# REASONS FOR CONTRACTORS' DELAY CLAIMS FAILURES IN SRI LANKA

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Project delays often occur due to the dynamic and complex nature of the construction industry and would lead to claims and disputes between contracting parties. Once a project exceeds the period contractually required to complete a project, there is bound to be an effect on expenditure or income of the contractor as well as the project owner. This study therefore determines the reasons for unsuccessful contractors' delay claims in Sri Lanka. The study administered a questionnaire survey to construction practitioners, contractors and consultants. A total of 55 respondents from both contracting companies (n = 40, with C1-C3 grading) and consultants (n = 15) were selected using stratified random and snowballing sampling methods respectively. The data obtained were analysed using descriptive statistics and Relative Importance Index (RII). The study found that time overrun occurs in 90% of projects in Sri Lanka and was indicative of the delays to settlement of contractors' claims. On average 60% of contractors submitted delay claims with only 40% success rate. The top most frequent reasons for unsuccessful claims include: inadequate documentation to substantiate claims, delayed submission of claim details, failure to establish link between cause and effect of claims and failure to use appropriate delay analysis method. Sri Lankan contractors explained that failure to use appropriate delay analysis method and contractors failing to mitigate the effects of the delays are also contributory factors to failures. In order to mitigate these issues, the study recommends that contractors adopt innovative strategies such as providing a contingency for the amount of claim failures under preliminaries or mark up at bidding stage and includes a measure of over valuation as a negotiating margin when preparing the claim first time. Also contractors would need to maintain up to date records of site transactions, while training of their staff to increase their knowledge of contract procedures are a necessity in Sri Lanka.

Keywords: delay claims, reasons for failures, Sri Lanka.

# INTRODUCTION

Construction claims refer to any application by the contractor for payment and extension of time (EOT) for changes which arise outside the ordinary contract provisions (Chappell 2011). Claims are one of the significant concerns in the construction industry especially with increasing magnitude of complexity of modern day projects. With modern complex construction contracts claims have become inevitable when things go wrong.

Contractor's claims are contractual in nature and often experienced due to delays and disruptions to project objectives. For example, on average final cost at completion of

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mega projects in Korea have increased by 122over original budget due to extended duration of 3.6 years on average (Han *et al.* 2009).

Iyer *et al.* (2008) explained that a claim could neither be completely accepted nor rejected, there is partial acceptance of the claim. On the similar note, Thomas (2001) indicates that often contractor's claims are under-settled, below a sum which reflects the contractor's full entitlement. For example, 86% of the respondents to a survey were of the view that clients always either reduce or completely reject contractors' claim entitlements in Zambia (Sibanyama, Muya and Kaliba 2012).

O'Connor (2003) stressed that many contractors damage their credibility by submitting complex and emotionally charged claims without addressing the primary requirements for a claim to succeed. However, Zaneldin (2006) is of the opinion that contractors accept partially approved claims as they are normally reluctant to refer to arbitration or litigation because of time and costs associated with these two methods of resolution.

The foregoing indicates that failure of delay claim occurs for several reasons that may be attributable to clients as well as contractors. Anecdotal evidence suggests that the rejection of contractors' claims seem to exist to a greater extent in the Sri Lankan construction industry. This research therefore primarily investigates the reasons why contractors' delay claims are unsuccessful in Sri Lanka and what strategies contractors use to mitigate the effects of such failure.

#### LITERATURE REVIEW

Construction delays refer to the time overrun either beyond completion date specified in a contract or the date that the parties agreed upon for delivery of a project (Assaf and Al-Hejji 2006). These are classified in to two major categories: excusable and non excusable (Bramble and Callahan 2011). Excusable delays are further classified as compensable or non compensable. Non excusable delays are compensable to the owner as to actual damages. These delays occur due to the fault of the contractor and therefore prevent contractors from obtaining a time extension and additional compensation (Bramble and Callahan 2011; Yates and Epstein 2006). Compensable excusable delays on the other hand are caused by owners or their representatives without any contributory fault of the contractor or its subcontractors. The contractor is entitled to a time extension for contract performance and additional financial compensation for the costs of delay, if the delay is deemed to be compensable (Bramble and Callahan 2011; Yates and Epstein 2006). Non compensable excusable delays occur due to the 'acts of god' or unforeseeable causes such as unusual severe weather conditions which are beyond the control of owners and contractors. These delays are not the fault of both parties and therefore often entitle the contractor to an EOT, but not to additional costs (Yates and Epstein 2006).

Difficulty of establishing fair and expeditious settlement of claims depended on untimely notification, poor record keeping, inadequate legal and factual justification and poor presentation (Sibanyama *et al.* 2012). On a similar note, O'Connor (2003) suggests that primary requirements for successful claims are timely notice of the claim in accordance with the terms of the contract, effective record keeping, establish entitlement and causation, calculate damages in accordance with the contract and negotiate the claim. The review suggests that reasons for the contractor's delay claims failures include: inadequate documentation to substantiate a claim, failure to notify the intention to claim in due time, delayed submission of the claim details, failure to

establish causal link, failure to establish entitlement to the claim, insufficient breakdown of claim amount, not calculate damages in accordance with the contract, not negotiate the claim and poor presentation of the claim. Kululanga *et al.* (2001) therefore suggest that to enhance the chances of success of claims, contractors need to closely follow the steps stipulated in the contract conditions, provide a breakdown of alleged additional costs and time and present sufficient documentation.

The foregoing review suggests that the following are responsible for contractor's delay claims failures.

- 1) Inadequate documentation to support a claim
- 2) Failure to notify the intention to claim in due time
- 3) Delayed submission of the claim details
- 4) Failure to establish causal link
- 5) Failure to establish entitlement to the claim
- 6) Insufficient breakdown of claim amount
- 7) Not calculate damages in accordance with the contract
- 8) Not negotiate the claim
- 9) Poor presentation of the claim.

# RESEARCH METHODOLOGY

The research adopted a quantitative approach in order to answer the research question, why contractor's delay claims are unsuccessful. As Punch (2005) suggests, research approaches depend on the research questions posed in any study. Rea and Parker (2012) explained that there is no better approach to a research than a survey for collecting information about large population. Literature suggests delay claims are prevalent in different forms and cut across many different types of organizations in Sri Lanka. Therefore the research employed a survey approach using questionnaire as the data collection technique.

A total of fifty five (55) respondents were selected for the study from both contracting (40) and consulting (15) organizations. Samples of consulting and contracting companies were drawn from the registry of Chamber of Construction Industry (CCI) and the Institute for Construction Training And Development (ICTAD) based in Sri Lanka respectively.

Stratified random sampling was used in selection of each grade of contractors (C1 to C3). The sample size for each category of contractors was determined using the formula suggested by Bless, Higson-Smith and Kagee (2006).

$$n_s = \frac{n}{N} x N_c$$

Where,  $n_s$ = Sample for the sector; n = Size of the sample, N = Population size;  $N_c$  = Category population (Bless, Higson-Smith and Kagee 2006).

Table 1: Sample size and the response rate

Category	Category population	Category sample	Response	Response Rate %	
C1 contractors	22	10			
C2 contractors	22	10			
C3 contractors	52	20			
Total of contractors	96	40	30	75	
Consultants		15	12	80	
Total sample		55	42	76	

A snowballing technique was used to select samples from consultants. Table 1 presents the sample size of each category and their respective response rates. A total of 42 responses were received out of 55 questionnaires which were sent out. This yields a response rate of 76% for the research.

Non parametric statistics involving descriptive statistics and Relative Importance Index (RII) were used to analyse the survey data. RII analysis is used for aggregating the scores of the factors rated on an ordinal scale to find the relative importance of each factor relevant to other. In addition, the Spearman's rank correlation coefficient was used to find the degree of agreement between contractors and consultants in relation to rankings of reasons for failure of delay claims.

#### RESEARCH FINDINGS

# Prevalence of delay claims in the Sri Lankan construction industry

In order to identify the extent the contracting firms submit delay claims, the respondents were asked to indicate their views in terms of: number of projects undertaken by their companies, number of projects that had time overruns, number of projects that had delay claims submission and number of projects that settled the claims without problems during last three years (2010 - 2012). Figure 1 gives an indication of number of projects that had time overruns.

As observed from Figure 1 majority, 76% of respondents indicated that time overruns occurred in more than 75% of the projects where they were involved. Only a 2% of respondents opined that less than 24% of their projects had experienced time overruns. This confirms that with 95% confidence time overruns occur in 78-90% of projects in Sri Lanka.

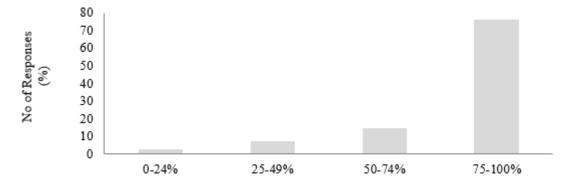


Figure 9: Projects that had time overruns in last 3 years (2010 - 2012)

Time overruns of projects could be an indicator of the potential delay claims by contractors. Thus an analysis was made of time overruns against the submission of

delay claims by contractors. Figure 2 presents the distribution of projects that had delay claims' submissions.

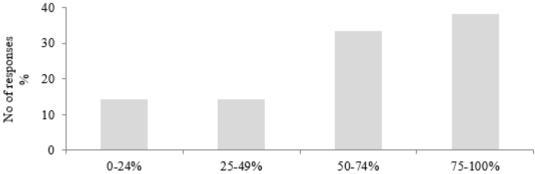
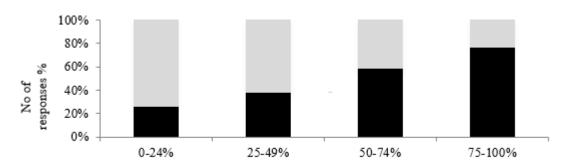


Figure 10: Projects that had delay claims submission in last 3 years

From Figure 2, 38% of the respondents reported that delay claims submission occurred in more than 75% of the projects that had time overrun. Nearly14% of respondents indicated that delay claims submission occurred in less than 24% of the projects that had time overrun. This suggests with 95% confidence level that delay claims submission occurs in 50-70% of the projects delayed in Sri Lanka.

A comparison was made between claim submission and the extent of their settlement. As observed from Figure 3, 40% of respondents indicated that claims settlement was not problematic for only 24% or less number of projects that had delay claims submission. Nearly 12% of respondents indicated that among the projects that had delay claims' submission, more than 75% of the projects were successful in settlement. The analysis confirms that with 95% confidence only a 25-40% of the projects where delay claims were submitted, were successful with their claims in Sri Lanka.



- Projects that settled the delay claims without problems in last 3 years
- Projects that had delay claims submission in last 3 years

Figure 11: Comparison of claim submission and its settlement

#### Reasons for the failures of contractors' delay claims

This part of the questionnaire sought views of consultants and contractors on the most frequent reasons for failures of contractors' delay claims. A five point Likert scale where 1 represents 'never' and 5 represents 'very frequently' was used to identify the most frequent reasons for delay claims failures. A total of 9 reasons identified through literature review were tested in the Sri Lankan context. In addition, participants were asked to indicate any other reasons they have experienced. Table 2 provides the reasons for failures of claims and their respective relative importance values (RII).

Table 2: Reasons for the failures of contractors' delay claims and their frequencies

Reasons for the failures of claims	Con	tractors	Cons	sultants		Overall
	RII	Rank	RII	Rank	RII	Rank
Inadequate documentation to substantiate the claims	76.00	1	88.33	1	82.17	1
Delayed submission of the claim details	66.67	2	71.67	2	69.17	2
Failure to establish link between cause and effect of the claim	61.33	3	65.00	4	63.17	3
Failure to use appropriate delay analysis	56.00	5	66.67	3	61.33	4
method Failure to notify the intention to claim in	58.00	4	63.33	5	60.67	5
due time Failure to establish the entitlement to the	54.00	6	58.33	7	56.17	6
claim Contractor failed to mitigate the effects of	50.00	8	61.67	6	55.83	7
the delays Poor presentation of the claim	48.67	9	56.67	8	52.67	8
Not negotiate the claim	53.33	7	50.00	9	51.67	9
Damages are not calculated in accordance with the contract	42.67	11	46.67	10	44.67	10
Insufficient breakdown of claim amount	43.33	10	41.67	11	42.50	11

The spearman's rank correlation coefficient value of 0.92 indicates that there is a strong consensus between contractors and consultants in their rankings. As observed from Table 2, inadequate documentation to substantiate the claims is the most frequent reason for the failures of contractors' delay claims with an importance index of 82%. This finding confirms the criticism the construction industry has long received that the contractors' failure to maintain adequate records of project activities and their costs is most responsible for unsuccessful claims (Society of Construction Law 2002). As Yates and Epstein (2006) suggest extensive documentation is essential for the proper management of construction delay claims. Thus the FIDIC (1999) conditions of contract require the contractor to keep necessary contemporary records to substantiate any claim.

As seen from Table, delayed submission of claim details is the second most frequent (RII = 69.17%) reason for contractors' delay claim failure. It is not practical for project engineers to assess a claim for EOT, if the contractor does not submit the details of the claim at the date specified by the engineer. FIDIC conditions of contract (1999) require contractors to submit an account giving detailed particulars of the amount claimed and the grounds upon which the claim is based. This research found that failure to establish the link between cause and effect of the claim, use appropriate delay analysis method, notify the intention to claim in due time, and establish the entitlement to the claim are also responsible for unsuccessful claims.

A clear demonstration of the link between cause and effect is an essential ingredient for delay and disruption claims to be successful. In line with this view, Thomas (2001) suggests that claims which are based on logical analysis, where cause and effects are established, are at the high end of the probability scale of success. Delay situations therefore need a careful analysis to assess the resulting damages by satisfying the causation requirement. Although there are several techniques available to assess, determination of the appropriate technique to be used under given circumstances is a subjective decision and it is guided by experience, the available information and the other relevant factors.

Timely notice of a claim is not only critical to the success of the claim ultimately, but also provides the employer an opportunity to assess project circumstances to determine whether or not there is an alternative method of dealing with problem situations. As Yates & Epstein (2006) explain, most construction contracts require notice of the occurrence of a delay to be provided within a fairly short period of time. FIDIC conditions of contract (1999) require the contractor to give the notice relative to delays and constructive changes as soon as practicable as and not later than twenty eight days after the contractor became aware of the event or circumstance. If this requirement is not followed, claims may become in valid.

Table 3 compares the findings of this research with previous findings in terms of reasons for failures. As shown on the table, current study indicates that failure to use appropriate delay analysis method and contractors failing to mitigate the effects due to delays are also responsible for contractors' delay claims failures. However in terms of top most frequent reasons for failures, the findings of the current study seem to be in line with previous researchers.

Table 3: Comparison of reasons for the fe	tailures of contractors'	delav claims
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Reasons for the failures of claims	Rank			
	Authors	Previous studies		
Inadequate documentation to substantiate the claims	1	1		
Delayed submission of the claim details	2	3		
Failure to establish link between cause and effect of the claim	3	4		
Failure to use appropriate delay analysis method	4	-		
Failure to notify the intention to claim in due time	5	2		
Failure to establish the entitlement to the claim	6	5		
Contractor failed to mitigate the effects of the delays	7	-		
Poor presentation of the claim	8	9		
Not negotiate the claim	9	8		
Damages are not calculated in accordance with the contract	10	7		
Insufficient breakdown of claim amount	11	6		

# Strategies to mitigate the losses due to failures of delay claims

Participants were asked to indicate the degree of agreement with the strategies that the contractors used to mitigate losses due to failures of delay claims. A five point Likert scale where 1= strongly disagree to 5 = strongly agree was used to assess the agreement with the strategies. Figure 4 presents the extent of agreement with three different strategies identified through literature review. The strategies identified include:

- A Include contingency for the amount of claim failures under preliminaries atbidding stage
- B When preparing construction programme allocate longerduration for the items that could appear variations
- C Include a measure of overvaluation as a negotiating margin when preparing the claim at first time

As shown in Figure 4, nearly 60% of contractors agreed that contractors operate stratergy A, include a contingency for the amount of claim failures under

preliminaries or mark up at bidding stage. Another 53% of contractors indicated that strategy B, assign longer duration for the items which are likely to have variations while executing the project, and preparing the construction programme is adopted by contractor. Nearly 73% of the contractors responded that they include a measure of overvaluation as a negotiating margin when preparing the claims at first time.

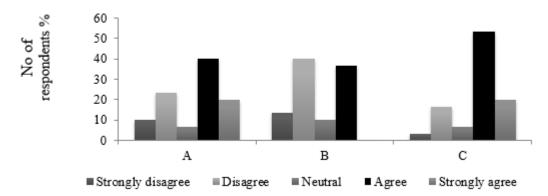


Figure 12: Strategies used by the contractors to mitigate the losses due to failures of delay claims

Most of the contractors agreed with the consultants' view that contractors include a measure of over valuation as a negotiation. This is consistent with the opinion of Thomas (2001), that even the most professionally prepared claim includes a measure of over valuation as it is a fact that the claim is unlikely to be paid in full.

#### CONCLUSIONS AND RECOMMENDATIONS

The research primarily investigated the reasons for contractors' delay claims unsuccessful in Sri Lanka and strategies the contractors adopt to mitigate the effects. Views collected through questionnaires distributed to contractors and consultants indicated that contractors' claims are mostly under settled, less than contractor's full entitlement. Contractors' claims are unsuccessful due to most frequent reasons of: inadequate documents to substantiate the claims, delayed submission of the claim details by contractors, failure to establish link between cause and effects of the claims and failure to use appropriate delay analysis method. Apart from past research findings, this study indicates that failure to use appropriate delay analysis method and contractors failing to mitigate the effects of the delays are contributory factors for the unsuccessful delay claims.

In order to mitigate the effects due to failures of delay claims, Sri Lankan contractors use the strategies of over valuation as a negotiating margin when preparing the claim at first time and include a contingency for the amount of claim failures under preliminaries or mark up at bidding stage.

This research therefore suggests that the following would minimise the failure of claims and enable settling claims with minimum cost without any party being disadvantaged adversely.

- Both parties to the contract need to behave professionally in submitting and evaluating the claims and treat the claim align with the contract. Contractors need to submit genuine documentations and consultants shall fairly evaluate those documents.
- Contractors need to anticipate the steps which could be taken by the clients or their representatives in evaluating claims. An independent review of the

- strengths and weaknesses of claims prior to submission of the claims would make the claim success.
- Programme updates need to be treated as a crucial aspect of projects and newly
  developed computer systems could be employed to update construction
  programme as well as in providing detailed and accurate records of the project
  history.
- Contracting organisations could develop their own strategies and policies which could expedite the substantiation of EOT entitlements.

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