

A Study of Payment Issues to Constructors in the Sri Lankan Construction Industry

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Abstract

Payment issues to main contractors and the subcontractors have been a major concern in the construction industry. This research therefore, investigates the payment issues to constructors in the Sri Lankan construction industry. A survey approach using semi structured interviews was adopted.

The research found delayed payments are mostly experienced than incomplete or non-payments. Government funded projects are highly exposed to delayed payments. Final payments are always delayed compared to retention and interim payments. Subcontractors are critically affected than main contractors. The findings indicated that the top three causes of delayed payments are paymaster's poor financial management, delays in certification by consultants and improper bills from the contractors.

The research therefore, recommended that parties need to procure appropriate security measures in the form of having a payment bond from the upper tier, separate form of contract to subcontractors and construction contract act. This would ensure that contractors get paid on time and thereby contribute to the success of the project.

Keywords- *Sri Lanka, construction industry, payment issues, main contractor, subcontractor*

1.0 Introduction

The client and the contractor are legally bound by the terms and conditions in a construction contract where payment is made on time is the liability of the client (Balamuralithara, Chong, & Chong, 2011). From the contractor's perspective, payment is the most important aspect of any construction project. However, from the owner's perspective, payment is the ultimate leverage to compel contractor's performance (Hussin & Omran, 2009).

Payments to contractors in construction industry are categorized as advance payment, interim payment, final payment and retention payment (Kaka & Motawa, 2008). The advance payment could help the contractor to relieve the financing problem during commencement of construction work (Hussin & Omran, 2009). According to Jayalath (2013), the purpose of interim payment is to ensure that the contractor is regularly paid throughout the progress of works, which leads to maintain cash-flow, thus minimizing any deficit which may otherwise affect the smooth running of the project. Koksai (2009) stated that the retention money is retained against the risk of non-compliance of work on time of the contractor. Liebing (2007) suggested that final payment is the last payment made by the client to contractor of the entire unpaid balance of the contract sum. Hence, payment plays a vital role in a construction contract. When the timing and quantum of payment affected, payment issues could arise. Payment issues can be either delays, incomplete or non-payments (Ramachandra & Rotimi, 2011).

Delayed and non-payment risk is primarily due to counterpart's 'cannot', 'would not' pay attitude or both. It is evidenced in large number of construction projects where the owners simply refuse to pay the contractors once the project is completed (Meng, 2002). Further, Meng (2002) stated that for some projects sufficient funding sources are not secured before project start and the contractors often agree to be paid after the work is fully or partly completed. Khosrowshahi (2000) stated that the chain payment culture within the construction industry where payment flows from the upper to lower levels makes the payment to lower levels depend on the upper levels. Therefore, when there is a payment issue at upper level it affects the lower level too. For example, if the client delays the main contractor's payment, main contractor delays to pay the subcontractor, then sub-contractor also fails to pay his supplier. Thus, Payment issues may cause series of effects in the payment chain.

Hence, payment issue is a serious problem in the construction industry of many countries and this could be attributed to the nature, consequences and risk associated with the industry (Ramachandra & Rotimi, 2012). Majority of contractors reported that delayed payment situation in government funded projects was commonly experienced whilst more of them affirmed the same situation in private funded projects (Hasmori, Ismail, & Said, 2012).

According to National Construction Association of Sri Lanka (2009), payment issues to contractors become serious concerns in the Sri Lankan construction industry. Jayalath (2013) is of the opinion that continuous progress payments could enable the contractors to maintain the cash flow and thereby ensure the success of the project. Despite the significant of payment issues received within the Sri Lankan construction industry, there seemed to be lack of research address to this area. Therefore, the research intended to investigate the nature and the causes of payment issues in the Sri Lankan construction industry.

2.0 Brief literature review

2.1 Payment in construction industry

Payment is considered as lifeblood of the construction industry because constructions often involve very large capital outlays and take a considerable time to complete (Ameer, 2005). Construction industry and payments have a strong relationship in a construction contract (Hasmori et al., 2012). In a construction contract client and the contractor are legally bound by terms and conditions where payment considered as reward for the work performed (Balamuralithara, Chong, & Chong, 2011).

Payments are a major concern as money is needed to pay for materials, labour, plant, subcontractors' account rendered, preliminaries and general overheads expended during the progress of the work (Frics & Smith, 2012). Kaka, Morledge, and Odeyinka (2003) pointed out that many construction companies have negative net cash flows and become bankrupt due to lack of liquidity for supporting their day-to-day activities which is caused by improper payment practices. Therefore, the practice of efficient and timely payment in construction projects is a major factor that can contribute to a project's success (Danuri, Munaaim, & Rahman 2012).

Construction payment issues have attracted wide concerns in the industry for many years in both developing and developed countries (Chen, Hou, & Liu, 2011). Payment has been an issue of major concern in the construction industry and majority of contractors reported that they have gone through such issues in government funded projects whilst more of them affirmed the same situation in private funded projects (Hasmori et al., 2012). Rahman and Ye (2011) stated that payment issue is endemic in construction and needs to be explicitly recognized as this problem recurs from project after project.

Hussin and Omran (2009) described that common issue related to advance payment is delay in realizing such payment. The Aqua group (1996) expressed that when the client delays the advance payment then the contractor tends to start the construction in a slow manner because such a situation the contractor has to use his own money or the money borrowed from financial intermediaries. With regards to the interim payment, the contractor will only receive the payment after completed the progress of works. Problems in granting the relevant interim payment certificate in line with stipulation of the contract will create issues in interim payment (Singh, 2003).

The rapid increase of the delays and losses in the final payments nowadays have gone to the point that it tends to decrease the good image of the construction industry in many countries (Ismail, Yusof, & Zakaria, 2012). Issues in closing of final accounts occur during rationalization of rates as well as due to the ignorance of contract administrator staffs in rationalizing the rates on time (Sambasivan & Soon, 2007). Another factor contributed by contractors to the issues in the final accounts closing is the contractors fail to agree with the variation of work (Battaineh & Odeh, 2002). RICS (2012) noted that if the retention is not set aside in a separate marked account, this is likely to lead to delay or default in such payment. Ramachandra and Rotimi (2012) found that retention payment is very often delayed while final and interim payments are delayed less than often in the New Zealand construction industry.

Carmichael and Tran (2012) mentioned that subcontractor payments typically come through the contractor, their timing and quantum can be affected by the upstream payment practices of the owner to the contractor, as well as the payment practices of the contractor. Thus, the extent of payment issues could be differs in terms of types of issues, clients, payments and industry groups.

2.2 Causes of Payment Issues

In order to give a better understanding about the payment issues, it is appropriate to discuss the causes of payment issues in the global construction industry. Based on the literature review the following factors have been identified as some of the potential causes of payment issues in the construction industry.

2.2.1 Poor financial management of paymasters

Qualified contractors are often unwilling to bid on projects for employers whose financial capacity and credit rating are not widely known (The Associated General Contractors of America, 2003). Thus, it is extremely important for the employer to manage his financial aspect in a good manner as it is a major factor in determining the project's success. It is anticipated that paymasters' poor financial management could cause contractors insufficient operating funds when the latter are obliged to pay the payees (Danuri et al., 2012). Further, it is emphasized that the late payment or even non-payment therefore could arise. Ayudhya (2012) identified that the top most important factor attributing to the payment issues faced by main contractor in residential building contract in Thailand, was owners' financial problems.

2.2.2 Delay in certification

According to Rahman and Ye (2010), delay in certification by parties involved, may also cause of payment issues. The parties involved may delay in approving the application for payment claim due to certain reasons which may arise because of his own or other parties' involvement. According to Ayudhya (2012), there were often complains from main contractors to consultants and owners that the evaluation of both quality and quantity of completed work was caused in payment issues. This was due to difference on aspect of quality and measurement of quantity of completed works. Presently, the main contractor's side was responsible for quality control whereas the acceptance testing responsibility falls into the consultant's hand. Danuri et al. (2012) noted that consultants have an attitude of delaying the approvals for claims to the contractor. Therefore, it is clear that delay in certification directly affects the timely payment.

2.2.3 Errors in bill

Ismail et al. (2012) stated that the main reason for payment issues is errors in the claims submitted. This includes claims without adequate supporting documents, wrongly calculated claims and those submitted without using the right procedures and when this happens, contractors need to resubmit the claims and repeat the whole process after making necessary corrections. The contractors need to submit the progress billing attached with the approved percentage of completion by the authorized person in charge. Most of the problems occur when contractors miss necessary supporting documents. According to Ayudhya (2012), in order to avoid payment issues, the quantity surveyor has to make sure that documentations are complete and accurate. Further Ayudhya (2012) stated that payment is only made to main contractor when all required documents are verified otherwise it leads to payment delays and losses.

3.0 Research method

Survey approach was adapted to the current study. Survey provides a relatively quick and efficient method of assessing information about the population (Kelley et al., 2003). Such information may be quantitative or qualitative. Survey approach facilitates the researcher to collect data through the main methods of asking questions face-to-face or through telephone, by using questionnaires, interviews or a mixture of two (Kothari, 2004). This research focuses on getting the views of the different disciplinary practitioners who have exposed in payment issues.

In survey approach, selection of sampling technique to draw sample from the total population is significant. Purposive sampling technique was selected for this study as the research required the professional who experienced in payment issues within the construction projects. Choosing the purposive sample is fundamental to the quality of the data collected; thus reliability and competence of the informant must be ensured. Sandelowski (1995) indicated that adequacy of sample size in qualitative research is relative, a matter of judging a sample neither small nor large. Further, Sandelowski (1995) suggested that a sample size of 10 can be judged as adequate for a certain category of participants. Accordingly, ten participants from each group; consultants and main contractors were selected for this study. Therefore, semi structured face-to-face interviews were conducted with twenty research participants.

Thematic analysis is the most common form of analysis in qualitative research (Boyatzis, 1999). It emphasizes pinpointing, examining, and recording patterns themes within data. Themes are patterns across data sets that are important to the description of a phenomenon and are associated to a specific research question (Guest, MacQueen, &

Namely, 2012). The collected views of interviewees were analyzed through thematic analysis using NVivo 7. The research findings are presented in the next section.

4.0 Research Findings

4.1 Participants profile

Prior to collect views for questions the participants were required to indicate their background information which includes designation, years of experience, nature of the work provided by the organization, ICTAD grading of the organization and number of employees. The research participants were selected from major industry groups: consultants and main contractors who have experienced payment issues in Sri Lankan construction industry.

Among the consultants, 50% are directing the organization, dealing with the research issue at managerial levels and remaining 50% are the senior quantity surveyors who are directly dealing with the payment issues. Among the main contractors, 60% are directing the organization and remaining 40% are the top level staffs of contracting organization: chief quantity surveyor, project manager and general manager who are handling the payment issues with the client and contractors. The selected organizations are involving in buildings and infrastructure projects of public and private sectors. The contracting organizations which are having the ICTAD grading C1 to C9 are considered to this research by selecting the participants of at least one from each organization. The selected organizations are providing services to buildings and infrastructure projects. Most of the participants have more than 20 years experience in construction industry.

A summary in Table 4.1 gives a good participants' profile information which suggests that the research findings are reliable.

Table 4.1: Profile of research participants - Consultants and main contractors

Interviewee Code	Designation	Years of experience	Nature of the work provided by the organization	ICTAD grade
Consultants				
C-I01	Director	20	Consultancy services	-
C-I02	Director	20	Cost, project, claim, disputes management	-
C-I03	Director	25	Cost, project, claim, disputes management	-
C-I04	Director	40	Quantity surveying, post contract cost management	-
C-I05	Senior Quantity Surveyor	20	Quantity surveying, post contract cost management	-
C-I06	Director	20	Consultancy services	-
C-I07	Senior Quantity Surveyor	10	Consultancy services	-
C-I08	Senior Quantity Surveyor	15	Consultancy services	-
C-I09	Senior Quantity Surveyor	19	Roads & infrastructure projects	-
C-I10	Senior Quantity Surveyor	19	Consultancy services	-
Main contractors				
MC-I01	Chief Quantity Surveyor	21	Construction of buildings and infrastructure projects	C1
MC-I02	Chief Quantity Surveyor	20	Construction of buildings and infrastructure projects	C1
MC-I03	Project Manager	23	Construction of infrastructure projects	C2
MC-I04	General Manager	42	Construction of infrastructure facilities	C3
MC-I05	Director	20	Construction of infrastructure projects	C4
MC-I06	Director	20	Construction of building projects	C5
MC-I07	Owner	8	Constructions building projects	C6
MC-I08	Owner	9	Construction of building projects	C7
MC-I09	Owner	12	Construction of building, roads and culverts	C8
MC-I10	Owner	10	Construction of roads and culverts	C9

4.2 Nature of payment issues

4.2.1 Types of issues

The empirical data disclose that the Sri Lankan construction industry is experiencing payment issues for many decades. Majority of the respondents (95%) are of the opinion of payment delays occur very often comparing to incomplete and non-payment. An interviewee (C-I04) expressed that incomplete payment occur only when it is reasonably proved by consultant. However, at the end of the project the contract price would be paid to the contractor as per MC-I04 and MC-I01. Further, an interviewee (MC-I03) specified that contractors experience incomplete payment in variation works the matters disputed with variations could be resolved in final payment certificate. Therefore, incomplete payments are not considered in this research. Most of the respondents (90%) confirmed that non-payment is rarely experienced by the contractors in Sri Lankan construction industry. Hence, the research investigates particularly the payment delays. The next sub section discusses the frequency of delayed payments in relation to types of payments.

4.2.2 Types of payments

The extent of the payment delays differs according to the types of payment. The following Figure 4.1 shows the frequency of delays within the types of payments.

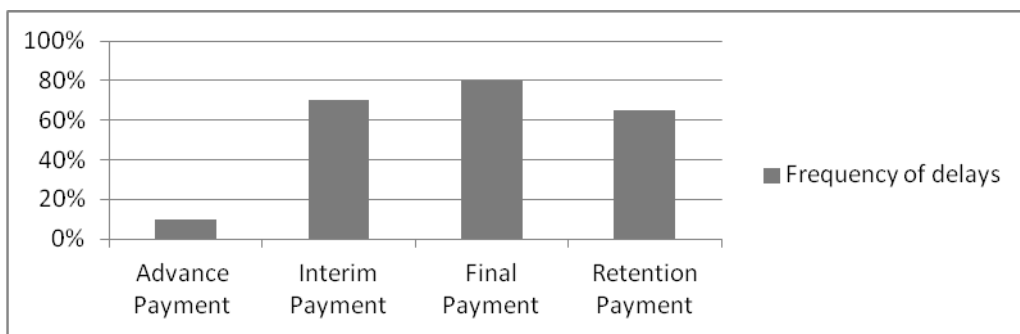


Figure 4.1: Types of payments

According to the above Figure 4.1, 10% of the participants only agreed that advance payments are delayed. An interviewee (C-I01) indicated that delay in advance payment occurs when client's financial arrangements mainly depend on the bank loans. The bank requires contract document to provide loan. However, the advance payment shall be released after the issuance of letter of acceptance. Thus, there are procedural delays with the banks. Majority of the respondents (90%) indicated that advance payments are not delaying because the client needed the early commencement of the project.

Majority of the respondents confirmed that delays in interim payments follows smoothly in the early stages and however it delays in later stages of project. The client reluctant to pay for the poor quality work of the contractor and consultant delays the certification of improper bills. 70% of the consultant participants are with the same opinion of the interim payments paid on time in the initial stages whereas delays occur from the middle stage of the project because of the cash flow difficulties of client. An interviewee (MC-I04) expressed that more trades are occurring during the middle stage of the project. Therefore, the value of interim payment application is considerably high during middle of the project. An interviewee (MC-I02) explained that interim payments are always delaying. MC-I05 agreed with MC-I02. 70% of the main contractors' representatives experienced delays in interim payments when the project moves towards the later stages. MC-I09 and MC-I10 reported they are not aware of interim payment as they are entitled to get two payments probably.

70% of the consultant participants mentioned that there is always delays in final payments as the contractor included all the variations and the disputed quantities which are not sorted out in the previous interim bills. 20% of the consultant participants reported that delays in final payments occur because of client's cash flow difficulties at the end of the project whereas C-I03 expressed that client reluctant to pay when the project finished. An interviewee (C-I09) responded that there is a long procedure to be followed in final payments. 90% of interviewees from main contractor group experienced delay in final payment whereas 60% from them reported final payment are mostly delayed than interim payments. Final payment application contains variation and all the disputed quantities which were not sorted out in pervious bills. Therefore, there is a possibility for delay rather than other types of payments. In contrary, an interviewee (MC-I04) expresses final payments are not delaying mostly like interim payments.

The empirical data reveals that even though there is a provision of getting retention fully at the completion by providing retention bond, the contractor are not utilizing that. 65% of the research participants indicated that retention payments are made on time when there are no defects in the project. C-I04 and C-I10 also in lined with the views of C-I03. An interviewee (C-I07) suggested that client delays the retention payment as because of his financial problems. 30% of the consultant representatives reported that clients are reluctant to pay the retention payment as the project completed. Further, an interviewee (C-I03) confirmed that client tries to get undue advantage by without paying the retention payment. The next section will discuss the payment issues related to types of clients.

4.2.3 Types of clients

Survey findings indicate that there are four types of client: local government, foreign government, corporate and individuals operating within the Sri Lankan construction industry. It appears that public projects are funded fully by local government or foreign government or in a combination of both. Private projects are funded purely by individual or corporate. Currently, the Sri Lankan construction industry is at growing pace with large scale buildings and infrastructure projects according to the above funding arrangements.

90% of the research participants (excluding C-I02 and MC-I06) explained that payment delays mostly exist with the projects fully funded by local government. Majority of respondents (95%) disclosed that government doesn't have money in treasury and there is a long procedure to be followed to make the payment. Therefore, payment delays occur in government projects. An interviewee (C-I01) accounted that the Sri Lankan government's financial discipline has gone down and it is on under drive. Without showing the development of country through construction of buildings and infrastructure projects, government could not survive. Hence, government starts the project without having proper policy planning to develop the country. An interviewee (C-I04) expressed there is a red tape in the procedure, the person signing the documents and forms is arising so many questions some are necessary to clarify and some are irrelevant. An interviewee C-I01 also in lined with the opinion of C-I04. 80% of research participants express that payment delays are very rarely occur in the projects funded by foreign government as the fund is ready before the awarding of the project. Therefore, payment follows smoothly in foreign funded projects.

85% of the interviewees (excluding MC-I06, MC-I07 and MC-I08) agree that private clients are good paymasters comparing to local government. An interviewee (C-I07) indicated that corporate clients are stable in their financial aspects. Corporate client establishes a proper budget initially and source the funding prior to initiate the project whereas individual clients enter into contract by having half of the arrangement of budget. MC-I02 and MC-I06 also in lined with the views of interviewee C-I07. Therefore, individual client tends to delay the payment in later stages of the project and corporate client make the payment on time from the start to end of the project.

According to the empirical findings, foreign government client and corporate clients are considered as good paymasters whereas local government client always delays the payment and individual client delays the payment at the end of the project. The next sub section addresses the payment issues related to types of industry groups.

4.2.4. Types of industry groups

As per the empirical findings, 75% of the research participants (25% consultants and 50% main contractors) revealed that subcontractors are mostly suffered by the payment delays comparing to main contractor. The main contractors are in the upper stream in payment chain, therefore subcontractor's payment goes from main contractor. An interviewee (C-I02) expressed that always there is a back to back arrangement irrespective of "pay when paid" clauses included or not. C-I05 accounted "pay when paid" clauses are called as exculpatory clauses and those are not so legally enforceable. 30% of the interviewees from consultant group responded that there is no proper form of contract for the subcontracting works in the Sri Lankan construction industry and the main contractor establish the subcontracting document fair with biasness. C-I02 responded that subcontractors do their business with few pages contract agreement and sometimes without that even. The subcontractors are absorbing the situation to get the job and survive in the industry.

MC-I03 reported that main contractor's cash flow is so critical and the payment values are considerably high. Further, main contractor has to spend huge amount of money for the construction works, subcontractors, suppliers, staffs, creditors and ect. Therefore, main contractors are affected severely because of delayed payments. MC-I05 also in lined with the views of MC-I03.

Since the evidences revealed that both the main contractor and the subcontractor are suffered by the delayed payments, the subcontractors are in critical plight than the main contractors in Sri Lankan construction industry.

5.0 Causes of delayed payments

The research participants were required to specify the causes of payment delays in construction industry. Figure 5.1 shows the outcomes of collected views on causes of delayed payments using NVivo structured under sub headings: due to clients, consultants, contractors and other factors. In the figure the sources represented the frequency of respondents who are in lined with the particular theme.

Name	Sources
Causes for Delayed Payments	0
Due to clients	0
Paymaster's poor financial management	14
Cost overrun	9
Failure to source the funding prior to initiate the project	8
Local culture or attributes	5
Paymaster's with holding of payment	4
Trustworthiness between parties	2
Client's unawareness on repercussions of payment delays	1
Due to consultants	0
Delay in certification	12
Cost overrun	9
Local culture or attributes	5
Trustworthiness between parties	2
Exploitation	1
Frequent design changes	1
Poor preliminary estimates	1
Due to contractors	0
Improper bills from contractor	10
Cost overrun	9
Poor quality of work	2
Trustworthiness between parties	2
Due to other factors	0
Procedural delays	4
Procurement system	4

Figure 5.1: Causes for payment delays

According to the empirical findings, paymaster's poor financial management is the key factor contributing to delayed payments to contractors. 70% of the research participants agree with the above statement in which half of them are contractors and remaining are consultants. An interviewee (MC-I04) indicated that towards the end of the project the client faces financial hardship leads which to delay payments in construction projects.

The second important cause recognized by 60% of the interview participants is delay in certification of payment application. Majority of the consultants indicate delays in certifying the payment application is unintentional. It is often because of the construction work load and the existing measure and pay system. As per C-I01 and C-I02, practicing measure and pay system particularly for the complex projects tend to incur more time for repeating measurement works, causes delay in certification.

The third important cause identified by 50% of the respondents is improper bills submitted by the contractors. As per C-I02 contractor's own fault causes largely to payment problems. Other than C1 and C2 contractors submit payment application with inaccurate quantities and without all supporting documents even without following the standard method of measurement. In contrary, consultant fails to finalize the bill formats in the early stages and consultant does

not attend to joint measurement. The aforementioned faults of the consultants lead the contractor to submit the improper bill as per MC-I03 and MC-I06.

The fourth significant cause for delayed payments identified by 45% of the research participants is cost overruns. As per C-I06, cost of the project increase the set budget in almost all projects because of the variations and extra works. Set budget is calculated as engineer's estimate plus 10% of estimate. C-I04 reported 10% allocation for variations and price escalation is not enough practically. Nowadays, projects are experiencing up to 40% of estimated cost for variations as per interviewees C-I04 and MC-I04.

The fifth cause for delayed payments identified by 40% of the research participants is failure to source the funding prior to initiate the project. Two of the interviewees (MC-I09 and MC-I10) indicated that most of the time government initiates the projects before the allocation of funds. Individual clients start the process with half of the budget arranged. Therefore, when the project moves there is a possibility of inadequate fund as per interviewees C-I10 & MC-I04. An interviewee (C-I05) specified that client's banking arrangement is not smart enough to honour the payment on time.

Following the explanation of causes for delayed payments, the next section tends to discuss the findings of the survey conducted within the industry practitioners.

6.0 Discussion

6.1 Nature of payment issues

According to the research findings, payment issues are identified as delays, incomplete and non-payments. Among these three types of issues, payment delays are critical in Sri Lankan construction industry. Delayed Payments are more frequent than losses (Ramachandra & Rotimi, 2012). Therefore, this seems the findings of the survey are in lined with the existing literature. Further, the empirical data disclosed that the concept "incomplete payment" is not accepted by the practitioners in the industry as the contract price is paid to the contractor at the end of the project anyway. Therefore, both contractors and consultants have same opinion that losses of payment happen rarely. The participants selected for this study have not experienced non-payment and they have not encountered any non-payments in the industry. Therefore, this research particularly focused on delay payments.

Hasmori et al. (2012) suggested that delayed payment situation in government funded projects was commonly experienced whilst more of them affirmed the same situation in private funded projects. However, the current study indicates that delayed payments are mostly experienced in the projects which are purely funded by local government as the government fails to source the funding prior to commence the project and existing lengthy procedures in government sectors. Generally, the payment issues are very less with the foreign funded projects as the fund is available before award the contract to particular contractor while corporate clients also considered as good paymasters as they have some sort of separate financial department to deal with financial matters. The delayed payments with the individual client vary according to time and each individual. In the early stages, payments made on time and latter stages payment delays occur because individual clients start the projects without sourcing the complete budget before initiate the project.

The extent of the delayed payments differs according to the types of payment. Advance payment is very rarely delayed as the client tends to provide the advance payment on time to commence the project. Retention sums are very often delayed while final and interim payments are delayed less than often (Ramachandra & Rotimi, 2012). However, the findings of current research indicates that final payments are delayed very often compare to interim and retention payment as final statement contains all the disputed items and quantities of previous interim bills, particularly variations. The client faces financial difficulties at the end of the project. Therefore, interim payments during the end of the project are delayed. The paymasters take undue advantages by delaying retention payments as the project has finished already. However, the retention payments are not delayed often.

Carmichael and Tran (2012) stated that the uncertainty in subcontractors' payments is increased because of the payment behaviour of clients and contractors. According to the survey, it was identified that the subcontractors are the mostly affected party in the payment chain comparing to the main contractors. There is no protection for the subcontractor's payment in their contract document. The subcontractors are entering into contract with a few pages subcontract agreement in spite of subcontract document with a set of terms and conditions. Most of the time subcontract agreement contains "pay when paid" clauses. Main contractors have always transferred all the risks to subcontractors. The subcontractors are financially not stable and they are in the bottom of payment chain therefore, subcontractor's status is critical in construction industry. However, the main contractors with lower ICTAD grading are also suffering a lot as their financial instability. To sustain in the construction industry, subcontractors and the small sector contractors are absorbing the situation and remain. Thus, the construction industry operates.

6.2 Causes of delayed payments

According to the views of research participants, the causes of delayed payments are attributed to clients, consultants, contractors and other factors. The top three causes of delayed payments are identified as client's poor financial management, delay in certification of payment application by the consultant and improper payment application from contractor. This seems all three parties are contributing to delayed payments. Further, the research indicates that cost overruns and failure to source the fund prior to initiate the project are some other important causes contributing to delayed payments. Most of the current research findings are in lined with the existing literature. However, there are certain new causes to existing literature have been identified: trustworthiness between parties, failure to source the fund prior to initiate the project, cost overrun, poor preliminary estimate, exploitation, frequent design changes and poor quality of work, procedural delays and procurement system.

Cost overrun is identified as significant cause contributing to delayed payments. Most of the time client's requirements increase when the time moves. Further, there are variations arise with the construction process because of several reasons. Therefore, these will leads to cost overruns. Then, the contract price exceeds the client's budget, the client faces difficulties to source the exceed amount. Thus, there are more delayed payments at the end of the project.

Failure to source the fund prior to initiate the project is recognized as the next important cause of delayed payments. The local government is often practicing in such a way. Government has to show the country's development through the construction of buildings and infrastructure projects. Therefore, government start the projects before arrange the adequate fund. Even, individual clients also start the project with the available fund not with the arrangement of complete fund. Therefore, delayed payments arise.

7.0 Conclusions and recommendations

Firstly, the current study was aimed at investigating the existing payment practices and related issues within the construction industry. There are three types of payment issues prevailing in the construction industry: delays, incomplete and non-payments. Among these three issues the Sri Lankan construction industry suffers widely by the delay payments. Incomplete payments are not applicable because at the end of the project the contract price is paid and the deductions made in the interim bills are reasonable deductions. Non-payment is not a common issue under Sri Lankan context. The projects funded by local government face more delays comparing to private and foreign funded project. Corporate clients are considered as good paymasters than the individual clients. Final payment delays very often than retention and interim payments whereas advance payment very rarely delayed. The subcontractors are mostly affected party in the payment chain than the main contractors. The uncertainty in the subcontractor's payment is increased because of the combined uncertainty in payment behaviour of client and main contractor. Further, the subcontractors are in the bottom of payment chain and financially instable. Therefore, subcontractors are mostly affected party in construction industry. The study concluded that payment delay is most significant issue in construction industry; delays are critical in the projects purely funded by the local government; final payments are very often delayed; and subcontractors are the mostly suffering party in the Sri Lankan construction industry.

Finally, the research was aimed at identifying the causes of payment issues prevailing within the Sri Lankan construction industry. The clients, consultants and the contractors are contributing to top three causes: clients' poor financial management, delay in certification by the consultants and improper bills from contractors. Cost overrun and clients' failure to source the adequate funding prior to initiate the project were also recognized as significant causes contributing to delayed payments.

The research therefore suggest to procure appropriate security measures in the form of having a payment bond from the upper tier, separate form of contract to subcontractors and construction contract act. This would ensure that contractors get paid on time and thereby contribute to the success of the project.

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