

JUSTICE AND NATURE OF CONTRACT AS DETERMINANTS OF ABANDONED HOUSING PROJECTS

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Abstract

This study aims at exploring the perception of stakeholders, particularly the home buyers, about the causes of abandoned housing project (AHP) in Malaysia. In terms of approach, assessing the determinants of AHP could assist in mitigating the effect of AHP in Malaysia. In this study, we employed factor analysis and structural equation modelling (SEM) to achieve the stated objective. The total sample size of the study comprises of 328 respondents that cut across all states in Malaysia. Two main constructs, namely justice and nature of contract are considered in this study. Furthermore, the results of the SEM revealed that lack of justice and weak regulatory system, coupled with the nature of the contract of financing significantly contribute to the problem of AHPs. Hence, it is suggested that fairness in the contract (e.g., risk sharing) and sound regulatory system could help in mitigating the effect of abandoned housing problems. The samples of this study are confined to Malaysians in Selangor and Kuala Lumpur. Further testing of the proposed model across different states is needed to determine the generalisability of this study's findings. The current study only examines two factors, which may limit its generalisation. Further testing on other factors is also needed to extend the findings. Concerning the research implications, the results obtained provide directions to policymakers to deal with the issue of AHPs in Malaysia. On the same note, results obtained provide better guidelines to improve the working practice for housing projects among developers. For originality, this study examines the determinants of AHPs in Malaysia. A framework developed captures the importance of justice and nature of the contract to mitigate the AHPs in Malaysia.

JEL Classification: R2; R21.

Keywords: AHP; Justice; Nature of contract; SEM.

1. Introduction

Though the Malaysia housing sector has achieved tremendous strides over the years by making housing affordable to a large part of the population, the

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housing sector is still inundated with numerous challenges, particularly the issues of AHP.

The philosophies employed in this study lie in the application of protecting the interest of house buyers using a maqasid al-Shariah as a point of departure. In the maqasid, five essential elements are protected for the well-being of ummah. The said elements are life, religion, intellect, property, and lineage, where providing equity financing to individuals can protect these elements. Any practices mar the said elements are considered haram and not permissible in Islamic banking and finance context.

There is no generally agreed definition of abandon housing in the literature (Morckel, 2014). This is the reason why various researchers came up with uncountable operational definition to represent or serve as a proxy for abandoned housing. Mallach (2006) for instance defined abandoned projects as those properties whose owner has stopped carrying out at least one of the important responsibilities of property ownership, as a result of which the property is vacant or likely to become vacant. In another study, Marcuse (1985) defined abandoned projects as the property where the owner is willing to surrender title to it without compensation because of the absence of effective demand for its continued use or reuse. Hence, researchers have used various operational definitions to represent the same construct. Based on the definition of Ministry of Housing and Local Government (MHLG), abandoned housing has been defined as any housing projects that have the following features:

- a) Construction activities on site of the housing construction project have stopped for 6 (six) months or more consecutively, after the expiry of the Sale and Purchase Agreement (SPA) executed by the developer and the purchaser or;
- b) The developer has been put under the control of the Official Receiver, and the Housing Controller is of the opinion that such developer cannot duly proceed with the execution of its obligations as a developer.

The Malaysian government has demonstrated tremendous interest and has achieved great strides in ensuring that her citizens are provided with affordable houses, especially the middle-income group. Thanks to the political, economic and social stability enjoyed over the past few decades. Through government strategic role and friendly policies, private sector participation has complemented government efforts in providing houses for the rapidly expanding middle class. Various strategies and approaches were taken. The enhancement of liquidity for the financial institutions mainly through the establishment of the secondary market spearheaded by CAGAMAS is one of the various policies that have helped in boosting home financing for most Malaysian. Indeed, as at 2012, housing loans in the Malaysia banking sector have been estimated at RM292.7 billions, representing 31% of the GDP (Cagamas, 2013).

Even with its tremendous achievements, the housing sector is saddled with numerous challenges, most especially the issues of AHPs. This has continually been a nightmare, particularly to the home buyers and government. As at mid of 2014, a total number of 211 sick housing projects, 33,647 houses and 22,135

house buyers in Malaysia had been abandoned by the private developers for various reasons.² The issue of abandoned housing is burdensome, not only to the home buyers, but also to the government and society. For instance, homeowners are required to pay back the loans, despite the fact that there is no guarantee of completion and handing over of the house. In addition, the problem of abandoned housing can jeopardise the government efforts of further developing the housing sector. It is no doubt that increasing rate of AHP has posed a serious headache to the government.

Despite the problems presented by the alarming rate of AHP, studies that explore the causes and perception of the stakeholders on this important issue are limited. The present studies, therefore, aim to fill this gap by exploring the perception of the customers about the causes of AHP in Malaysia. One of the significant contributions of the present studies is that it explores the causes of AHPs from the perspective of justice and the nature of the contracts between the banks, developers and the home buyers. The absence of justice and nature of contract has been characterised in the manner in which the risk and burden of AHPs are transferred to the house buyers. Even though the issues of justice and weak regulatory dominate in the discourse of AHPs, empirical evidence based on these two factors are limited.

2. Literature review

Justice and fairness constitute essential element towards successful implementation of transactions or contracts. The absent of fairness in any business dealing or contract may result in less commitment and subsequent failure of the project. In relation to AHPs, various studies have attributed justice as one of the main problems.

Before the emergence of Islamic finance, home financing was mainly done using interest-based conventional financing mode. This model has been highly criticised for being unfair and put too much burden on the home buyers. According to Amin and Chong (2007), the home buyers' periodic payment is determined by the movement of interest rate. This implies that customers' instalment payments are not fixed and is likely to increase with any increase in interest rate. As such, the banks shift all the related risk to the customers.

Considering the principle of Islamic finance which emphasises on fairness and transparency in business dealing, the notion of injustice is expected to be reduced. The dominant debt structured of Islamic home financing, however, made it looks similar like conventional financing mode. According to Dahlan and Aljunid (2010) who assessed Shariah and legal issues in the bai bithaman ajil (BBA), BBA which is one of the main financing products used in Islamic finance, marred with injustice and unjust to the customers. In the case of default, for instance, the borrower has to repay to the banks the whole amount of sale price, which is usually higher than the purchase price in the SPA entered into by the house buyer. The whole amount of the debt, together with the margin portion should be limited to the repayment period which the house

² Source: MHLG.

buyers have utilised, occupied and enjoyed rather than the blanket amount of the whole repayment period as contained in the SPA.

Based on the findings of the authors, BBA is embedded with a high level of uncertainty, which constitutes one of the major grievances of the purchaser in AHPs. According to the authors, the position regarding the status of the house, the charge, the ownership, the purchaser, the bank and the developer in the BBA transaction is ambiguous. BBA contract is equally considered as unfair to the public because the profit margin is higher than the debt owed. Moreover, the purchasers or borrowers are still required to pay monthly instalment to the banks, even if the housing project is subsequently abandoned. This thus makes the banks to worry less about the issue of abandoned housing, since their monthly instalment is guaranteed. The purchasers are, therefore, the victims in abandoned houses issues because they must continue paying the instalment, yet they cannot occupy the purported houses. In a situation where the return of the banks is tied up to the performance of the contract, the banks will take appropriate measure before realising money to the developers with more commitment to regularly evaluate the progress of the contract.

In support of the above argument, Razali (2011) indicated that the current system of house delivery (i.e., sell-then-build (STB)) had been acknowledged to help more people as home-owner, but it has, however, shown to be unsustainable due to the high occurrence of delay and AHPs. According to the author, the STB system has been blamed for the rising case of abandoned housing because it puts the house buyers at the mercy of the developers. The system, therefore, makes it possible for the house buyers to bear the business risk of the developers through the progressive payment. This thus purely reflects injustice on the part of the house buyers.

The issue of injustice faced by the house buyers has been further expounded by Yap (2013), that house buyers are the immediate victims the event of abandoned projects. For the fact that the house buyers bear the business risk that supposes to be borne by the developers, they (i.e., developers) take less measure to prevent the project from abandonment. This has resulted in a lack of feasibility studies and mismanagement of financial resources. Despite the fact that the project becomes abandoned, the house buyers are mandated to service the bank loans. In addition, the house buyers are denied the benefits of potential property value appreciation and rental collection. Another aspect of injustice that contributes to abandoned project is high interest rate which affects the sales and cash flow of the project (Yap, 2013).

Similar view has been expressed by Tan (2011) who indicated that the main victims of abandoned comprise mainly of low and middle-income groups, that bear a large portion of the risk involved when buying a house. As further stated by the author, there are cases where developers employed substandard materials such as leaking roof and uneven flooring. This is made possible due to the delivery system, whereby developers receive money before completion of the project, and lack of law that protects the house buyers for such breach of contract.

Khalid (2010) assesses the development of abandoned housing in Malaysia using mixed method approaches. According to their findings, the strict and unfair condition imposed by the financial institutions for approving bridging loans contribute to the problem of AHPs. One of such condition demands that the bridging loans can be approved subject to 80% of the housing units being sold. This suggests that failure to achieve 80% of the housing sales by the developers means that they will not get approval for loans, and they have to use their funding. Furthermore, it is stated that bridging loans represented about 30% of total development costs, and it was very important for the developers to initiate the housing project. The cost of loans is a huge burden to the developers and the home buyers, and this can significantly affect the completion of the projects.

As argued by the Association of Abandoned Building Owners (AABO) in Malaysia, banks rather than buyers should bear the risk of AHPs. The banks care less about the abandoned projects, since the bulk of the burden is borne by the home buyers rather than the banks and the developers who have real direct control. The banks in most cases do not care about the viability of the housing projects, since their regular payment by the homeowners is guaranteed irrespective of the completion of the projects. According to the report, most victims of AHP recommended the build-then-sell (BTS) model. Meanwhile, the president of the AABO argued that such a model would be too riskier for the big project, rather the solution lies on the risk sharing between the developers and the banks. This thus indicates that the prevalent injustice in terms of transferring the bulk of the risk to the house buyers is a significant contributing factor to the problems of abandoned housing.

Another leading cause of abandoned is a lack of effective regulatory system. As indicated by Hoe (2013), lacking home indemnity insurance, no special tribunal for home buyers claims, and lack of effective planning and land policy significantly contribute to AHPs. The existence of an effective special tribunal, whereby errant developers are penalised could serve as a deterrent to others. This may thus make the developers take proper measure that could lead to the abandonment of the project. Tan (2011) identified some natures of the regulatory system such as the ambiguous relationship between federal, state and local level, delay in the process and approval of an application for land development, conversion, subdivision and issuance of titles that contribute to abandoned projects. The same view has been expressed by Khalid (2010) who relates weak institutional factors as one of the leading causes of abandoned houses.

Thornton (2007), in his survey, finds that slow collection, low profit margins, and insufficient capital or excessive debt are the three major causes of financial difficulties among contractors. Some of the contractors are overburdened with debt due to excessive interest rate and other loans condition. In addition, it is equally stated that poor site management significantly contributes to the problem of AHP. This might be due to the possibility of transferring the bulk of the problems to the home buyers. As such, the contractors care less about effective site management since they are going to be less affected if the project is abandoned. If the contract is

structured based on profit–loss sharing basis, all parties might take site management seriously to protect their respective investment.

Several studies also pointed that abandoned housing problems are mainly due to the nature of the contract (i.e., STB system) (Sufian & Sopian, 2009). According to several commentators, the STB system has caused unbearable damages to households (Md. Dahlan, 2006; Sufian & Sopian, 2009). An example of the problem witnessing is the situation where developers collect a deposit from purchasers and then disappears. As such, some developers collect booking fees and deposits with completing delivering the projects.

Nevertheless, the decreasing popularity of BBA among financial institutions in Malaysia, *tawaruq*, which is predominant is also debt-based in structures. As such, injustice in the contract is still an issue. According to Siddiqui (2006), *tawaruq* just like other debt-structure contracts is detrimental to a healthy economic environment and tends to favour one party of the contract more compared to the other.

Based on the review, abandoned project is due to the interplay of various factors that mainly comprises of injustice in contract, which transfer most of the risk to the house purchaser, ineffective regulatory system, and the nature of the contract.

3. Methodology

The main objective of this paper is to assess the perception of the home buyers. Specifically, the study seeks to assess the problem of abandoned house from justice and nature of the contract perspective. As such, a self-structured questionnaire based on 5 Likert scale was developed. The questionnaires were distributed to a sample of 500 respondents that are selected based on judgmental sampling methods. By definition, it is a type of non-random sampling in which the researcher selects units to be sampled based on their knowledge and professional judgment.

The statistical techniques mainly used in this study are factor analysis and SEM. The current study opted SEM owing to the merits possessed by the model; (1) treatment of both endogenous and exogenous variables as random variables with errors of measurement (2) latent variables with multiple indicators (3) separation of measurement errors from specification errors (4) test of a model overall rather than coefficients individually, and (5) handling of non-normality data (Golob, 2003).

The first part of the analysis involved factor analysis. To reduce the number of elements into a manageable size to ease the analysis, we employ confirmatory factor analysis. This procedure helps in reducing the number of variables into a small set of factors (Hair et al., 2010). Factor analysis can help in reducing items to form a smaller number of coherent subscales (Hair et al., 2010). SEM is then employed to assess the relationship between the variables that contribute to abandoned housing problem.

4. Research hypotheses and framework

Regarding the effect of justice and regulation on the AHP, many kinds of literature have linked the problem of AHP to justice issues and inefficient regulatory system. Khalid (2010) for instance indicated that the banks impose

stringent and unfair conditions on the developers before the required funding, which sometimes consequently lead to project been abandoned. The influences of injustice and weak regulatory framework that protect the interest of the various stakeholders have been emphasised by Amin et al. (2015) and Ibrahim and Kamarudin (2014). Justice has been considered important in Islamic banking, as it plays a role in balancing the need between the transacting parties. The key axis for justice is to tap the truest notion of the win-win situation between customers, banks and developers. Based on the discussion in the literature, the following hypotheses are developed:

H1: Justice contributes to the problems of AHP.

In addition, the nature of the contract (i.e., debt based or partnership based) has been revealed to have a significant impact on the issues of AHP. For instance, Sufian and Sopian (2009) attribute the problem of AHP to the current housing delivering method (i.e., STB method) and suggest an alternative model. Some studies equally link blame the prevalence debt based financing contract for the high rate of abandoned housing (Ibrahim & Kamarudin, 2014; Ahmad & Sabri, 2014). What is more, the issue of abandoned housing can be reduced if the contract to be transacting is on cooperatives based or somehow a partnership. In Islamic literature, musharakah mutanaqisah is an exemplary example of meeting the need of project financing partnership, where customers, banks and developers are brought into play. Hence, the hypothesis below is developed.

H2: The nature of the contract significantly contributes to the problem of AHP.

As mentioned earlier, the objective of the present study is to assess the perception of related customers in relation to AHPs. In line with this and the various findings in the literature, two main constructs, namely, justice and nature of the contract have been identified. Due to the absence of fairness in the contract, the banks transfer the risk to the customers. As such, there is no incentive to assess the credibility and progress of the project by the banks, which is expected to contribute to the problems of AHPs significantly. Also, the nature of the contract, which is predominantly debt-based in nature, may contribute to the abandoned housing problems.

Unlike the partnership contract, whereby banks are more likely to be committed because of their investment contribution, the reverse is the case for the debt based financing. Hence, the nature of the contract is likely to contribute to the AHP. As such we intend to see the perception of the stakeholders in terms of the effect of the two constructs identified on AHPs.

There are two main constructs as shown in Figure 1 represent the independent variables, namely, justice and nature of the contract. The first construct (justice) comprises of 8 elements while the second construct (nature of the contract) consists of 3 elements which are obtained from the questionnaires. AHPs composed of three elements representing some selected features of abandoned housing as included in the questionnaire.

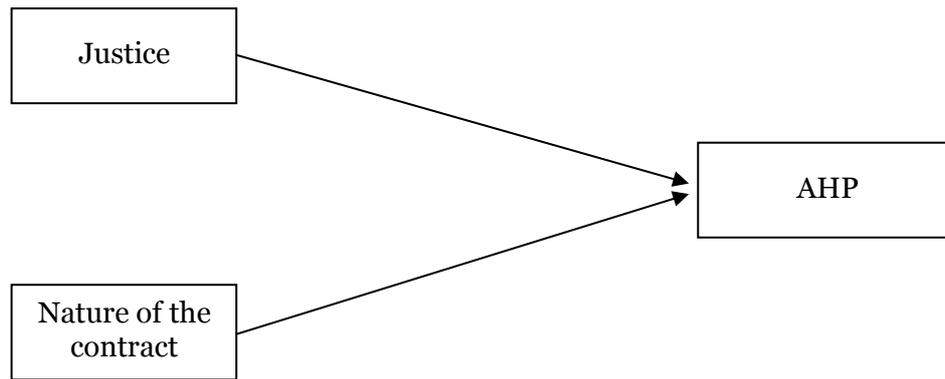


Figure 1: Conceptual framework.

5. Results and Discussions

5.1 Descriptive results

This study aims at exploring the perception of house buyers and experts on the causes of AHPs. The data are collected through survey questionnaires, involving 328 participants. The participants cut across various disciplines and expertise, and cover all states in Malaysia. As suggested by the results of the descriptive statistics in Table 1, the majority of the participants are from Selangor and Kuala Lumpur, which constitutes 33% and 30.2%, respectively. As indicated in Table 2, 176 representing 53.7% of the respondents are male, and 45.4% are female. The marital status of the respondents as indicated in Table 3 shows that majority of the respondents representing about 79.3% of the respondents are married, while 16.8% are single. Expectedly, Table 4 demonstrated that majority of the participants are of age 40 years and above. The income level as revealed in Table 5 indicated that majority of the respondents (36%) have an income level of RM3000–5000, while about 22% of them belong income level group of RM5000-10,000. Only a few of the respondents (5.5%) have income level RM10,000 and above.

Table 1: State of origin of the respondents.

State	Frequency	Percent
Kuala Lumpur (KL)	97	29.6
Penang	3	.9
Selangor	106	32.3
NS	14	4.3
Melaka	4	1.2
Pahang	18	5.5
Johor	20	6.1
Terengganu	8	2.4
Perak	28	8.5
Kedah	6	1.8
Kelantan	17	5.2
Missing data	7	2.2
Total	328	100

Table 2: Gender of the respondents.

Gender	Frequency	Percent
Male	176	53.7
Female	149	45.4
Missing Data	3	0.9
Total	328	100

Table 3: Marital status.

Marital status	Frequency	Percent
Single	55	16.8
Married	260	79.3
Divorce	5	1.5
Missing data	8	2.4
Total	328	100

Table 4: Age of the respondents.

Age	Frequency	Percent
<20	1	.3
20-30	75	22.9
31-40	77	23.5
>40	169	51.5
Missing	6	1.8
Total	328	100

Table 5: Income of the respondents.

Income	Frequency	Percent
<3000	90	27.4
3001-5000	118	36.0
5001-10000	73	22.3
10001-20000	29	8.8
Missing	18	5.5
Total	328	100

5.2 Reliability coefficient

This is the degree to which the items that make up the scale hangs-up together. One of the popular methods for measuring reliability is Cronbach’s alpha. According to Pallant (2007), Cronbach’s alpha is highly sensitive to the number of items in the scale. Its value ranges from 0 and 1, with a higher value indicating greater reliability. Based on Table 6, Cronbach’s alphas for this scale of this study are 0.789 for the first construct (i.e., justice) and 0.634 for the second construct (i.e., nature of the contract). Each of the items has Cronbach's alpha above 0.7, which is considered strong and reliable.

Table 6: Reliability test for justice.

	Mean	Std. deviation	Cronbach's alpha
Profit earned by Islamic banks should not be burdened to the customers	3.6189	1.00393	.810

Table 6 (continued).

	Mean	Std. deviation	Cronbach's alpha
Bank should not charge the customers the entire price for uncompleted houses	4.5537	.70447	.784
Customer should not be fully burdened for houses that are abandoned	3.5993	.89975	.802
Islamic home financing should comply with Shariah governance	4.4104	.81306	.774
Banks have the responsibility to ensure that house is delivered to customers	4.2606	.85397	.783
Banks should take legal action against developers who fail to deliver the house on time	4.4919	.71567	.769
Developers and their parent companies that are responsible for AHPs should be charged to court	4.2020	.97263	.797
Existing law and regulation are insufficient	3.9218	1.02601	.797
Overall alpha	-	-	.789

Table 7: Reliability test for nature of the contract.

	Mean	Std. deviation	Cronbach's alpha
Islamic home financing is free from usury	3.4510	1.18980	.672
Profit and loss sharing can help to minimised problem of abandoned housing	4.3660	.81181	.622
Islamic home financing model will help to mitigate abandoned housing problem.	3.9510	.87265	.607
Pricing of Islamic home financing is fair	3.8203	.97361	.590
Overall alpha	-	-	.634

5.3 Factor analysis

The questionnaires obtained from the 328 respondents were entered into SPSS spreadsheet upon which factor analysis technic is applied. In order to properly define the underlying structure among the variables and ease the analysis process, factor analysis is employed. According to Hair et al. (2010), factor analysis is a tool for analysing the interrelationships among a large number of variables by defining a set of variables that are highly interrelated. In line with the objectives of the present study, confirmatory factor analysis is employed. Hence, confirmatory factor analysis was employed to explore the underlying factors associated with the 37 items in the questionnaires. Following Pallant (2007), the test for construct validity was carried using Bartlett's test of sphericity and The Kaiser–Mayer–Olkin (KMO) measure of sampling adequacy. This helps in revealing the strength of the relationship

among the variables. As indicated, the results of the KMO and Bartlett’s test, which is 0.855 and 0.000 respectively is quite above the threshold of 0.6. This thus suggests a strong and significant result. It can now be concluded that factor analysis is deemed appropriate for the data.

Table 8: KMO and Bartlett's test.

Kaiser-Meyer-Olkin measure of sampling adequacy	-	0.855
Bartlett's test of sphericity	Approx. chi-square	1941.272
	d.f	276
	Sig.	.000

To determine the number of components to extract, those components with eigenvalues of less than one are dropped. As suggested by Hair et al. (2010), variables with the loading of 0.3 and above are considered significant. For the purpose of the current study, only those variables with the loading of 0.4 are considered. Based on the findings, two dimensions (i.e., justice and nature of the contract) were found to be homogeneously loaded different factors.

Table 9: Total variance explained.

Component	Initial eigenvalues			Extraction sums of squared		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	11.708	48.786	48.786	11.708	48.786	48.786
2	3.896	16.23	65.016	3.896	16.23	65.016
6	2.11	8.79	73.80			
7	2.06	8.602	82.40			
8	1.858	7.744	90.144			
9	.870	3.626	93.77			
10	.844	3.515	97.28			
11	.533	2.222	99.5			

Table 10: Factor loadings.

Item	F1	F2
(Just1) Profit earned by Islamic bank should not be burdened to the customers	0.712	
(Just2) Bank should not charge the customers the entire selling price for uncompleted houses	0.706	
(Just3) Customers should not be fully burdened for houses that are abandoned	0.668	
(Jus4) Islamic home financing should comply with Shariah governance	0.636	
(Jus5) Banks are responsible for house delivery to the customers	0.617	

Table 10 (continued).

Item	F1	F2
(Jus6) Banks have to take legal action against developers for failing to deliver the house	0.608	
(Just7) Developers and their parent companies that cause abandoned houses should be charged to court	0.587	
(NOC1) Islamic home financing is free from usury		0.919
(NOC2) Islamic home financing is fair		0.916
(NOC3) Home financing based on profit and loss sharing can help in reducing problem of abandoned house		0.912
(NOC4) Islamic home financing can help to mitigate abandoned house problems		0.907

Note: Just and NOC are justice and nature of the contract, respectively.

6. Results of Structural Equation Modelling

Sequel to the validity test and factor analysis, SEM is used to analyse the structural model. One of the main benefits of SEM is its ability in assessing the causal relationship between variables (Hair et al., 2006). The main aim of this study is to assess the relationship between two constructs namely: Justice and nature of the contract, that has eight and four elements, respectively. The following fit indices (chi-square, chi-square/degree of freedom, comparative fit index (CFI), root mean square error of approximation (RMSEA), parsimony goodness-of-fit index (PGFI)) are employed to evaluate the fitness of the data in the model. According to Table 11, chi-square/degree of freedom = 3.287; CFI = 0.841; RMSEA = 0.084; PGFI = 0.610. As suggested by the various authors (Hair et al., 1998, 2006; Hu & Bentler, 1999; Mulaik et al., 1989), the fitness indices are close to an acceptable level, and it indicates a good model fit. This thus suggests that the model employed in the present study fit the data.

6.1 Model fit indices

Table 11: Goodness of fit indices.

Fit indices	Results	Accepted value
Chi-square	286.001 (0.000) df-87	p -value > 0.05
Chi-square/degree of freedom	3.287	≤ 5.00 (Hair et al., 1998)
CFI	0.841	> 0.90 (Hu & Bentler, 1999)
RMSEA	0.084	< 0.08 (Hair et al., 2006)
PGFI	0.610	Within 0.5 (Mulaik et al., 1989)

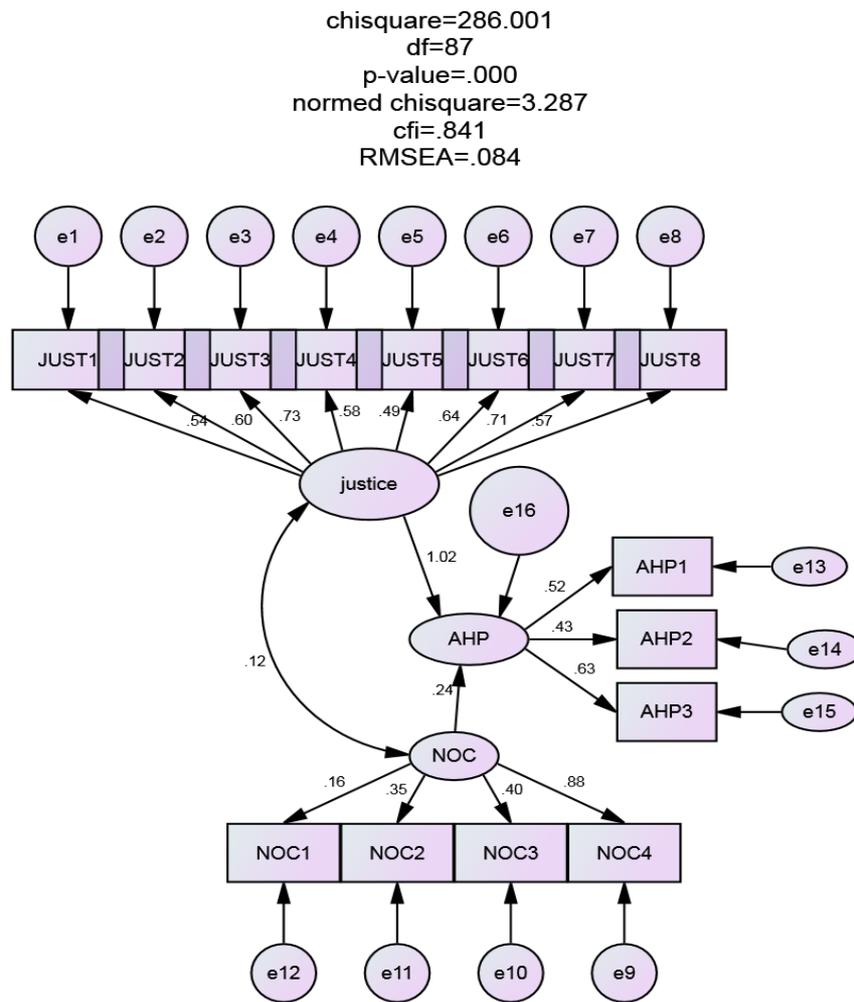


Figure 2: Analysed conceptual framework.

As presented in Table 12, the first hypothesis which postulates that justice has a significant effect on AHP. This result indicates that justice plays a significant role in AHP. Previous studies such as Tan (2011) and Yap (2013) have a similar opinion. Similarly, the nature of the contract has been found to significantly contributes to AHP, and this supports the second hypothesis. Previous studies attributed the high rate of an abandoned project to the nature of the contract (Md. Dahlan, 2006; Sufian & Sapian, 2009). The STB system and the debt based financing, which virtually transfer all the risks on the home buyer, make the banks and the contractors to be less dedicated since they have little or nothing to lose.

Table 12: Testing results.

Pathway	Standardised beta	S.E.	C.R.	p-value
AHP <--- Justice	1.192	.156	7.620	***
AHP <--- NOC	.116	.038	3.031	.002

Note: S.E. and C.R. denote standard error and critical ratio, respectively.

7. Conclusion

The present study explores the perception of home buyer and expert about the causes of AHP. The study mainly assesses how justice and regulatory system; and nature of the contract affect AHP. The study is based on survey questionnaire comprises of 37 elements. Validity test was carried out to assess the suitability of scales. We employed factor analysis to reduce the variable into manageable construct with the homogeneous element. Eventually, we came up with two main constructs, namely, justice and nature of the contract. The results of the SEM thus suggest that justice and nature of the contract significantly contribute to the issue of abandoned housing problem.

As revealed in the literature and the findings of the current study, the risks associated with the contract are passed to the home buyers. The possibility of less incentive to monitor the progress, completion of the project, and the credibility of the contractors is high. The presence of such injustice that allows the passing of the entire risks to the home buyers, therefore, increases the rate of AHPs. In addition, the lapses in the regulatory system that allow errant developers to go unpunished, encourage the developers to take improper preventive measure in relation to the issue of AHPs. As such, they take less precaution in properly managing the projects and prevent it from been abandoned.

Based on the findings of this study, partnership contract that ensures risk sharing could help in mitigating the risk of abandoned projects. There would be a high incentive for the banks to properly monitor and ensure that credible contractors handle the projects to protect their investment. More so, the strengthening of the regulatory system that can protect the right of the home buyers and minimise the presence of injustice in the contract, could help in reducing the case of abandoned housing.

The present studies have contributed in identifying and empirically assessing the effect of two main important factors (i.e., (1) justice and regulation; (2) nature of contract) on the abandoned housing problems. This is expected to help the policymakers in their decision-making process in relation to AHP.

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