependent variable. A significant F-test result ($p < 0.05$) would indicate that the model has a good fit for the data and that the independent variables collectively contribute significantly to predicting the dependent variable. The F-test result yielded a significance value of 0.005, indicating that the overall model is significant.

The MRA test was used to examine the effect of saving behavior on the spending behavior of millennial workers in Indonesia. A simple regression analysis was first conducted to determine whether the independent variable in this study influences the dependent variable. The results of the simple regression analysis are as follows:

Table 5 – Result form Simple Regression

Variabel	Unstandardized Coefficient B
Constant	607812.255
Saving	0.263

Dependent Variable: Spending

Source: Primary data, 2024; Author

Based on the results of the simple linear regression test between saving (as the independent variable) and spending (as the dependent variable), the regression equation is as follows: **Spending = 607,812.255 + 0.263 Saving**, where 607,812.255 is the constant (β_0), representing the estimated baseline spending when saving equals 0. The coefficient of 0.263 (β_1) indicates the change in spending for each 1-unit increase in saving. This means that when saving is 0, the estimated baseline spending is approximately Rp. 607,812.255. In other words, without any savings (saving = 0), individuals or this group are estimated to have a spending level of around Rp. 607,812.255. For each 1-unit increase in saving, spending increases by 0.263. For example, if saving increases by Rp. 1,000,000, spending is expected to increase by Rp. 1,000,000 x 0.263 = Rp. 263,000. This positive coefficient demonstrates a positive relationship between saving and spending, suggesting that an increase in saving is associated with an increase in spending. The model indicates a positive linear relationship, meaning that as individuals save more, they tend to spend more as well. In regression analysis, if the p-value is less than 0.05, the coefficient is considered statistically significant. Therefore, H1 of this study is supported: individual saving behavior positively influences the spending behavior of millennial workers in Indonesia. A multiple linear regression equation with the addition of an interaction term between saving and gender was used to assess whether gender moderates the relationship between saving and spending behavior among millennial workers in Indonesia. The results of the multiple regression analysis are as follows:

Table 6 – Result for MRA Test

Variabel	Unstandardized Coefficient B	Sig.
(Constant)	-329,363.146	0.618
Saving	0.468	0.000
Gender	1942179.482	0.036
Saving*Gender	-475	0.008

Source: Primary data, 2024; Author

The regression analysis results indicate that saving has a significant positive effect on spending, with a coefficient of 0.468 and a p-value of 0.000. This finding confirms that each increase in saving is correlated with a 0.468 increase in spending, showing a strong relationship between these two variables. In other words, the higher an individual's savings, the greater their tendency to increase spending.

Additionally, the gender variable also significantly impacts spending, with a coefficient of IDR 1,942,179.482 and a p-value of 0.036. This positive coefficient suggests a difference in spending based on gender, where certain groups (e.g., males with gender = 1) tend to have average spending that is IDR 1,942,179.482 higher than other groups. This result indicates that gender significantly affects spending behavior.

Furthermore, a moderating effect was identified through the interaction between saving and gender, with an interaction coefficient of -0.475 and a p-value of 0.008. This negative coefficient implies that gender acts as a moderator in the relationship between saving and spending, where the impact of saving on spending is weaker for certain gender groups. This means that certain groups may have a lower tendency to increase spending alongside increased saving compared to others. Overall, these results show that both saving and gender affect spending. Based on these findings, H2 is supported, confirming that gender moderates the

influence of saving on spending, indicating variations in spending behavior across gender groups.

5.4 Result Analysis

This study found that 79.66% of respondents preferred modern savings methods, mainly bank accounts (64.41%), with only 61.02% avoiding non-banking institutions (e.g., pawnshops). Over 50% also did not invest in stocks or other instruments, aligning with the Financial Services Authority's (2022) survey showing banking access (74.03%) as much higher than fintech (2.56%) and capital markets (5.19%). However, Auliandari (2022) noted high millennial interest in investing, especially among those knowledgeable about capital markets. Similarly, Sellina et al. (2023) highlight that direct exposure to capital markets enhances millennials' investment awareness and risk understanding.

The primary motivation for respondents to open bank accounts was job requirements, followed by the need for secure asset transfers. This aligns with Maison's (2019) findings on financial exclusion in Indonesia due to limited access to banking services. Psychological factors also play a role; some respondents avoid opening accounts to save time, preferring digital solutions over traditional banking. This preference reflects Bencsik and Juhasz's (2016) observation that millennials favor simplicity and digital accessibility, leading banks to develop digital services.

Regarding bank loyalty, most respondents have not switched banks but are open to changing if better benefits are offered elsewhere. Harapan and Amanah (2019) emphasize that banks must offer unique services to retain millennial customers. Setiawan (2019) adds that competitive advantages can be achieved through timely delivery, accurate information, personalized service, trained staff, and efficient complaint handling. In terms of banking activities, respondents primarily visit branches to resolve issues like blocked or swallowed ATM cards, with fewer seeking financial advice. Balance checks are commonly conducted via mobile banking, supporting Caldararo's (2013) view of banking as a utility facilitating daily transactions. Customers are willing to visit branches when banking issues disrupt their daily routines.

This study found that most respondents' spending is on food and drinks, clothing, footwear, and personal care, aligning with Irawati (2022), who noted millennials are major users of delivery services like Gojek and Grab. Hidayatullah (2018) also found that this generation is highly consumptive, especially with food ordering apps. Ordun (2015) explains that technological reliance shapes millennial consumer habits, making online purchases normal and creating market opportunities for daily needs. Meanwhile, Ismail et al. (2021) suggest that good financial planning, such as investment, can help millennials reduce consumptive spending.

The findings of this study provide an in-depth view of how saving behavior relates to spending among employed millennials in Indonesia, with gender considered as a moderating variable affecting this relationship. The simple regression analysis results indicate that saving has a significant positive effect on spending. With a coefficient of 0.263, this suggests that each increase in savings among millennial workers in Indonesia tends to be accompanied by an increase in their spending. This reflects a common pattern among millennial workers, where the tendency to save appears associated with higher consumption behavior. For millennials often engaged in a modern lifestyle, entertainment needs, and a desire for personal development, increased savings often correlate with increased spending.

Furthermore, the regression results show that gender has a significant impact on spending behavior among millennial workers. A coefficient of IDR 1,942,179.482 suggests differences in average spending between certain gender groups. Additionally, this study indicates that gender has a significant moderating effect on the relationship between saving and spending. With an interaction coefficient of -0.475, these results suggest that the impact of saving on spending weakens for specific gender groups. The results of this study align with other findings on the financial behavior of the millennial generation in Indonesia. Several studies indicate that financial literacy and lifestyle significantly influence millennials' financial behavior. For example, a study by Sufyati and Lestari (2022) found that financial literacy, financial inclusion, and lifestyle collectively impact the financial behavior of millennials. Additionally, research by Wahyuni and Setiawati (2021) revealed that financial literacy and lifestyle significantly influence the financial behavior of Generation Z in Jambi Province.

In the context of gender roles, research by Febrianty et al. (2023) highlights the issue of gender in digital financial literacy and financial behavior among millennials. This study shows differences in financial behavior between men and women, supporting the finding that gender moderates the relationship between saving and spending. Overall, these results are consistent with existing literature, emphasizing the importance of financial literacy, lifestyle, and gender in shaping the financial behavior of millennials in Indonesia.

A study by Westermann (2017) found that men are more likely to take risks in investments and have higher spending levels, while women are more conservative in saving and spending. This difference reflects the role of gender in moderating the relationship between saving and spending, with men more inclined to reduce savings for riskier expenditures. Research by Somasundaram and Krishnan (2015) indicates that women in India tend to save a larger portion of their income than men, primarily for household needs and children's education, whereas men are more likely to allocate income toward personal spending and investments. This demonstrates that gender moderates the relationship between saving and spending, with women focusing more on family-related savings. Overall, these studies show that gender plays an important role in moderating the relationship between saving behavior and spending across different countries.

6. CONCLUSION, IMPLICATION, LIMITATION, AND RECOMMENDATION

6.1 Conclusion

This study shows that saving behavior has a significant positive influence on spending behavior among millennial workers in Indonesia. Each increase in savings tends to raise spending levels, indicating that millennials with larger savings are likely to spend more, possibly due to the financial security they feel, which allows them to spend more freely on lifestyle needs and desired experiences. Overall, these results support the hypothesis that saving is positively correlated with spending among millennials. Additionally, gender plays an important role in moderating the relationship between saving and spending. The moderation results indicate that the impact of saving on spending is weaker for certain gender groups, implying spending behavior differences between male and female millennials, likely due to differing spending preferences or lifestyles. Thus, this study highlights the importance of considering gender in understanding millennials' financial behavior, providing valuable insights for financial planners and business professionals in designing strategies that better align with the financial and consumption needs of millennials in Indonesia. This study shows that most respondents prefer saving in banks over non-banking institutions or investment instruments. While millennials tend to be consumptive, their high interest in investing suggests

potential for improved financial planning. Emphasizing education and access to capital markets can help millennials optimize their financial potential.

The findings in this study might provide an initial picture of the relationship between saving and spending behavior among millennial workers in Indonesia. However, considering the limitation, generalization of these results to a wider population, including other age groups or populations in countries with different social and economic contexts, needs to be done with caution. Further research with a larger sample size and additional variables is recommended to support generalization.

6.2 Practical Implication

This study highlights the need for millennials to expand their understanding of investments, especially in the capital market. Millennials are encouraged to diversify savings beyond banks by exploring stocks, mutual funds, and other financial instruments. Banks can support this shift by enhancing digital services, such as user-friendly apps, e-commerce integration, and offering educational resources on investments (e.g., webinars and calculators). Providing rewards and competitive advantages can also strengthen millennial customer loyalty, helping them see added value in their bank relationship.

This study suggests that financial consultants could use insights into millennial saving behaviors to offer targeted advice on effective savings strategies for goals like emergency funds, retirement, and major purchases. Companies are encouraged to develop financial literacy programs on budgeting, investment basics, and debt management, empowering millennials to make informed decisions. Additionally, offering benefits such as financial planning services, student loan assistance, and flexible savings plans can address millennials' unique financial needs. Millennials are advised to prioritize essential needs over discretionary spending, while the government could launch financial education campaigns focused on responsible money management and planning. Businesses might further engage this demographic by offering discounts on essential items, like healthy food, affordable clothing, and personal care services, aligning with millennials' core needs and preferences.

In response to the study's findings, the government and financial institutions could consider policies that promote gender equality in access to financial products. For instance, savings schemes with special interest rates or tax incentives for homemakers or women working in the informal sector could be implemented to encourage increased savings. Given that millennials exhibit unique saving and spending behaviors, banks and financial institutions could design tailored services for this demographic that combine flexible money management with a focus on long-term investment. Such programs might include automatic savings packages, digital finance tracking applications, and accessible investment programs with embedded financial education.

6.3 Limitation of Study

This study has a limitation regarding the sample amount of working millennials population that would be considered as representative to the entire population in which the result in limited generalization to the entire millennial population. The constraints came from the limitation of time and cost in conducting research. Another constraint might be related to the method to gather the data using a one-time survey. The study uses a quantitative approach to measure the relationship between saving and spending variables, with gender as a moderator. However, this approach is limited in explaining the deeper reasons or motivations behind millennials' saving

and spending behaviors, such as psychological factors, emotions, or social pressures that may affect financial decision-making.

6.4 Suggestion for further study

Future research could expand the sample to include age groups beyond millennials, such as Gen Z or Gen X, to determine if similar financial behavior patterns apply across generations. Cross-country or cross-cultural studies could offer insights into how social norms, economic conditions, and cultural values moderate the relationship between saving and spending in various countries or cultures. Additionally, future research could consider adding other moderating variables, such as income level, education, marital status, or number of dependents. Including these variables may lead to more accurate and relevant findings.

ACKNOWLEDGEMENTS

Researchers express our deepest gratitude to all parties contributing to this research. The researcher would like to thank the respondents who participated in this research and provided valuable data for the researcher. With their participation, this research was possible. Thank you to all parties who have provided technical and logistical support during the research, including our institution, the Faculty of Business and Economics, Universitas Atma Jaya Yogyakarta in which the assistance and facilities immensely helped the process of conducting this research. Finally, the researchers would like to thank to the anonymous reviewer for any kind of helpful comments and suggestions for enhancing the substance of this article.

REFERENCES

- [1] Arshath, T., Al Rawahi, K.A.H., Al Hinai, A.A.M., Al Shuraiqi, A.K.N., and Al Hasani, H.M.S. 2021. An Analysis of The Spending and Saving Pattern of The Students of The University of Technology and Applied Sciences, Muscat. *Journal of Emerging Technologies and Innovative Research* 8(6), pp. 638-643
- [2] Auliandari, T. (2022). Minat Generasi Milenial Terhadap Investasi. *Research in Accounting Journal (RAJ)*, 2(3), 315-322.
- [3] Baumeister, R. F. (1998). The self-regulation of behavior. *Cambridge University Press*. <https://doi.org/10.1017/CBO9780511527906>
- [4] Bencsik, A., & Juhasz, T. (2016). Y and Z generations at Workplaces. *Journal of Competitiveness*, 8(3), 90–106.
- [5] Birari, A., & Patil, U. (2014). Spending & saving habits of youth in the city of Aurangabad. *The SIJ Transactions on Industrial, Financial & Business Management (IFBM)*, 2(3), 158-165.
- [6] Bolton, R.N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Loureiro, Y.K., and Solnet, D. 2013. Understanding Generation Y and their use of social media: A Review and Research Agenda. *Journal of Service Management, Vol. 24 Issue: 3*, pp.245-267
- [7] Caldararo, N. (2013). The theory of banking: Why banks exist and why we fear them. *International Journal of Sociology and Anthropology*, 5(4), 116-132.
- [8] Central Statistics Agency. (2023). Angkatan Kerja (AK) Menurut Golongan Umur, 2023. Downloaded from: <https://www.bps.go.id/id/statistics-table/2/Njk4IzI=/angkatan-kerja--ak--menurut-golongan-umur.html>

- [9] Central Statistics Agency. (2020). Hasil Sensus Penduduk 2020. Downloaded from: <https://demakkab.bps.go.id/news/2021/01/21/67/hasil-sensus-penduduk-2020.html>
- [10] Dalton, A. N., & Huang, L. (2020). The impact of social identity on consumers' economic behavior: *The role of gender*. *Journal of Consumer Research*, 47(3), 414–430. <https://doi.org/10.1093/jcr/ucaa030>
- [11] Dewi, V., Febrian, E., Effendi, N., & Anwar, M. (2020). Financial literacy among the millennial generation: Relationships between knowledge, skills, attitude, and behavior. *Australasian Accounting, Business and Finance Journal*, 14(4), 24–37.
- [12] Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- [13] Febrianty, D., Sudarwan, A., & Dewi, W. (2023). Peran Gender dalam Literasi Keuangan Digital dan Perilaku Keuangan di Kalangan Milenial. Accessed on <https://journal.uny.ac.id/index.php/economia/article/download/56529/pdf>.
- [14] Financial Services Authority. (2022). Inforgrafis Hasil Survei Nasional Literasi dan inklusi Keuangan Tahun 2022. Jakarta
- [15] Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- [16] Friedman, M. (1957). *A Theory of the Consumption Function*. Princeton University Press.
- [17] Furnham, A. 1999. The saving and spending habits of young people. *Journal of Economic Psychology* 20 (1999) pp. 677-697.
- [18] Herawati, N. T., Candiasa, I. M., Yadnyana, I. K., & Suharsono, N. (2018). Factors that influence financial behavior among accounting students in Bali. *International Journal of Business Administration*, 9(3), 30-38.
- [19] Hidayatullah, S., Waris, A., & Devianti, R. C. (2018). Perilaku generasi milenial dalam menggunakan aplikasi Go-food. *Jurnal Manajemen dan kewirausahaan*, 6(2), 240-249.
- [20] Hira, T. K. (2009). Personal Finance: Past, Present, and Future. *Networks Financial Institute Policy Brief*.
- [21] Indonesia Millennials Report. 2024. Downloaded from: <https://cdn.idntimes.com/content-documents/indonesia-millennial-report-2024.pdf>
- [22] Irawati, R. (2022). Pengaruh E-Marketing Mix Umkm Kuliner Malang Terhadap Minat Beli Generasi Millenial Pada Start-Up Food Delivery Online Di Masa Pandemi. *Jurnal Penelitian Manajemen Terapan (PENATARAN)*, 7(1), 50-66.
- [23] Ismail, A. R. N., Noviantati, K., Syahril, S., & Fikri, A. R. (2021). Investasi Digital Sebagai Solusi Mengurangi Perilaku Konsumtif Milenial Masa Pandemi Covid-19. *CAPITAL: Jurnal Ekonomi dan Manajemen*, 4(2), 125-136.
- [24] Jain, N., and Sehgal, A. 2022. Statistical Decision Making of Spending and Savings Habits among Students of Delhi NCR Region. *Proceedings of International Conference on Application of AI and Statistical Decision Making for the Business World 2022, 16-17 December 2022, Rukmini Devi Institute of Advanced Studies, Delhi, India*.
- [25] Jumena, B.B., Siaila, S., and Widokarti, J.R. 2022. Saving Behaviour: Factors That Affect Saving Decisions (Systematic Literature Review Approach). *Journal Economic Resources*, Vol. 5 Issues 2, pp 217 – 235.
- [26] Jeevitha, P., and Priya R.K. 2019. A Study on Saving and Spending Habits of College Students with Reference to Coimbatore City. *International Journal of Research and Analytical Reviews*, Volume 6, Issue 1, January–March 2019, pp. 463-466.
- [27] Kumar, D.S., Sudin, H., Othman, J., and Salehuddin, S. 2022. The Influence of Spending Behaviour Among University Students in Malaysia. *Asian Journal of Accounting and Finance*, Vol. 4, No. 3, pp 30-43

- [28] Lusardi, A., & Mitchell, O. S. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education. *Business Economics*, 42(1), 35-44. <https://doi.org/10.2145/20070204>
- [29] Lusardi, A., & Mitchell, O. S. (2013). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44. <https://doi.org/10.1257/jel.52.1.5>
- [30] Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. In K. K. Kurihara (Ed.), *Post-Keynesian Economics* (pp. 388-436). Rutgers University Press.
- [31] Nithya, M., and Vijayalakshmi, S. 2020. A Study on Spending and Saving Habits of College Students in Thoothukudi. *Studies in Indian Place Names (UGC Care Journal)*, Vol.40, Issues 71, March 2020, pp 1424 -1431.
- [32] Ordun, G. (2015). Millennial (Gen Y) Consumer Behavior Their Shopping Preferences and Perceptual Maps Associated with Brand Loyalty. *Canadian Social Science*, 11(4), 1–16. https://doi.org/10.3968/pdf_294
- [33] Palan, K. M. (2014). Gender identity in consumer behavior research: A literature review and research agenda. *Academy of Marketing Science Review*, 4(1), 22–34. <https://doi.org/10.1007/s13162-013-0043-2>
- [34] Patil, Y.A. 2023. Study The Spending and Saving Habits Among Youth W.R.T. Jalgaon District (Maharashtra). *International Journal of Creative research Thought*. Volume 11, Issue 6 June 2023, pp 496-502
- [35] Peramesti, N. P. D. Y., & Kusmana, D. (2018). Kepemimpinan ideal pada era generasi milenial. *TRANSFORMASI: Jurnal Manajemen Pemerintahan*, 73-84.
- [36] Pyöriä, P., Ojala, S., Saari, T., and Järvinen, M. 2017. The Millennial Generation: A New Breed of Labour?. *SAGE Open*, January-March 2017: 1–14
- [37] Sabri, M. F., and MacDonald, M. 2010. Savings Behavior and Financial Problems Among College Students: The Role of Financial Literacy in Malaysia. *Cross-Cultural Communication*, 6(3), pp. 103-110
- [38] Schuchardt, J., Bagwell, D. C., Bailey, W. C., DeVaney, S. A., Grable, J. E., Leh, R. E., Lown, J. M., and Xiao J. J. (2007). "Personal Finance: An Interdisciplinary Profession." *Journal of Financial Counseling and Planning* 18 (1), pp 61–69.
- [39] Sellina, S., Soleha, E., & Rachmawati, D. (2023). Edukasi dan Perencanaan Investasi Generasi Millennial: Kegiatan Pengabdian Masyarakat. *Jurnal Pengabdian Bersama Masyarakat Indonesia*, 1(3), 100-105.
- [40] Setiawan, H. (2019). Pengaruh Kualitas Layanan, Persepsi Nilai dan Kepuasan Nasabah terhadap Loyalitas Nasabah Bank. *MOTIVASI*, 2(2), pp 207-229.
- [41] Sheehan, R., & Xia, J. (2018). The impact of financial knowledge and saving attitudes on saving intentions and behaviors. *Journal of Family and Economic Issues*, 39(3), 317-327. <https://doi.org/10.1007/s10834-018-9565-5>
- [42] Smith, T.J. Nichols, T. 2015. Understanding the Millennial Generation. *Journal of Business Diversity* Vol. 15(1) 2015, pp. 39-47.
- [43] Sufyati, H. S., & Lestari, A. (2022). Pengaruh Literasi Keuangan, Inklusi Keuangan dan Gaya Hidup Terhadap Perilaku Keuangan Pada Generasi Milenial. *Jurnal Multidisiplin Madani*, 2(5), 2415-2430.
- [44] Sussman, A. B., & Olivola, C. Y. (2022). Gender differences in financial decision making. *Behavioral Science & Policy*, 8(1), 45–58. <https://doi.org/10.1353/bsp.2022.0003>
- [45] Tam, L. & Dholakia, U. 2014. Saving in Cycles: How to Get People to Save More Money. *Psychological Science* 2014, Vol. 25(2) 531–537

- [46] Wahyuni, U. S., & Setiawati, R. (2022). Pengaruh Literasi Keuangan dan Gaya Hidup Terhadap Perilaku Keuangan Generasi Z di Provinsi Jambi. *Jurnal Dinamika Manajemen*, 10(4), 164-175.
- [47] Xiao, J. J., & Porto, N. (2017). Which financial advice topics are positively associated with financial satisfaction? *Journal of Financial Planning*, 30(1), 48-55.