



Determining Critical Contributory Factors of Payment Default in Residential Construction Projects

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Abstract: Issues in relation to payment is not new and it has always been debated widely in construction contracts research discipline. Payment default is one of a crucial issue that refers to the situation whereby the claimant claims the amount of payment, but they are not being paid in a whole or in part within a specific time (including under payment, delayed payment, and non-payment). In this case, majority of the contractor would be the direct and enormously affected party, however, this area is still under discovered empirically. This research aims to identify factors significantly contributing to the payment default, specifically in private construction projects. Survey was used in this research through questionnaire surveys. The targeted respondents were G7 contractors who have been involved in private projects, mainly in residential projects. The findings address that factor of delay in certification or poor documentation rated the highest average mean value. Meanwhile, the CIDB Standard Form of Contract for Building Works 2000 Edition was determined as the highest average mean value out of five remedies. The outcomes of the study could be useful for the key parties in project to enhancing their understanding and commitment in mitigating payment default issues in private construction projects.

Keywords: Payment default, contractors, remedies, private projects

1. Introduction

Payment is known as an essential element of the construction industry. However, the industry notices that payment default, especially for delayed and non-payment remain as a major problem (Ali, 2006). Payment critically influenced project performance due to the involvement of multiple phases as well as multiple tiered parties. Payment issues are not only between contractor and client, but it also commonly involved main contractor and sub-contractors. Although studies on payment have been done widely, however, investigation on the factors contributing to payment default, mainly in private construction projects is still opened debatable. The findings of the research would be provided a pave in terms of useful information to the stakeholders regarding payment default issues.

2. Background of the Research

Generally, payment is defined as a sum of money for the completion of work or services delivered that under the express terms of a construction contract (Kuala Lumpur Regional Centre for Arbitration, 2014). When it turns to payment of money in a construction project, client, main contractor and also sub-contractors are the main parties commonly in risks (such as non-payment, late payment and payment default). Frequently, the main contractor is caught between the client and his sub-contractors (Mak, 2013).

Furthermore, payment default is not a new issues and it is one of the problems that always been discussed in construction contracts. Din & Ismail (2014) provides a concise meaning of payment defaults occurred in the construction industry that is to be specified as under payment, late payment, and non-payment. It is important to be addressed as a chronic problem of payment default in construction industry may result in negative impacts to the entire construction supply chain (Malaysia Productivity Corporation, 2014). Disputes comes from under payment; delayed payment; and also non-payment to the contractor which contributes about 56.7% in profiling of construction disputes are normally been highlighted and discussed (Rashid, 2007). Although there are specific provisions provided in the standard forms of contract addressing to the payment obligations, Judi & Sabli (2010) noticed that there are some issues that still arise in regard to under, late, and non-payment remain substantial in construction sector.

On the other hand, payment in the private sector is keener to delayed payment as compared to the public sector (Kho & Rahman, 2010; Hasmori et al., 2012). There are 65.4% of the respondents have experienced late payment in private fund projects; whereas there are 44.8% of respondents affirmed that they had not been paid for the works executed in private fund projects (Rahman et al., 2014). Additionally, out of 333 of contractors, there are 53.5% (178) of contractors have affirmed that delayed payment situation in private projects (CIDB, 2014). By considering this, there is a need a research to identify the factors that contribute to payment default in private construction projects. This research was conducted in Selangor, and Kuala Lumpur. The targeted respondents was the grade G7 contractors which involved in residential projects due to they are able to tender projects which are no limits in the tendering capacity.

This research aims to identify the factors that contribute to payment default in private construction projects. For example, delayed payment problem is interconnected with the cash flow problem. When the cash flow into a business is late, the net cash flow may become negative (Kho & Rahman, 2010). Therefore, the findings of this research could lead the contractors to be deeply understandable regarding the issues discussed, and also the ways to remedy in payment issues. Besides that, the findings of the study would also be a pave to the future studies in mitigating the payment default issues based on the perception of contractors.

3. Literature Review

Payments issues is not a new problem in construction industry. Several existing studies have mentioned that payments issues caused by various factors. According to Din & Ismail (2014), payment default issues such as under payment, delayed payment and non-payment are still unresolved and it seems getting crucial in construction industry. There are three types of payment default namely under payment, delayed payment, and non-payment. Under payment is defined as the certified and paid amount by the client is lower than the value of contractor's work done (Din & Ismail, 2014). Furthermore, issues on payments are not only happen in Malaysia, but it also occurs in developed country such as Australia. For instance, there is study addressed that a builder was underestimated construction costs on a large inner-Melbourne project, and leaving workers underpaid (Lucas, 2012). In contrast, delayed payment referred to withholding of payment based on variety of reasons from insolvency to defective construction works (Sahab & Ismail, 2011). Delayed payment are potentially due to several reasons such as paymaster's financial problem. If the payment does not pay on time by the client, the contractor would have cash flow problem to run their business. Another issues that have been received a wide attention is non-payment that may happen during construction or after the project completed. It refers to no payment paid by the client to the contractor after the submission of the claim is done. Interestingly, non-payment issues in private projects are more seriously than that in public or government projects (Danuri et al., 2006; Rahman et al., 2014). Here, there are several factors and remedies in regards to payment in construction project will be discussed in the following sections.

3.1 Factors of Payment Default

Payment default in construction happened due to several factors that mentioned in table as shown in Appendix A. Based on the previous research, the payment default not only caused by client, but it also caused by the other parties such as contractors, and consultants. Based on the results from the literature review, paymaster's poor financial management are the most significant factors that contributed to payment default in construction industry, and followed by the delay in certification; and local culture / attitude. Additionally, paymaster's poor financial management may cause insufficient operating funds when they are obligated to pay the payees (Ansah, 2011). This factor may be caused by cash flow problem due to deficiencies in client's management capacity, overlook the undulation effect of economic downturn on cash flow, and financial failure because of insolvency of employer in other business, employer ineffectively utilize the funds, and also poor cash flow due to lack of proper process implementation (Kho & Rahman, 2010; Hasmori et al., 2012).

Furthermore, the literature suggests that Involvement of too many parties in the process of honoring the interim certificate, inefficient procedures of the payment process, and delay in evaluation and certification of interim and final payment may cause payment problems. These may lengthen the time for approving the certification or the documentation of the projects. Sometimes, conflict also will happen due to lack of trust between key parties, and also causes the disagreement on the valuation of the work done (Azman et al., 2014; Kho & Rahman, 2010; Hasmori et al., 2012). Meanwhile, there is a study based on New Zealand's construction industry perspective concludes that the financial stability of players is central to payment problems (Ramachandra, T. and Rotimi, J.O.B., 2015). This means that stability of payment is ensured through a regular flow of cash during work progress and ensures that all parties' financial claims are important to courage contractor to proceed their work successfully. There is also a latest study conducted in Vietnam supported that it is necessary to identify other factors affecting cash flow management among contractors namely macro environment, during construction, payables and receivables, construction cost, retention; loan payment and tax (Lea, Vub & Nguyenc, 2020).

Interestingly, payment that made by client was late for few days less than five (5) working days, or received delayed payment from client by the contractor in Malaysia as they are always mercy to the client is still acceptable. This may because of culture of delayed payment in Malaysian construction industry that makes the contractors perceived delay payment for few days are acceptable (Kho & Rahman, 2010; Hasmori et al., 2012). Besides of the above reasons, clients' assumption that contractors may get financial assistance from the bank for the project in advance also potentially cause to payment problems (Rahman et al., 2014). Notably, the late payment issue that potentially affect the financial stability, performance, and quality of construction of subcontractor in Malaysia construction industry seems getting acceptable, whether it comes from government or private sector (Haron & Arazmi, 2020). With reviewing the existing studies, it shows that payment default in project could be contributed not only one key factor but it could be caused by various of factors in different stages of construction.

3.2 Remedies for the Payment Default

Payment issues may bring a negative impact to the construction supply chain. Therefore, a several ways have to be taken effectively to remedy the issues. There is a way to mitigate this issues in which the newer set of standard forms of contract used by the private sector in the construction industry. The provisions to address the payment issues by allowing contractors to take the action to the client will be a possible way to solve this payment problems (Kuala Lumpur Regional Centre for Arbitration, 2014).

Under the common law, the contractor has no right to suspend of work, whereas the employer also has no legal right to order any suspension of work. Suspension is a temporary halting by one party of the performance of their obligations under the contract on the grounds that the other party is in contravention of contract for failing to make payment in accordance with the terms agreed between them (Judi & Rashid, 2010). According to PAM 2006, the contractors was given the right to claim for interest for delayed and non-payment by the client as stated in the clause 30.17. On the other hand, the client has the right to pay the contractor a sum in addition to the certified amount which can be considered as an interest for the delayed payment (Judi & Rashid, 2010).

CIDB 2000 contains a provision that allow the contractor to determine the contract when there is a default by the client. On the other hand, in PAM 2006, the client's default that listed in the clause 26 empower the contractor to terminate his own employment under the contract. It is noticed that such notice is drafted into the contract to afford a chance to the client to remedy the default within that seven (7) days period. Failure by the client to pay within the stipulated time would entitle the contractor to terminate his employment under the contract (Judi & Rashid, 2010). Based on the pilot test result, the respondent recommended that payment bonds is also one of the ways to remedy the payment default issues. Nevertheless, according to Supardi, Adnan, & Mohammad (2011), the payment bonds is the one of the best remedies offered to contractors. Moreover, the performance bond that the contractors have to give to the developer, the contractors also has to provide payment bonds to their sub-contractors, and suppliers (Supardi et al., 2011).

Implementation of CIPAA is also one of the possible measures to be taken by contractors in order to remedy the payment issues (Din & Ismail, 2014). The purpose of the CIPAA is to reduce the payment default by establishing a cheap and rapid means of resolving payment disputes. CIPAA introduces a statutory adjudication regime for construction contract relating to the construction work that carried out partly or in whole in Malaysia. Furthermore, the primary objective of CIPAA is to address cash flow issues and remove the pervasive practice of conditional payment in the construction industry, while the conditional payment provisions refers to the pay when certified, 'pay when paid', and 'pay if paid' clauses (Kuala Lumpur Regional Centre for Arbitration, 2014).

4. Research Methodology

A quantitative approach was used in this research since the quantitative approach tends to be related with large scale studies (Denscombe, 2010). Survey was chosen for the data collection in which questionnaire was distributed to the targeted respondents by several medium such as email, post, and call in order to achieve the research objectives. The targeted population of this research is the G7 contractors in Kuala Lumpur and Selangor. The number of G7

contractors registered under CIDB in Selangor, and Kuala Lumpur are 1,339 and 1,530 respectively (CIDB, 2014). According to Krejcie & Morgan (1970), there are at least three hundred and thirty-eight (338) of respondents are needed for ninety-five (95) percent of level of confidence with five (5) percent of error. However, according to research that conducted by Motuun (2014), only hundred (100) sets of the questionnaire were distributed to the respondents due to time constraint, and high cost. Therefore, hundred (100) sets of the questionnaires were distributed to the G7 contractors in Kuala Lumpur and Selangor for this research.

In this research, random sampling method was used. Random sampling ensures that there is no scope for the researcher to affect the sample in some ways that will cause prejudices (Denscombe, 2010). Hundred (100) sets of the questionnaires were distributed randomly through email, post, and call based on the list of Grade G7 contractors in Kuala Lumpur and Selangor that provided by Construction Industry Development Board Malaysia, CIDB. This research was conducted to determine the factors that contribute to payment default in private construction projects. The research instrument used in this study was questionnaire. The questionnaire included four (4) section. Closed questions was asked in section A and B in order to get the demography of the respondent, and to identify the types of payment defaults happens in the current construction industry. For section C, the likert scale was used to identify the factors that contribute to payment default in private construction projects; whereas section D was used also the likert scale to determine the ways to remedy the payment default in private construction projects. The level of measurement of the likert scale were 1= very low, and 5= very high.

A pilot test is conducted to detect the weaknesses in the research design, data collection instrument, and also procedures (Cooper & Schindler, 2014). In this research, the first draft of the questionnaire was tested by supervisor. Next, the draft questionnaire was tested by six (6) industrial people. The questionnaire was finalist once the pilot test result shows that the questions are viable, clear, and easy to be understand. The summary of pilot test was showed in table in appendix B. To analyse the data collected from the questionnaires survey, SPSS version 22.0 was used in this research. SPSS is a standard analytical tool for most survey researchers (Davies, 2007). All the data were analysed by considering the all the available factors as stated in the literature review and supported with the descriptive analysis. The data were analysed into the forms of percentage and frequency. The tables, and figures were help the researcher to present or display the data clearly and make the readers easy to understand it. The level of agreement for mean measurement were 1.00 – 2.33= low, and 3.68 – 5.00= high (Al-Awawdeh, 2012).

5. Data Analysis

This section discusses the results that obtained from the questionnaire survey that have been conducted regarding the factors contributing to payment default in private construction projects, and also the ways to remedy the issues. Hundred (100) sets of questionnaires were distributed to the G7 contractors in Kuala Lumpur, and Selangor through email, post, and call. However, there are only forty-one (41) sets of questionnaires returned. Unfortunately, there were two (2) sets of questionnaires was not valid to be used for further analysis. According to Saunder, Lewis & Thomhill (2009), the total number of respondents which exceeding thirty (30) respondents are adequate to obtain desire information for the study (Saunder et al., 2009).

Cronbach's alpha is the most common measure of internal consistency of a scale or test. According to George & Mallery (2003), the coefficients alpha of 0.80 to be considered as good, and the value exceeding 0.70 to be considered as acceptable. The results of the reliability statistics for objective 1 and 2 were 0.897 and 0.936 respectively. Therefore, the questionnaire can be considered is good and reliable.

Most of the respondents worked as contract executive in construction field. Besides that, majority of the respondents in this study were experienced 11 years and above, they are considered as experienced and their answers are more useful and helpful in this study. Furthermore, there are 36 (92.3%) of respondents are experienced payment default issues, and 29 (74.4%) of respondents had experienced payment default issues in residential projects. The result also showed that the housing projects had the highest percentage which is 64.5% regarding on payment default issues. The summary of demography of the respondents was showed in the Table 1 in below.

Table 1 - Summary of demography of the respondents

VARIALES	FREQ	PERCENTAGE (%)
<i>Job Position</i>		
Contract Executive	8	20.5
Senior Contract Executive	1	2.6
Project Coordinator	3	7.7
Contract Manager	4	10.3
Senior Contract Manager	5	12.8
Project Manager	7	17.9
Senior Project Manager	5	12.8

VARIABLES	FREQ	PERCENTAGE (%)
Others	6	15.4
Years of Experience		
Less than or equal to 5 years	12	30.8
6 – 10 years	6	15.4
11 – 20 years	16	41.0
More than or equal to 21 years	5	12.8
Types of Residential Projects that Respondents' had Experienced Payment Default Issues		
Housing Projects	20	64.5
High Rise Residential Projects	10	32.3
Others	1	3.2

Based on the past research, there have three (3) types of payment default are happens in current construction industry. However, based on the findings, majority of the respondents which is 34 (64.2%) of the respondents were experienced delayed payment in current construction industry. This result shows that delayed payment was not only happened in past research, but it also still often happens in our current construction industry.

5.1 Factors Contribute to Construction Payment Default in Private Residential Projects

The finding shows that there are nine (9) factors are ranked as “high” by the respondents, which is factors of delay in certification / poor documentation (3.94), economic recession / slowdown (3.92), contractor’s work performance (3.87), paymaster’s withholding of payment (3.82), financial market instability (3.82), insufficient financial resources (3.75), conflict and poor communication among parties involved (3.73), and consultant’s quantity surveyor (3.72). Furthermore, there are three (3) factors were ranked as “median” by the respondents, which is factors of local culture / attitude (3.62), client’s poor financial management (3.59), and contractor’s default / technical problem (3.55). There are no factors was ranked as “low” by the respondents in this research. The summary of factors showed in the Table 2 and Figure 1 as depicted below.

Table 2 - Summary of factors

Factor	Average mean	Result	Rank
F1	3.59	Median	10
F2	3.75	High	6
F3	3.82	High	5
F4	3.73	High	7
F5	3.62	Median	9
F6	3.82	High	5
F7	3.94	High	1
F8	3.72	High	8
F9	3.55	Median	11
F10	3.87	High	4
F11	3.92	High	2

Notes:-

- F1 - Client's Poor Financial Management
- F2 - Insufficient Financial Resources
- F3 - Paymaster's Withholding of Payment
- F4 - Conflict and Poor Communication among Parties Involved
- F5 - Local Culture / Attitude
- F6 - Financial Market Instability
- F7 - Delay in Certification / Poor Documentation
- F8 - Consultant's Quantity Surveyor
- F9 - Contractor's Default / Technical Problem
- F10 - Contractor's Work Performance
- F11 - Economic Recession / Slowdown

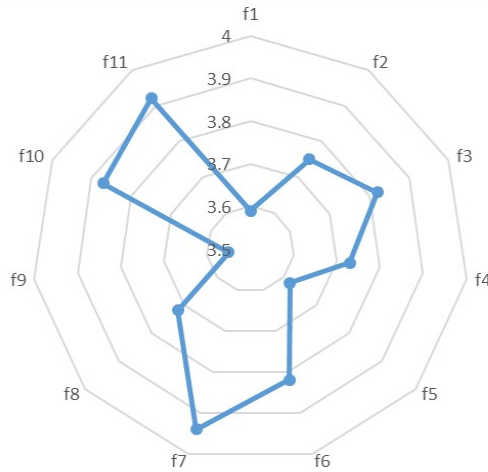


Fig. 1 - Contributory factors to construction payment default in private residential projects

5.2 Ways to Remedy the Construction Payment Default in Private Projects

With referring to Table 3 and Figure 1 showed that three (3) remedies was ranked as “high” by the respondents, which is CIDB Standard Form of Contract for Building Works 2000 Edition (3.83), PWD Form 203A (Rev.01/2010) (3.82), and PAM Sub-Contract 2006 (3.75). Next, there are two (2) remedies was ranked as “median” by the respondents, which is remedies of implementation of CIPAA 2012 (3.62), and PAM Contract 2006 (With Quantity) (3.59). There are no remedies was ranked as “low” by the respondents.

Table 3 - Summary of factors

Remedy	Average mean	Result	Rank
R1	3.82	High	2
R2	3.59	Medium	5
R3	3.75	High	3
R4	3.83	High	1
R5	3.62	Medium	4

Notes:-

- R1 – PWD Form 203A (Rev. 01/2010)
- R2 – PAM Contract 2006 (With Quantity)
- R3 – PAM Sub – Contract 2006
- R4 – CIDB Standard Form of Contract for Building Works 2000 Edition
- R5 – Implementation of CIPAA 2012

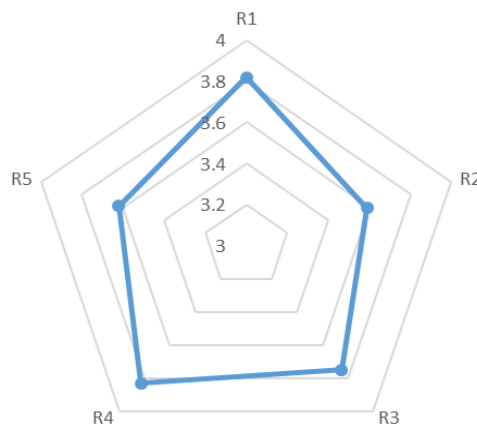


Fig. 2 - Ways to remedy the construction payment default in private projects

6. Discussion, Conclusion, and Recommendation

This section discusses the findings of the study that obtained from the descriptive data analysis. Furthermore, the conclusion and recommendation for future study are also discussed. Based on the questionnaire gathered, there were eight (8) factors out of eleven (11) factors rated “high” level of agreement by comparing the average mean value. It consists of delay in certification / poor documentation, economic recession / slowdown, contractor work performance, paymaster’s withholding of payment, financial market instability, insufficient financial resources, conflict and poor communication among parties involved, and consultant’s quantity surveyor.

According to the findings stated in previous section, the factors of delay in certification / poor documentation was ranked as the most significant. Most of the respondents agreed that delay in certification / poor documentation happened due to the inefficient procedures of payment process. Certification is important to the contractor when they want to claim back the amount of work done from the client(s). If the certification was submitted late, which means that the contractor potentially to receive the payment from the client not as per scheduled.

This finding seems contrastingly with the past researches. Previous literatures found that client’s poor financial management was the main factors that caused to the payment default issues (Rahman et al., 2014; Azman et al., 2014; Hasmoni et al., 2012; Kho & Rahman, 2010; and Danuri et al., 2006). The scenario might cause by the size of the contractors as this study only focused on the G7 contractor in Kuala Lumpur and Selangor. This shows that different sizes of organisation, different experiences of players could influence their opinions. Otherwise, nowadays, the contractor will do the company search and bankruptcy search before accepting the project. If they noticed that the client does not have a good financial management or enough funds to run the project, they may refuse to accept the project.

It is noted that due to the factor of delay in certification / poor documentation was the main factor that caused payment default issues which is different with the past researches. In addition, this result was resolutely supported by majority of the respondents. Therefore, the factors of client’s poor financial management may not become the main factors that contribute to payment default in private residential projects in the current construction industry. Based on the findings, there are three (3) remedies out of five (5) remedies were rated “high” level of agreement by comparing the average mean value. It includes CIDB standard form of contract for building works 2000 edition, PWD form 203A (Rev. 01/2010), and PAM sub-contract 2006; whereas the implementation of CIPAA 2012, and PAM contract 2006 (With Quantity) were rated as “median” level of agreement by comparing the average mean value.

Based on the findings of the result that stated in table shown in Appendix C, majority of the respondents agreed that CIDB Standard Form of Contract for Building Works 2000 Edition was the most effective ways to remedy the payment default in private construction projects. Clause 42.1 (e) – payment bonds under CIDB Standard Form of Contract for Building Works 2000 Edition was gained the highest mean value which is 3.95, and standard deviation of 0.868 in this study. Besides that, according to the pilot test results, the respondents also agreed that payment bonds was the effective remedies for the payment issues and also is what they practicing in the current construction industry. Furthermore, Supardi, Adnan & Mohammad (2011) also cited that payment bonds was one of the effective remedies offered to contractor to remedy the payment issues (Supardi et al., 2011).

The findings of this study are in line with the results from the previous research in which standard forms of contract, and implementation of CIPAA 2012 were the effective ways to remedy the payment default issues (Judi & Rashid, 2010; Supardi et al., 2011; Din & Ismail, 2014). However, based on the findings of this study, most of the respondents agreed that standard forms of contract is the most effective ways to remedy the issues due to they are lack of the knowledge in implementing of CIPAA 2012. Majority of the respondents are still not familiar with the CIPAA 2012. Therefore, they still stick on their point of view that standard forms of contract can be the most effective ways to remedy the payment default issues in private residential projects. Although the remedies of CIDB Standard Form of Contract for Building Works 2000 Edition is not the new remedies for the construction industry, however, there are still often been used in our construction industry in order to remedy the payment issues particularly, in private projects.

7. Conclusions

Payment is a vital for construction companies to operate in the construction industry. Additionally, this is due to the cash flow is becoming priority and important for them to sustain their business in short and long term. The impact can be seen if they do not receive the timely payment, then it leads to a negative impact to the company especially for those who handle numbers of projects at the same time. All the parties involved need to understand and try to avoid it from all factors that might contributing to the payment default. The suitable remedies also have to be introduced and implemented in order to solve the payment default issues in the current construction industry. The outcome of the research would be useful in paving an understanding and improved awareness on mitigating payment defaults among key participants involve in project development regardless private or public.

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Appendix A: Factors that Contribute to the Default Payment in Construction

Factors	Descriptions
Client's poor financial management	<ul style="list-style-type: none"> - Deficiencies in client's management capacity - Client's ineffective utilization of funds
Insufficient financial resources	<ul style="list-style-type: none"> - Financial failure due to insolvency - Clients loan from bank not in place to pay - Banks refuse to provide credit facilities to small construction - Clients inaccurate forecasting of market demand when pre-selling property
Paymaster's withholding of payment	<ul style="list-style-type: none"> - Delay in releasing retention monies to contractor - Clients deliberate delay for their own financial advantage - Willful withhold payment for personal reason
Conflict and poor communication among parties involved	<ul style="list-style-type: none"> - Lack of trust - Lack of understanding - Disagreement of the valuation of work done
Local culture or attitude	<ul style="list-style-type: none"> - Contractor willing to accept late payment from clients as they are always at the mercy of the clients - General perception of construction players who think that delay for few days is acceptable.
Financial market instability	<ul style="list-style-type: none"> - Inflation - Increment of foreign exchange rate
Delay in certification / poor documentation	<ul style="list-style-type: none"> - Involvement of too many parties in the process of honoring interim certificate - Inefficient procedures of payment process - Delay in evaluation and certification of interim and final payment.
Consultant's quantity surveyor	<ul style="list-style-type: none"> - Underpaid claims - Consultant's quantity surveyor not a quality management system company
Contractor's default or Technical Problems	<ul style="list-style-type: none"> - Contractor's capital lock up - Contractors delay in submitting claims - Contractors do not do research on paymaster ability to pay when tender for a project
Contractor's work performance	<ul style="list-style-type: none"> - Contractor's poor quality of work lead to client's dissatisfaction.

Factors	Descriptions
Economic Recession / Slowdown	- Construction companies faced financing difficulties and, in worst, bankruptcy.

Appendix B: Summary of Pilot Test Process

Draft	Comments	Action taken
1	<ul style="list-style-type: none"> Grammar mistake and format error. Add in more question into questionnaire 	<ul style="list-style-type: none"> Some of the grammar mistake were amended and then sent to supervisor for checking.
2	<ul style="list-style-type: none"> Grammar mistake Amend Section A by deleting the unnecessary question such as gender. Change the words using in Section A such as working experience change to years of experience. Suggested to proceed to the pilot test. 	<ul style="list-style-type: none"> Five (5) respondents was contacted and agreed to help in piloting the questionnaire. All the comments and suggestions was recorded and the pilot test was then prepared. After two (2) weeks, the questionnaires was amended accordingly and sent to supervisor by email together with the pilot test report for checking.
3	<ul style="list-style-type: none"> Amend the alignment Amend the Section B by deleting the unnecessary question such as the frequency of the payment default issues happen in current construction industry. 	<ul style="list-style-type: none"> After semester break, the questionnaire was piloted again by one (1) certified quantity surveyor who worked as senior project manager. All the comments and recommendations was recorded. The questionnaire was then amended accordingly together with the supervisor's comments.
4	<ul style="list-style-type: none"> There still have a minor problems to amend such as alignment of the table. Add in the economic recession as one of the factor and find the supporting point for it. 	<ul style="list-style-type: none"> The alignment was adjusted and the supporting point was added into the Section B. The fifth (5th) draft of questionnaire was then sent to supervisor for checking and approve.
Final	<ul style="list-style-type: none"> The questionnaire was then approved by the supervisor. 	<ul style="list-style-type: none"> The questionnaire was then distributed to hundred (100) of the targeted respondents in Kuala Lumpur and Selangor.

Appendix C: Summary of Contributory Factors

Factors	Variables	Average mean	Result	Rank
F1 Client's Poor Financial Management	Deficiencies in Client's Management Capacity Client's ineffective utilization of funds Financial failure due to insolvency Client's loan from bank not in place to pay	3.59	Median	10
F2 Insufficient Financial Resources	Bank refuse to provide credit facilities to small construction Client's inaccurate forecasting of market demand when pre-selling property	3.75	High	6
F3 Paymaster's Withholding of Payment	Delay in releasing retention monies to contractor Client's deliberate delay for their own financial advantage Wilful withhold payment for personal reason	3.82	High	5
F4 Conflict and Poor Communication among Parties Involved	Lack of Trust Lack of Understanding Disagreement of the valuation of work done	3.73	High	7
F5 Local Culture / Attitude	Contractor willing to accept late payment from client(s) as they are always at the mercy of the client(s)	3.62	Median	9

Factors		Variables	Average mean	Result	Rank
F6	Financial Market Instability	General perception of construction players which think that delay for few days is acceptable	3.82	High	5
		Inflation			
F7	Delay in Certification / Poor Documentation	Increment of foreign exchange rate	3.94	High	1
		Involvement of too many parties in the process of honoring interim certificate			
F8	Consultant's Quantity Surveyor	Inefficient procedures of payment process	3.72	High	8
		Delay in evaluation and certification of interim and final paymet			
F9	Contractor's Default / Technical Problem	Underpaid claim	3.55	Median	11
		Contractor's delay in submitting claims			
F10	Contractor's Work Performance	Contractors do not do research on paymaster ability to pay when tender for a project	3.87	High	4
		Contractor's poor quality of work lead to client's dissatisfaction			
F11	Economic Recession / Slowdown	Construction companies faced financing difficulties and, in worst, bankruptcy	3.92	High	2