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Determining Potential Investor Preferences on Financial Investment Products Through Cluster and Conjoint Analysis

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Abstract

The amount of capitalization and community participation in investing indicates a country's economic development. Indonesia is presently experiencing a demographic advantage that could lead to a rise in investors, particularly in financial investment products. This potential must be supported by market research on financial investment products to optimize such a large potential market. Therefore, this study aims to analyze potential market segments and design financial investment product characteristics that align with investor preferences. This study utilized a quantitative approach with k-means clustering and adaptive conjoint analysis. The study results can define the optimal investment product and provide policymakers with information for introducing and educating the public about diverse investment categories. This study provides an exhaustive analysis of investor preferences and market segmentation in the Indonesian financial investment sector.

Keywords: conjoint analysis; cluster analysis; financial investment products; investor preference

1. Introduction

Investment is one of the most important indicators of a country's economic development, as measured by various factors, including the level of community participation in investing and the amount of investment capitalization on the capital market. The main implication of the increase in the level of community participation is that a greater number of investors can raise the total market capitalization. The effect will undoubtedly increase a country's economic growth (Bist, 2017; Hailemariam, 2014; Murari, 2017; Oprea & Stoica, 2018). Overall, increasing the number of people interested in investing can have positive implications for economic growth by stimulating capital accumulation, entrepreneurship, investor confidence, consumer spending, and the efficient allocation of resources.

There is currently a demographic bonus in Indonesia, where the productive age population is greater than that of the non-productive age. With this demographic bonus, Indonesia is expected to enter the demographic bonus period between 2030 and 2040, when the proportion of the productive population (15-64 years old) will be greater than the proportion of the non-productive population (65 and older) and will exceed 60% of the total population. In addition, Indonesia's productive population or labor force in 2020 was 140 million out of a total of 270.20 million

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(Badan Pusat Statistik, 2022). This productive population represents an enormous market potential for the investment finance industry.

This productive population is also supported by projection data from the Indonesian Financial Services Authority (OJK), which states that the number of investors in the capital market is expected to exceed 20 million in 2023-2027. In addition, it is estimated that the average daily transaction value is around Rp 25 trillion. The number of listed companies is anticipated to reach 1,100, and the total managed funds in the industry will total approximately Rp 1 trillion. Increasing numbers of transactions and investors unquestionably contribute to Indonesia's economic growth (Otoritas Jasa Keuangan, 2023). This substantial market opportunity must be accompanied by an understanding and analysis of the market in the form of market preferences and segmentation in Indonesia to maximize investment value and continue attracting more investors. This study aims to conduct market research on financial investment products in Indonesia by examining market segmentation and product preferences.

This study provides an understanding of the characteristics of Indonesian investors by analyzing market segmentation among investors. Thus, policymakers and issuers of financial investment products can comprehend the appropriate target market for the offered investment products. According to Pirinsky and Wang (2011), market segmentation imposes significant costs on issuers and investors in the form of higher yields and higher costs of financial intermediation. In addition, understanding market segmentation for financial investment products is essential for issuers and companies that issue financial investment products to develop products that meet the specific needs of various customer segments. It facilitates the development of targeted marketing strategies, increases customer retention, and fosters long-term customer relationships. By segmenting the market, businesses can concentrate their efforts on those with the highest return on investment and remain competitive in the investment market. Market segmentation also aids businesses in effectively segmenting the entire market, thereby facilitating the delivery of diversified and customized products and services (Bose, 2012).

Understanding the preferences for financial investment products also entails increasing the adoption rate of investment products (Brent & Ward, 2018; Luca et al., 2022). By developing investment products that cater to the preferences of investors, the number of markets that adopt the products increases. In addition, investment products that match investor preferences can increase investor satisfaction with investment purchases, thereby fostering long-term relationships between investors and the products offered (Luca et al., 2022; Sung & Choi, 2010). By conducting this study, it will be possible to create general characteristics of investment product design that can accommodate the preferences of potential and actual investors, thereby increasing the number of new and retaining existing ones.

In addition to the importance of preferences and segmentation research regarding issuers of financial investment products, the Indonesian government issued law number 4 in 2023 concerning the development and strengthening of the financial sector. The financial sector is subject to various dynamics and obstacles that can affect and disrupt stability. In this instance, the government considers financial sector reforms to be of the utmost importance. It also

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conferred new responsibilities on the Financial Services Authority (OJK) as a financial sector supervisory institution.

From the background stated above, this research aims to determine the ideal investment product of consumer choice based on cluster and conjoint analysis. Therefore, the purpose of this research can help the parties, in this case, the community and individuals, as a view or concept guide in choosing investment products in Indonesia today. In addition, the study's results can be a direction or guide on how an investment product can be ideal if it has passed several stages of analysis. Especially the Financial Services Authority (OJK) as a reference in the role of duties and functions of supervision regarding the development and strengthening of the financial sector (P2SK) under Law number 4 of 2023.

The sections in this study consist of introductory background, a literature review of previous research, research methods used to obtain data, data analysis, discussion results, conclusions from this study, and the last policy recommendation.

2. Method

2.1. Data Collection

This study collects two types of data. The first set of data for cluster analysis consists of socio-demographic respondent information and investor profiling based on psychographics. The second data set consists of responses to 32 investment product choice scenarios on a 7-point Likert scale (1 = strongly dislikes the option, 7 = strongly likes the option), which will be analyzed using conjoint analysis.

This research employs quantitative methodology to collect the two data types necessary for the analysis database utilizing online questionnaires. Distribution of questionnaires to the academic community of the Islamic University of Bandung and the School of Business and Management, Bandung Institute of Technology, in accordance with the purposive sampling method, was used to collect samples. This purposive sampling aims to ensure that the data is still relevant and in accordance with the desired population characteristics, namely, potential investors with a moderate level of financial literacy and general comprehension of financial investment products in Indonesia.

Since data collection occurs in Indonesia, questionnaires should be drafted using Indonesian to facilitate comprehension of their contents and questions. The questionnaire is divided into multiple sections, the first of which is an introduction to the conducted research. The second section concisely explains financial investment products in Indonesia via descriptive writing and researcher-created videos. The third section contains Likert data for conjoint analysis, followed by socio-demographic and psychographic information.

From April to May 2023, data was collected using a Microsoft Office form platform over two months. The data collection generated a total of 99 respondents. The researcher then cross-checks and validates the data to avoid data bias, such as data that fills in one option repeatedly or respondents who fill in more than once. According to Hair et al. (2014), a minimum sample size of 50 respondents can be used to determine consumer preferences. Therefore, the minimum

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number of respondent criteria required for data analysis has been met. Thus, data from 90 respondents were obtained and used for clustering and conjoint analysis.

2.2. Data Analysis

This study employs two methods of data analysis: K-Means Clustering and conjoint adaptive analysis. K-means Clustering is used to classify potential investors based on socio-demographic and psychographic characteristics using these two analysis concepts. Furthermore, the use of conjoint analysis to determine which investment product preferences and attributes have the greatest and least impact on investment product selection decisions based on utility score values.

3. Results & Discussion

3.1 Sample Characteristics

There are two distinct categories of descriptive data collected from respondents. Socio-demographic data such as gender, occupation, age, level of education, and income level are used to generate the sample's characteristics. Then, the respondents' investment profiling data included investment intensity, investment product ownership, the number of investment transactions, and the amount of savings. Table 3.1 provides more details regarding the proportion of respondents' characteristics.

Table 3.1 Sample Characteris

No	Sample Characteristics		n	Percentage (%)
1	Gender	Male	38	42.2
		Female	52	57.7
2	Occupation	Job Seeker	3	3.3
		State-owned employee (BUMN)	1	1.1
		Private employee	2	2.2
		Civil servants	19	21.1
		Student	53	58.8
		Professional Sector	7	7.77
		Entrepreneur	5	5.55
3	Age	17-20	6	6.67
		20-30	63	70
		31-40	14	15.5
		41-50	6	6.67
		More than 50	1	1.1
4	Educational Level	Junior High School	1	1.1
		Senior High School	36	40
		Scholar	24	26.6
		Master	23	25.5
		Doctoral	2	2.2
5	Investment Intensity	Never invested yet	40	44.4
		Not necessarily	19	21.11

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No	Sample Characteristics		n	Percentage (%)
		Once every week	3	3.33
		Once every month	17	18.88
		Once every three months	4	4.44
		Once per year	7	7.778
6	Number of investment product ownership	Has no investment products	40	44.44
		Less than three products	27	30
		3-5 products	15	16.67
		6-8 products	2	2.22
		9-12 products	2	2.22
		More than 12 products	4	4.44
7	Transaction amount on each investment product	Never invested before	40	44.44
		Less than Rp100.000	7	7.77
		Rp100.000 – 500.000	16	17.77
		Rp500.000-1.000.000	10	11.11
		Rp1.000.000-5.000.000	6	6.67
		Rp5.000.000 – Rp10.000.000	6	6.67
		More than Rp10.000.000	5	5.55
8	Transaction amount at each time of saving	Less than Rp100.000	28	31.11
		Rp100.000 – 500.000	25	27.7
		Rp500.000 – 1.000.000	10	11.1
		Rp1.000.000 – 3.000.000	12	13.33
		Rp3.000.000 – 5.000.000	5	5.55
		More than Rp5.000.000	10	11.11
9	Amount of income (month)	Less than Rp1.000.000	36	40
		Rp1.000.000 – 2.000.000	10	11.11
		Rp2.000.000 – 3.000.000	6	6.67
		Rp3.000.000 – 4.000.000	2	2.22

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No	Sample Characteristics		n	Percentage (%)
		Rp4.000.000 – 5.000.000	5	5.55
		Rp5.000.000 – 10.000.000	12	13.3
		More than Rp10.000.000	19	21.1

3.2 Analysis of Clustering Investors

After analyzing to evaluate the quality of clusters in grouping data for a total of 90 participants, it resulted in the formation of 2 clusters with the number of participants for each, namely cluster A with a total of 43 and cluster B with a total of 47. More details for the gender category, there are 25 men and 18 women in cluster A. There are 13 men and 34 women in cluster B. Cluster quality provides a concise graphical representation of multiple categories; in this study, there are eight categories to determine the classification accuracy of each category. This method also measures the category's coherence with the cluster; the resulting silhouette value ranges from -1 to +1. In the silhouette analysis, if the results show numbers in the "good" range or above the value of 0.5, this indicates that the category fits or fits the cluster in which it is located and does not fit other clusters. This analysis concludes that the clustering configuration can be suitable and that the number of clusters produced in a data set is optimal.

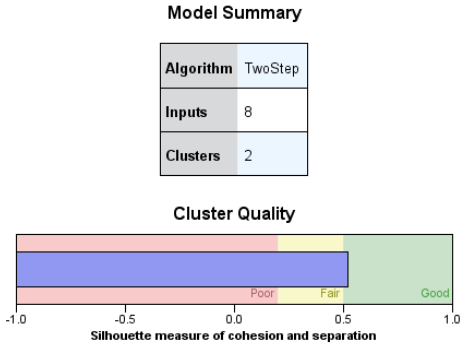

Figure 3.1 Cluster Quality

Based on the cluster analysis results, the input of eight categories reveals the intensity of both clusters. Cluster 1 respondents have a high level of investment intensity. Investment amount, nominal investment, nominal savings, nominal income, age, and education are more intense in cluster 1 respondents compared to cluster 2 respondents; for instance, the investment amount category has a high level of intensity in spending to invest compared to cluster 2, which has a relatively low level of intensity. It pertains to the age category for which cluster respondents have a high level of intensity; it can be concluded that cluster 2 respondents are, on average, older than cluster 1 respondents. There are seven categories with a high intensity for cluster 1 respondents, but only one category with a high intensity for cluster 2 respondents. This study

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classifies cluster 1 as a potential cluster based on the final results of the cluster analysis and cluster 2 as a non-potential cluster.

Table 3.2 Final Cluster Centers

	Cluster	
	1	2
Zscore(Intensitas_Investasi)	.71546	-.62603
Zscore(Jumlah_Investasi)	.66285	-.57999
Zscore(Nominal_Investasi)	.80255	-.70223
Zscore(Nominal_Tabungan)	.77524	-.67834
Zscore(Nominal_Pendapatan)	.97418	-.85241
Zscore(Gender)	-.30041	.26286
Zscore(Umur)	.59771	-.52300
Zscore(Pendidikan)	.83995	-.73495

There are four columns in the ANOVA table: Cluster, Error, F-value, and P-value. In the Cluster column, the mean square value measures the categories between clusters, whereas the mean square value in the error column measures the categories within clusters. The mean square value is also used to calculate the F-value, indicating a statistically significant difference between or within clusters. For instance, the nominal income category has a mean square value in the Cluster column 74.736, while the mean square value in the Error column is 0.162. Since there is a large difference between the mean square values of the two columns, the greater the resulting value indicates a significant difference between clusters. The table below demonstrates that the Cluster square value differs from the Error square value for all categories, indicating that there is a significant difference between clusters. In the ANOVA table, the Degree of Freedom (df) indicates the number of values that can vary within a statistic. The df value in the Cluster column measures the categories between clusters, whereas the df value in the Error column measures the categories within clusters. The greater the df value, the greater the likelihood of a significant difference between or among clusters. The df one value in the Cluster column is 1, and the df two value in the Error column is 88; therefore, based on the f table, the p-value of 0.05 is 3.95. The results indicate that the F value exceeds the F table value (3.95); for instance, the lowest value in the gender category has a value of 7.637, greater than the F table value of 3.95. Consequently, it can be stated that all categories for each cluster contribute to the clustering of the dataset.

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Table 3.3 ANOVA Table

	Cluster		Error		F	p-value
	Mean Square	df	Mean Square	df		
Zscore(Intensitas_Investasi)	40.311	1	.553	88	72.858	.000
Zscore(Jumlah_Investasi)	34.600	1	.618	88	55.971	.000
Zscore(Nominal_Investasi)	50.722	1	.435	88	116.606	.000
Zscore(Nominal_Tabungan)	47.329	1	.474	88	99.947	.000
Zscore(Nominal_Pendapatan)	74.736	1	.162	88	461.069	.000
Zscore(Gender)	7.107	1	.931	88	7.637	.007
Zscore(Umur)	28.134	1	.692	88	40.677	.000
Zscore(Pendidikan)	55.559	1	.380	88	146.202	.000

3.3 Conjoint Analysis Investment Products and Attributes

After clustering analysis of demographic characteristics and investment management patterns, conjoint analysis was performed. This conjoint analysis is utilized to determine the significance of several financial investment attributes based on attribute category and attribute level. Two measurements can be used to determine the significance: the utility estimate and the standard error or p-value.

The utility estimate quantifies how much a particular attribute contributes to the overall value of a product or service. In conjoint analysis, respondents are asked to rate or rank hypothetical products or services based on their preferences. Through analysis of the responses, conjoint analysis can determine the relative importance of each attribute and the utility of each attribute level. The utility estimate quantifies how much a particular level of an attribute contributes to the product or service's overall value. The greater the utility estimate, the more the respondents value that attribute level. The utility estimate can be used to predict how much people are willing to pay for a product or service with a specific set of characteristics and to optimize the design of a product or service by identifying the most important characteristics and levels.

Furthermore, to determine whether an attribute can be used as an attribute level, the p-value must be examined. In this study, a p-value ≤ 0.10 will be employed. Complete the conjoint analysis on category and level attributes by calculating the estimated utility value and p-value in Table 4.3.

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Table 3.4 Utility Score Investment Attributes

Utilities			
Attribute category	Attribute Level	Utility Estimate	p-value
Investment Product	Retail Government Bonds	.003	.048
	Time Deposit	.071	.048
	Stocks	-.018	.048
	Stock mutual funds	-.004	.062
	Money market funds	-.054	.062
Return Investment Percentage	1-3%	-.473	.044
	4-6%	-.069	.044
	7-9%	.214	.044
	More than10%	.328	.044
Initial Investment Capital	Rp100.000 - 500.000	.109	.044
	Rp500.000 - 1.000.000	-.034	.044
	Rp1.000.000 - 5.000.000	.096	.044
	More than Rp5.000.000	-.170	.044
Tax	10 percent	.020	.025
	20 percent	-.020	.025
Payback Period	One month	-.019	.044
	Three months	-.011	.044
	Six months	.045	.044
	12 months	-.015	.044
Return Type	Fix	.036	.025
	Floating	-.036	.025
Investment Category	Shariah	.100	.025
	Conventional	-.100	.025
Risk Level	Low	.250	.034
	Medium	.052	.040
	High	-.302	.040
(Constant)		4.313	.028

According to the conjoint analysis results, each attribute value has a significance p-value greater than 0.10. So that each attribute level value may be utilized as a level parameter in conjoint analysis. Before viewing the utility estimate value of each attribute level, an analysis of the attribute category of Indonesian financial investment products is performed (see Figure 3.2).

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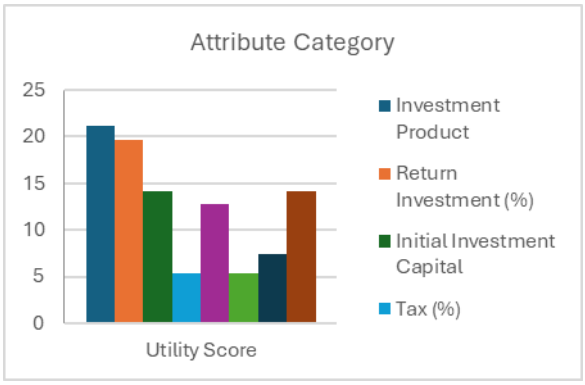

Figure 3.2 Utility Score Attribute Category of Financial Investment Product

Based on the data, it is determined that the type of investment product attribute has the highest utility score of 21.185. Then comes investment return at 19.687, risk level at 14.174, initial investment capital at 14.167, payback period at 12.747, investment category at 7.42, return type at 5.318, and taxes at 5.303.

According to these findings, the type of financial investment is the most influential factor in an investor's choice of financial investment product. It indicates that return is not the most important factor for investors when making investment decisions, although it remains the second most important factor. Figure 3.3 illustrates the level of attributes these two variables possess in greater detail.

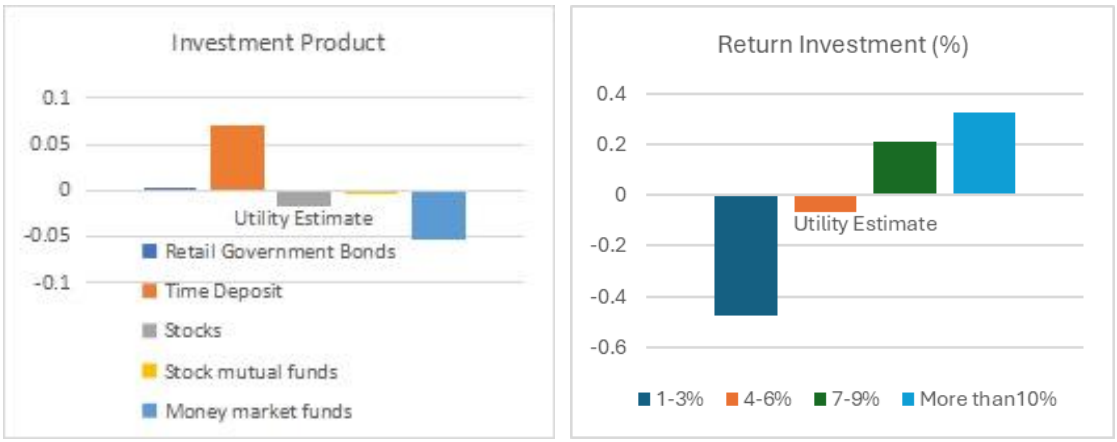

Figure 3.3 Utility Score Investment Product and Return

The investment product as a time deposit has a utility value 0.71, as shown in Figure 3.3. This value exceeds that of other investment products. Then comes Retail government bonds, which have an economic value of 0.003. This value remains within the positive range. Consequently, these two investments are still preferable to investments with negative values. The results of a conjoint analysis indicate that stocks (-0.018), stock mutual funds (-0.004), and money market mutual funds (-0.054) are no longer preferred investment products.

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For the investment return attribute, it is determined that the profit of investment products with a return of more than 10% has a utility value of 0.328, followed by an investment return of 7% to 10% (0.214). In contrast, 4-6% (-0.069) and 1-3% (-0.473) investment returns have negative utility values. The interpretation generated from the conjoint analysis results to make the investment product preferable has a minimum return threshold of 7%. When the investment return threshold falls below this level, the utility of the investor's investment product selection is diminished.

The utility estimate values for the level of risk (14.174) and nominal investment (14.167) are comparable (see Figure 3.2). According to the results of the conjoint analysis of the two attributes, the two attributes have nearly the same influence on investor preferences when selecting investment products. Figure 3.4 provides additional information regarding the level attributes of the two categories.

Figure 3.4 Utility Score Risk Level and Initial Investment Capital

Based on conjoint analysis, it can be seen that investors prefer investment preferences with low (0.250) and medium (0.052) risk levels. In contrast, higher-risk investments have a utility value of (-0.302), indicating that investors do not prefer these investment products.

In addition, the initial investment attribute reveals that investment products priced between 100,000 and 500,000 rupiahs (0.109) and between 1,000,000 and 5,000,000 rupiahs (0.096) have a positive utility value. Consequently, investment products in the nominal range are more desirable than those with negative utility values in the nominal ranges of 500,000 to 1,000,000 rupiah (-0.034) and more than 5,000,000 rupiah (-0.096).
The fourth category factor influencing the selection of investment products is the payment return period (12.747), followed by the type of investment product (7.42) based on the utility score (See figure 3.2). Figure 3.5 provides additional information about the level of attributes in each category.

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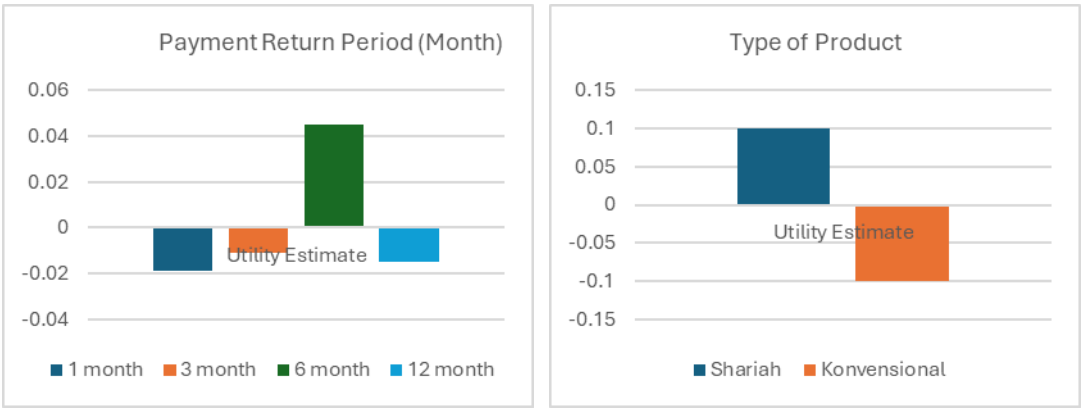

Figure 3.5 Utility Score Payment Return Period and Initial Investment Category

Based on the attribute level for the payment return period, it can be seen that the six-month investment return period (0.045) is preferable to the longer one of 12 months (-0.015) or the shorter ones of three months (-0.011) and one month (-0.19). Based on the results of a conjoint analysis of the payment return period, the six-month investment return period with the highest utility value annually.

Next is the category attribute of the type of financial investment, which is grouped based on sharia and conventional in the Indonesian context. According to conjoint analysis, sharia-compliant financial investments (0.1) are more desirable than conventional investments (-0.1). Based on this result, financial investment products that adhere to the rules of buying and selling transactions in accordance with Islamic religious law provide investors with a greater degree of utility when selecting investment products. It is due, among other things, to the increasing variety of Sharia-compliant financial investment products, the emergence of Sharia-compliant financial and banking institutions, and the growing Sharia-literate population.

In the attribute category in the last position, the utility score value is not much different between return type (5.318) and tax (5.303). Although the value these two attributes possess is small at 5 /100, it still influences investor preferences in choosing financial investment products. For more information regarding the attribute levels owned by a return type and tax, please see Figure 3.6.

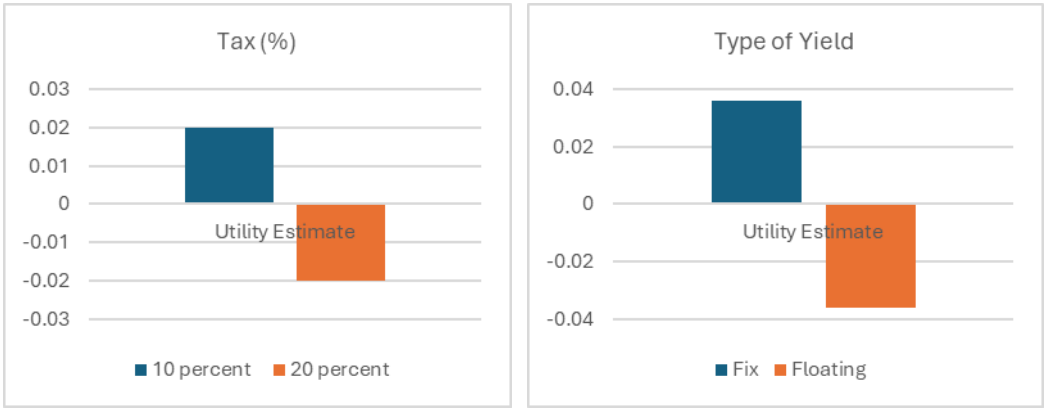

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Figure 3.6 Utility Score Tax (%) and Type of Yield

At the attribute level within the tax category, a 10 percent (0.020) investment tax rate on financial products is preferable to a 20 percent (-0.020) rate. The interpretation of the tax attribute's results is that changes in the percentage increase in taxes levied on investment products can influence the selection of investment products.

As a result of market mechanisms, financial investment products with a fixed return (0.036) are preferable to those with a floating return (-0.036) in terms of the yield type obtained. This result is consistent with the investment risk attribute, which has a lower risk, and the category of financial investments in deposits and retail government bonds, which tend to have a fixed rate of return compared to high-risk investment products with variable returns.

In the final step of conjoint analysis, Pearson's R correlation test and Kendall's tau are applied to the attributes of the category of tested financial investment products and the levels of the analysis conducted.

Table 3.5 Correlation Analysis Pearson's R and Kendall's Tau

Correlations

	Value	Sig.
Pearson's R	.977	.000
Kendall's tau	.887	.000

In conjoint analysis, Pearson's R-value indicates the strength and direction of the linear relationship between variables. In the context of conjoint analysis, Pearson's R measures the linear correlation between the respondents' preferences for the tested attributes. In conjoint analysis, Pearson's R assesses the linear relationship between respondents' preferences for the examined attributes. One indicates a perfect positive relationship, 0 indicates no linear relationship, and -1 indicates a perfect negative relationship. A high Pearson's R-value (0.977 in this study) indicates a strong and positive relationship between the respondents' preferences and the conjoint analysis attributes. In other words, respondents' preferences for the tested attributes tend to be comparable.

In conjoint analysis, Kendall's Tau value also measures the relationship between variables but is not limited to a linear relationship. The Kendall's tau value (0.887 in this study) indicates that respondents' preference ratings of the attributes in the conjoint analysis are nearly identical. Kendall's tau values range from -1 to 1, with 1 indicating perfect ranking agreement, 0 indicating no ordinal relationship, and -1 indicating perfect ranking agreement with opposite rankings. The greater the value of Kendall's tau, the greater the agreement between respondents' rankings of their preferences for the attributes tested. Regarding attribute preferences, a high Kendall's tau value indicates a high level of agreement between respondents.

Based on the results of the correlation test described previously, it is determined that the obtained conjoint analysis results are very good at describing the investment product selection test's attributes and ranking the influence of attributes and attribute levels.

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4. Conclusion & Recommendations

Along with developing an ever-growing investment market in Indonesia, both in terms of the variety of products offered and the market share of the market, market research in financial investment has become a crucial and essential aspect for stakeholders in the financial industry. Understanding the pattern of investment market development in Indonesia requires understanding market segments and investment product preferences.

This study discovered two clusters of investor segmentation in Indonesia: potential and non-potential investors. The first cluster consists of prospective investors with the psychographic characteristics of investing at least once per month, owning more than three investment products with an average investment amount per transaction of more than one million rupiahs, and saving more than one million rupiahs monthly. Socio-demographic, this cluster is dominated by men with an average monthly income of over 5 million rupiahs. In contrast, cluster two is a non-potential cluster that has never invested or invested indefinitely and saves less than one million rupiahs/month. Regarding socio-demographics, this cluster is dominated by females under 30 with a senior high school education and a monthly income of one to five million.

Then, based on investment product preferences with conjoint analysis, it is determined that the ranking of investment attributes that most influence the selection of investment products begins with the category of investment product types and the presentation of returns obtained, next followed by the initial investment amount and the level of investment risk, then by the period of investment return payment, the type of investment product, and finally the type of yield and tax charged from return investment.

Based on the results of the conjoint analysis, the optimal choice is also determined to have the following characteristics: Investment products are time deposits or retail government bonds, with a minimum return of seven percent, a low-to-medium investment risk range, then the price of investment products can be purchased in the range of Rp100,000 to Rp500,000 or Rp1,000,000 to Rp5,000,000, with a period of providing returns in six months, investment products categorized as sharia, with a fixed yield, and the highest tax at ten percent.

The results of this study have several limitations and recommendations for future research to complement the preferences and segmentation of potential investors in Indonesia's investment market. First, this research is limited to clustering socio-demographic and psychographic data, so it does not precisely describe the segmentation of the Indonesian investment market. To determine whether the majority of investors in Indonesia invest rationally or emotionally, future research is anticipated to include behavioral variables and influence factors that influence investment decisions. Second, this research is limited in the types of investment products used as scenarios in the conjoint analysis, as it is restricted to financial investment products only, and the types of investment products studied vary. Therefore, the results obtained only compare financial investments in specific investment products. Future research could expand the study by comparing financial product investments and foreign exchange, crowdfunding, peer-to-peer lending, and other investment types.

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However, the Financial Services Authority (OJK) can use the findings and recommendations from this study to describe the financial product investment market in Indonesia. Based on the findings of this study, policyholders and the government can be given the following recommendations:

Based on the clustering results, the women cluster group continues to exhibit a pattern of low investment intensity caused by low education and income levels. Therefore, developing financial literacy and investment awareness must specifically target this population segment so that this group can increase their access to investments and their investment intensity.

According to this study's findings, most respondents continue to favor government and bank-issued investments, such as retail government bonds and time deposits. According to the findings of this study, mutual funds and stock products are not favored by the community. It indicates that the public continues to consider investing in familiar and easily accessible financial products, whereas other investments have not sounded familiar. Therefore, policymakers, in this case, the government and financial services authorities, must introduce and educate the public on Indonesia's expanding variety of investment categories. With the development of digital information technology and the increasing use of social media and the internet by Indonesians, it can be used to educate the public, for instance, by collaborating with social media influencers to educate consumers about increasingly diverse investment products.

Lastly, this study's findings indicate that information regarding the attributes of investment products substantially impacts the decision to purchase investment products. Not only do consumers consider the rate of return and the type of investment products, but they also consider the category. Other attributes relating to payment maturities, sharia or conventional investment products, taxes, risk levels, and types of variable or fixed yields also influence investors' investment decisions. The results of this study suggest that OJK can provide an integrated big data service for investments. So that people can check necessary information about the investment products they intend to purchase in advance so that their purchasing decisions are rational and well-considered.

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Appendix

Table 7.1 Conjoint Analysis Scenario from Orthogonal Design

No	Jenis Investasi	Return/Interest	Harga Minimal Pembelian	Pajak	Waktu Pembayaran Investasi (Bulan)	Return (Tetap atau Tidak Tetap)	Kategori Produk	Tingkat Resiko
1	Saham	4-6%	Rp100.000 - 500.000	20	1	Tidak tetap (Floating)	Konvensional	Rendah
2	Deposito Berjangka	1-3%	Rp1.000.000 - 5.000.000	20	1	Tetap (Fix)	Shariah	Rendah
3	Deposito Berjangka	7-9%	Rp100.000 - 500.000	20	6	Tetap (Fix)	Konvensional	Menengah
4	Reksadana Saham	Lebih dari 10%	Rp100.000 - 500.000	10	6	Tidak tetap (Floating)	Shariah	Tinggi
5	Surat Berharga Negara	7-9%	Rp1.000.000 - 5.000.000	20	3	Tidak tetap (Floating)	Shariah	Rendah
6	Surat Berharga Negara	1-3%	Rp100.000 - 500.000	20	12	Tidak tetap (Floating)	Konvensional	Tinggi
7	Surat Berharga Negara	7-9%	Rp1.000.000 - 5.000.000	10	6	Tetap (Fix)	Konvensional	Tinggi
8	Deposito Berjangka	Lebih dari 10%	Rp500.000 - 1.000.000	10	12	Tidak tetap (Floating)	Konvensional	Rendah
9	Deposito Berjangka	4-6%	Rp1.000.000 - 5.000.000	20	12	Tetap (Fix)	Shariah	Tinggi
10	Saham	4-6%	Rp100.000 - 500.000	10	12	Tetap (Fix)	Shariah	Menengah
11	Surat Berharga Negara	Lebih dari 10%	Leih dari Rp5.000.000	20	12	Tidak tetap (Floating)	Konvensional	Rendah
12	Saham	Lebih dari 10%	Rp1.000.000 - 5.000.000	20	6	Tidak tetap (Floating)	Shariah	Menengah
13	Surat Berharga Negara	4-6%	Rp500.000 - 1.000.000	20	3	Tidak tetap (Floating)	Shariah	Menengah
14	Saham	7-9%	Leih dari Rp5.000.000	20	1	Tidak tetap (Floating)	Konvensional	Tinggi
15	Deposito Berjangka	Lebih dari 10%	Rp100.000 - 500.000	20	3	Tetap (Fix)	Konvensional	Rendah
16	Surat Berharga Negara	4-6%	Rp500.000 - 1.000.000	10	6	Tetap (Fix)	Konvensional	Rendah
17	Saham	Lebih dari 10%	Rp1.000.000 - 5.000.000	10	3	Tetap (Fix)	Konvensional	Rendah
18	Saham	7-9%	Leih dari Rp5.000.000	10	12	Tetap (Fix)	Shariah	Rendah
19	Reksadana Pasar Uang	7-9%	Rp100.000 - 500.000	10	3	Tidak tetap (Floating)	Shariah	Rendah
20	Reksadana Saham	1-3%	Leih dari Rp5.000.000	20	3	Tetap (Fix)	Konvensional	Menengah
21	Deposito Berjangka	1-3%	Leih dari Rp5.000.000	10	6	Tidak tetap (Floating)	Shariah	Rendah
22	Surat Berharga Negara	1-3%	Rp100.000 - 500.000	10	1	Tetap (Fix)	Shariah	Rendah
23	Saham	1-3%	Rp500.000 - 1.000.000	10	3	Tetap (Fix)	Konvensional	Tinggi
24	Surat Berharga Negara	Lebih dari 10%	Leih dari Rp5.000.000	10	1	Tetap (Fix)	Shariah	Menengah
25	Deposito Berjangka	7-9%	Rp500.000 - 1.000.000	10	1	Tidak tetap (Floating)	Konvensional	Menengah
26	Reksadana Pasar Uang	1-3%	Rp1.000.000 - 5.000.000	10	12	Tidak tetap (Floating)	Konvensional	Menengah
27	Reksadana Saham	7-9%	Rp500.000 - 1.000.000	20	12	Tetap (Fix)	Shariah	Rendah
28	Reksadana Pasar Uang	Lebih dari 10%	Rp500.000 - 1.000.000	20	1	Tetap (Fix)	Shariah	Tinggi
29	Reksadana Saham	4-6%	Rp1.000.000 - 5.000.000	10	1	Tidak tetap (Floating)	Konvensional	Rendah
30	Saham	1-3%	Rp500.000 - 1.000.000	20	6	Tidak tetap (Floating)	Shariah	Rendah
31	Deposito Berjangka	4-6%	Leih dari Rp5.000.000	10	3	Tidak tetap (Floating)	Shariah	Tinggi
32	Reksadana Pasar Uang	4-6%	Leih dari Rp5.000.000	20	6	Tetap (Fix)	Konvensional	Rendah