

A CONCEPTUAL FRAMEWORK FOR MINIMISING MIDDLE-INCOME HOUSING MISMATCH

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ABSTRACT

The housing demand of the middle-income group cannot be ignored as they are the majority of the population in Malaysia which is about 40% out of the population. However, there is a mismatch between the supply and middle-income housing demand. The developer has always been eager to develop high-end products instead of affordable housing. This circumstance leads to the insufficient supply of middle-income housing. The mismatch is not only in terms of housing price, but also does not meet their housing preferences towards other housing attributes. Accordingly, this paper attempts to develop a conceptual framework for minimising middle-income housing mismatch. Thus, this paper reviewed the existing literature on the housing mismatch occurrences and the strategies to overcome this situation through government intervention. Almost all evidences from the studies indicate government, developer behaviour and buyer preferences have contributed to the middle-income housing mismatch occurrences. The findings were compiled through the creation of a conceptual model. Government intervention, developer behaviour and buyer preferences are included in the model as aspects that cause the housing mismatch occurrences. Significantly all these three aspects should interrelate with each other so that the potential of housing mismatch occurrences is low.



Keywords: *Middle-Income, Housing Mismatch, Government Intervention, Developer Behaviour, Buyer Preferences*

INTRODUCTION

The housing sector in Malaysia has always received special attention through various forms of housing policies and programmes. However, there are still issues such as accessibility, housing affordability, and quality that need to be considered. One of the central issues in the housing market is the existence of housing mismatch (Saleh et al., 2016). The developer has supplied more high-end units in the market to the point where it is almost impossible for the middle-income group to own their first property and this has contributed to the mismatch between supply and demand (Tobi et al, 2020). There is a mismatch between what has been supplied in the market and middle-income groups affordability. This issue basically has been tackled by providing affordable housing schemes but it seems that the mismatch still exists. Why does mismatch still exist? Why do those units remain as no takers even when it is affordable?

Accordingly, most of the available frameworks focus on the affordability of buyers; how to address the affordability issue and how to increase the supply of affordable housing. For example, the aspect of housing policy framework (Jana et al.,2016), four clusters of policy instruments to encourage private sector involvement in rental housing (Tsenkova & Witwer, 2011), and framework for sustainable affordable housing (Chan & Adabre, 2019). None of them specifically aims to minimise housing mismatch matter except Barlow and Ozaki (2003). Barlow and Ozaki (2003) discussed how to bridge the mismatch situation and Saleh et al. (2016) had discussed and developed a framework of housing mismatch phenomenon; discussed how to bridge the mismatch situation. However, the framework did not touch on the developer role and aspect of buyers' housing preferences. Hence, this study attempts to fill the gaps by proposing a conceptual framework specifically to minimise the mismatch of the developer behaviour, buyer preferences and government intervention for middle-income housing.

LITERATURE REVIEW

Housing Market

Housing market can be defined as a business situation that exists between the demand and supply (Miles et al., 2001; Bujang, 2006). Housing demand is referred to as the desire to own an interest that arises from the use of a property. Meanwhile, Haii (1999) defined housing demand as the willingness and ability of buyers to pay for a particular dwelling. Belsky et al. (2006) have a similar definition as they stated that housing demand arises from the decision to pay the price of a housing unit. He added that housing demand is related to the willingness and ability of a buyer to pay the price for housing attributes such as house type and location. Golland and Gillen (2004) had a different perspective about housing demand definition; they defined this as housing demand that is related to the buyers' preferences which are supported by the willingness and ability of the buyers to pay for the housing. Therefore, the housing demand is about the ability to pay and preferences (Nyrud, 2012).

Meanwhile, housing supply consists of the entire housing stock for both old and new housings. The supply side is from the construction industry, whereby the housing provider plays a role in developing housing projects. In Malaysia, housing provider is referred to the government and private housing developers. The developers need to follow the regulations and legislation that have been determined by the government in developing a housing project. The government has the power to either approve or disapprove development proposals (Mohd et al., 2009). The developer needs to get approval permission from the local government before embarking on any housing development. With respect to middle-income housing, the government supply through control market which refers to the housing schemes (PR1MA, Rumawip, PPIAM, My First Home Schemes and etc.). Not all middle-income group is eligible to buy housing under those schemes. Meanwhile, the private developer too do supply housing in the open market. Private housing developers are the main suppliers of housings in Malaysia (Jaafar et al., 2014). The middle-income group could buy the units under the open market, but unfortunately most of the houses are beyond affordability.

Housing Mismatch

Housing mismatch is mostly related to supply and demand (Khazanah Research Institute, 2015). One of the reasons of mismatch occurrences is the inability of the supply to respond quickly to the increase in demands. In the short run, the housing supply cannot increase correspondingly with the sudden increase in demands (Schiling, 2002). The developers cannot plan and produce a housing project in the short run as they need more time to construct a new housing project. In the long run, insufficient resources, especially in the financial aspect, can lead to mismatches, which in turn lead to insufficient supply (Mbuguah, 2016). The financial aspects issue includes development cost, material, labour, construction, and land. From the previous literature, there are main reasons that cause middle-income housing mismatch occurrences such as developer behaviour, buyers preferences and government intervention.

RESEARCH METHODOLOGY

An in-depth and comprehensive literature review was conducted in this research. It discussed and reviewed related literature on middle-income housing mismatch occurrences and the strategies for minimising the mismatch. Based on the reviews, the proposed conceptual framework was developed.

LITERATURE FINDING

Table 1 shows some evidences from previous research concerning the factor of middle-income housing mismatch occurrence. From the table, three aspects that contribute to the middle-income housing mismatch are developer behaviour, buyer preference and government intervention.

Developer Behaviour

Developer behaviour is one of the main factors that cause the mismatch situation (Shahrom, 2007; Ramli, 2017). The developer is profit-oriented (Jzen & Chim, 2016) so it is clear that they prefer to build the high-end product because they can generate high profit (Bujang et al., 2015). They

only focus on the housing project that gives them profit without considering the genuine demand. This statement is proven to be true when the developers prone to apply approval for the high-end product instead of other housing categories (Ramli, Zainal & Ali, 2020). This has a negative impact on the housing market and middle-income groups, as the units exceeds their housing affordability (Samad et al., 2016). The high-end product is beyond the financial ability of the vast majority of the Malaysian population, which is categorised under the lower-income (B40) and middle-income (M40) with the percentage of about 40% respectively (Budget 2016). Their income is not more than RM8, 319 monthly (Eleventh Malaysia Plan). Households with income that is less than RM8,319 monthly can only purchase houses with the price of less than RM299,484 (Ngadiman & Husin, 2012). Accordingly, a mismatch exists and could not be denied (Khazanah Research Institute, 2015). The mismatch affects the middle-income in the housing purchasing (Wilcoz, 2003). However, the low-income group has no problem as the government has always provided them with low-cost houses. The concern now is the middle-income group as they have to rely on the private developer's housing project. Even though nowadays, there are housing schemes for the middle-income group, some of them are not eligible to apply

Buyer Preferences

On the buyer aspect, there are two factors that contribute to the mismatch situation; affordability (Saleh et al., 2016) and housing preferences (Tan, 2011). The middle-income group has little opportunity to own a house because they have low purchasing power and therefore cannot cope with rising house prices in the free market. In response to this issue, the government has launched several housing schemes for them that provide financial assistance. Nevertheless, the mismatch still exists. This may due to those units that do not match with the buyer's housing preferences (Kowaltowski & Granja, 2011; Saleh et al., 2016). The housing provider did not consider or ignore the buyers' housing preferences (Moghimi et al., 2016). In this sense, it was not about housing price anymore, but it was due to other housing attributes such as location that the housing area is located at inappropriate or undesirable locations, poor design, bad neighbourhood factor, and lack of sufficient amenities and facilities (Tan, 2011; Falzon & Bezzina, 2013; Lee, 2014; Saleh et al., 2016). For instance, in a study by

Mang, Zainah and Mat Radzuan (2020), they found that besides housing price, the other factors that influence them to buy a house in the Klang Valley are housing structure, space, location and neighbourhood. It could be said that the buyers consider their preferences in order to ensure they make a wise decision in housing purchasing (Ismail & Mohamad, 2020). The buyers would consider various housing attributes in the housing purchasing, it is not based on a single housing attributes.

Government Intervention

The third aspect that contributes to the housing mismatch is the government; first, it is related to the housing planning system or regulation (Saleh et al., 2016). Although the housing supply is shaped by the market forces, the planning system has a specific role in governing the housing supply process (Hui & Soo, 2002; Liang & Ma, 2004). The housing mismatch could occur when the housing planning system delivers approval permission without considering the genuine demand and supply data, and only focuses on the technical requirement (Alias et al., 2006). In addition, Ramli, Zainal and Ali (2020) remarked that every housing application will be approved even though there is no demand in the market. Furthermore, a study conducted by Zulkepli (2011) showed that there is no specific housing policy in all structure plans in confirming the consideration of the actual supply and demand aspect during the process of development control. The government needs to take heed of this matter. Ignoring the housing demand and supply aspect could lead to the uncontrolled of development undesirable housing projects which eventually lead to other problems such as the problem of overhang property and insufficient supply of particular housing product. Alias et al. (2009) stated that the lack of information on actual demand by developers and local authorities could lead to the continuous uncontrolled construction of new housing supplies and cause the mismatch between demand and supply still persists. Lack of such information causes a mismatch between demand and supply (Jim & Chen, 2007).

Second, as describe above, it was about housing preferences. Realizing the need to assist the middle-income group in homeownership, the Malaysian government has launched several housing schemes for the middle-income group such as PR1MA, PP1AM, My First Home, My Home Schemes, Rumah Selangorku, Rumah Mampu Milik Wilayah Persekutuan,

and Rumah Mampu Milik Johor. Nevertheless, this positive government intervention shows a poor response. The housing mismatch situation still exist and persist. This might be because those units do not match with buyers preferences, although the unit being offered is affordable. This is seen to answer the housing planning process should not be based only in fulfilling the housing needs solely instead it should be fulfilled by considering genuine demand (Nicol, 2002). As mentioned above, demand has two elements such as ability to pay and preferences.

Table 1. Review on the Factor of Middle-Income Housing Mismatch Occurrences

Aspect	Causes	Researcher
Developer behaviour	Profit oriented; prefer to develop high-end products	Shahrom (2007), Khazanah Research Institute (2015), Jzen & Chim (2016) Ramli (2017) Ramli, Zainal & Ali(2020)
Buyer preferences	Beyond buyer affordability; low purchasing power	Saleh et al. (2016)
	Not match with buyer housing preferences toward housing attributes	Kowaltowski & Granja (2011), Tan (2011), Falzon & Bezzina (2013), Lee (2014), Saleh et al.(2016) Moghimi et al. (2016)
Government intervention	Housing planning system	Saleh et al. (2016).
	Focus on the technical requirement solely, without take into account the genuine demand and supply data	Nicol (2002), Alias et al. (2006), Zulkepli (2011), Ramli, Zainal & Ali (2020)
	Lack of demand and supply data	Jim & Chen (2007).Alias et al. (2009), Femi & Khan
	Housing schemes;not match with buyers preferences	Kowaltowski & Granja (2011), Tan (2011), Falzon & Bezzina (2013), Lee, (2014), Saleh et al.(2016) Moghimi et al. (2016)

Source: Author

DISCUSSION ON STRATEGIES FOR MINIMISING HOUSING MISMATCH OCCURENCES THROUGH GOVERNMENT INTERVENTION

This section presents several possible strategies that could minimise the housing mismatch occurrences. Table 2 shows the strategies for minimising

housing mismatch occurrences. The government could reduce the middle-income housing mismatch through housing planning, regulation, housing schemes and incentive to the developer. First, it is through government intervention that is by controlling housing development. According to Leornard (1987), the development control enables the local authority to protect the public interest from unsuitable development, take corrective action, facilitate appropriate development, and avoid overcrowding. In the context of housing, it could improve the housing condition (Memunatu, 2015). In the context of this study, the development control can be seen as a way to control the housing supply and developer activities in order to minimise or overcome the housing mismatch occurrences. The government needs to play a role to get the developer to improve the supply for the middle-income and at the same time they need to control the housing activities.

Development should be controlled at the early stage which is at the planning stage; the approval permission. The planning system can influence the housing supply (Mohd et al., 2009). The housing supply and demand in the housing market are affected by regulations, institutional process and policies set by the planning and development system (Raymond et al., 1999; Bramley, 2003). Alias et al. (2006) affirmed that there is a close interaction between housing market system and planning in the structure, operation, and the process of housing supply. Besides, the planning can determine the numbers of supply, either increase or decrease by controlling the land use (Mohd & Alias, 2011). In addition, the planning system acts as a control tool in the housing development processes because it determines the type of housing supply (Maruani & Cohen, 2011). Housing planning plays a key role in meeting the population's housing demands.

The housing planning should emphasize the housing demand aspect in providing housings to the population, otherwise, it could lead to housing mismatch occurrence (Jiam & Chen, 2007; Alias et al., 2009). Hence, it is suggested that the developer and local authority should obtain information regarding population demand (Tan, 2011). It is important to obtain information regarding housing demand for different households to assess what they need and want for housings before planning any housing projects is implemented (Femi and Khan, 2014). Otherwise, it can trigger a mismatch situation.

Furthermore, the approval for any housing application should be based on the database. It is crucial to collect and create a central database on the population's housing demand for proper housing planning (Makinde, 2014). According to Jzen and Chim (2016), the data must be updated from time to time. Therefore, the government can monitor and control the supply such as quantity and housing price for any particular area. The database can help the government to determine whether the property segment is insufficient or oversupply. The data can assist developers and the government to address the unmet demand (Almaden, 2014). Jzen and Chim (2016) stated that the database could be used to ensure that the housing supply matches the demand according to the location, price, and targeted group. This strategy has been practised by the Korean government. The Korean government has detailed information regarding the supply and demand, which are used to determine the number of new houses (types, size, location) for the public and private sectors annually (Habitat, 2008).

Besides that, the government should get the private developers to be involved in affordable housings by regulation. Currently, in the Malaysian context, there is a policy under the state government whereby it requires the developer to build affordable housing, otherwise they could not get any approval permission for other projects. Hence, it is a state government intervention in providing housing schemes. Housing schemes is one of the strategies that could bridge the gaps between buyers' affordability and house price (Hoekstra & Marais, 2016). For instance, the developers in Johor have to fulfill the requirements in Johor Housing Policy. They have to build affordable housings such as several types of low houses, medium cost houses, and medium cost shop lots. It is about 40% of the total quantity of any new housing development. This initiative from the Johor government aims to ensure that the low-income and middle-income groups could have their own homes. The other states such as Selangor, Wilayah Persekutuan, and Sarawak also practice the same thing, but differs in terms of the price offered and eligibility.

In addition, the housing scheme was found as a good way to solve the mismatch and meet the population's demand (Lopez & Parades, 2018). However, most of the housing schemes only focus on housing affordability (Ariff et al., 2016; Mulliner & Algrnas, 2018) to assist the buyer in the financial matter. Most of them were designed without taking

into account the housing preferences towards housing attributes. A point to be highlighted with regard to middle-income housing is that, based on the study by Lo (2011) it was found that in housing decision making, the middle-income take into account the aspect of housing attributes compared to the low-income group. It could be said that they consider various housing attributes such as housing type, location, design and others. It is not solely about the house price. Therefore, in developing housing schemes for the middle-income, the housing providers need to consider the middle-income housing preferences aspect besides affordable price. Otherwise, a mismatch situation will be initiated.

Furthermore, cooperation between the government and private developers needs to be improved in order to have a successful affordable housing delivery (Majelan et al. 2020; Tobi et al., 2020). Accordingly, in creating such cooperation, an incentive may serve as an approach and encouragement to the developers in supplying middle-income housing in the market. Yap and Ng (2018) found that developers need incentives from the government to build affordable housings especially for the middle-income group. The incentives could convince and encourage developers to develop affordable housings (Saieed, 2016). The fundamental that underlies incentives is indeed effective as organisations expect to get some benefits before starting on a new product or idea (Wagner III, 2009). An organisation or a company would put in more effort if it is given beneficial incentives (Beerepoot & Beerepoot, 2007). Lucas and Ogilvie (2006) and Turnbull (2011) defined incentives as a motivational mechanism to encourage an individual or a group to perform the desired action. Lucas and Ogilvie (2006) elaborated that incentives can influence a company to get involved in desired activities. Besides, incentives can be defined as a reward to motivate an organisation for a particular action (Berrone, 2008). Instead of focusing on a high-end housing project that eventually ends up as an unsold and overhang unit, government could use this incentive to shift developer direction towards affordable housing.

The incentives can be in the form of tax waiving discounts or exemption of premiums for land development. Howell et al. (2002) mentioned that tax incentives are used to achieve different goals such as tackling development needs. In the case of housing, it could reduce the cost of housing development. These kinds of incentives could convince

and encourage developers to develop affordable housings. In China, the administrative fees and half of the taxes were waived since 1994 to support and increase the supply of affordable housings (Niu, 2008). Ram and Needham (2016) stated that the government in India reduces the development cost of affordable housings by tax exemption and fee waiver. The other form of incentive is related to the land matter. According to Alaghbari et al. (2011), the allocation of public lands is one of the approaches to solve the insufficient supply of affordable housings, which is in line with Acolin and Green (2017). Incentives in the form of providing land could reduce developer's housing development costs and at the same time could provide the middle-income with a good location. Another incentive that needs to be highlighted is flexibility in regulations. This could encourage the improvement in a product, process, and technology (Beerepoot & Beerepoot, 2007). In the context of housing, the flexibility in regulations can be referred to as the fast-track planning approval process. After all, the incentives should create a win-win situation. Otherwise, the developers may not be interested in developing affordable housings for the middle-income group.

Referring to the high price of housing in the market, the Khazanah Research Institute (2015) suggested that the government should have some regulations to control the housing price over five years. This is due to the fact that developers have freedom in the house price matter because there is no specific rules that they must follow (Ramli, 2017). They could take much profit up to above 50%. However, the economist does not like the idea as the housing market is supposedly free to be set by demand and supply (Kamal et al., 2016). Laguerodie and Vargara (2008) have a different opinion as controlling the housing price does not mean that a house should be bought or sold at a precise price. If certain housing prices could give a bad impact on the housing market, the government could take appropriate action to control the housing market. For instance, the government can stop approving the application when there are too many supplies of high-end products that are priced at RM500, 000 and above. At the moment, in Malaysia's perspective, only Melaka has executed housing price control. Melaka is the first state set up a special body called Jawatankuasa Pecah Sempadan dan Belah Bahagian (JKBB). The price control mechanism has been implemented for all types of houses including the high cost houses. Unlike the other states such as Johor, Perak and Selangor only focus on low-cost and affordable housing only. Therefore, it is not surprising that

Melaka has been categorized as the most affordable housing provider in the country by Khazanah Research Institute and World Bank. The initiative by the Melaka government needs to be followed. Kim (2002) described the Korean government controls the housing supply regarding types, sizes of houses, location, and prospect clients. Kim (2002) further stated that the Ministry of Construction and Transport (MOCT) in Korea has drafted a plan annually for housing supply in detail and executed the plan with various instruments. Among the instruments are price control, regulations, conversion of land title, provision of loans, and subsidised interest rates.

Table 2. Strategies for Minimising Housing Mismatch through Government Intervention

Government Intervention	Sub-intervention
Efficient Housing Planning	Control housing development through approval permission
	Emphasize on housing demand aspect
	Collect and create central database supply and demand, approval permission based on this data
Regulation to build affordable housing	Development of affordable housing for middle-income
Housing Schemes to middle-income	Develop Affordable housing
	Emphasize demand aspect; not only affordability factor but together with housing preferences
Incentives to developer	Reduction related fees
	Tax waiving discounts or exemption of premiums
	land
	Flexibility in regulation

Source: Author

PROPOSED CONCEPTUAL FRAMEWORK

There is no specific framework specifically aim to minimise the middle-income housing mismatch. None of them highlighted the housing mismatch problem, except from Saleh et al. (2016). Based on the framework, housing mismatch occurrences could be explained by three main aspects namely affordability, regulatory, and spatial geographical location. The affordability refers to the buyers’ financial capability in housing purchasing, house price and the availability of affordable housing in the market. The regulatory

represents the government in the sense of supplier and financial institution. The spatial location is about the location of the housing project. It refers to the housing project that is located at an unsuitable or not strategic location (misallocation). Based on the discussion in the previous section, it was indicated that there are three aspects that contribute to the middle-income housing mismatch. The aspects are government intervention, developer behaviour and buyer preferences. Hence, this study develops a conceptual framework that consists of those three aspects. Figure 1 presents the conceptual frameworks. Basically, this framework has adapted framework from Saleh et al. (2016). The present framework has included the developer aspect as it was found that the developer was the main contributor in the middle-income housing mismatch occurrences.

This framework takes into account the housing preferences aspect as it is connected to purchase intention. This is due to the fact that in the context of housing purchasing, buyers tend to buy houses that can meet their affordability and housing preferences. The structural pathway that attributes to the housing mismatch problem among middle-income, the government should intervene in ensuring middle-income has the opportunity to purchase a house that able to meet their affordability and housing preferences in the housing market. The significance of this is to ensure the supply of affordable housing in the market is sufficient and does not experience unsold unit problem.

Next, this framework suggested that approval permission should be revised by emphasizing the housing demand and supply aspect and creating the data bank or database. With such information, not only housing for middle-income, the entire population housing demand could be monitored efficiently given the fact the government could control the housing supply; what should be supplied and what is not. At this point, the efficiency of housing planning practice could overcome the insufficient housing supply for the middle-income. This is to commensurate with the first thrust in National Housing Policy that is provision of adequate housing based on the specific needs of target groups. Hence, the issue of insufficient supply may be reduced.

Additionally, the implementation of housing price control is in need. By controlling the house price, the government could control the

quantity of supply in terms of house price in the market and at the same time, the government could control the developers from taking too much profit. The developers prefer to build high-end products because of high profit. Therefore, the regulation that imposed them to build affordable housing needs to be continued. Additionally, it is ideal if the government formulates a comprehensive framework that does not confine on regulation solely. Providing incentives to the developer could be a great initiative and encouragement. The incentive could be given through several forms such as tax waives, provide land, etc. The incentives may divert them from focusing on high-end products to affordable housing for the middle-income groups.

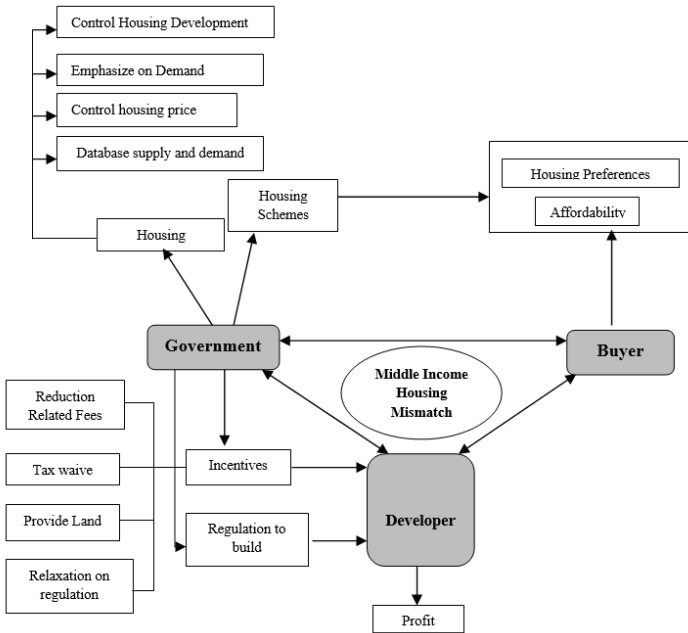


Figure 1. Conceptual Framework for Minimising Middle-Income Housing preferences: Mismatch Occurences Emphasize on Government Intervention

Source: Author

CONCLUSION

The paper attempts to develop a conceptual framework for minimising the gap in middle-income housing mismatch occurrences by emphasizing the aspect of government intervention, developer behaviour and buyer preferences. Significantly all those three aspects should interrelate with each other so that the potential of housing mismatch occurrences is low. In addition, the present framework emphasize on government intervention. The government's intervention is required to involve the developers to take part in developing housing for the middle-income group. In other words, the government should create a win-win situation to avoid any losses to the developer and at the same time could provide sufficient supply housing to the middle-income population. The incentives provided could entice the developer behaviour from high-end units to middle-income housing. Lastly, housing preferences play a crucial role besides affordability. This is because takes into account the middle-income buyer's preferences in housing decision-making. Thus, this particular paper basically provides a good perspective in exploring future potential research in the field of housing mismatch, middle-income housing and government intervention. Since cooperation and proper coordination between government and housing developers is crucial in creating sufficient affordable housing, it would be better to extend the research to identify and evaluate developer perspective towards incentive. Hence, the finding could provide a clearer picture to the government to abort ineffective incentive and vice versa for future affordable housing supply.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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