Comparative Analysis of Variables Affecting Preferences of Potential Investors for Real Estate or Stocks

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Abstract: Investing is a daunting task for potential investors since the avenues for investment are more diverse than ever. Investment options such as stocks, bonds and real estate each have common characteristics such as potential return and risk. It is crucial for investors to decide how much risk they can tolerate since higher returns are associated with higher risk. In this study, we measured the responses of 602 participants in Makassar who favor real estate investment over stock options. By using weighted average scores method of a total of 25 economic variables that affect investment decision 15 of these were found to have some level of importance for potential investors to participate in real estate investments. The participants were then asked to rank these variables based on their personal perceptions of their importance towards investing in the stock market. The respondents stated that 19 of these variables serve differing levels of importance. Inflation resistance was found to be the most influential variable for both real estate and stock investment avenues.

Key words: Investing preferences, weighted average scores, real estate, stocks, investor behavior, importance

INTRODUCTION

Individuals making investment decisions face a daunting task (Ackert and Church, 2006). Today, the financial services and the economic sector are more highly diversified than ever. This implies that individual investors have a wider range of investment instruments to invest in and a greater choice for investing their money (Warren *et al.*, 1990).

Investment options open to the public include stocks, bonds, fixed deposits, gold and real estate (Mayo, 2009). Each investment option has common characteristics such as potential return and risk. An investor must determine how much risk they are willing to bear because higher returns are associated with accepting higher risk (Dash, 2010).

The purpose of investing in real estate is to profit from future return in compensation for the cost of forgoing present consumption. However, expected returns depend on an uncertain future which always involves risks (Marwaha, 2014). The decision-making process in real estate investment refers to systematic research, acquisition, application and analysis of the desired real estate asset that satisfies the investor's economic and personal goals during their period of ownership (Lee, 2000).

The key to a successful financial plan is to reserve a large amount of savings and investing it well. The highest rate comes from stocks, bonds and other types of investments in assets such as real estate. Nevertheless,

these investments are not free from risk so one should attempt to understand what risks they will face before taking action. To understand this one must possess sufficient financial knowledge (Dash, 2010).

Perception of risk plays an important role in the decision-making process. Within behavioral finance it is assumed that information structure and characteristics of market participants systematically influence individual's investment decisions as well as market outcomes (Bennet *et al.*, 2011).

Research problems: From the explanation above, the problems for this study are as:

- Between real estate and stocks which investment alternative do potential investors in Makassar prefer?
- Which factor is most influential in deciding an investment route?
- Which factor is least influential in deciding an investment route?

Theoretical review of factors influencing investment decisions: Al-Tamimi (2005) examined the factors that influence the behavior of UAE investors in Dubai Security Market and Abu Dhabi Securities Market. Using a modified questionnaire with reference to the one used by Nagy and Obenberger (1994) which included 34 items represented in five categories (self-image/firm image, coincidence, accounting information, neutral information, advocate recommendations and personal financial

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needs). The researcher found 6 factors to be most influential, namely expected corporate earnings, get-rich-quick, stock marketability, past performance of firm's stock, government holdings and creation of the organized financial markets. The least influential factors were expected losses in other local investments, minimizing risk, expected losses in international financial markets, family member's opinions and gut feelings on economy. Religious reasons and family opinions were of not much importance for UAE financial behavior.

Kumar *et al.* (2008) examined financial product preferences of Tiruchipalli investors in order to rank their product preferences among investment choices (post savings, bank deposits, gold, real estate, equity investment and mutual funds). The respondent's preferences were known by their attributes (safety of principal, liquidity, stability of income, capital growth, tax benefit, inflation resistance and concealability). They found investors are unlikely to determine financial product preference. Therefore, investor's choices depended on what is available and personal priority ratings. In the end, they found investor preferences to be post office, bank deposits, gold, real estate, equity investment and mutual fund.

Shim observed behavioral patterns of real estate investors. Factors used for consideration in this study were investment profitability, stability, liquidity, regulations, investment locations and well-being. Responses of real estate investors were obtained through distribution of questionnaires in order to study these behavioral factors of investors in Gumi Area in South Korea. Out of 200 questionnaires, 170 responses were received from which 147 were used for final analysis. The researcher concluded that location had a positive effect on investment satisfaction, followed by liquidity, profitability and well-being. Investment satisfaction had equally positive effects on re-investment intention and trust in investment firms.

Al-Tamimi (2005) focused on identifying the relationship between financial literacy and investment decisions of UAE individual investors. They employed the use of a modified questionnaire from that used by Al-Tamimi (2005) and by Monetary Authority of Singapore (2005). This questionnaire was divided into two parts: demographic variables and educational level of UAE investors. They found no significant difference in financial literature on the basis of age, employment and monthly income but there was a significant difference between financial literacy on the basis of gender, work activity and educational level. Using a five-point Likert scale they determined that of the 37 variables affecting decisions, religious reasons was the most influential factor, contrary to the findings of Al-Tamimi (2005) while the least influential factors was rumors.

Gill examined factors that influence the decisions of Indian investors to invest in real estate. They were surveyed to evaluate their perceptions, feelings and beliefs on factors that positively influence their decision to invest in the real estate market. They found that investment expertise of investors their motivation from advisors, investment propensity of investors and age positively influences investors to invest in real estate.

Marwaha (2014) attempted to identify factors that influence individual stock investors of Punjab towards investing in real estate. This study collected responses from 124 participant using a well-structured questionnaire, finding that the security needs factor has the most significant influence on investing in real estate. Social influence and personal needs factors are the least significant influencing factors for real estate investors.

Marwaha and Arora (2015) attempted to analyze the perception of individual investors of the stock market of Punjab towards investing in gold vis-a-vis stocks. In-depth interviews were conducted to explore influencing variables of investment decisions by individual investors. A pre-tested, well-structured questionnaire was administered personally and responses by 207 respondents were analyzed. Weighted average scores method was used to identify the most and least influential variables and paired t-test was applied to the data to identify whether any significant difference in these variables existed. Inflation resistance was found to be the most important variable whereas stability of income was found to be the least influential variable for investors opting towards gold investments. High returns was found to be the most important variable towards stock purchases whereas religious reasons was found to be least influencing.

Sample: A total of 868 participants were asked in order to determine their investment preference between real estate and stocks. A total of 602 individuals in Makassar view real esatate as the more favorable investment option. This study will use the responses provided by these 602 individuals for analytical purposes. The participants were initially interviewed briefly then personally administered a structured questionnaire. Simple random sampling was used to select the sample population.

Research variables: This study follows Marwaha and Arora (2015) by using their list of variables and well-structured questionnaire items. However, for the purpose of this study, diversification needs, past portfolio performance and general trend of investment in public variables were eliminated to suit the population of non-investors in real estate and stocks. Table 1 show the list of variables used in this study and their descriptions.

Table 1: Economic variables influencing investment preference

Variables	Description
High returns	Maximum returns expected in future from an instrument
Liquidity	Converted into cash without delay at short notice and the investment is easy realizable, saleable or marketable
Convenience	Easy to invest in
Tax benefits	The return is exempted from tax, so the net return does not increase
Safety principal	Protection against loss under reasonable conditions of principal amount and expected rate of return protection
Capital growth	Appreciation in the capital value
Future security	Protection against loss in future
Flexibility	Funds are easily convertible and managed as needed
Concealability	Safe from social disorders and government confiscation
Stability of income	Uniform, assured and constant return to meet the investor's needs
Low transaction cost	Minimal cost of making an investment
Associated risk	Level of risk involved in investment
Professional management	Investment involving expert advice
Legality	Within the applicable laws of the government
Rumors	Market gossip about investments
Competing financial needs	Personal financial needs of an investor
Terms and conditions	Level of terms and conditions involved in an investment
Current economic indicators	Market indicators for an investment
Religious reasons	Social and religious concerns influencing investment
Inflation resistance	Return from the investment beats prevailing inflation
Financial analyst and advisor recommendations	Advice from financial service providers, consultants, brokers, chartered accountants, etc.
Coverage in financial news	Financial news about various investment options
Family member opinions	Opinions and preferences of family members
Friend or peer recommendations	Opinions from friends and colleagues
Fluctuations in stock market	Daily fluctuations of IDX and other Indonesian indices

Table 2: Most and least influential variables affecting real estate investments

Variables	Most imp (Freq.)	Imp (Freq.)	Ind (Freq.)	Unimp (Freq.)	Least imp (Freq.)	WAS	SD	Rank
Inflation resistance	582	15	5	0	0	4.975	0.238	1
High returns	438	155	9	0	0	4.728	0.485	2
Stability of income	298	271	15	18	0	4.425	0.687	3
Safety principal	276	167	147	9	3	4.183	0.883	4
Future security	237	219	139	7	0	4.153	0.808	5
Associated risk	133	401	66	0	0	4.112	0.565	6
Convenience	57	497	45	3	0	4.023	0.435	7
Flexibility	235	217	65	72	13	3.992	1.083	8
Liquidity	85	418	87	12	0	3.970	0.603	9
Family member opinions	199	185	146	60	12	3.842	1.060	10
Religious reasons	148	72	347	35	0	3.565	0.926	11
Low transaction cost	145	74	303	75	5	3.475	1.015	12
Friend or peer recommendations	41	334	78	70	79	3.323	1.172	13
Legality	90	95	319	92	6	3.295	0.932	14
Professional management	97	31	409	61	4	3.270	0.871	15
Capital growth	12	274	188	98	30	3.243	0.919	16
Current economic indicators	12	184	293	99	14	3.145	0.791	17
Fluctuations in stock market	2	165	301	133	1	3.067	0.716	18
Financial analyst and advisor recommendations	74	10	372	125	20	2.993	0.923	19
Competing financial needs	67	64	284	97	90	2.878	1.138	20
Terms and conditions	39	65	281	197	20	2.853	0.897	21
Concealability	4	42	348	201	7	2.735	0.634	22
Coverage in financial news	85	36	68	226	187	2.353	1.348	23
Tax benefits	2	26	74	484	16	2.200	0.562	24
Rumors	7	17	134	275	169	2.040	0.849	25

MATERIALS AND METHODS

This study employs the use of conducting brief interviews with participants then administering questionnaires. Answers provided by the participants were given using a five-point lickert scale ranging from least to most influential (for least important, for unimportant, for indifferent, for important and for most important).

Weighted average scores: The answers provided by the respondents were then analyzed using weighted average scores with scores ranging from 1-5 (least to most important). Table 2 shows a description of these variables in terms of frequencies, percentages, values, weighted average scores and standard deviation for the participants who prefer real estate investment options. Individual responses have been interpreted according to the following data adopted from Marwaha and Arora (2015):

Table 3: Most and least influential variables affecting stock investment

Variables	Most imp (Freq.)	Imp (Freq.)	Ind (Freq.)	Unimp (Freq.)	Least imp (Freq.)	WAS	SD	Rank
Inflation resistance	566	35	1	0	0	4.955	0.247	1
Safety principal	475	92	31	1	3	4.735	0.613	2
Associated risk	422	165	13	0	2	4.685	0.552	3
Fluctuations in stock market	451	77	73	1	0	4.640	0.698	4
Current economic indicators	390	189	23	0	0	4.625	0.561	5
Capital growth	386	199	15	0	2	4.622	0.574	6
High returns	357	221	21	0	3	4.543	0.615	7
Future security	265	315	20	0	2	4.412	0.588	8
Liquidity	267	278	48	2	7	4.337	0.734	9
Flexibility	96	462	39	3	2	4.088	0.519	10
Coverage in financial news	366	50	68	73	45	4.042	1.372	11
Legality	285	66	217	32	2	4.010	1.038	12
Terms and conditions	96	285	209	7	5	3.777	0.757	13
Professional management	39	308	198	54	3	3.553	0.767	14
Competing financial needs	65	332	71	120	14	3.533	1.003	15
Tax benefits	17	284	266	31	4	3.475	0.670	16
Convenience	15	329	152	104	2	3.428	0.812	17
Religious reasons	95	136	287	70	14	3.390	0.962	18
Concealability	26	42	478	52	4	3.067	0.594	19
Stability of income	68	107	225	187	15	3.053	1.020	20
Low transaction cost	110	175	55	133	129	3.017	1.450	21
Rumors	9	8	497	54	34	2.850	0.603	22
Friend or peer recommendations	109	24	114	341	14	2.798	1.175	23
Financial analyst and advisor recommendations	3	84	337	109	69	2.748	0.856	24
Family member opinions	33	59	230	198	82	2.615	1.019	25

- Most important/important if WAS ≥ 3.25
- Indifferent if 2.25 < WAS < 3.25
- Unimportant/least important if WAS ≤ 2.25

The 602 respondents were asked to rank the variables in terms of their effects on stock investment. A description of their perception on the variables in terms of frequencies, percentages, values, weighted average scores and standard deviation can be seen in Table 3.

RESULTS AND DISCUSSION

Of 868 participants questioned about their most preferable investment option, 602 respondents answered by stating their preference in real estate. This is consistent with Kumar *et al.* (2008) who found respondents to have a favorable view of real estate over stock investments. These 602 respondents were given questionnaires with 25 variables that potentially influence their investment decisions.

This study used weighted average scores method in order to give nominal values to the answers provided by the sample population. These individuals were given questionnaires where they provided their answers based on the important of the variables in regards to making investment decisions in real estate. Answers from 602 participants were collected and measured using a five-point Lickert scale where 1 means least important and 5 means most important.

First of all, we examined the responses of the respondents by measuring the influence of 25 variables

on their willingness to invest in real estate. Overall, there are 15 variables the respondents view as important when investing in real estate. These variables are high returns, liquidity, convenience, safety principal, future security, flexibility, stability of income, low transaction cost, associated risk, professional management, legality, religious reasons, inflation resistance, family member opinions and friend or peer recommendations. This contrasts with the findings of Al-Tamimi (2005) where family member opinions were unimportant for UAE investors. However, there are some similarities with previous research. Shim also found that, respondents in South Korea also viewed Liquidity as a legitimate factor when investing in real estate. Al-Tamimi (2005) found Religious Reasons to be an important factor for investors for UAE investors. It was found that of the important variables mentioned above, the most influential variable in the respondent's view is Inflation Resistance. The participants expressed their willingness to invest in real estate because of its constant appreciation in value. This is in accordance with the findings of Marwaha and Arora (2015) where they concluded that for investors from Punjab who prefer gold over stocks, the respondents viewed Inflation Resistance as the most influential variable.

In the end, we found 10 variables that do not make a difference for investors who wish to invest in real estate. These variables are capital growth, current economic indicators, fluctuations in stock market, financial analyst and advisor recommendations, competing financial needs, terms and conditions, concealability, coverage in financial

news, tax benefits and rumors. We found the least important variable for potential investors in Makassar, Indonesia to be Rumors. This is consistent with the results found by who found UAE investors to not consider Rumors when investing. This also parallels the findings by Marwaha and Arora (2015) where investors in Punjab ranked Rumors in the bottom three variables of 28.

Another aspect measured in this research was the level of influence these 25 variables had on the respondent's willingness to invest in stocks. In the end, we found the respondents to consider 18 variables to have some level of importance if willing to invest in stocks. These variables are religious reasons, convenience, tax benefits, competing financial needs, professional management, terms and conditions, legality, coverage in financial news, flexibility, liquidity, future security, high returns, capital growth, current economic indicators, fluctuations in stock market, safety principal and inflation resistance of these 18 significant variables in affecting investments in stocks, 12 of these variables were found to be of importance to the sample population used by Marwaha and Arora (2015). The differing variables are convenience, diversification needs (not used in this study) risk associated, rumors, concealability, professional management, past performance of portfolio (not used in this study) and general trend of investment in public.

CONCLUSION

The variables found to be most important to potential stock investors is inflation resistance, similar to the potential real estate investors mentioned previously. This differs with Marwaha and Arora (2015) who found High returns to be the most significant variable. In our study, High returns was ranked 7 among the 12 variables found to have some level of importance.

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