

DEBUNKING THE UNAFFORDABLE HOUSES IN MALAYSIA FROM THE TRANSACTION COST ECONOMICS PERSPECTIVES: A PRELIMINARY STUDY

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Abstract: *There has been debates over whether housing improvement should be recognised as one of the characteristics to measure economic development of a country. This is due to the fact that a house also known as shelter, despite being one of the important physiological needs, is still a wishful thinking as many people still struggle to own a house. Bank Negara Malaysia's data in 2019 reported that the housing median multiple affordability score is 4.8, indicating the house prices in Malaysia is seriously unaffordable. Previous research postulate that the needs to fulfil government's policies is one the key factors that increases the housing prices. Interestingly, a research proposed a strategy to apprehend unaffordable housing through transaction costs analysis. Transaction costs are the costs incurred from the transaction activities in the construction industry, however the said cost is not consistently and clearly defined due to low acceptance and familiarity in the construction industry. Hence, this paper aims to debunk the aforementioned issues from the transaction cost economics (TCE)'s perspective. TCE is a theory that provides a platform to allow parties to distinguish the invisible costs from transaction of activities. TCE theory will be investigated in Malaysian housing development, as unbundling TCE in housing development will provides economic transaction efficiencies and able to identify and quantify transactions that can either be removed or improved to lower the transaction costs and subsequently debunking the unaffordable housing issues in Malaysia due to the high housing prices in Malaysia. To support the limitation of TCE, integrating it with other complimenting will help to get a better insight and understanding of TCE in housing development.*

Keywords: *Transaction Cost Economics (TCE), Housing Development, Unaffordable Housing, Research Gap*

Introduction

Physiological needs are the lowest and most essential level in Maslow's Hierarchy of Needs for a person to survive. They include food, air, water and shelter (Maslow, 1943; Kaur, 2013). Yet, many people struggle to afford a house despite its importance for both human and country's performance measurement (Omsmadi et.al, 2017; Baqutaya, Ariffin, & Raji, 2016; Samad et.al, 2016). Adequate housing is productive, stimulative and has broader implications for country's economic development. Better housing is also linked to advancement of human productivity as people will focus on more work (Arku, 2006).

However, the basic fundamental seems to be an expensive item in Malaysia. This is mostly due to the mismatch between the affordability level and the house prices, which supported by a report in the first half of 2020 on Residential Transaction Data by the National Property Information Centre (NAPIC) that signified 61.9% consumers demand residential within the price range below RM 300,000 (National Property Information Centre, 2020), whereas the average prices in Malaysia is RM 429,877 according to NAPIC Malaysian House Price Index Q2 2020.

Bank Negara Malaysia (BNM)'s data in 2019 also indicates that the housing median multiple affordability score reported is 4.8, indicating the house prices in Malaysia is considered to be seriously unaffordable, and a research by Khazanah Research Institute in 2019 further stated that housing affordability for middle-income households (M40) has deteriorated, in which the maximum price for an affordable home for the M40 under the Residual Income and Housing Cost Burden approach is 50% more expensive than the maximum price for the median multiple estimate Housing Affordability (Khazanah Research Institute, 2019).

In response to the issues highlighted, many research investigated from the supply and demand perspectives to find the root of high housing prices. Most findings indicated the cause of high price in houses due to the needs to fulfill government's policies (Othman, A, 1999; Samad et. al, 2106; Mustafa et. al, 2016). Remarkably, Cruz in 2008 suggested to apprehend unaffordable housing issues through the transaction cost analysis (Cruz, 2008). This paper highlights the investigation of the possibilities to study the causes of high house prices from the Transaction Cost Economics (TCE)'s perspective. It aims at highlighting the components of the TCE and identify any redundant activities that can be improved for efficient resource allocations that ultimately lower the transaction costs and high development costs.

Literature Review

Overview of Transaction Cost Economics

Ronald Coase first introduced the concept of transaction costs in 1937 by defining these costs as 'the costs of using the price mechanism in the market' in his journal "The Nature of The Firm", where he observed that firms exist to economize on the cost of coordinating economic activity. (Ronald H. Coase, 1937). Oliver Williamson managed to further elaborate the concept and introduced the Transaction Cost Economics theory in 1981 and defined transaction costs as the costs of running the economic system (Williamson, 1981).

Transaction Cost Economics (TCE) refers to a theory that evaluate the cost-effectiveness of institutional arrangements in managing transaction (Whittington & Young, 2013) and it allows players in an organization to have better understanding towards the hidden costs associated with pre-contract and post- contract of project work. Given the fact that TCE is an important

component in any construction, it is obvious to assess the transaction costs in construction (Rajeh et al., 2013). It involves (i) searching and information costs; (ii) bargaining and decision costs; and (iii) policing and enforcements costs (Williamson, 1981; Wink Junior et al., 2011; Dyer, 1997; Liang & Huang, 1998).

TCE has been successfully applied into various industries to analyze on the cost-effectiveness of their activities and performances and also other different purposes as depicted in the following Figure 1. For example, a research by Liang and Huang (1998) incorporated TCE to find the best business integration decision and model for electronic markets whereas DJ. Yates and Greenwood (2002) applied TCE to analyze the organizational behavior in the construction industry.

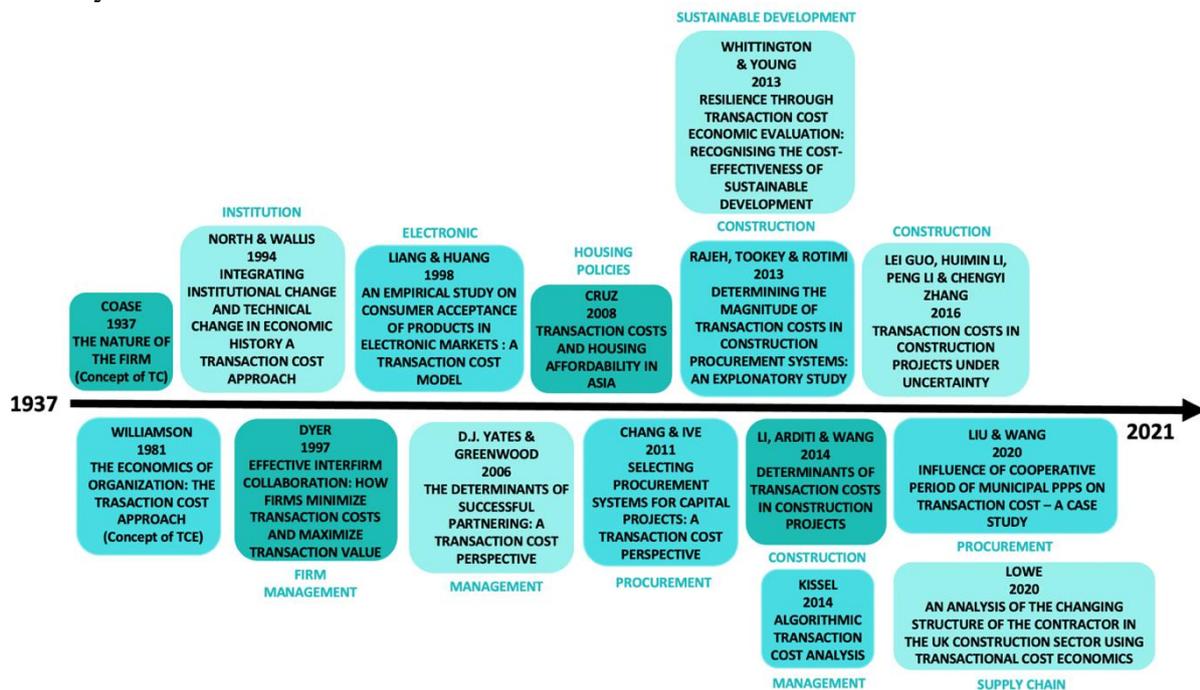


Figure 1: Previous Research on Transaction Cost Economics

Transaction Cost Economics Application in Construction Industry

Li, Arditi and Wang also managed to successfully applied the theory in construction industry and defined transaction costs as costs incurred from transaction activities in the construction industry (Li et al., 2014).

The application of Transaction Cost Economics theory is expected to improve the project performance as it facilitates better contractual procedures, encourage long term strategic methods of procurement, improve cost estimation, and determine most workable contractual ways under a particular situation, which can assist in improving whole procurement process (Dudkin & Vålilä, 2006; Ho & Tsui, 2009; Soliño & Gago de Santos, 2010; Rajeh et al., 2013).

Nonetheless, there are contradictions in defining transaction costs (Morteza Farajian, 2010) as this term is not consistently and clearly defined in the construction industry due to low acceptance and familiarity among industry players. Therefore, it is not clear whether transaction costs can be reduced, mainly because they are not defined systematically and consistently (Li et al., 2014).

Williamson, who introduced the concept of Transaction Cost Economics (TCE) theory back in 1981, concluded that measurement of transaction costs constitutes challenging difficulties (Williamson, 1996). This may contribute to the reason on why TCE is not widely applied in various industries including construction industry. According to Allen (2006), the theory would be more valuable if transaction costs could be measured with reasonable accuracy.

The lack of standardized transaction costs definition is a drawback and limitation that failed many attempts of TCE quantification in different research fields (Serigati & Azevedo, 2016). As an example, the economic profession has not been able to incorporate transaction costs in their analysis due to inconsistent definitions and frameworks, as well as difficulties in measurement and quantification (McCann et al., 2005).

Transaction Cost Economics Application in Housing Development

TCE is applied in housing development for this research by integrating several other theories to overcome TCE's limitations such as difficulties in measuring the exact TCE, bounded rationality and disregard of the role of differential capabilities in structuring economic organization (Tisdell, 2004; Hodgson, 2010; Foss & Klein, 2010) to get a better insight and understanding of TCE in housing development. This is achieved by integrating the typical housing development process with RIBA Plan of Work 2013 as depicted in the Figure 2. RIBA Plan of Work 2013 is a process protocol and management tool that serves as a guideline for the architects' profession and the construction industry by providing a shared framework for the organization and management of building projects and is used worldwide. RIBA Plan of Work 2013 will provide a clear view of the overall housing development and also to provide a standard platform of measurement to ensure consistency in activities listed in the pre-contract and post-contract in typical housing development process (RIBA, 2013).

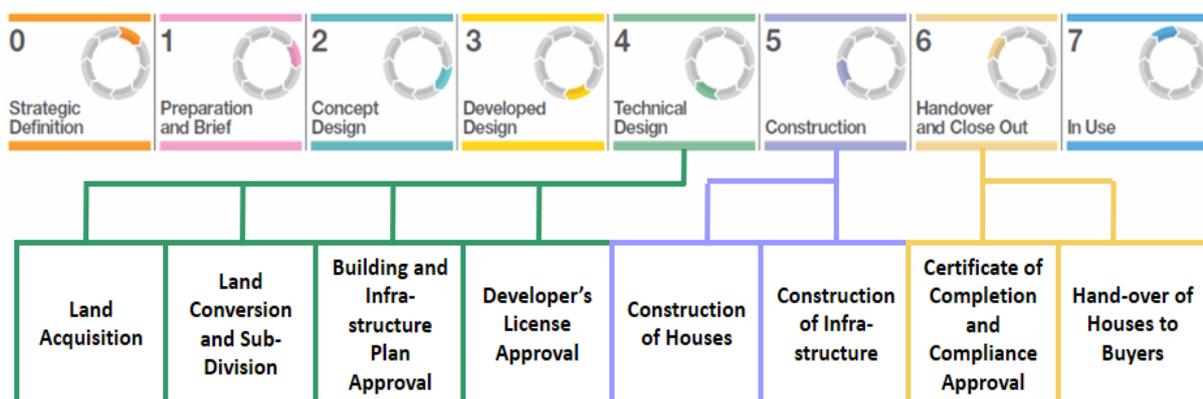


Figure 2: Typical Housing Development Process Based on RIBA Plan of Work 2013

Coupled with RIBA, Lean Construction is a method of lean production in project management to highlight inefficient economic activities. Through application of lean construction in project management in the typical housing development, identification of redundant and insignificant activities can be made in order to remove unnecessary and redundant process and activities. (Howell & Ballard, 2010). Studying TCE together with Lean Construction will be able to analyze on the essential or relevancy of any particular activity/ies to improve project production and performance.

Business Strategy Model is also integrated in this research as this theory allows to comprehend the strategic decision-making made by the developers of typical housing development in Malaysia. It will give a better understanding and insight on how the developers' business strategy models influence their strategic decision-making regarding the housing development process, activities and transaction costs in typical housing development. Strategic decision-making has become increasingly important because the environment of construction industry is complex and uncertain (Junnonen, 1998).

Based on the explanation of TCE, typical housing development process based on RIBA Plan of Work 2013, Lean Construction and Business Strategy Model, the following Figure 3 is the research gap identification for TCE in Malaysian housing development. It is a combination of TCE coupled with Lean Construction theory based on RIBA Plan of Work 2013 in Malaysian housing development with the Business Strategy Model's perspective.

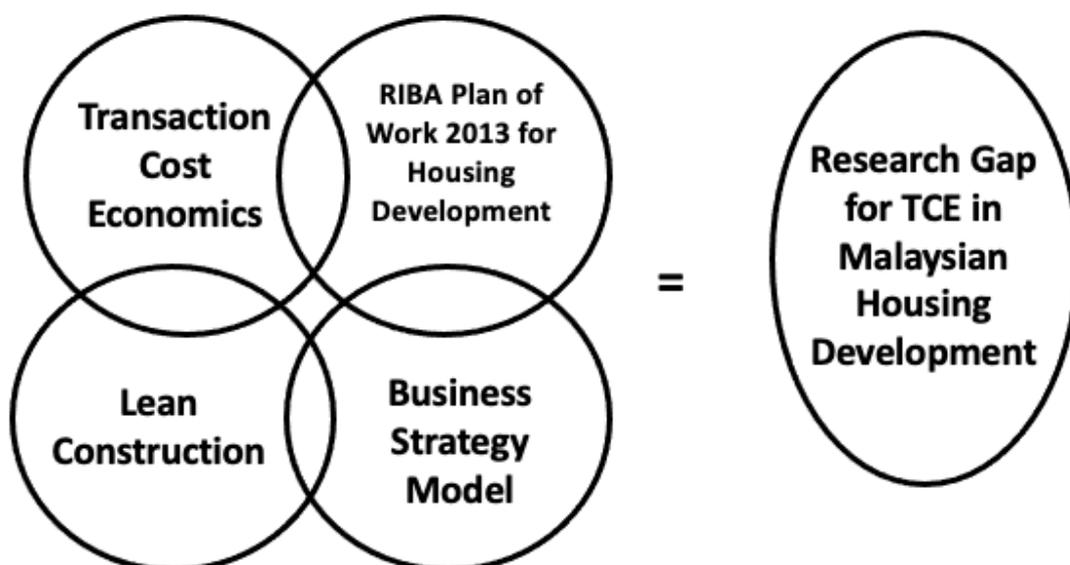


Figure 3: Research Gap Identification for TCE in Malaysian Housing Development

From the study of the research gap identification, the following Table 1 is the anticipated corresponding TCEs according to housing development stages. Overall, there should be 26 transaction cost components based on the literature review conducted derived from the RIBA Plan of Work 2013 and Lean Construction. The actual identification and quantification of TCE shall be made by the industry players according to their company's business strategy model.

Table 1: Anticipated TCE in Housing Development

Housing Development Stage	Project Stages	Transaction Cost Components derived from RIBA Plan of Work 2013
Pre-Contract	Strategic Definition	Initial considerations in assembling the project team Establish Project Program Review Feedback from previous projects Negotiation of contract
	Preparation and Brief	Prepare Project Roles Table and Contractual Tree and continue assembling the project team Review Project Program Prepare Handover Strategy and Risk Assessment Agree Schedule of Services, Design Responsibility Matrix and Information Exchanges and prepare Project Execution Plan including Technology and Communication Strategies and consideration of Common Standards to be used
	Concept Design	Review Project Program Prepare Sustainability Strategy, Maintenance and Operational Strategy and review Handover Strategy and Risk Assessments Undertake third party consultations as required and any Research and Development aspects Review and update Project Execution Plan Consider Construction Strategy, including offsite fabrication, and develop Health and Safety Strategy
	Developed Design	Review and update Sustainability, Maintenance and Operational and Handover Strategies and Risk Assessments Undertake third party consultations as required and conclude Research and Development aspects Review and update Project Execution Plan, including Change Control Procedures Review and update Construction and Health and Safety Strategies
	Technical Design	Review and update Sustainability, Maintenance and Operational and Handover Strategies and Risk Assessments Prepare and submit Building Regulations submission and any other third-party submissions requiring consent Review and update Project Execution Plan Review Construction Strategy, including sequencing, and update Health and Safety Strategy

Post-Contract	Construction	Administration of Building Contract, including regular site inspections and review of progress Review and update Sustainability Strategy and implement Handover Strategy, including agreement of information required for commissioning, training, handover, asset management, future monitoring and maintenance and ongoing compilation of 'As- constructed' Information Update Construction and Health and Safety Strategies
	Handover and Close Out	Conclude administration of Building Contract Carry out activities listed in Handover Strategy including Feedback for use during the future life of the building or on future projects Updating of Project Information as required

Conclusion

This paper delineates an insight and illustration of components of transaction costs within the pre and post contract of typical housing development projects. The illustration will be ideal to analyze on the relevancy of components of transaction costs which reveal typical transactions within the pre and post contract of typical housing developments. Transaction Cost Economics will provide economic transaction efficiencies and able to identify and quantify transactions that can either be removed or improved to lower the transaction costs and subsequently lowering the overall housing development costs and housing prices. The output of this research will be used as cost model that can be used to estimate efficient economics housing development costs using transaction cost economics process protocol to apprehend unaffordable housing issues.

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