Property Stigma and Overhang Units: SEM-PLS analysis of Clio2 Residence, Putrajaya

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Abstract

Property stigma encompasses characteristics, features, social values, or events related to land and buildings that generate negative perceptions of a property or neighborhood. This stigma significantly contributes to the overhang of residential units in Malaysia. This study aims to develop a Partial Least Squares Structural Equation Modeling (SEM-PLS) model to analyze the impact of stigmatized property dimensions on Clio2 Residence, an overhang strata residential scheme in Putrajaya. The findings indicate that both external and internal stigmas are significant factors leading to unsold property units in Clio2 Residence.

Keywords: SEM-PLS; High-rise strata; Property overhang

1.0 Introduction

The Malaysian property market continued growth as Selangor dominated the overall property transactions within the Central Region. However, according to the National Information Center (NAPIC), up to the third quarter of 2023, Selangor will be the main contributor to the central region state with the highest number of overhangs. Selangor was the state that had active industrial activity and the highest population among the states in Malaysia. Therefore, the issue of why the buyer refuses to buy the house in Selangor should be resolved. This paper was a preliminary study that adopted one sample residential housing scheme. Thus, Clio2 Residence was identified as one of the residential schemes listed in the overhang residential sector as of the first half of 2023 (NAPIC, 2023). After four (4) years in the selling phase, as of the first half of 2023, it was found that only 50% of the units have been sold, and the rest of the units are categorized as overhang units. Property values are affected by "location, location, location," an old and oversimplified saying. It might be more accurate to say that "perception, perception, perception" determines the value of a property." (Bell, 2016). According to his statement, other significant factors need to be closely examined rather than location. According to Said et al.(2017), property that has been found to have a stigma will affect housing prices. Thus, properties with a stigma differ from the choice of investors or potential buyers. This indicates that any property with a stigma will have a lower take-up rate because the value differs from a property without a stigma. This aligns with the definition of property overhang, a property that has been completed and not sold after nine months and is considered a property overhang (NAPIC, 2023). Does this Stigma have a direct effect on the occurrence of property overhang?

2.0 Literature Review

2.1 Stigma

Stigma is believing in something or an event that can create a negative perception of something different from the norm. It is an attribute that conveys devalued stereotypes (Clair, 2018). Stigma or fear is a behavior that people have that cannot be quantified and may or may not be quantified (Callanan & Eves, 2015). Stigma studies carried out till the 2000s are related to the non-physical character and phenomenon variables; most do not cover variables related to a property's physical aspects or features. Later research examines stigmas identified as affecting property values in neighborhoods with physical issues (Bell, 2016). Thus, according to the previous study, stigma can be divided into three categories, namely internal stigma, external stigma, and phenomenon stigma.

2.2 Internal Stigma

Internal Stigma consists of minimal Stigma and physical Stigma. The minimal Stigma is known only to a small group of people and is usually taken seriously only by locals (Nallathiga et al., 2017). Minimal Stigma is only known by interested persons and locals. However, for individual property, the minimal Stigma can refer to any negative perception

of the land titles, for example, the tenure of property (Cheng & Ling, 2023), multiple layer sub-lease, and the land size (Cradduck & Warren, 2019). House purchasers will be hesitant to purchase if the tenure of properties is a private lease scheme. Furthermore, multi-layer sublease will cause strata title issuance issues. The physical Stigma refers to the current condition of building features. Insufficient maintenance of a building's characteristics and physical attributes can lead to a negative perception, as potential purchasers primarily consider these factors when purchasing a house (Cradduck & Warren, 2019). For newly launched housing projects, shape layouts, inefficient layouts causing unusable space, etc., will be more challenging to sell, contributing to the property overhang scenario.

2.3 External Stigma

External categories refer to attributes that are distinct from individual properties. Three (3) variables are under this category: environmental Stigma, neighborhood stigma, and structural Stigma. The perception of environmental Stigma is thought to influence the value of property, as the general public has become more conscious of environmental hazards. This recognition is seen in the adverse effect of environmental pollution on the worth of properties. (Mccluskey & Rausser, 2003). For example, the neighborhood property adjacent to the dumping site (Ogban & Akujuru, 2016), groundwater contaminated by chemicals (Hajnal, 2017), nuclear power stations (Leiss, 2013), high voltage power lines cables (Bell, 2016), airport and railway lines (Hajnal, 2017). These stigmas contribute to scent pollution, noise pollution, and health concerns. Neighborhood stigma in this context refers to safety (Ibrahim & Maimun, 2022; Nallathiga et al., 2017), access to public transport (Cheng & Ling, 2022), and distance location to the public healthcare facilities and educational facilities (Olanrewaju & Woon, 2017). This type of Stigma is highly significant because it is associated with a property or community, for example, a housing scheme located within a high crime rate area (Ibrahim & Maimun, 2022), high student occupancy with tenancies in family neighborhoods (Horgan, 2020) and housing scheme with poor security design (Teck-Hong, 2011). These factors pose a potential risk to personal and familial safety. Location accessibility and physical distance are more significant in influencing purchasing decisions because living far from job centers is more expensive (Olanrewaju & Woon, 2017), facilities, e.g., hospitals, schools (Rahim et al., 2019) and retail precincts (Kasim & Tey, 2022).

In addition, there is structural Stigma, also known as institutional Stigma. Developers' reputations are vital in attracting buyers (Rahim et al., 2019). Potential house buyers are a variety of developers with poor track records in delivering properties on schedule and new launches at higher prices than nearby similar properties (Rahim et al., 2019). Another institution is a local authority responsible for the planning permission approval on an area of development (Said et al., 2017). Apart from that, the housing site also gives more probability to the creation of property stigma whereby the housing site is ex-mining land, located in the flood zone area and close to the industrial zoning area (Zhuang et al., 2016) which is believed the house adjacent to an industrial area. The house will experience rapid building obsolescence.

2.4 Phenomenon Stigma

Phenomenon stigma refers to the physiological effects caused by adverse circumstances, which in turn influence the value or reputation of property (Said et al., 2017). This perception will influence the decision of the homebuyers when purchasing the property. For example, houses with murder, unnatural death, haunted (Gourley, 2016), past flood incidents, landslide phenomena (Adzhar et al., 2021), and former abandoned housing projects (Ibrahim & Maimun, 2022). Therefore, if the prospective buyer becomes aware of such stigmas, they will certainly decline to purchase a property in the residential area.

2.5 Research Model Development

Before this study, no previous research was conducted on the stigmatized aspect of property overhang. Hence, this study tries to model the relationship to identify the stigmatized dimensions in the case study area.

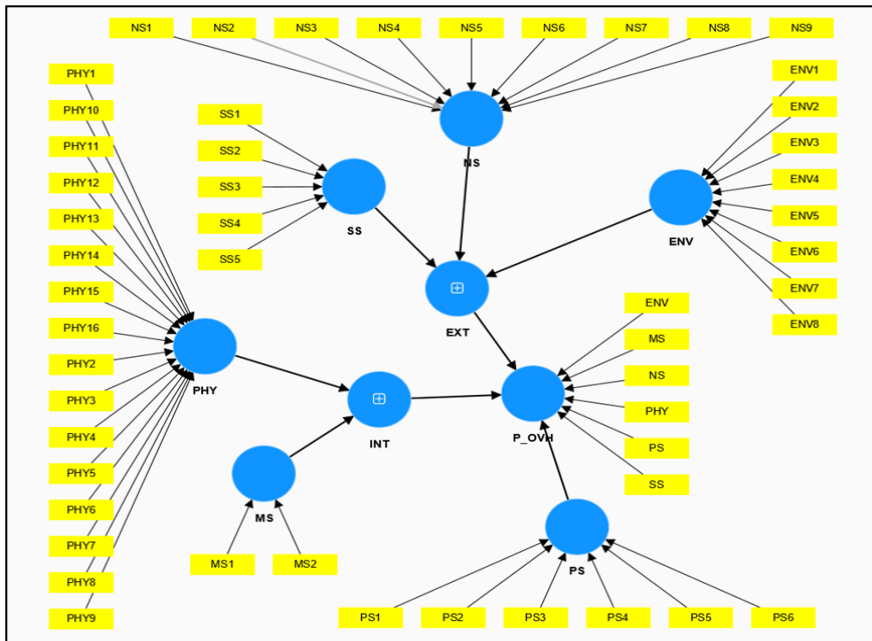

Figure 1: Research Model
(Source: Author, 2023)

Figure 1 shows the research model of this study. The literature review on the stigmatized dimension of property value has formed a model that can incorporate the property overhang in investigating the purchaser's perspective towards property overhang. This model specifically uses the Higher Order Construct (HOC) for the External (EXT) and

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Internal (INT) Stigma Constructs. The external construct consists of sub-constructs such as Structural Stigma (SS), Environmental Stigma (ENV), and Neighbourhood Stigma (NS). On the other hand, Internal Stigma (INT) consists of sub-constructs, namely Physical Stigma (PHY) and Minimal Stigma (MS). Generally, this study has identified three (3) primary constructs of the stigmatized dimension that contribute to the property overhang: external, internal, and phenomenon stigma. The indicator variables are shown in Table 1. The research model development will lead to three (3) hypotheses:

H1: External Stigma has a positive and significant relationship with Property Overhang
H2: Internal Stigma has a positive and significant relationship with Property Overhang
H3: Phenomenon Stigma has a positive and significant relationship with Property Overhang

3.0 Methodology
This section presents the research methodology for developing a model using stigmatized property dimensions on Clio2 Residence, a strata residential scheme in Putrajaya. It comprises the explanation of the sample, data collection method and strategy, and data analysis technique. The samples were tested using the Partial Least Square Structural Equation Model (PLS-SEM) technique (formative-formative measurement model) to demonstrate the relationship between property stigma variables and their impact on property overhang issues. Partial least squares structural equation modeling (PLS-SEM) is a multivariate statistical technique that helps examine complex relationships among several variables (Kono & Sato, 2023).

This study focuses on the purchaser's perspective of the Clio2 Residences, Putrajaya. The Clio2 Residence was launched for sale in September 2019. It has three (3) towers and consists of 550 units. It was selected as a case study since this residential scheme failed to achieve 50% sales performance even after more than four (4) years since it was launched for sale. According to the NAPIC, the period of four (4) years is an indicator of the construction of high-rise residential strata. Questionnaires were sent to the user, who is the purchaser of Clio2 Residence. In total, the study managed to obtain 35 completed questionnaires from the respondents. The minimum sample size for PLS-SEM analysis is 30 samples (Hair et al., 2017). Therefore, the number of samples in this study is considered adequate for analysis.

The data were collected using a self-administered questionnaire developed using Google Forms and distributed via the online WhatsApp group community. This study relies heavily on online approaches to data collection since it can be easily distributed, monitored, and managed. The questionnaire was designed and developed from the factors obtained from previous studies. It consists of four (4) sections. Section 1 focuses on respondent's background questions, including gender, age group, period of living, educational background, and purpose of buying the house. While Section 2 focuses on external stigma, section 3 focuses on questions related to internal stigma, and the last section focuses on the phenomena of stigma that contribute to why people refuse to buy the Clio2 Residence.

The questionnaire uses a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5).

In this study, frequency analysis is performed to summarize and identify any peculiarity of data to ensure the data is suitable to be analysed. The next step of data analysis involved the Partial Least Square Structural Equation Model (PLS-SEM) to investigate the relationship and test the hypotheses developed previously. PLS-SEM is useful for small sample sizes with the ability to handle many indicators. Two types of applications will be employed for data analysis: IBM SPSS Statistics Version 28 and SmartPLS Version 4. Table 1 below describes the constructs and indicators used for the PLS-SEM analysis.

Table 1: Indicator Variable

CODE	CONSTRUCT / INDICATOR
ENV	*Environmental*
ENV1	Dumping site (Ogban & Akujuru, 2016)
ENV2	Groundwater contaminated by chemicals (Hajnal, 2017)
ENV3	Odor nuisance (Mccluskey & Rausser, 2003)
ENV4	Environmentally friendly (Mccluskey & Rausser, 2003)
ENV5	Agencies Nuclear (Leiss, 2003)
ENV6	High-voltage power line cable (Hajnal, 2017)
ENV7	Airport (Hajnal, 2017)
ENV8	Railway line (Hajnal, 2017)
NS	*Neighbourhood*
NS1	Crime area (Ibrahim & Maimun, 2022)
NS2	Students renting in the neighborhood (Horgan, 2020)
NS3	No sense of security (Teck-Hong, 2011)
NS4	Distance to government office (Kasim & Tey, 2022)
NS5	Distance to hospital (Rahim et al., 2019)
NS6	Distance to the sports centre (Kasim & Tey, 2022)
NS7	Distance to school (Rahim et al., 2019)
NS8	Distance to the shopping mall or retail area (Kasim & Tey, 2022)
NS9	Assess public transport (Rahim et al., 2019)
SS	*Structural Stigma*
SS1	The developer has a bad reputation (Rahim et al., 2019)
SS2	The developers set expensive house prices (Rahim et al., 2019)
SS3	Ex-mining land (Zhuang et al., 2016)
SS4	Flood zone area (Said et al., 2017).
SS5	Industrial zoning area (Zhuang et al., 2016)
PS	*Phenomenon Stigma*
PS1	Haunted (Gourley, 2016)
PS2	Murder (Gourley, 2016)
PS3	Unnatural death (Gourley, 2016)
PS4	Flood phenomenon (Adzhar et al., 2021)
PS5	Landslide phenomenon (Adzhar et al., 2021)
PS6	Abandoned project (Ibrahim & Maimun, 2022)
MS	*Minimal Stigma*
MS1	Housing tenure (Cheng & Ling, 2023)
MS2	Small land area (Cradduck & Warren, 2019)

PHY	*Physical Stigma*
PHY1	Fungal attack (Cradduck & Warren, 2019)
PHY2	Aesthetic view restriction (Hajnal, 2017)
PHY3	Age of building or dilapidated building (Cradduck & Warren, 2019)
PHY4	Small built-up area (Said et al., 2017)
PHY5	Poor quality of flooring type (Teck-Hong, 2011)
PHY6	Poor dimension for ceiling height (Teck-Hong, 2011)
PHY7	Low-quality of building material (Cradduck & Warren, 2019)
PHY8	Small living area (Mccluskey & Rausser, 2003)
PHY9	Building concept (Rahim et al., 2019)
PHY10	The number of bedrooms (Mccluskey & Rausser, 2003)
PHY11	Bedroom's size (Kassim & Tey, 2022)
PHY12	Total number of stories (Cheng & Ling, 2023)
PHY13	Car park (Olanrewaju & Woon, 2017)
PHY14	Facilities (Mccluskey & Rausser, 2003)
PHY15	Swimming pool (Rahim et al., 2019)
PHY16	Property management (Rahim et al. 2019)
P_OVG	*Property Overhang*
EXT	*External Stigma*
INT	*Internal Stigma*
PS	*Phenomenon Stigma*

(Source: Author,2023)

4.0 Results

This section discussed the results obtained from the frequency and PLS-SEM analysis techniques. Firstly, the frequency analysis analyzed the respondents' backgrounds. Secondly, the PLS-SEM results were discussed from the measurement model to the structural model. This analysis was used to develop the structural model that shows the relationship between purchasers' perspectives towards the stigmatized property dimension.

4.1 Respondent Background

Table 2: Respondent Background

No.	Respondent Profile	Criteria		No.	Frequency (%)
1	Education	Diploma or Technical Certificate		2	5.7
		Bachelor Degree		17	48.6
		Master Degree		13	37.1
		PHD		3	8.6
			Σ	35	100
2	Purpose Ownership	Investment		6	17.1
		Living		27	77.1
		Weekend House		2	5.7
			Σ	35	100
3	Period of Living	Less than 1 year		3	8.6

				Σ		
		1 Year			5	14.3
		2 Year			24	68.6
		3 Year			3	8.6
				Σ	35	100
4	Race	Malay			26	74.3
		Chinese			9	25.7
				Σ	35	100
5	Age	30 year - 39 year			21	60
		40 year - 49 year			8	22.9
		50 year - 59 year			4	11.4
		60 years old and above			2	5.7
				Σ	35	100

(Source: Author,2023)

Table 2 displays the demographic information of 35 respondents who have purchased Clio2 Residence. The respondents were selected among the purchasers of the Clio2 Residence to get their point of view regarding the stigma that might exist in this housing scheme. This study aims to fill the gap by (Said et al., 2017) They have previously identified the property stigma from property experts. Clio2 Residence is a low-density housing scheme located strategically surrounded by amenities and infrastructure. However, Clio 2 Residence is listed among the residential overhang properties in Selangor. Therefore, the selection of samples in this area was appropriate for this preliminary study. Table 2 summarises the respondent's background.

Apart from the respondents' backgrounds, this study also gathers data on the purpose of buying the Clio2 Residence and how long they stay in this locality. The data were analyzed using a descriptive approach since it is straightforward and easily understood by the reader (Jasimin & Ali, 2015). The aim was to investigate the user experience of the stigma found at Clio2 Residence. This study aims to fill the gap by Said et al. (2017), whereby they study stigma from the expert's opinion. This study is in line with the definition of stigma by Bell (2016), who said that the stigma can never be found easily until it can be experienced by itself.

4.2 Results from the PLS-SEM Analysis

Prior to the PLS-SEM analysis, the data were examined to check on the issues of missing data, suspicious and inconsistent response patterns, outliers, and normality. Generally, the examination suggests that the data were free from all these issues and suitable for the next analysis. Then, the researcher proceeds to the measurement and structural model specified in this research. For the formative model, the convergent validity test needs to be conducted. The analysis showed that the path coefficient for convergent validity between all variables is more than 0.8, which means that all evaluated formative constructs achieved a sufficient level of convergent validity (Gogia et al., 2024). Therefore, all variables have contributed to its intended content.

4.3 Formative Measurement Model Evaluation

Firstly, the constructs were examined using the variance inflation factor (VIF) to identify their collinearity levels. The VIF value of below 5.0 indicates that the formative indicators are free from collinearity issues (Hair et al., 2017). The results signify that all indicators produced a desirable VIF value below 5.0 suitable for the next analysis. Secondly, the measurement model was tested to identify the significant indicator outer weights, outer loadings, and t-value using the PLS-SEM algorithm and bootstrapping. The aim was to determine the suitable indicator for keeping or deleting from the measurement model. The indicator shall remain in the model if it produces an outer loading of more than 0.7 and significant or 0.5, even if it is not significant (Hair et al., 2017). Otherwise, it shall be removed from the model if the outer loading is less than 0.5. About Table 3, Table 4 and Table 5, several constructs were removed from the measurement model, including external variables (NS3, NS4, NS5, NS 6, NS7, NS8, NS9, AND SS2), Internal variables (PHY6, PHY8, PHY9, PHY10, PHY11, PHY12, PHY13, AND PHY16) and Phenomenon variables (PS2 and PS3), these constructs produced an outer loading less than 0.5. Table 4, Table 5, and Table 6 shows the significant value of formative construct measurement.

There are four (4) steps to examine the constructs, namely:

Table 3: Measurement Indicator

Steps	Measure	Indicator
1	Variance Inflation Factor (VIF)	< 5.0: remain
2	Outer Weigh	> 0.5 : remain
3	T-Value	> 1.65: remain
4	Outer Loadings	> 0.5: remain

Source: (Hair et al., 2017)

Table 3 presents the steps to examine the construct through all measures to make sure the construct is suitable for the subsequent analysis.

Table 4: External Indicators

Construct	Weight	t-value	Significance (One-tailed)	VIF	Outer Loadings	Result
ENV1	0.201	3.093	Significance	2.387	0.656	Remain
ENV2	0.276	6.329	Significance	3.25	0.714	Remain
ENV3	0.262	4.574	Significance	2.52	0.676	Remain
ENV4	0.209	3.916	Significance	3.474	0.744	Remain
ENV6	0.303	5.227	Significance	1.747	0.783	Remain
ENV7	0.169	2.452	Significance	3.991	0.596	Remain
NS1	0.258	1.452	Not Significance	2.347	0.699	Remain
NS2	0.242	1.473	Not Significance	4.532	0.746	Remain
NS3	0.092	1.252	Not Significance	1.798	0.437	Remove
NS4	-0.155	1.182	Not Significance	3.669	-0.46	Remove
NS5	-0.25	1.342	Not Significance	1.924	-0.65	Remove
NS6	-0.26	1.431	Not Significance	1.748	-0.721	Remove
NS7	-0.123	1.065	Not Significance	3.976	-0.42	Remove
NS8	-0.18	1.167	Not Significance	2.299	-0.5	Remove

NS9	-0.107	0.876	Not Significance	7.301	-0.33	Remove
SS1	0.173	2.663	Significance	1.318	0.57	Remain
SS2	0.045	0.352	Not Significance	3.711	-0.077	Remove
SS3	0.313	8.264	Significance	6.182	0.941	Remove
SS4	0.334	11.967	Significance	4.113	0.94	Remain
SS5	0.326	8.210	Significance	4.171	0.909	Remain

(Source: Author,2023)

Table 5: Internal Indicators

Construct	Weight	t-value	Significance (One-tailed)	VIF	Outer Loadings	Result
PHY1	0.010	0.368	Not significance	2.098	0.083	Remove
PHY2	0.111	5.266	Significance	4.002	0.688	Remain
PHY3	0.106	7.192	Significance	3.872	0.682	Remain
PHY4	0.106	4.224	Significance	2.937	0.641	Remain
PHY5	0.051	2.034	Significance	1.937	0.35	Remain
PHY6	0.036	1.233	Not Significance	2.338	0.251	Remove
PHY7	0.067	2.719	Significance	3.373	0.443	Remain
PHY8	0.140	26.644	Significance	5.719	0.864	Remove
PHY9	0.119	9.114	Significance	5.223	0.748	Remove
PHY10	0.124	11.203	Significance	6.704	0.779	Remove
PHY11	0.124	11.981	Significance	7.857	0.798	Remove
PHY12	0.127	14.521	Significance	5.147	0.804	Remove
PHY13	0.140	20.002	Significance	7.003	0.874	Remove
PHY14	0.080	3.216	Significance	3.58	0.527	Remain

(Source: Author,2023)

Table 6: Phenomenon Indicators

Construct	Weight	t-value	Significance (One-tailed)	VIF	Outer Loadings	Result
PS1	0.188	6.304	Significance	2.596	0.762	Remove
PS2	0.169	4.4	Significance	10.881	0.815	Remove
PS3	0.165	4.846	Significance	13.588	0.875	Remove
PS4	0.245	16.993	Significance	4.097	0.903	Remain
PS5	0.215	5.168	Significance	2.412	0.758	Remain
PS6	0.214	9.744	Significance	4.632	0.891	Remain

(Source: Author,2023)

4.4 Structural Model Evaluation

Figure 2 above depicts the final structural model for this study. In this model, ENV, NS, SS, MS, and PHY constructs were transformed into indicators under EXT and INT constructs under the HOC approach. Next, the structural model evaluation was conducted, which consisted of three procedures: collinearity assessment, structural path coefficient, and hypothesis testing, and coefficient of determination (adjusted R square) to assess the relationship between exogen and endogen latent variables.
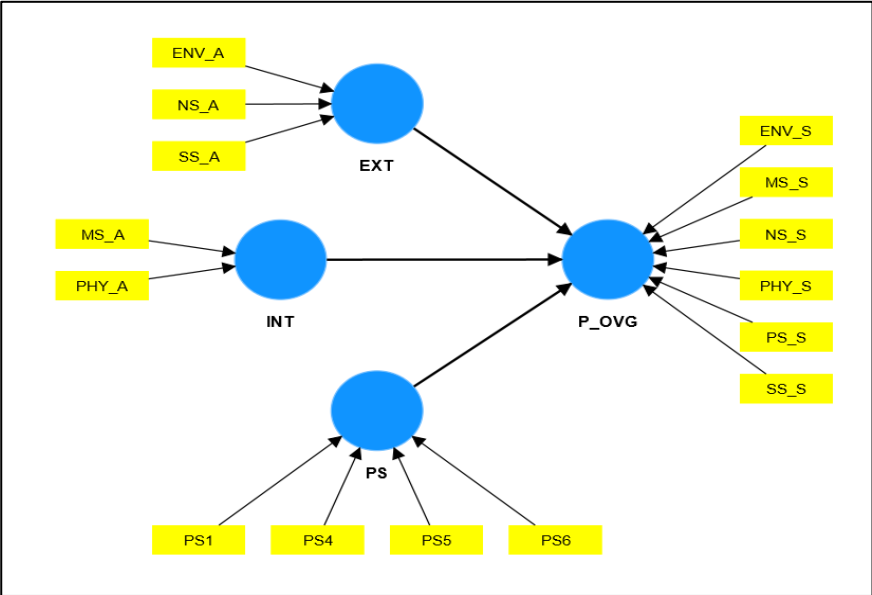
Figure 2: Final Structural Model
(Source: Author, 2023)

Table 7 shows the collinearity assessment results using VIF, which recommends that all predictors in the structural model were free from collinearity problems. VIF values above 5 or 10 are typically problematic and may involve further investigation or remediation. Afterward, the bootstrapping technique using 5,000 bootstrap samples to weigh the indicators was conducted to assess the structural path coefficient. Therefore, this technique will determine the significance and relevance between endogen and exogen constructs for hypothesis testing. The closer the correlation coefficient values to -1.00 or +1.00, the stronger the relationship (negative or positive).

Table 7: Summary of the VIF value for the exogenous latent variables

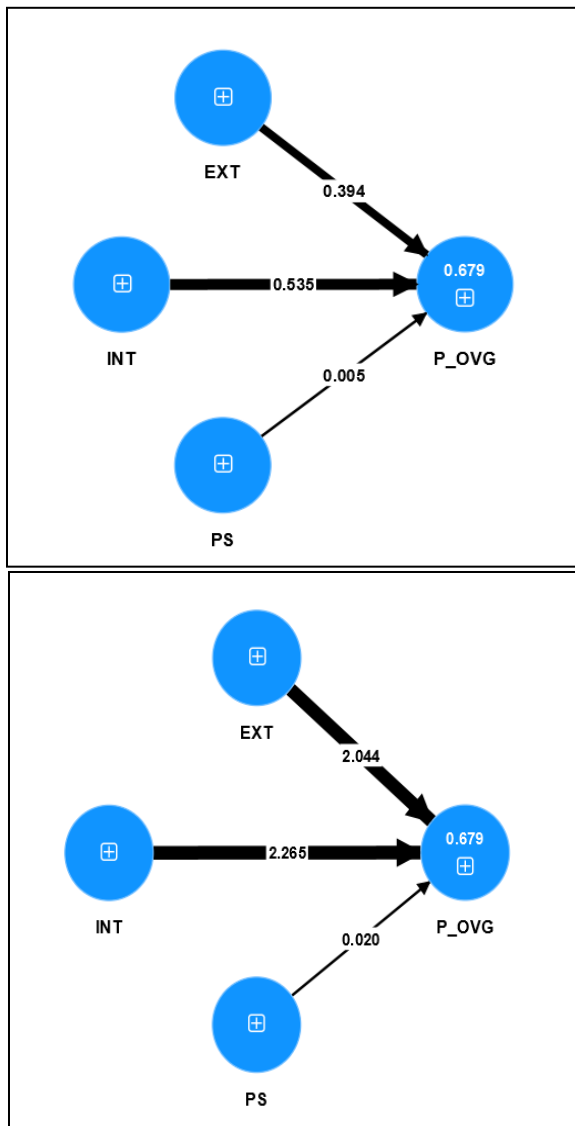| Endogen Construct	Exogen Construct	VIF
Property Overhang (P_OVG)	External (EXT)	2.193
	Internal (INT)	1.625
	Phenomena (PS)	1.609

(Source: Author,2023)

Figure 3: Structural Model Coefficient Value (above) and Bootstrapping results t-values (below)
(Source: Author, 2023)

Figure 3 shows the PLS algorithm results of a positive relationship for INT, EXT, and PS with P_OVG, denoted by the positive coefficient values of 0.535, 0.394, and 0.005 correspondingly. Two constructs exhibited a significant relationship, with the highest t-

values of 2.265 for INT, followed by EXT with t-values of 2.044, significant at a p-value greater than 10 percent. Construct PS, with t-values of 0.020, demonstrated an insignificant relationship with P_OVG. The structural model also produced an adjusted r2 of 0.679, moderately representing a 67.9 percent variance in explaining the stigmatized dimension of Clio2 Residence. Table 8 shows the results of the path coefficient and t-values of the structural model.

Table 8: Path Coefficient and T-Values for all constructs

Hypothesis	Relationship		Coefficient Value	t-value	Result
H1	EXT ⟶	P_OVG	0.394	2.044*	Accept
H2	INT ⟶	P_OVG	0.535	2.265*	Accept
H3	PS ⟶	P_OVG	0.005	0.02	Reject

*p<0.10; **p<0.05; ***p<0.01; NS = Not Significant

(Source: Author, 2023)

5.0 Discussion

In relation to Table 8, two (2) out of three (3) hypotheses were generally accepted based on the result of t-values using PLS-SEM bootstrapping estimation. Firstly, it was also hypothesized that the External Stigma (EXT) factor significantly influences the property overhang (H1). This hypothesis was also accepted based on the result of the t-values in the bootstrapping technique. It can be inferred that the external stigma construct is strongly linked to the property stigmatized dimension and will influence the property overhang. The positive relationship reflects that overhang units will remain challenging to sell as long as this stigma continues. Therefore, the respondents trust that external stigma contributes to why people refuse to buy houses in this housing scheme. The result was endorsed by (Rahim et al., 2019) External Stigma significantly influences the relationship between property stigma and property overhang.

Secondly, it was hypothesized that Internal Stigma (INT) significantly influences the property overhang (H2). Based on the results, this hypothesis was accepted. Compared to other variables, INT exhibits more significance as it has the highest t-values. Based on the result, INT proves that the purchaser's experience is more precise than the experts' opinions as they are only experts and give their opinions based on their professional experience but not the user experience. It can be inferred that the internal stigma construct is strongly linked to the property stigmatized dimension and will influence the property overhang. The positive relationship reflects that overhang units will remain challenging to sell as long as this stigma continues. Therefore, the respondents trust that internal stigma contributes to why people refuse to buy houses in this housing scheme. The result was endorsed by Cradduck and Warren (2019), who explain that internal stigma significantly influences the relationship between property stigma and property overhang.

Lastly, the third hypothesis stipulated that the Phenomenon of Stigma (PS) significantly influences the property overhang (H3). Results of the analysis reveal that this construct has

no significant relationship with the stigmatized dimension construct. Most of the respondents believed the phenomenon of stigma in stigma categories was less significant since the Clio2 Residence is not an abandoned project in fact, the housing development was completed within the stipulated time frame. Besides that, the respondents also believed that Clio2 Residence had been built in an area that is not zoned as a flood area, and also, in this area, there has never been a landslide event. Other than that, respondents rejected the argument that this area or the overhang unit is haunted and that there has never been an issue of murder and so on. It is too early to mention that this finding contradicts Gourley (2016) and Ibrahim and Adi Maimun (2022); the element of the phenomenon of stigma should be incorporated into property stigma dimensions due to this study being a preliminary study that employed only one case study in Selangor. However, this study needs further investigation by adding more sample housing schemes from overhang residential listings in Selangor to get the result more precisely for producing the model of stigmatized dimension towards property overhang.

6.0 Conclusion
Researchers have neglected stigmas as a contributory factor towards residential property overhang. Stigmas are expected to influence negatively the decision-making of house buyers. Considering the stigmatized dimension of property overhang can guide the government or related agencies in mitigating the stigmas, from site selection and layout design to the strata management phase. The findings of this research show that only external and internal Stigma are significant. However, this study is only a preliminary study, and the results are based on one case study. The findings may vary according to the property type, geographical area, layout design, site characteristics, surrounding neighborhood features, etc. Extending this research by using more overhang projects and adding more variables will give a better picture of the impact of stigmas on the property overhang issue.

Acknowledgement

Article Contribution to Related Field of Study
Local Authorities can utilize this model as a key factor for applicants to consider when creating a new development plan in a particular region. This technique establishes an action plan based on stigma symptoms, identifying responsible bodies to enhance their policies and processes. Examining the fundamental reasons for property overhang based

on the stigma aspect can assist the government in addressing the overhang issue beyond providing rebates, such as refunds on stamp duty, which affects government revenue.

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