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Effects of Property Construction Cost Increase during Covid-19 Pandemic

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Abstract

The development of the property sector can significantly influence socio-economic growth and infrastructure development as an essential part of the construction industry. But the sudden COVID-19 pandemic has had severe, and far-reaching effects felt all over the world. Controls on movement, slower circulation of human and material resources and blockades on entry and exit have affected almost all sectors, including the construction industry. For property construction, the increase in costs is a vital issue. The increase in costs due to the pandemic has held back development, and it is essential to minimise the rise in costs. The point of cost increase needs to be explored in terms of its effects on property construction. As this study is more closely related to property construction, an online questionnaire was distributed to property developers, contractors and quantity surveyors in Kuala Lumpur and Selangor to obtain their views. The primary data collected was analysed using statistical tools such as the one sample T-test. The study results indicated that the most significant effect on property construction due to the increased costs of the COVID-19 pandemic was due to funding shortages and financial distress, followed by the credit crisis and more conflict.

Keywords

Effects, Cost increases, Property Construction, Covid-19 Pandemic.

Introduction

The property sector is characterized by rapid growth and a high contribution rate. More and more developers are choosing to invest in property to meet market prospects and social development needs. Adequate construction and infrastructure development can ensure economic stability, create jobs, enhance community cohesion, and improve living standards. As an essential component of the construction industry, the development of the property sector can significantly impact socio-economic growth and infrastructure development. The property sector plays an integral role in Malaysia's national economy.

However, the unusually sudden COVID-19 pandemic has severely affected the global economy and financial markets (Statista, 2021). The WHO declared the COVID-19 outbreak an international public health emergency at the end of January 2020. Since the beginning of the COVID-19 pandemic, many countries, including Malaysia, have reported an increase in the

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number of virus cases. As of February 2022, 3,040,235 infections and 32,125 coronavirus-related deaths have been reported in Malaysia. The Covid-19 pandemic is a health crisis and a social and economic crisis whose severe and far-reaching impact has been felt around the world.

The impact has been felt in almost every sector, including the construction industry, which is set to contract by 8.8% in 2020 as the situation worsens. After economic activity recovery, construction sites were expected to increase rapidly in the coming months to make up for some of the output lost since mid-March 2021. The property construction currently has to address various difficulties in moving the project forward, such as resolving logistics and transportation issues, as well as supply chain imbalances and material shortages due to the epidemic; avoiding the spread of the epidemic due to the high concentration of people, which will bring increased costs for epidemic prevention and loss of efficiency.

The property sector was most directly affected by the increased costs in many areas at construction. For example, projects are being delayed, put on hold, or cancelled because of Movement Control Order (MCO), and unemployment in the construction industry is beginning to skyrocket. In addition, the construction industry is highly dependent on migrant labour, and the current pandemic has led to short term job shortages across the country. The transportation of materials has also slowed down due to the pandemic, so these resources will increase in price to some extent. All of this can make for increased costs and affect the sustainability of the property. This study will focus on the main causes of increased property construction costs during the Covid-19 pandemic and some effective measures to address the causes.

There are problems in relation to the increasing cost of property construction during the COVID-19 pandemic. The property sector has experienced varying degrees of impact in this special time, the nature and extent of the impact depend largely on the location of the respective business and underlying projects, which is facing more and more pressure and challenges, including social and industrial challenges, cost increase has thus become more common.

The supply chain in the property construction industry is a social system, and any imbalance in the chain will challenge the industry (Liu et al, 2020)). In addition, the increase in costs has slowed the overall development of the property market, which has lost its peak selling season. The high inventory and slow return of funds to companies may also slow down new construction projects. According to the DOSM, the industrial production index for April 2020 in Malaysia will be 32.0% lower than in April 2019. The impact on companies will be more pronounced in the coming months as manufacturing, and industrial activities are slowed down due to delays in major decisions (DOSM, 2020).

When the cost of building a property increases, the developer may face a shortfall in funding due to budget overruns. Some of the cost risks may be partially transferred to the contractor. On the other hand, it can also bring more disputes to the project and face higher pandemic contingency costs (Lee, N. and Sch., J.E., 2014).

The main objective of this study is to study the effects of construction cost increase to the property by Covid-19 pandemic.

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Shortage of funds and financial worries

When the cost of building a property increases, the developer will pay more money and risk overspending on the total construction cost, leading to delays while the project manager finds more funding for the project. If there are not enough funds to make up the difference and finance the completion of construction, the project will have to be stopped. On the other hand, it affects the creditworthiness of the owner's loan.

The insolvency of construction companies in the UK was rising overall since the end of the government's coronavirus work retention scheme in September 2020. Figures from the Insolvency Service (both liquidation and administration) show that 260 construction companies registered as insolvent in October due to the significant pressure on development costs. This compares to 112 in October 2020, when various forms of financial support were in place. In October 2019, prior to the pandemic, the number of insolvencies was 279.

The increase in liquidations reflects the number of companies that have run out of options, with a disproportionate share of smaller companies. This can be seen in the rise of Creditor Voluntary Liquidations (CVLs), mainly used for smaller companies and those with no other options. CVLs have jumped from around 70% of overall insolvency proceedings before the pandemic to over 90% in recent months. Construction administration and insolvency largely reflect the general trend of companies simply reaching the end of the line and reaching the CVL process (Blazy, R. and Nigam, N, 2019).

Credit crisis

The risk of increased costs resulting from an epidemic leading to a corresponding increase in financial and administrative costs may be partially transferred to the contractor. Projects will be caught in the middle of disputes. They will face higher contingency costs, i.e. contingencies set aside to cover unexpected costs (Lee, N. and Sch., J.E., 2014).

When contractors fail to deliver on time, it may undermine the ability of property developers to deliver to purchasers on the scheduled delivery date, especially for housing projects which make up a large part of the Malaysian construction industry (Esa, et al. 2020). In turn, this sets off a chain reaction throughout the housing supply chain, with purchasers seeking liquidated damages (LAD) from developers when they do not receive the delivery as expected, developers try to recover losses from contractors, and then contractors are abandoning the project when they are unable to pay.

At the same time, the developer cannot pay consultants, suppliers, creditors, and even bank loans and facilities, which leads to another chain of adversarial litigation. Soon the whole industry will be caught in a vicious cycle of litigation. The number of troubled projects proliferates, development companies collapse, homebuyers go bankrupt for failing to repay their home loans and eventually, even banks experience a credit crunch. Ultimately, all parties will fail.

More disputes

Faced with the reality of increased costs, the various departments also need to work closely together to meet their respective obligations in a pandemic situation. However, if the cooperation of all parties goes wrong, more disputes can arise. For example, suppose a pandemic completely deviates from the subjective expectations at the time of contracting. In that case, it becomes more difficult for contractors to complete construction and negotiate with developers.

An RICS survey of the global construction industry found that more than 40% of professionals reported an increase in disputes since the outbreak of the COVID-19 crisis. In comparison, less than 3% of respondents reported a decrease in disputes over the same period, suggesting that the pandemic puts further pressure on an already stressed industry (RICS, 2021). This has had a widespread impact on cash flow, leading to a lack of regular progress payments in the supply chain, leading to further delays. When an event such as COVID-19 occurs, the issue of making and processing claims becomes difficult if neither party can be held responsible for it or cannot be foreseen (Hossain, 2021).

Research Methodology

Secondary data is reused in this example, making it primary data in the first research and secondary data in the second. The sources include books, articles, newspapers, webpages, official records, etc. The primary data was collected after collecting the secondary data. As statistical data was more appropriate to test the hypothesis and address the objectives of this study, it was decided to use a questionnaire as the primary data collection method for this study. The questionnaire is sent via email to 32 property development companies and 20 architectural firms, and 30 individuals from different property enterprises in the Kuala Lumpur and Selangor region and 36 responses are obtained.

Data Analysis

The data collected in this section is used to achieve the first objective of this study, and the statistical tool used to analyse the data is the t-test. The questions in this section are set according to Likert scale questions. Respondents answered the questions according to their level of agreement on the effects of the increased costs on property construction due to the COVID-19 pandemic.

Table 1: Descriptive Data Analysis

EFFECTS	**FREQUENCY OF SCALE**					**MEAN**	**STANDARD DEVIATION**
	1	**2**	**3**	**4**	**5**		
Shortage of Funds and Financial Worries (E1)	0	0	0	13	23	4.64	0.487
Credit Crisis (E2)	0	0	1	15	20	4.47	0.567
More Disputes (E3)	0	0	3	13	20	4.52	0.667

Table 2: Inferential Data Analysis

Effects	T-Value
Shortage of Funds and Financial Worries (E1)	20.186
Credit Crisis (E2)	16.371
More Disputes (E3)	13.505

Note: Critical value = 1.68957

Conclusion

This research is concerned with the effects of construction cost increase towards the property by Covid-19 pandemic. It is derived that the greatest effect is on funding shortages and financial distress, followed by the credit crisis and more disputes. Therefore it is concluded that financial problem in term of project funding is the main effect to the construction projects due to Covid-19. This will lead to problems such as project delay as discussed above. This research is limited to 'effects' of construction cost increase and targeted Kuala Lumpur and Selangor region.

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