PLANNING MALAYSIA:
Journal of the Malaysian Institute of Planners
VOLUME 22 ISSUE 4 (2024), Page 86 – 98

EXPLORING INSTITUTIONAL INVESTORS' DETERMINANTS OF INVESTMENT IN AFFORDABLE HOUSING FUND

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Abstract

This study attempts to explore factors that may attract institutional investors to invest in affordable housing funds in Malaysia. Six traits of investments were tested, namely fund structure and mandate, market return, social return, risk mitigation, governance and transparency, and government support for the investment. Based on the six determinants, the study uses a partial least square structural equation modeling (PLS-SEM) technique using data gathered from a survey involving employees of institutional investment firms in Malaysia. The study found three significant factors motivating institutional investors to invest in affordable housing fund, namely social return, government support, and governance and transparency. Overall, it was found that institutional investors do greatly consider social elements in their investment decisions. This will potentially open new avenues in fundraising efforts to build more affordable housing, hence providing an adequate supply of these homes for those in need.

Keywords: Affordable Housing, Institutional Investors, Investment Determinants, Social Investment

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INTRODUCTION

Providing shelter is one fundamental human rights component that Islamic economics and finance must give undivided attention to. However, this is challenging since high house prices have been set by market forces. Consequently, one of the biggest problems facing large cities worldwide, including Malaysia, is having houses that are affordable. People naturally turned to the government for help since housing is a problem that need to be addressed on a social and political level. However, the government's options are constrained due to its limited fiscal capacity. In the same way, private developers will not construct unprofitable homes. Therefore, one potential solution is to get investments from institutional investors, who have large financial resources and could be able to resolve this conundrum.

One of the key initiatives to attract institutional investors to invest in affordable housing projects is to create instrument(s) that suit their risk profile and investment appetite as suggested by (Mohd Daud et al., 2020). This research surveys institutional investors in Malaysia on their preferences towards certain variables that may attract them to invest in affordable housing projects as proposed by (Mohd Daud et al., 2023). Six variables are tested, namely structure and mandate, market return, social return, government support, risk mitigation, and governance and transparency.

This research contributes to knowledge in four ways. First, this study is among the limited research done on trying to understand the motivation of institutional investors in their investment decision-making process. Particularly in the Malaysian context, there is limited research on these institutions, despite their significance influence in the financial market, due to huge amount of funds under management of these institutions. Second, research on institutional investors at the global level is also scarce. This study contributes to understanding institutional investors' decision-making and determinants of interest in their investment. Third, this study identifies crucial property trust funds performance indicators that may entice institutional investors to make investment. The policymakers may benefit by applying the attributes in structuring the investment vehicles. Fourth, although the study's main intention is to investigate what makes institutional investors want to invest in affordable housing funds, these same factors could be relevant to other socially conscious investment projects.

This article's remaining sections discuss the literature on investment determinants, the study methodology, and an interpretation of the findings. We wrap up this research by outlining the main findings and their implication for policymakers.

LITERATURE REVIEW

Since the inception of the global financial crisis, restrictions on public and private institutions have compelled governments in the United Kingdom and Australia to

encourage institutional investors and do research in this field (Milligan, Yates, Wiesel, & Hal, 2013; Milligan, Yates, Wiesel, & Pawson, 2013; Montague, 2012). The impetus behind these initiatives originated from the prosperous experience of the Low-Income Housing Tax Credit (LIHTC) system in the United States, which attracted considerable attention from institutional investors seeking to allocate capital towards social and affordable housing (Lawson et al., 2010). Despite being extensively and formally announced (M Berry et al., 2006; Mike Berry, 2000), the effort to solicit capital from institutional investors was unsuccessful, both in the United Kingdom (Crook & Monk, 2011) and in Australia (via public-private partnerships, equity investments, mortgages, REITs, housing supply bonds, and equity investment) (Milligan, Yates, Wiesel, & Pawson, 2013). Mohd Daud et al., (2020) emphasized the need for increased supply of affordable housing by encouraging institutional investors to invest more in such developments. A progressive affordable housing policy, with the primary objective of addressing prevailing challenges in affordable housing, is an essential requirement for the realization of such scheme (Mohd Daud et al., 2022).

Milligan, Yates, Wiesel, Hal, et al., (2013) & Pawson & Milligan (2013) delineated a multitude of factors that influence allocations towards the provision of affordable rental homes. The factors include resilient demand for rental housing, population and household growth, dynamics of social and economic structures that delay homeownership, major disruptions in traditional financing accessibility brought on by the global financial crisis, shortages of housing supply, and concerns about housing affordability. In addition, they outlined several significant obstacles that prevent institutional investors from investing in affordable housing in Australia. The critical factors include suboptimal returns when compared to infrastructure investments, compliance charges such as stamp duty and land taxes, risks associated with house prices and market information, counterparty and scale constraints, liquidity concerns arising from the lack of a secondary market, and intricate administrative matters. Regarding the concerns, several suggestions were put out, including risk mitigation, effective governance framework, and the imperative for governmental backing, particularly to initiate the undertaking. Their primary recommendation was to reduce the associated risks to attract institutional investors who would be willing to participate despite the potentially low return, provided that a reasonable risk-adjusted rate of return was offered.

Due to the paucity of research on the factors that attract institutional investors to invest in affordable housing, Socially Responsible Investment (SRI) was added to the evaluation. One could characterize an investment in affordable housing as a social investment. Social return, market-based return, risk mitigation, transparency and corporate governance, and government support were the other determinants to be tested.

Social return is the primary determinant. SRI funds, according to Benson & Humphrey (2008) are less return-sensitive than conventional funds. A range of factors, including non-financial rewards or utility (Beal et al., 2005; Bollen, 2007), social relations (Galema et al., 2008), collectivism (a type of social cohesion), religiosity, and environmental attitude, are considered by investors in this regard (Sreekumar Nair & Ladha, 2014).

Market-based return continues to be a significant factor in investment attraction (Bland et al., 2015; Galema et al., 2008). According to a study by Mukherjee & Roy (2011), return on equity for debt instruments had an impact on investment decisions for mutual funds in the India market, but not for equity instruments. As posited by Galema et al., (2008), administration expenses must be minimal to guarantee an adequate market return.

In addition, adequate risk reduction is a crucial factor in attracting investments. Management risk, property risk, and operational risk are among the most significant dangers. Furthermore, because of the investment's distinctive and innovative framework, investors demand a greater risk premium (Lawson et al., 2009, 2010; Milligan, Yates, Wiesel, & Hal, 2013). Bland et al., (2015) identified three significant characteristics that significantly impact depositors' demand for government investment instruments in Texas: default risk, liquidity risk, and market risk. Mutual funds, according to Ferreira & Matos (2008), prioritize liquidity to a larger extent than insurance firms and banks. In addition, they stress the importance of having an adequate-sized fund to mitigate information asymmetry.

The risk premium of the investment may be diminished, or the government may assist in the form of a reduction in the development's associated expenses. Tax incentives, subsidies, reduced compliance obligations, higher density, lenient loan terms, and decreased investment transaction costs comprise the associated costs. Government guarantees comprise the majority of the risk premium (Gurran & Phibbs, 2013; Lawson et al., 2009, 2012; Milligan, Yates, Wiesel, & Hal, 2013).

The behavioral components of investing decisions cannot be ignored, even if the goal of this study is to investigate how institutional investors' motivations influence their choices. The behavioral aspects of human choice, such as attitude and belief, are still significant in this study since it focuses more on the crucial success element influencing institutional investors' investment decisions. Standard items from behavioral theories like the Theory of Reasoned Action and the Theory of Planned Behavior are incorporated and utilized in this research.

Based on the above, this research identified a deficiency in the literature about the financing of the development of affordable housing in Malaysia, particularly regarding institutional investment that is open to the principles of social finance and responsible financing.

RESEARCH METHODOLOGY

This study uses purposive non-probability sampling method, by collecting data from a sample of institutional investors in Malaysia. The respondents are selected based upon the criteria that they must be employees of institutional investment firm and involved with investment activities in their job. These institutional investors might include the Armed Forces Fund Board (LTAT), Permodalan Nasional Berhad (PNB), Tabung Haji, Retirement Fund Incorporated (KWAP), Employee Provident Fund (EPF), and Khazanah Nasional Berhad.

For data analysis, we employed Partial Least Square Structural Equation Modeling (PLS-SEM). SEM can quantitatively evaluate previous theoretical hypotheses in comparison to empirical evidence. Using this method, the properties of the scales employed are measured against the theoretical constructs and relationships among said constructs are hypothesized (Barclay et al., 1995; Chin et al., 2003).

A total of 252 answers were obtained. With an average of six to ten years of work experience in institutional investment, most respondents work in the departments of equities and fixed income investments. Majority held a bachelor's degree, with a significant number also had professional qualifications like CFA and ACCA.

ANALYSIS

There are 46 constructs used to measure the six variables. The evaluation of multi-collinearity among indicators is done to validate the formative measurements. The results in Table 1 show that all indicators for formative constructs satisfy the VIF values and they were consistently below the threshold value of 5 as suggested by (Hair et al., 2017). It can thus be concluded that collinearity was not a problem for the estimation of the PLS path model and did not approach critical levels in any of the formative constructs.

Next, the significance and relevance of the formative constructs' outer weights were then analysed. The results suggest too many non-significant results for the items. As posited by Hair et al., (2017), the non-significant indicator weights should not be automatically excluded as poor measurements. In essence, consideration should be given to the formative indicator's absolute relevance to its construct (i.e. its loading). Apart from items MR01, MR04, SM08, and IN06, which did not meet the minimal requirements of loadings over 0.50 and t-values more than 1.96, the outer loading findings show that all formative indicators were significant. However, prior research supported the inclusion of item MR04 to capture the operational definition of Market Return (Li et al., 2005). Nevertheless, Item SM08 was retained to capture the operational definition of structure and mandate due to the content validity process's strong support. Consequently, the formative construct's elements MR01 and IN06 were removed. Table 1 outlined the final outer loadings for all the constructs.

Table 1: Outer Loadings Result for Constructs

Construct	Items	Loading	VIF	t-value weights	Sig
Structure & Mandate	SM01	0.546	1.299	4.934	0.000
	SM02	0.753	1.537	8.479	0.000
	SM03	0.259	1.340	2.123	0.034
	SM04	0.653	2.135	6.815	0.000
	SM05	0.501	2.017	4.652	0.000
	SM06	0.449	1.489	4.100	0.000
	SM07	0.523	1.570	4.862	0.000
	SM08	0.323	1.359	2.571	0.010
	SM09	0.633	1.303	7.209	0.000
Market Return	MR02	0.624	1.415	4.377	0.000
	MR03	0.669	1.171	4.567	0.000
	MR04	0.149	1.171	0.765	0.444
	MR05	0.734	1.220	5.148	0.000
	MR06	0.369	1.031	2.250	0.024
Social Return	SR01	0.730	2.162	10.777	0.000
	SR02	0.763	3.598	11.496	0.000
	SR03	0.821	3.851	15.359	0.000
	SR04	0.735	1.751	10.787	0.000
	SR05	0.850	2.864	12.643	0.000
	SR06	0.764	1.951	9.098	0.000
	SR07	0.775	1.837	10.646	0.000
Risk Mitigation	RI01	0.822	1.318	10.821	0.000
	RI02	0.495	1.310	3.998	0.000
	RI03	0.599	1.214	5.304	0.000
	RI04	0.418	1.468	2.367	0.018
	RI05	0.639	1.478	5.552	0.000
	RI06	0.382	1.187	2.637	0.008
	RI07	0.462	1.370	3.558	0.000
Governance & Transparency	GT01	0.345	2.555	1.955	0.051
	GT02	0.362	2.886	2.127	0.034
	GT03	0.706	2.223	5.792	0.000
	GT04	0.674	1.202	7.494	0.000
	GT05	0.887	1.795	13.569	0.000
	GT06	0.296	1.532	2.087	0.037
Government Support	GS01	0.654	1.617	6.862	0.000
	GS02	0.741	1.486	7.966	0.000
	GS03	0.666	2.062	5.686	0.000
	GS04	0.534	2.309	5.206	0.000
	GS05	0.471	1.936	3.809	0.000

Construct	Items	Loading	VIF	t-value weights	Sig
	GS06	0.616	1.684	6.056	0.000
	GS07	0.471	1.556	4.748	0.000
	GS08	0.734	1.473	8.956	0.000
	GS09	0.730	1.973	6.672	0.000
Intention to Invest	IN01	0.809	1.897	11.728	0.000
	IN02	0.620	1.347	6.525	0.000
	IN03	0.607	1.213	6.137	0.000
	IN04	0.822	3.068	11.456	0.000
	IN05	0.767	2.646	11.509	0.000
	IN07	0.498	1.250	4.074	0.000

Standardized Root Mean Square Residual (SRMR) was used to quantify the model's goodness of fit after the measurement model was evaluated. The squared difference between the observed and model-implied correlations is known as the SRMR. A value of SRMR less than 0.1 is considered a good fit (Hu & Bentler, 1998). The value of the Standardized Root Mean Square (SRMR) analysis is 0.089. This suggests that for both saturated and approximated models, the model fits data rather well. After that, the structural model is assessed for lateral collinearity issues. Results shows that all the Inner VIF values for the independent variables are less than 5 and 3.3, thus indicating collinearity is not a concern (Hair et al., 2017).

Evaluating the importance and applicability of the structural model connection is the second phase in the structural model evaluation process. It is clear from examining the relative significance of the exogenous variables in predicting the dependent construct (Intention to Finance) that Social Return (0.322), Government Support (0.279), and Governance & Transparency (0.182) are the most significant predictors. At the 95% significance level, these three predictors were significant. The remaining three predictors - Market Return (0.078), Structure & Mandate (0.073), and Risk Mitigation (0.027) were not significant and were considered weak predictors. Additional analysis is performed by evaluating the confidence interval bias adjusted to confirm this. To interpret the analysis's findings, the study examines the figure at 5.0% and 95.0% confidence intervals. If 0 is not straddled in between the confidence interval bias results, this indicates a significant result (Ramayah et al., 2018). The findings for Social Return, Government Support, and Governance & Transparency were significant, but Market Return, Risk Mitigation, and Structure & Mandate were not. Then, value of R^2 is evaluated. The value of R^2 is 0.561, and the value of adjusted R^2 is 0.55. These values are moderately predictive and accurate (Hair et al., 2017).

Assessing the amount of effect size (f2) is the next stage in the evaluation of the structural model. The f2 values of 0.35, 0.15, and 0.02 are

considered as large, medium, and small respectively (Cohen, 1988). The outcome shows that R2 (Finance Intention) has a large effect from Government Support (0.111), Social Return (0.099), and Governance and Transparency (0.049). The outcome also suggested that R2 (Finance Intention) has a small effect from Market Return (0.01), Structure and Mandate (0.007), and Risk Mitigation (0.001). The final path coefficient of the model was generated after all the assessments were completed. The result of assessment of structural model using PLS-SEM in Figure 1 suggests that there are significant results for Governance & Transparency, Government Support and Social Return, whilst depicting a non-significant result for Market Return, Risk Mitigation and Structure & Mandate.

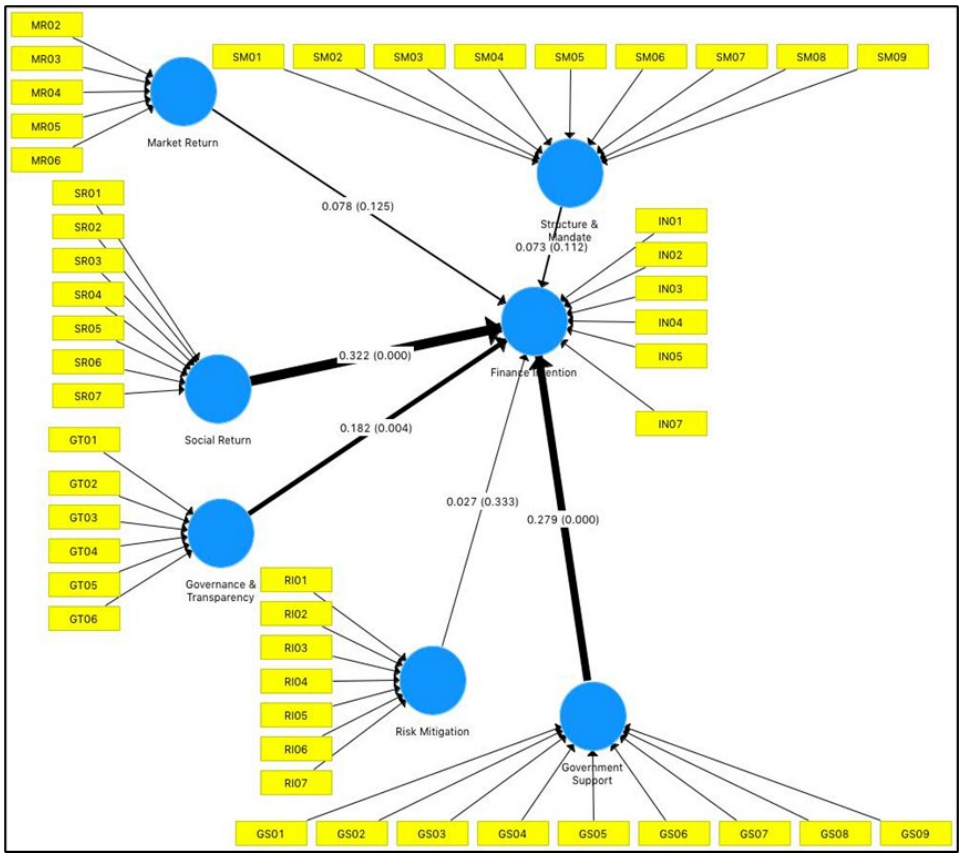

Figure 1: Assessment of structural model

Institutional investors consider social return as the most important predictor. This outcome is consistent with the directive of certain institutional investors, who are only allowed to make investments in conformity with the

United Nations Principle of Responsible Investment (UNPRI), Environmental, Social and Governance (ESG), and Socially Responsible Investment (SRI). Other institutional investors will attempt to follow the Malaysian Code for Institutional Investors if they are not mandated to invest in SRI/ESG/UNPRI compliance. Furthermore, the United Nations Principles for Responsible Investment (UNPRI) are endorsed by one institutional investor, KWAP. The UN Secretary-General called for the creation of UNPRI, which was developed by a global consortium of institutional investors considering the significance of environmental, social, and corporate governance concerns in the investing process. In essence, investments that adhere to SRI/ESG/UNPRI investing guidelines will entice institutional investors. This is consistent with the findings of Pasewark & Riley (2010), who discovered that investors care about social return in addition to monetary gain.

The second most important factor that has been shown to be critical in enticing institutional investors to make investments is government assistance. Since the present housing market is thought to be skewed and needs government intervention to fix the imbalances in the market, help from the government is considered required. Items in the questionnaire addressed to institutional investors focus more on reducing red tape, lowering compliance costs and stamp duty, and offering an investment-friendly legal environment. These will not require monetary backing from the government. The finding is aligned with research by Gurran & Whitehead (2011), who outlines the importance of government support to attract investment, especially for greenfield project which does not have track record.

Institutional investors regard governance and transparency as important predictors as well. The public's constant scrutiny of institutional investors makes strong governance and increased transparency imperative. The result is in line with Schaefer (2003), who indicates that good governance and transparency to be substantial determinants of luring investment. Essentially, number of variables in this theme such as investor protection (Abdioglu et al., 2013; Aggarwal et al., 2005); high information disclosure (Abdioglu et al., 2013); transparent market (Gelos & Wei, 2005); issuance of instrument by strong institution (Cai & Warnock, 2006); separation between ownership and control (Kim et al., 2011); diluted ownership structure (Ferreira & Matos, 2008); and transparent accounting policies (Aggarwal et al., 2005) are key towards achieving good governance and transparency.

It is interesting that market return, commonly perceived as one of the most important factors in deciding investment decisions, is not a main predictor of institutional investors' decision to invest. This negates the finding by Milligan, Yates, Wiesel, Hal, et al., (2013), who expect that the market-based return to play a significant role in attracting investment towards financing affordable housing. Nonetheless, care should be used when interpreting the analysis's findings. The

concept of market return is constructed using three distinct benchmark items for comparative analysis: one that pertains to cost-benefit analysis, another to the fiduciary obligation of investors to maximize returns, and a third that is profitability-related. From these five items, three items are significant at 95% significance level, which are benchmarking against Malaysia House Price Index, benchmarking against Sustainable and Responsible Investment (SRI) sukuk, and institutional investors' fiduciary obligation to provide investors with the maximum possible return. The institutional investors appear to be at odds with the reduced return on investment that may result from funding an affordable housing project; they may think that the effort may be competitive and provide a respectable return without sacrificing affordability. Additionally, the benchmarking exercise will go against the primary motivation for establishing the Fund, as the management of the Fund will want to maximize profit rather than provide housing at a reasonable cost.

Another predictor that is insignificant is structure & mandate. Majority of the respondents support the Fund's designation as SRI fund. This is potentially due to institutional investors in recent times have a mandate of investing only in ESG and SRI compliance investment. Furthermore, those surveyed express a preference for the Fund to be supported by the government or government-affiliated institutions.

Risk Mitigation is another construct that is rated as non-significant. This contradicts with Northern Ireland Assembly (2010), which argue that sufficient risk mitigation strategy employed will encourage investors to contribute to the financing of affordable homes. Like the Market Return, though, one should proceed cautiously when dealing with this predictor's insignificance. Most of the elements on this construct are designed to reduce risk through involvement and guarantees from the government. The findings may indicate that while the respondents did want the government to be involved in the program, they did not want it to go so far as to interfere or offer guarantees.

CONCLUSION

The characteristics of investments that might entice institutional investors to fund affordable housing projects in Malaysia are examined in this study. For policymakers to create investment vehicles that may be used to entice private investment into this project, it is imperative that they identify and outline these characteristics. Rent-capped housing and a new business model for housing supply with regulated profit are necessary for this to be successful. In essence, a comprehensive strategy to housing finance and development with the involvement of institutional investors may be able to achieve the Malaysian government's aim of delivering more affordable housing units. It is thus necessary to establish affordable housing as an asset class to achieve this aim.

ACKNOWLEDGEMENT

This research received a grant from Khazanah Nasional Berhad Research Grant (Ref.No: RWC23:03/2016/KIR/016)

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Received: 28th Jan 2024. Accepted: 8th July 2024

