

**ADJUDICATION: EVOLUTION OF NEW FORM OF DISPUTE
RESOLUTION IN CONSTRUCTION INDUSTRY?**

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**A project report submitted in partial fulfilment of the
requirements for the award of Bachelor of Science
(Hons.) of Quantity Surveying**

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August 2011

DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTAR or other institutions.

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Specially dedicated to
my beloved family and friends

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ADJUDICATION: EVOLUTION OF NEW FORM OF DISPUTE RESOLUTION IN CONSTRUCTION INDUSTRY?

ABSTRACT

Cash flow is vital to a building trade, but default payment is not uncommon in the construction industry worldwide. It was appeared that the existing dispute resolution methods unable to resolve payment dispute economically and effectively. Statutory adjudication was first introduced in United Kingdome as a mean of improving payment practices in the construction industry. Its adjudication regime has been modelled by other countries jurisdictions such as Australia, New Zealand and Singapore. In contrast, Hong Kong is trialling contractual adjudication scheme in construction. This research aims to have broad overview on the application of adjudication in the construction industry. The objectives are: (i) to study the trend of adjudication in overseas construction industry; (ii) to determine the application of adjudication in overseas adjudication regimes, (iii) to identify the challenges of adjudication in practice countries, (iv) to has in depth understanding of the arrangement of overseas adjudication regimes to overcome doubts of its implementation; and (v) to examine and evaluate the proposed CIPA Bill in Malaysia. The literature review and documentary analysis were carried out to achieve the objectives of the research. The security payment acts of the countries were studied and commended and it showed that there are still some hesitations on their provisions. The recognised questions are: freedom of contract; adjudication timeframe; adjudication cost; legal representatives; adjudication ambush; and applicable of oral contract. Subsequently, these questions are referred to the provisions in CIPA Bill and KLRCA's CIPA Bill. The notable amendments in KLRCA's CIPA Bill are studied thoroughly. This research is able to make recommendations to the provisions of CIPA Bill and such provisions are modelled on the practice adjudication regimes and nature of the construction industry itself.

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LIST OF SYMBOLS / ABBREVIATIONS

ACP	Airport Core Project
ANA	Authorised Nominating Authority
ANBs	Adjudicating Nominating Bodies
BCA	Building Construction Authority
CIDB	Construction Industry Development Board
CIPAA	Construction Industry Payment and Adjudication Act
CIPA Bill	Construction Industry Payment and Adjudication Bill
HKIAC	Hong Kong International Arbitration Centre
IES	Institution of Engineers Singapore
KLRC	Kuala Lumpur Regional Centre for Arbitration
MBAM	Master Builders Association Malaysia
NEC	New Engineering Contract
NSW	New South Wales
NZ	New Zealand
REDAS	Real Estate Developer's Association of Singapore
RICS	Royal Institution of Chartered Surveyors
SCAL	Singapore Contractors Association Limited
SIA	Singapore Institute of Architects
SISC	Singapore Institute of Surveyors and Valuers
SG	Singapore
UK	United Kingdom

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CHAPTER 1

INTRODUCTION

1.1 Background

The construction industry plays an important role in a country's economic development. It is not uncommon for a country to use the construction industry as economic regulator through the translation of respective government's policies. Furthermore, the economic performance of a country can be gauge by the growth rate of the construction sector. This phenomenon is strengthened when the economic of the country is going downhill, whereby the government's "stimulus packages" always allow substantial allocation for the construction industry to boost the economy (Oon, 2003b).

Generally, the construction industry is complex and involves multiple processes. CIDB Malaysia (2007) stated that the construction industry has multiplier effect to other industries, such as manufacturing sector, financial sector and professional services. The consumption of construction industry itself will determine the economy growth of the other industries in a country. In fact, the construction industry is the primary user of the manufactured goods (construction materials, iron and steel), specialised and heavy machineries, and the financial services. Therefore, the reason of substantial allocation for the construction sector during recession is self-explained.

The uniqueness of the construction industry makes it different from other industries. A construction project may take years to bring it to fruition, and it does involve tremendous documentation and professional services (architects, quantity surveyors, civil and structural engineers, mechanical and electrical engineers, land surveyors etc.) during the course of construction. As there are various parties involved in the construction project and the nature of the project itself, the conflict among the contracting parties are inevitable. The conflict exists when there are clash of interest between the contracting parties. The conflict would turn into dispute when the contracting parties failed to manage the conflict arisen (Chong & Rosli, 2009).

Construction Industry Review Committee. (2001), commented in Construction for Excellence report:

It is further observed that the multiple parties involved in the construction supply chain often adopt an adversarial approach in dealing with one another. The absence of a teamwork culture in the industry and the lack of common purpose amongst stakeholders have inhibited concerted efforts in driving for better overall performance of the industry as a whole (p. 28).

In the report of Construct for Excellence, Construction Industry Review Committee (2001) has discovered the ground of the dispute in the Hong Kong construction industry. In reality, these cultures do exist in the construction industry of the whole world. Oon (2003a) argued that the rise of claim industries, which known as “arbitration industry” in the construction industry is a concrete evidence of the prevalence of disputes within the industry. There are several reasons where the disputes are likely to occur, for example, poor communication between the parties, late payments, unclear delegation of responsibilities, delay payments to subcontractors, poor standards of work, failure of performance and so on. The parties liable for disputes are clients, consultants, contractors, subcontractors, manufacturer and suppliers. However, the disputes will only exist where there have contractual relationships between the parties (Ashworth, 2006).

The disputes are commonplace on construction projects. Therefore, it is advisable that the potential disputing parties to outline the appropriate procedures to deal with the disputes. It should be done before commencement of construction and normally it is being accomplished through inclusion of a claim clause in the contract. The claim clause will allow the disgruntle party to present disputes to the other party without having to resort to litigation as a first step (Hinze, 1993).

There are various dispute resolution methods adapted in the construction to resolve the disputes in the worldwide. Some of the primary methods are negotiation, mediation and conciliation, dispute review board, litigation and arbitration. Smith and Yates (2007) argued that the arbitration is the preferred method of alternative dispute resolution other than litigation. The arbitration is more efficiency than litigation in term of time and cost. Some of the features of the arbitration are speedy, confidentiality, efficiency and cost effectiveness compare to litigation proceeding. The most important is the decisions made by arbitrators always respect the contract choice of law, while court system may not always honour the contract choice of law.

But, arbitration started to lose its possession as primary alternative dispute resolution in the worldwide recently. Adjudication, a new form of dispute resolution has developed to take the place of arbitration in the construction industry. Adjudication is adapted in most of the standard form of contract as primary alternative dispute resolution. (Dancaster, 2008; Seifert, 2005; Teo, 2008).

Adjudication had become a statutorily imposed method of dispute resolution in the United Kingdome. The movement towards adjudication of United Kingdome has affected other countries in other part of world, for example, Singapore, Australia, Hong Kong, Ireland and so on (Fenn & O'Shea, 2008). This study will provide a broad overview of the adaptation of adjudication as alternative dispute resolution in the construction industry. Further, this study will identified and described the challenges of the adjudication in the coming chapters.

1.2 Problem Statement

In global area, there are numerous methods of alternative dispute resolution practice in construction industry. All disputes are resolved in court proceeding, or formal and informal alternative dispute resolution. Negotiation, mediation and conciliation are the common informal alternative dispute resolution in the worldwide (Chong & Rosli, 2009; Owens, 2008).

Informal alternative dispute resolutions have distinguishing feature, whereby legal agreement has to be drawn up after settlement to made it enforceable and binding upon both parties. Further, it is again depends on the disputing parties either accept or deny legal agreement (Smith & Yates, 2007). When one of the parties denied the agreement, it may bring back the dispute to its original place. Very often, the informal alternative dispute resolution methods are not workable and recourse to formal dispute resolution. (Chong & Rosli, 2009)

According to study of Seifert (2005), arbitration remains ultimate method of formal dispute resolution other than litigation proceeding in international construction industry. However, adjudication has been introduced in construction industry as a mandatory form of primary dispute resolution before arbitration proceeding. The arbitration is no longer an efficient means of dispute resolution as the time and cost of the process increased. The reason behind the fact is, arbitration has become an excessively formal process, time consuming and costly. Further, most of the construction contracts provide that the disputing party can seek for the arbitration proceeding only after the project is completed or terminated (Lim, 2008; Noushad, 2006; Rubin et al., 1999)

Another vital factor contribute to the development of the adjudication is the changes of payment culture in the construction industry (Dancaster, 2008). The industry has been known with the payment default, either late payment or non-payment. These incidents mostly happened in the sub-contracting sector of the industry, which was finding that the payment times lengthening and more difficult in obtaining payment for the full work executed from main contractors.

Payment is an issue of major concern in the construction industry. The construction projects are unlike simple off-the-shelf product procurement in other industries, it involving multiple phases of construction works such as site works, building works, infrastructure works, external works, mechanical and electrical services etc. Further, term of payment in construction industry is based on credit rather than payment upon delivery. Bigger capital outlay is necessary for contractors to undertake construction work before progress payment is made. Payment problems in a construction project can severely affect cash flow (CIDB Malaysia, 2008).

In the studied of Walton (2006), he is agreed with the observation of Lord Denning in 1970, “There must be a ‘cash flow’ in the building trade. It is a very lifeblood of the enterprise.” Cash flow is critical to the construction industry and ease of the cash flow can ensure the delivery of construction project. Therefore, the arbitration process that is over formalised and over time-consuming no longer served the problems of cash flow. The conduct of arbitration in construction disputes may be too disruptive to continue the remaining construction work (Oon, 2003a).

Adjudication was introduced to overcome the cash flow problems resulted by payment issues. Report of “Constructing the team” (1994) had developed various ideas for improving the payment procedures and ensuring that appropriate payment was made for work implemented in the construction industry. Further, the report proposed that adjudication has to be adapted to enforce rights to payment within the context of the contract (Dancaster, 2008).

Basically, the adoption of adjudication as a mean of dispute resolution in the construction contract is to facilitate fair payments, outlawing the unfair terms, such as pay-when-paid and conditional payment from construction contracts, establish cheaper, speedier and binding alternative dispute resolution method (CIDB Malaysia, 2008; Kennedy, 2008). The adjudication is first presented in United Kingdom and become statutorily imposed method of dispute resolution afterward. There are a number of commonwealth countries, for example, Singapore, Hong Kong, New Zealand, Ireland and some of the state of Australia have followed the footsteps of the UK by introducing adjudication in their respective construction act (Fenn & O’Shea, 2008).

1.3 Aim

- To have broad overview on the application of adjudication in the construction industry

1.4 Objectives

- To study the trend of adjudication in overseas construction industry
- To determine the application of adjudication in overseas adjudication regimes
- To identify the challenges of adjudication in practice countries
- To has in depth understanding of the arrangement of overseas adjudication regime to overcome doubts of its implementation
- To examine and evaluate the proposed CIPA Bill in Malaysia

1.5 Significant of Study

The default in payment can severely interrupt the “life blood” of the construction industry. Intervention of adjudication can defer the disruption by default payment during construction of project. It is useful to understand the application of adjudication by those adherence governments in respective construction industry.

The major concern of the study is to determine the movement of the countries toward the adoption of adjudication in the construction industry through the review of existing literature. Further, this report going to examine the way of respective governments incorporate the provision of the adjudication as primary mean of dispute resolution in the construction contracts with their distinguish judicial processes. To have further understanding of the adjudication, challenges of

adjudication need to be identified. Subsequently, establish the way of adjudication adherent confront the problems arisen in respective construction industry.

1.6 Scope of study

- Study and review the implementation of adjudication in the construction industry in different countries
- Review and identify the challenges of adjudication in construction industry
- Pose questions on the implementation of adjudication and identify solutions taken by the countries
- Analysis and discuss the current adjudication arrangement in Malaysia

1.7 Limitation of Study

- Study carried out based on literature review, very often it is difficult to judge the actual performance of adjudication
- The selected literatures, in some circumstances, will be biased as journalists have different perceptions toward the issues
- The observation and understanding of the author may not appropriate due to the limited knowledge and experiences on adjudication.

1.8 Research Methodology

The research methodology has to be incorporated in the study to achieve predetermined objectives. The objectives can be achieved through literature review, by obtained necessary information from the sources available, for example, journals,

articles, internet, books etc. Literature review will provide a broad overview of the application of adjudication in construction industry, enforceability of adjudication and challenges of the implementation.

Queries relate to the application of the statutory adjudication are raised. The hesitations are being answered through documentary analysis on the adjudication legislation of the studied countries. Also, it is interesting to analyse the exertion of Malaysia government to confront the hesitations in its proposed adjudication regimes. The result and discussion of documentary analysis will be documented to appreciate the valuable information collected.

1.9 Flow of Research Methodology

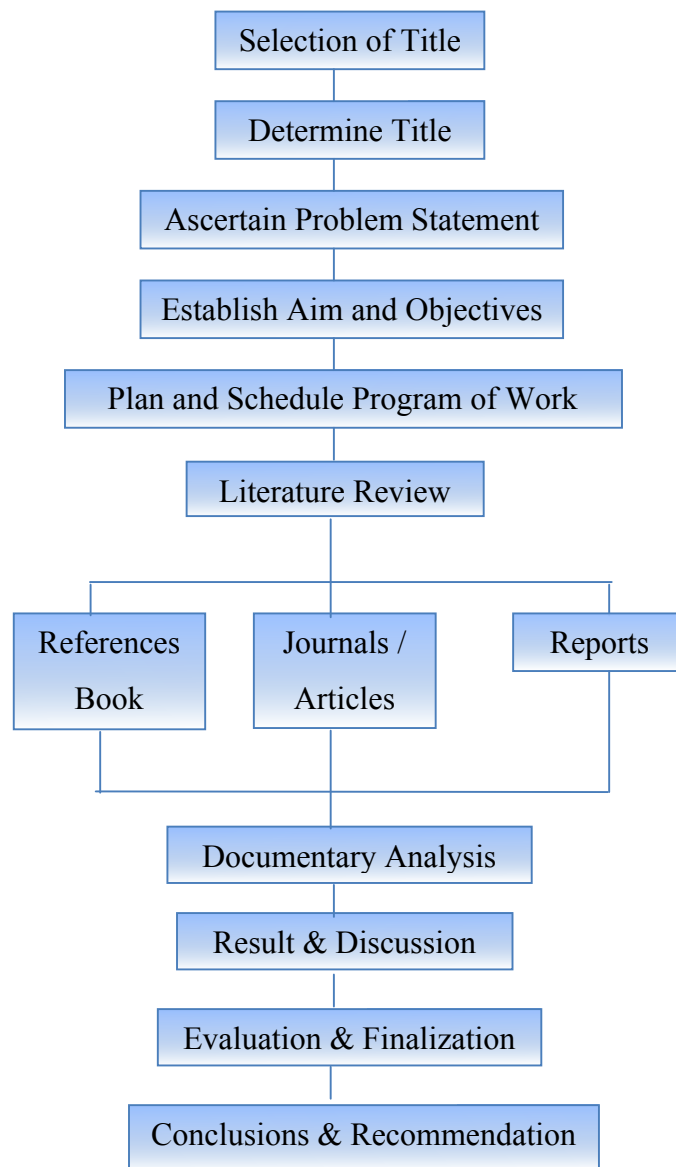


Figure 1.1: Research methodology flow

1.10 Brief summary of the content of chapters

This report composes by five chapters and generally summarised as follows:

- Chapter 1 introduce the field going to study. There are background of the construction industry and alternative dispute resolution, problem statement of study, aim and objective, significant of study, scope and limitation of the study, research methodology adapted in study, brief summary of the content of chapters and lastly, the conclusion.
- Chapter 2 review the practice of adjudication in United Kingdome, New South Wales, New Zealand and Hong Kong. Also, this chapter going to identify the existing challenges in respective construction industry. The current development of adjudication in Malaysia is recognised.
- Chapter 3 explain the means of research for the study, which is literature review and documentary analysis.
- Chapter 4 analysis and discuss the implications of adjudication in construction industry. Hesitations on the adjudication regimes are recognised and discussed.
- Chapter 5 include the conclusion for the study, recommendations for the further research and learning outcome.

1.11 Conclusion

In this chapter, the writer was presented the background of the construction industry and dispute issues within the industry. The development of alternative dispute resolution method had been broadly discussed. The needs for the introduction of the adjudication to replace arbitration as primary alternative dispute resolution method to cope the unhealthy cash flow in the construction industry were identified in the problem statement.

The study aimed to have broad overview on the application of the adjudication in the construction industry. The objectives had been pre-determined, which are to study the trends of worldwide construction industry towards adjudication, examine the practicability and limitation of adjudication in construction industry.

Significant of study was identified the interest of study on the application of the adjudication in the construction industry. The scope and limitation of research had been established in section 1.6 and section 1.7 respectively. Least but not last, the research methods adapted in this study were literature review and documentary analysis. The conclusion and recommendation of this study will draw up based on the research carried out later.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Adversarial nature of the arbitration had spur the development of adjudication in the construction industry. This fact is not without justification. The adjudication is comparative cheaper, speedier and contemporaneous. Basically, the adjudication is concerned with these four aspects, which are time, procedure, binding effect and immunity of the adjudicator (Kennedy, 2008).

Generally, adjudication can be distinguished into two types: statutory adjudication and contractual adjudication (Oon, 2003). Statutory adjudication is the use of adjudication that statutorily provided for and as a precedent method of dispute resolution before arbitration. The decision made by adjudicator in a dispute is 'temporary' binding on the both contractual parties, unless it is challenged in stipulated time. Contractual adjudicator works in same basis, but his/her power is enforced by the agreement between the two parties. South Africa is one of the countries adopts contractual adjudication in the construction industry (Maritz, 2009).

Adjudication had first introduced in United Kingdome (UK) and become statutorily imposed method of dispute resolution in construction industry. Yet, there are different forms of adjudication suspect in other countries, for example, Singapore, Ireland, some state of Australia, Hong Kong etc. The practices of adjudication in these countries will be examined in to have better understanding on the position of adjudication in construction industry around the world.

2.2 United Kingdom Perspective

2.2.1 Approach to adjudication

Historically, litigation is the only option for dispute resolution in the construction industry of UK. When the arbitration is first introduced in UK, the arbitration is adapted in most the disputes in the industry. Just like the litigation, the decisions made by the arbitrator are binding. Nonetheless, the arbitration was seen to be more efficient in dispute resolution as it comparative speedy and cost efficient (Oon, 2003). The notable advantage over litigation proceeding is private and confidentiality, whereby making it particularly suited for commercial disputes. Further, arbitration proceeding permitted the dispute parties to refer their dispute to experienced and sophisticated Arbitrator that they agreed with (Miles, 1996). Therefore, arbitrator being able to comprehend the problem and made a decision that would reflect the commercial needs of the disputing parties.

Nevertheless, construction contract was written and provided that arbitration could only be commenced once the practical completion of the project is achieved. This provision is easily understandable, as any disruptions caused by disputes during construction can brought severe effect to the industry and the project itself. Therefore, other informal alternative dispute resolution methods were developed in UK construction industry during the course of construction. Negotiation, hearsay and anecdotal evidence show that it still holds goods in some circumstances (Hinze, 1993). However, the negotiation may not workable when both parties involved entrench their commercial interest in the dispute.

Arbitration started to lose its position in the late 1970s and early 1980s in UK construction industry (Dancaster, 2008). There was no concrete evidences as why the industry reluctant to proceed their disputes to arbitration. However, Dancaster (2008) argued that the rapid changed of the nature of building process in the industry is the ground of the changes. Very often, disputes referred to arbitration at the higher end of the monetary scale due to dramatically increased of size and complexity of projects. It could be understandable as the society expected that every formal process should become more transparent, which would required detailed forensic

examination of the matters in disputes. Consequence, arbitration became less and less prevalent in UK construction industry as cost and time involved increased.

However, the arbitration still remained as primary dispute resolution method in the standard form of contracts of the UK construction industry in early 1990s. Dancaster (2008) discovered that the UK construction industry was interested in developed alternative form of dispute resolution method during this period. Mediation with some limited application of adjudication was introduced in assisting the disputes parties to reach a resolution for their disputes. Still, mediators are not a decision maker and only facilitate negotiation among dispute parties.

The volume of work in UK construction industry reduced gradually in the late of 1980s and early 1990s. Meanwhile, there was an increase in competition for scarce construction works. This incident resulted changes of payment culture in the construction industry (Dancaster, 2008). Provision of unfair terms in the subcontract was not uncommon and subcontractor suffered with the late payment, even the full value of work executed. This pressure triggered a report commissioned jointly by Government and the industry players. The report was published on July 1994 entitled “Constructing the team” by a committee led by Sir Michael Latham (Latham, 1994). The report was able to reveal the problems in building process and made recommendations to tackle the problems.

In Latham Report, various ideas were developed to improve the payment procedures used in the industry and ensure proper payment was made for works executed. Part of the recommendations suggested that a system of adjudication should be introduced and underpinned by legislation (Latham, 1994). It is undeniable that the report tried to introduce adjudication as a fast-tracked enforcement of the rights to payment of the contract parties. Latham (1994) strengthen his idea of adoption of adjudication in standard form of contracts through the provision of procedures for adjudication in the New Engineering Contract (NEC). Nevertheless, the adjudication was provided on contractual basis and not supported by legislation of the day.

Latham Report had drawn attention of the UK government and the recommendations of the report were adopted in the Housing Grants, Construction and Regeneration Act 1996 (often refer to Construction Act). “The Scheme for Construction Contracts (England & Wales) Regulations 1998”, introduced as Part II of the Construction Act, came into force on 1 May 1998. In this new legislation, it defined in detail the construction contract that covered by the Act, right to adjudication, the elimination of conditional payment and to fair payments (United Kingdome Government, 1998).

The Construction Act came into force on 1 May 1998, Joint Contracts Tribunal (JCT) had revised all the existing standard form contracts to comply with the statute requirement. JCT 98 (newer version known as JCT 2005) had incorporated the provision of adjudication as primary method of dispute resolution in the contract. In UK construction industry, application of adjudication is not restricted to matters relating to payment, but in the majority of case the issues involved resulted in a plea for relief of a financial nature (Dancaster, 2008).

2.2.2 Application of adjudication

Adjudication is defined as the action of judge in a competition or argument or to make a formal decision about something (Cambridge University Press ©2010). Construction adjudication, however, not only restricted to the activity of judging and making decision. Adjudication is proceed just the same way of arbitration proceeding, which included adjudicating the disputes and coming to a decision that is binding to the dispute party (Dancaster, 2008).

Under section 107 of the Construction Act Part II, it provided that contractual right to adjudication is limited to disputes arising under the construction contract in writing. The agreement in writing exists when there is agreement made in writing; agreement is made by exchange of communications in writing; the agreement is evidenced in writing (United Kingdome Government, 1998). It is a statutory right that adjudication can be invoked unilaterally in the construction contract, provided

the party complying with section 108 of the Construction Act Part II. This section includes the following aspects: time, procedure, binding nature of the decision and immunity of the adjudicator (Kennedy, 2008).

Time is crucial in adjudication. The Construction Act enables a party to give notice of intention to refer a dispute to adjudication at any time and no bar as to when it can be invoked (West Sussex County Council, 2010). Unlike arbitration, the reluctant party would not be able to avoid the adjudication during construction and faced with an enforceable decision. The appointment of the adjudicator has to be done within seven days of the notice of the intention to refer a dispute. The time is shortened compare to arbitration, whereby the whole process of adjudication is 28 days. The adjudicator required reaching a decision within 28 days of referral, despite size of the dispute. The time of reaching decision cannot be extended, unless with the consent and agreement of the parties involved (United Kingdome Government, 1998).

Kennedy (2008) argued that the procedure of the adjudication was intended to be investigative rather than an adversarial system. The Construction Act provided that the contract should enable the adjudicator to take the initiative in ascertaining the facts and the law (United Kingdome Government, 1998). Further, the contract shall impose a duty on the adjudicator to act impartially in reaching decision. To some extent, adjudicator may take its own steps to ascertain facts required to make a decision, including employed of third party expert to assist him coming to a decision.

Adjudicator is immune from suit under the provision of contract. The Construction Act provided that adjudicator is not liable for anything done or omitted in the discharged of his functions as adjudicator. However, adjudicator would be held liable if he acted with gross negligence or bad faith (United Kingdome Government, 1998). Adjudication is subject to professional standards and competency requirement. The adjudicators are not permitted to have financial interest on the disputes, remained independent and act impartially (Seifert, 2005).

The notable distinct of the adjudication and arbitration is the binding nature of the decision. Unlike arbitration, adjudication is not a final process. The decision of the adjudicator is binding until the dispute is determined by litigation, arbitration or agreement (United Kingdom Government, 1998). Therefore, the decision is “temporary binding”, the court will enforce the decision of adjudicator if either disputing parties do not abide by it. The issues arise in dispute will be determined by the court proceeding or by arbitration if there is an arbitration agreement in the contract. However, the disputes can be resolved through negotiation before proceed to more formal dispute resolution (Ashworth, 2006). Very often, disputes referred to formal dispute resolution were not being able to maintain amicable relationship between the disputing parties.

Dancaster (2008) stated that the adjudication is on a less exhaustive basis than would be the case determined in arbitration and litigation. The industry still finds that it is sufficient for the dispute parties to appreciate their respective positions. He continued to argue that the specialist courts deals with construction matters in U.K., the Technology and Construction Court (part of the Queens Bench Division of the High Court), experienced reduction of its workload since the introduction of adjudication.

JCT 2005 standard form of contracts has the provision that allows the parties to named an adjudicator in a contract, appointed by agreement of contractual parties or nominated by Adjudicating Nominating Bodies (ANBs). When the parties failed to agree on an adjudicator themselves in dispute, the referring party can ask for the nomination of adjudicator by ANBs (Kennedy, 2008).

Kennedy et al. (2010) discovered that the numbers of adjudication referred to ANBs increased in a remarkable rate initially. However, the rate of adjudication referrals decrease gradually after it reached its peak on April 2002. Kennedy et al. (2010) suspected the direct appointment through agreement by parties rather than ANBs is the ground for the declination of adjudication referrals recent years. This is indicative that even with the introduction of adjudication, there is still parties would like to resolve their disputes by tribunal of their own choice.

2.2.3 Challenge of adjudication

2.2.3.1 Provision of contract to be in writing

Housing Grants, Construction and Regeneration Act of 1996 stated that “The provision of this part apply only where the construction contract is in writing, and any other agreement between the parties as to any matter is effective for the purposes of this part only if in writing (Part II, Section 107). Intention of parliament in provides this provision is understandable, as any writing agreements could be concrete evidences in resolving dispute arisen in contract.

Dancaster (2008) had studied the case of *RJT Consulting Engineers Limited v. D M Engineering (NI) Limited* (2002) EWCA Civ 207 considered by the Court of Appeal. In this case, the judge held that a contract be in writing should be construed narrowly. The result is that numerous disputes will not be able to refer to adjudication, as the terms of the particular contracts are not fully interpreted in writing. For more complex disputes, which may arise from oral contracts or from oral variations to written contracts, arbitration and litigation would provide a more comprehensive method of dispute resolution (Atherton, 2010).

The party would abused the flaw of adjudication by evade their obligation under the Act, simply avoid written agreement and opt for oral agreement, or even use contract terms as partly written and partly oral agreement (Kennedy, 2008). Dancaster (2008) commended that the exclusion of oral agreement will exclude the benefits of adjudication of smaller parties, who may not have the commercial power to ensure that they are entering into a written contract.

Department for Communities and Local Government, London (2008) had carried impact assessment of the amendments to Part 2 of the Housing Grants, Construction and Regeneration Act 1996. The impact assessment report was produced after consulted with the government and with the industry. The assessment proposed that it is necessary to extending the Construction Act to oral construction contracts and to those that are partly oral and partly in writing. However, the proposed amendments have no indication to be considered by the UK parliament.

2.2.3.2 Allocation of Costs of Adjudication

Under the Construction Act Part II, there are no provisions of the allocation of costs of adjudication in disputes. Construction Umbrella Bodies Adjudication Task Group had appointed by UK Government to conduct a review on the Construction Act, together with Sir Michael Latham.

Primarily, there were two aspects concerned by the Task Group. The first is the dominant party placed contractual obligation on the referring party to pay all the cost of adjudication (including all legal costs and the ANBs fee). The cost arisen would bear by the referring party regardless any decision made by adjudicator. The provision of such unfair conditions was not being able to abolish with the existing Act. This unfair arrangement had been upheld in the case of *Bridgeway Construction Ltd v Tolent Construction Ltd*. This unfair practice will erode the adoption of adjudication as dispute resolution method and should be prohibited (Construction Umbrella Bodies Adjudication Task Group, 2004).

The second aspect is the ability of the adjudicator to award costs. The Act is not governed this aspect and the adjudicator could only derived his power to award cost through the agreement of the parties. *Dancaster (2008)* believed that this would prevented the disgruntled party from refer to adjudication as they needed to borne the cost in case they failed in adjudication. To some extent, this would deterred the small and medium size companies from enjoyed the benefits of the adjudication as they were think that parties always have to bear their own costs. In contrast, some other had different views toward the issue, as the adjudicator should be given the authority to determine the costs provided but only after the dispute has been referred.

Construction Umbrella Bodies Adjudication Task Group (2004), in its report on adjudication, strongly recommended that the Construction Act and the Scheme should be amended to nullify the provisions of unfair penalties in the construction industry. The authority of the adjudicators in determined the costs should not derived from contractual agreement, but statutory requirement. Nevertheless, these proposed amendments unable to draw the attention of UK parliament to revise the provision of the Contract Act.

2.3 New South Wales, Australia Perspective

2.3.1 Approach to adjudication

Australia construction industry had a tough time during the 1980s. The recession of the Australia construction industry during these difficult times had caused enormous increased of construction disputes and claims. The increased of construction disputes and litigation had caused adverse impact on the efficiency and well being of the construction industry (Stehbens et al., 1998). There was an immense increase of the court proceeding and promoted the nature of 'aggressive and confrontational relationship' in the construction industry (Love et al., 2007; Tyrriil, 1990).

In North South Wales (NSW), the construction industry was characterised as industry that involving of illegal activities and unethical conduct, payment default, lack of coordination and communication between construction players, disintegration of organisation, poor working conditions, fragmented practice and processes, adversarial relationship between the contract parties and lack of customer focus (Risgalla & Smithies, 2008; Royal Commissioner, 2003a).

Another aspect concerned by the parties is the improvement of the efficiency and operation of the construction industry in the disputation environment. The poor payment practices were recognized as the major barrier to the efficiency of construction industry (Royal Commissioner, 2002). This was identified in the NSW Government's Royal Commission into Productivity in the Building Industry in NSW (Gyles Royal Commission) and Federal Government's Royal Commission (Cole Royal Commission into the Building and Construction Industry) (Risgalla & Smithies, 2008).

Subcontractors of the construction industry has lobbied for the payment legislation over a long period as they were experienced most with the payment default in the industry. Due to the limited financial resources of the subcontractors, they were commonly unable recover progress payment through the existing dispute resolution mechanism during the tough time (Uher & Brand, 2008).

Just like most of the commonwealth countries, Australia has inherited the English Law of English and Wales in its court system. Traditionally, litigation remained the primary method of dispute resolution in the construction industry. Nevertheless, evolution of the modern dispute resolution has developed two major approaches in addressing disputes, which are alternative dispute resolution and dispute avoidance (Love et al., 2007).

Prior to the introduction of statute adjudication in NSW, alternative dispute resolutions available are arbitration, negotiation, conciliation, facilitation and mediation, expert determination and dispute resolution boards (Love et al., 2007). Other than arbitration, alternative dispute resolutions are consensus-based and may not have conclusiveness in outcome. However, 'No Dispute' report had criticise the practice of arbitration in construction dispute as the tremendous documentation, excessive cost and long period involved in proceeding (Love et al., 2007).

NSW was the first Australian jurisdiction to introduce security payment act. The Act has replicated some extend of the UK security payment legislation in Housing Grants, Construction and Regeneration Act 1996 (Brand & Davenport, 2010). The Building and Construction Industry Security of Payment Act 1999 (NSW) was introduced on 5 October 1999 and enforced by 26 March 2000. (Risgalla & Smithies, 2008). The Act was reviewed and amended by the Building and Construction Industry Security of Payment Amendment Act 2002 and Building and Construction Industry Security of Payment Amendment Act 2010 subsequently (New South Wales Government, 1999).

The Act aims to ensure that any person who undertakes to carry out construction work or supply related goods and services under a construction contract is able to recover and receive progress payments for the work carried out and those goods and services supplied. (New South Wales Government, 1999). Since the introduction of the Act, construction industry payment legislation has progressively been enacted on a jurisdiction-by-jurisdiction basis throughout Australia. (Coggins, 2011). It was the first comprehensive legislation in Australia, serving as the model of payment legislation in other states and mainland territories (Coggins, 2009).

2.3.2 Application of adjudication

Security of payment in NSW is regulated by two different set of legislations, which are Contractor Debts Act 1997 (NSW) and Building and Construction Industry Security of Payment Act 1999 (NSW). Both legislations operate in tandem to resolve the default payment in the construction industry. Different from the security payment Act, the Contractor Debts Act 1997 do not confined to the building and construction industry (Royal Commissioner, 2002).

In the context of the building and construction industry, the Contractor Debts Act 1997 allow the subcontractor who has not been paid by the main contractor for his/her work done applied to a debt that is owed for work carried out and for related goods and services supplied (New South Wales Government, 1997). It enables the subcontractors to recover their payments directly from principal through *attachment of moneys* by freezing moneys in the hand of principal until judgement obtained and *assignment of debt* by he court (Royal Commissioner, 2003b).

The Building and Construction Industry Security of Payment Act 1999 introduced statutory rights for claimants, such as a right to progress payment, a right to interest on any late payment, a right to suspend work and a right of lien for default payment (Brand & Davenport, 2010). The Act also introduced a unique form of rapid adjudication, aims to be quicker and more cost effective with interim decision subject to final resolution by arbitration or litigation (Risgalla & Smithies, 2008). It is a new layer of dispute administration, which is being applied to the NSW building and construction industry.

The Act is applied to all contracts for building and construction work or the supply of related goods and services within NSW. The construction contracts would not be able to exclude from the ambit of the Act even it expressed to be governed by law of jurisdiction other than NSW. The notable distinct of the NSW adjudication regime from UK and Singapore is the Act would cover the construction contract whether in oral or written, or partly written and partly oral (New South Wales Government, 1999).

However, the Act does not apply to construction contracts for carrying out of residential building work for the person who resides in or proposes to reside in the premises on which the work is carried out; construction contracts that form part of loan agreements or guarantees or insurances with recognised financial institution; construction contracts where payment is not for money and not by reference to the value of work carried out or value of goods and services supplied (Kreisson Legal, 2009). It is further stated in section 7(3) that the Act would not cover contract of service, whereby a party is employed to carry out construction works or supply of goods and services as an employee (New South Wales Government, 1999).

The principle of the Act is to provide a fast-track dispute resolution mechanism, which aims to safeguard the claimant's cash flow under the contract. Unlike UK adjudication regime, the Act only applies to payment claim disputes (Uher & Brand, 2005). Under provisions of the Act, only claimants allow to initiate the adjudication process. Nonetheless, both contract parties are entitled to make their submission to the adjudicator (Brand & Uher, 2008; Uher & Davenport, 2005). Furthermore, the Act has introduced a range of statutory measures under part 2 of the Act, such as right to progress payment, the use of default provisions for progress payment if there is no express contractual provision; nullifying the effect of 'pay when paid' and 'pay if paid' clauses in a construction contract; and right to exercise lien over any unfixed plant or materials in respect of unpaid amount (Che Munaaim, 2010; New South Wales Government, 1999; Uher & Brand, 2005).

The Act has established a mechanism for making payment claims and a mechanism for responding to such claims (Uher & Davenport, 2005). The procedural steps to recover progress claims are confined in Part 3 of the Act (New South Wales Government, 1999). The claimant, a person who entitled to progress payment under construction contract entitled to serve a payment claim on respondent, who liable to make the payment. A valid payment claim must identify the Work carried out in the construction contract; amount of the progress payment; state that the payment claim is made under provision of the Act (Kreisson Legal, 2009).

When a valid payment claim made under the Act, the respondent shall furnish the claimant a payment schedule if the respondent dispute the claimed amount by the

claimant (Uher & Brand, 2005). The payment schedule is a written response to the payment claim in which the respondent indicate the reason for paying less than the claimed amount, or reason for withholding payment (Uher & Brand, 2005, 2008). The payment schedule must be provided to the claimant within ten business days of the claim being serve, else, the respondent becomes liable to pay the claimed amount in the payment claim (New South Wales Government, 1999).

Nonetheless, the Act does not allow the respondent to bring any cross-claim or raise any defense in relation to matters arising under the contract in proceedings for the recovery of a statutory debt (Uher & Davenport, 2005). In case of the payment becomes due, the claimant may either recover the payment through any court of competent jurisdiction as a statutory debt or refer the dispute to a competent adjudicator (Uher & Brand, 2005). Prior to the adjudication application, claimant has to notify the respondent of his intention to apply for adjudication for the payment claim. The adjudication application must be made within the time frame prescribed in the Act, such as within ten business days after the claimant receives the payment schedule; within twenty business days after the payment due; and within ten business days after the end of five-day-period for the respondent to provide payment schedule after notice of intention to apply for adjudication (New South Wales Government, 1999).

An adjudication application must be submitted to an Authorized Nominating Authority (ANA) in writing with predetermined adjudication fees, accompanies with the relevant payment claim and the payment schedule. Upon receipt of adjudication application, ANA will refer it to an adjudicator affiliated as soon as practicable (Uher & Davenport, 2005). The adjudicator may accept the adjudication application by serving notice of the acceptance to the claimant and respondent (New South Wales Government, 1999).

Time is vital in adjudication. The procedures and time frame in relation to the adjudication process are strict and govern solely by the Act (Brand & Davenport, 2010). The respondent may lodge adjudication response at any time, but within 5 business days after receiving a copy of the adjudication application or two business days after receiving notice of an adjudicator's acceptance of the application,

whichever expires last. The Act precludes the inclusion of any reasons for withholding payment in the adjudication response, which were not included in the payment schedule (New South Wales Government, 1999).

It is expected to have adjudication process to be conducted informally, speedy and cost effective. The parties are not entitled to any legal representation in the adjudication process (New South Wales, 1999). An adjudicator has to determine the adjudication within ten business days after the date on the notice of acceptance of the application by adjudicator (Kreisson Legal, 2009). The adjudication determination must be in writing and include the reasons for the determination. The adjudicator is only required to determine the adjudicated amount payable by the respondent to the claimant, the date on which any such amount became or becomes payable and any entitlement to interest. The amount of progress payment is to be calculated in accordance with the contract, if there is no express provision, it is to be evaluate in accordance with section 10 of the Act (New South Wales, 1999).

An adjudication determination is binding on the parties, until the dispute is resolved by mutual agreement, arbitration or court proceeding (Brand & Davenport, 2010). The respondent is obligated to pay the adjudicated amount by the relevant date, if fail, the claimant entitled to file adjudication certificate as judgement debt with any court of competent jurisdiction and serve notice to respondent on his intention to suspend work or exercise a lien on unfixed plant or materials supplied under the construction contract. The amended Act permits the claimant to serve payment withholding request to the principal contractor and recover the payment claim directly from the principal contractor for the purposes of the Contractor Debts Act 1997 (New South Wales Government, 2010).

An adjudicator is immune from his determination in adjudication, unless, it is done in bad faith. If a respondent seeking to set aside the adjudication determination, the respondent is not be entitled to bring any cross-claim against the claimant; or to raise any defence in relation to matters arising under the construction contract; or to challenge the adjudicator's determination. Also, the respondent required to pay into court as security the unpaid portion of the adjudicated amount pending the court determination (New South Wales Government, 1999).

2.3.3 Challenge of adjudication

2.3.3.1 Adjudication ‘ambush’

The Building and Construction Industry Security of Payment Act 1999 requires parties (claimant and respondent) to serve their documents within a tight timeframes (New South Wales Government, 1999). The perceived problem for the tight timeframes is adjudication ‘ambush’. Risgalla & Smithies (2008) argued that adjudication ‘ambush’ could be initiated either by a claimant or a respondent during the process.

The claimant can mount ambush claim by preparing a payment claim over a long period and submitting it to the respondent (Risgalla & Smithies, 2008). Furthermore, some contractors submit enormous final progress claim at the end of the contract by combining the delay and disruption claims over the construction period. The respondent then only given ten business days to evaluate and respond to the claim (Davenport, 2007). The respondent’s ability to defence is weakens if the respondent unable to provide a valid payment schedule on time (Uher & Brand, 2008).

Under the original scheme of the Act, the respondent was allowed to lodge security instead of paying the adjudicated amount. If the respondent fails to lodge security, the claimant can only sue for a statutory debt in court and caused delay in payment, which oppose to the intention of the Act. In addition, the respondent could further delay payment by setting aside an adjudication determination in a court (Uher & Davenport, 2005). However, the adjudication ambush of respondent has been excluded in the amended Act 2002. The respondent is not allowed to bring any cross-claim, such as claims for defect, set-off and liquidated damages in the payment schedule or adjudication response (New South Wales Government, 2002).

2.3.3.2 Imbalance of the Act

Under the Building and Construction Industry Security of Payment Act 1999, there is no mechanism for the respondent to initiate an adjudication process (New South Wales Government, 1999). In NSW, only a person who has carried out construction work or supplied goods and services can initiate adjudication. There is an imbalance that arises under the Act, whereby the claimant entitled to claim for damages while the respondent is not allowed to do so (Brand & Davenport, 2010).

It is acceptable that the Act is intended to expedite payment and improving cash flow of those inferior parties, especially subcontractors in the NSW construction industry (Uher & Brand, 2008). Some of the construction players perceive the NSW scheme as a subcontractor's protection regime rather than a protection regime for all construction parties (Che Munaaim, 2010). Coggins (2009) has clarified the notable differences between the adjudication legislations practice in the Australia, East Coast model restricts statutory adjudication to progress payment while West Coast model permits all payment disputes to be submitted to statutory adjudication. On the other hand, Brand & Davenport (2010) difference the adjudication regimes in 'Defined Scheme' and 'Non-specific Scheme'.

Hybrid adjudication scheme is proposed to combine both the strengths of the West Coast model and East Coast model or Defined Scheme and Non-specified Scheme (Coggins, 2011). The Dual Scheme proposal would be a dual process, which retain Defined Scheme for purely progress payment, and adopt Non-specific Scheme for other payment disputes. Under this scheme, either party to a construction contract can initiate adjudication under the construction contract with a different timetable and allowance for cross-claim (Brand & Davenport, 2010). However, this proposal has not yet been adopted in the statutory adjudication up to date.

2.4 New Zealand Perspective

2.4.1 Approach to adjudication

In the past, the construction players in New Zealand (NZ) get paid through stage payment. Hence, it is not uncommon that default payment prevalent as a result of the abuse of this deferred payment privilege. Delay payment culture is the major root of the disputes within the construction industry (Ramachandra & Rotimin, 2010). Cash flow is the lifeblood of enterprise, very often, lower tier subcontractors can not survive financially when there is a delay in their payment (Walton, 2006).

Litigation remained the common ultimate form of judicial dispute resolution in the construction industry. However, formality and resources limitation of the litigation have largely lost commercial and practical credibility (Building Disputes Tribunal, 2010). Thus, alternative dispute resolutions that are greater flexibility and informality have enjoyed some success in the industry. The traditional approaches to dispute resolution are reflected in one of the NZ standard form of construction contracts – NZS3910: 2003. The standard form of contract has adapted engineer's review, mediation and arbitration as its multi-tiered approach to any dispute arisen under the contract (Walton, 2009).

Negotiation is the preference of the construction industry in dispute resolution, rather than third party determination. However, this situation has changed with the introduction of compulsory rapid adjudication by the security payment regime in NZ (Walton, 2009). The Construction Contracts Act 2002 came into force on 1 April 2003 and dramatically changed the face of dispute resolution in the construction industry NZ (Building Dispute Tribunal, 2010). The Act is introduced to restraint the poor payment practice and secures the right to payment of contract parties within the construction industry (New Zealand Government, 2002).

The Construction Contracts Act 2002 is modelled on the Building and Construction Industry Security of Payment Act 1999, NSW (Davenport, 2002). The Act applied to every construction contract entered into after 1 April 2003, whether or not governed by NZ law. The Act is concerned only with the construction contract

relate to carrying out construction work in NZ, whether in written or oral, or partly written and partly oral. The Act has effect notwithstanding any provision that expels the rights of contract parties under the Act (New Zealand Government, 2002).

The intention of the Act is to facilitate timely payments between the parties to a construction contract and prohibition of conditional payment provisions in construction contract. The Act nullify the conditional payment provisions such as 'pay when paid' and pay if paid' and provide default provisions for progress payment in absence of express term in contract. Furthermore, the Act established speedy resolution of dispute arising and remedies for the recovery of payments under a construction contract (New Zealand Government, 2002).

2.4.2 Application of adjudication

Construction Contracts Act is modelled on the NSW security payment regimes (Davenport, 2002), yet, both schemes have conspicuous differences. The Construction Contracts Act covers either commercial or residential construction contract, but with limited interpretation on the construction works. The Act not applies to related goods and services to construction work such as suppliers of good, services and equipment, design or architectural work, engineering and quantity surveying (Department of Building and Housing New Zealand, 2011; Kennedy-Grant, 2007).

Payer is liable to pay claimed amount in any progress claims submitted by the payee, who is entitled to progress payment under the construction contract. The payer required to response to a valid payment claim by providing a payment schedule to the payee. The servings of payment claims and payment schedules have to strictly comply with the procedural steps as provided under the Act (New Zealand Government, 2002). If the payer failed to serve payment schedule within twenty working days or failed to pay scheduled amount by the due date, the payee may recover unpaid amount as statutory debt in court or serve notice on his/her intention to suspend the carrying out of construction work (Gellert Ivanson Limited, 2009).

Unlike Singapore (SG) and NSW adjudication regimes, the scope of Construction Contracts Act is broader and covers all types of claims (Uher & Davenport, 2005). Any party to a construction contract can refer a dispute to adjudication for any differences arisen under the contract. The Act has the provisions to allow disgruntled party pursue their rights under the construction contract (New Zealand Government, 2002).

Adjudication is commenced by serving of the notice of adjudication on the other party/parties by the claimant under the construction contract. The unique feature of the Act is the ability of the claimant to include the owner of construction site in the adjudication (Davenport, 2002). The claimant may seek a determination that the owner is jointly and severally liable for the adjudicated amount. Furthermore, the claimant can obtain a charging order over the construction site in a court after get approval of the adjudicator (New Zealand Government, 2002).

Under the Act, an adjudicator could be selected through mutual agreement of dispute parties. If the parties unable to reach agreement, they can seek for nomination of adjudicator by an agreed nominating body or an authorised nominating authority by the Minister (Kennedy-Grant, 2007). The selection of adjudicator must be done within 5 working days after the notice of adjudication served or any further period agreed. The adjudicator must response to the nomination within two working days by serving a notice of acceptance for the nomination (New Zealand Government, 2002).

Immediately after the receipt of notice of acceptance, the claimant must serve an adjudication claim to the adjudicator within five working days by extended one copy to respondent. On the other hand, the respondent shall within five working days, may serve a written response to the adjudication claim. Different from NSW adjudication regime, the Act does not expressly prohibit a response to include any reasons for withholding payment, which were not included in the payment schedule (New Zealand Government, 2002).

Adjudication can be conducted in any manner that the adjudicator thinks acceptable under the Act, which include appointment of expert, request submission of relevant particulars and issue any reasonable directions to the parties (New

Zealand Government, 2002). The Act permits a claimant to seek an adjudicator's approval for the issue of a charging order on construction site owned by a respondent or an owner (Uher & Davenport, 2005). The adjudicator must perform his/her duties and exercise his/her powers in accordance with the provisions under the Act. New Zealand government has made provision regarding the relationship of adjudication to other form of proceeding in the section 26 of its security payment Act (New Zealand Government, 2002).

Construction Contracts Act 2002 allows the dispute parties to extend the jurisdiction of adjudication beyond the bounds of the Act by written agreement, at any time (New Zealand Government, 2002). The adjudicator is allowed twenty working days for his/her determination after the end of period allowable to respondent to serve its adjudication response. An adjudicator could extend the dateline for his/her determination to further ten working days, which he thinks is reasonably required, without consent of the parties (Kennedy-Grant, 2007).

Provision of the Act tolerate with the errors in computation or any clerical or typographical errors in adjudication determination, and allow the adjudicator to make correction on the determination within two working days. The determination by an adjudicator is subject to review under the Act. The disgruntled party can serve an application for review in the District Court within twenty working days after the date of determination or any further time allowed by the District Court (New Zealand Government, 2002). However, determination by the District Court is not a final determination of the dispute of the application under review.

An adjudicator is entitled to determine the dispute either in monetary claim or non-monetary term (Building Dispute Tribunal, 2010). In monetary claim, the adjudicator may determine whether any parties to the adjudication are liable to make payment to others or any queries about rights and obligations of the dispute parties under the contract. The adjudicator may determine the amount conditionally payable and date upon which that payment becomes payable under his determination. On the other hand, the adjudicators can determine the rights and obligations of the parties under the contract in non-monetary claim (New Zealand Government, 2002).

If a defendant to the adjudication, who are liable to make payment to plaintiff fails to made payment within time stipulated in the adjudicator's determination or two working days after copy of relevant determination is served if non-specify, the plaintiff can pursue his/her right for payment under provisions of the Act (Building Dispute Tribunal, 2010). There are three remedies available for non-payment of adjudicated amount, such as recovery of the unpaid amount as a debt in court, suspension of work and entry the determination as a judgement in the District Court (Kennedy-Grant, 2007). The defendant is given the right to oppose any application of determination as judgement, within fifteen working days from the date of claimant's application (Uher & Davenport, 2005).

There are some exceptions to the enforceability of the adjudicator's determination. The right to enforce a determination as a judgement does not apply to residential construction contract (Building Dispute Tribunal, 2010). Furthermore, any determination relating to the parties' rights and obligation under the contract is not enforceable. Nevertheless, the Act allows the parties to initiate court proceeding to enforce their rights under the contract (New Zealand Government, 2002).

It is not uncommon that the defendant delays payment by raised counterclaims in response to an application for judgement of debt by the plaintiff. The enforcement of the debt as judgement can be deferred and it is oppose to the intention of the Act (Davenport, 2002). Therefore, the Act does not permit any counterclaim or set off other than set-off of liquidated amount in the proceedings for the recovery of a debt (New Zealand Government, 2002).

A party can still apply for other dispute resolutions even though adjudication has been initiated for the same dispute (Gellert Ivanson Limited, 2009). The submission to other dispute resolution does not terminate the adjudication, but conduct contemporaneously with adjudication. Lastly, the Act gives immunity to an adjudicator and experts engaging in the proceedings, provided they not act in bad faith (New Zealand Government, 2002).

2.4.3 Challenge of adjudication

2.4.3.1 Residential construction contract

For the sake of completeness, the Act applies to commercial and residential construction contracts. Nevertheless, the Act distinguishes between residential and commercial construction contracts by providing special provisions for residential contracts (Department of Building and Housing, 2011). In residential contract, the default statutory progress payment provisions do not apply; option for enforcement of an adjudication order are limited; and a contractor cannot suspend work or obtain a charging order over a site for default payment under the contract (Building Dispute Tribunal, 2010; Kennedy-Grant, 2007).

Furthermore, It is mandatory to compliance with the notice requirement for residential construction contract under the Act. Any non-compliance with the notice requirement will make a payment claim or a notice of adjudication invalid under the Act (New Zealand Government, 2002). These practices may create imbalance in the construction contracts.

Department of Building and Housing (2010) has identified the issues relating to the exceptionally provisions for residential construction contracts. Adjudication orders about residential disputes are difficult to enforce. The only options for the party for non-compliance of adjudication order are to have dispute reheard in court or arbitration. In addition, the Act relies on the contract parties to negotiate on the progress payment for the residential contract.

Another important issue is the difficulty of the contractors to define whether the party contracting with is a residential occupier. Many properties in NZ are held in family trust, which outside the definition of residential occupier defined in the Act. This may create considerable confuse to the contract parties when there is a dispute in the contract (Department of Building and Housing, 2010).

2.4.3.2 Exclusion of related goods and services in construction work

The definition of construction work in the Act has excludes related goods and services to construction work, such as supply of good, materials and equipment, design, surveying and quantity surveying, drilling for or extracting oil or natural gas and extracting minerals (New Zealand Government, 2002). Although the definition does not extend to plant and equipment but it does provides limited safeguard for construction work in respect of prefabricating customised components (Kennedy-Grant, 2007)

Any dispute with the contracts for related goods and services are unable to determine through adjudication. In addition, these contracts are not subject to the statutory progress payment provisions in the Act (Department of Building and Housing, 2010). The contractors for related goods and services contractor could be at risk of delayed payment or non-payment in the industry. Therefore, the parties will have to rely on other alternative dispute resolution methods which are more time consuming and costly.

Most of the contracts of related goods and services have been provided with dispute resolution methods yet, some of them experienced the dispute resolution options are slow and difficult. Furthermore, the exclusion of the related goods and services contracts is a form of unfair protection to the construction players (Department of Building and Housing, 2011).

2.5 Singapore Perspective

2.5.1 Approach to adjudication

The recession of the economy of Singapore in the past years, resulted the fallen of annual construction demand. The economy downturned had significant impact on the cash flow of the construction players. Cash flow is crucial as the building processes involved are relatively long period. Cash flow problems in the Singapore construction industry worsen, default payment or late payment to contractors, subcontractors and suppliers were not uncommon during this difficult time. Eventually, the payment issues would result in projects failure in the industry (Chau, 2004; Lim, Leong, & Ng, 2010).

Other forms of alternative dispute resolution method were available in Singapore. Arbitration is operated in a similar ways of other countries. Arbitration proceeding is viewed as faster and more cost efficient dispute resolution method compare to court proceeding. However, adversarial approach of arbitration made the proceeding unusually time consuming and unable to tackle the cash flow problem during the recession. Mediation practices in Singapore unable to cope the effect of economy downturn, as the process is not binding and not final and subject to consent of disputes party. Therefore, a more pragmatic dispute resolution method was introduced and underpinned by the legislation of Singapore.

Prior to introduction of adjudication into SG under the Building and Construction Industry Security of Payment Act 2004 (Singapore Act), Building Construction Authority (BCA) had studied the security of payment models in UK, NSW and NZ. Besides this, BCA had conducted extensive consultation with key bodies in the construction industry including Singapore Contractors Association Limited (SCAL), the Singapore Institute of Architects (SIA), the Real Estate Developers' Association of Singapore (REDAS), the Institution of Engineers Singapore (IES) and the Singapore Institute of Surveyors and Valuers (SISV). Dialogue sessions were held with the industry and major public agencies to develop an effective solution to mitigate the problems of cash flow in the Singapore construction industry (Chau, 2004).

The Building and Construction Industry Security of Payment Act 2004 was come into force on 1 April 2005. The Act provides a framework for statutory adjudication and preserved the right of the contractual parties to refer any dispute arisen under the contract to adjudication at any time (Cheng, 2005). Teo (2008) found that the adjudication regime in SG and NSW (Building and Construction Industry Security of Payment Act 1999) have most similar statutory framework.

The Singapore Act is introduced to improve cash flow by expediting payment in the building and construction industry. Besides this, it provides a quick and low cost of resolution of payment dispute through adjudication. The objectives of the Act are to ensure that the party is entitled to payment for works executed or goods supplied or services provided; rights of the party to suspend work or supply for default payment, outlawing “pay when paid” provision in the contract; and nullify any provisions of contract contrary to the Act (Lim, Leong, & Ng, 2010).

The objectives of the Singapore Act are generally similar to other adjudication regimes practice in UK, NSW and NZ. However, there are some distinctive features adopted in the regime of Singapore to overcome the myriad problems of cash flow in the construction industry (Teo, 2008). The unique features of the Singapore Act will be highlighted and discuss further in the application of adjudication of next section.

2.5.2 Application of adjudication

The concerned of adjudication regime in Singapore is slightly different from UK adjudication regime. The adjudication regime in SG is concerned on the resolution of “payment disputes” in the construction industry, while latter is focused on resolution of all the construction disputes under the contract (Teo, 2008). It is understandable, as the origin of the adoption of adjudication in Singapore was to expedite payment within the construction industry

In order to fully interpreted the provision of statutory adjudication in accelerate the cash flow within the industry, the time frame for the determination of adjudicator is shorten. The period allowed for an adjudicator to make a decision is within fourteen days from the commencement of the adjudication. In section 17(2) of Singapore Act, it clearly demonstrated the time frame of the adjudication or longer time as requested by adjudicator and agreed by the parties. In fact, the time frame for the determination is the shortest among the entire adjudication regime in other countries (Building Construction Authority Singapore, 2005a, 2005b).

It is necessary to ensure the construction parties to receive a fair adjudication determination with the speedy mechanism of adjudication. To overcome this issue, some provisions have provided in the Singapore Act. Under section 12.2(b), it requiring the adjudication can only be considered after the dispute settlement period. During this period, the parties may seek clarification each other and the respondent may vary or serve a payment response. The Singapore Act has expressly requiring the adjudicator to comply with the principles of natural justice in section 16.2(c).

The Act is providing mechanism to allow disgruntled party seek review for the determination of adjudicator (Teo, 2008). Unlike other adjudication regime, the adjudication adopted in SG is more regulatory and rule-based (Teo, 2008). The parties seek for adjudication in their disputes requires complying the provisions of the Act, including the allocation of cost of adjudication by adjudicator.

The right to payment and adjudication mechanism are the main concerns of the Singapore Act. The mechanism for preserving the right to the payment is demonstrated in the Par III of the Act. This part is concerned with the payment claim, payment response and dispute settlement period (Teo, 2008).

Provision of the Singapore Act enables any person under a written contract entitled to make payment claim for the construction works carried out, services provided or goods supplied. "Claimant" referred to the person who is or claims to be entitled to a progress payment in the Singapore Act. The payment claim shall be served at the times as specified in contract, if not specify, the serving of claim is by the last day of each subsequent month (Lim, Leong, & Ng, 2010). The Singapore Act

has formulated certain criteria to be fulfilled in serving payment claim by claimant in section 10.3.

Payment response is the response to a payment claim made by a respondent. The Singapore Act defined that respondent is any person liable to make a progress payment under a contract to a claimant. Respondent received payment claim is required to provide a payment response in writing by the date specified in the contract; or within twenty one days after received the payment claim, whichever is the earlier. If it is not provided under the contract, it shall be within seven days after the payment claim is served. The respondent may response to the payment claim by pay full amount, partial pay or no pay. When the response amount is the amount specified in the payment, the reason for the doing do need to written down in the payment response (Building Construction Authority Singapore, 2005a, 2005b).

As mentioned earlier, the Singapore Act has the provision for the “dispute settlement period”, whereby the adjudication commenced only after dispute settlement period. Dispute settlement period is defined as the period of seven days after the date when the dispute response is required to be provided. During this period, the parties may seek clarification each other on any matters regarding the payment claim made. The respondent is given the chance to vary the amount of payment response or provide claimant a payment response where he failed to serve earlier. (Building Construction Authority Singapore, 2005a, 2005b)

The claimant is entitled to make adjudication application after the period of dispute settlement. The section 12 of the Singapore Act has demonstrated the right of the claimant to commence adjudication when claimant failed to receive any amount set out in the payment response that he has accepted by the due date; or claimant disputes a payment response provided by the respondent; or respondent failed to serve a payment response within specified period (Building Construction Authority Singapore, 2005a, 2005b).

Before a claimant calls for commencement of adjudication, claimant is requires to notify the respondent on intention to apply for adjudication. Once the notice is issued to respondent, claimant is eligible to apply for the adjudication with

an authorised nominating body. In Singapore, the application for adjudication is to be made to the Singapore Mediation Centre, the only one authorised nominating body under the Act. The adjudication application shall be made within seven days after payment due date or last day of settlement period. However, in case of adjudication deal with progress payment, even a claimant unable to file the adjudication within seven days, he could include that in a subsequent claim (Cheng, 2005).

The authorised nominating body has to serve a copy of adjudication application to respondent after receipt of the adjudication application. Upon received a copy of adjudication, the respondent required to lodge adjudication responses with the authorised nominating body. Both adjudication applications and adjudication responses shall be made in writing, and mostly, they are accompanied by all relevant documents relevant to the adjudication (Building Construction Authority Singapore, 2005a, 2005b).

The authorised nominating body will then appoint adjudicator from its register of adjudicators to determine the adjudication application. An adjudicator requires reach his determination within fourteen days after the commencement of the adjudicator or within seven days, if the respondent failed to make a payment response or failed to pay response amount that is accepted by claimant. The time frame of the adjudication can be extended as requested by adjudicator and agreed by parties. This can be happened when the dispute arisen is complex and detailed examination is necessary to reach a determination (Building Construction Authority Singapore, 2005a, 2005b).

Decision made by the adjudicator in adjudication is binding on the parties, but it is not finality. Respondent is permitted to lodge an application for the review of within seven days of the determination, provided the adjudicated amount exceeds the payment response has specified. The authorised nominating body will appoint different adjudicator or a panel of three review adjudicators to review the earlier determination. Under section 18.3 in the Singapore Act, it requires respondent to pay an adjudicated amount to the claimant before lodge any application for review. The reason behind this provision is to ensure the cash flow of the project is not compromised by the review of determination. Alternative way of set aside the

determination of the adjudicator is through arbitration or court proceeding by the respondent. But, it will require the respondent to pay the adjudicated amount to the court as security (Building Construction Authority Singapore, 2005a).

The confidentiality of adjudication is demonstrated under section 33 in Singapore Act. The Act expressly provides that all relevant documents or information for the purpose of adjudication remained confidential, unless with the exception stated in the Act. The purpose to attach confidentiality is to ensure the commercial interest of the parties is not compromised in the adjudication. Another notable provision is the provision of the Singapore Act to allow the Minister make regulations for any related matter. This will allow the government to make necessary adjustment to the regime without amend the principal legislation (Teo, 2008). The rapid changes of nature of building and construction works have facilitated such provision in the Singapore Act.

The adjudicated amount shall pay to claimant by respondent within seven days after the adjudication determination is served. The Singapore Act provides several measures to enforce payment of adjudicated amount and established in Part V of the Act. The mechanisms provided in the Act are covered both contractors and suppliers.

Under section 23.1(a), claimant can exercise a lien on unfixed goods supplied to the respondent under the contract which have not been paid for. The supplier has to serve a notice in writing on the respondent of the intention to exercise lien. However, the claimant needs to comply with the requirement of the Act in section 25 to exercise lien on goods supplied (Building Construction Authority Singapore, 2005a).

In the event of non-payment for adjudicated amount, the claimant is given the rights to suspend the construction work carrying out or supplying goods or services under the contract. A notice in writing is necessary to issue to respondent before the suspension. The claimant has to comply with certain prescribed formalities in suspend the scope of works under the contract (Building Construction Authority Singapore, 2005a, 2005b).

When the respondent failed to pay the whole or any part of the adjudicated amount, the claimant may apply to the court to enforce the adjudication determination. The unpaid adjudicated amount will be treated as judgement debt through the court proceeding in Singapore (Building Construction Authority Singapore, 2005a).

2.5.3 Challenge of adjudication

2.5.3.1 Interface between Singapore Act and Underlying Contractual Framework

The adjudication regime in Singapore is interpreted from the Building and Construction Industry Security of Payment Act 2004 (Singapore Act). The regime exists and enforced separately from the existing contractual framework. The Singapore Act will infringe upon the contractual regime in some circumstances, for example, the provision of unfair term in the contract will be nullified by the Singapore Act or uncertainty in payment terms of the contract (Teo, 2008).

The provisions of the Singapore Act have impinged the underlying Contract Law in Singapore. Under section 36.1, it stated that the provisions in the Act are taken precedent and enforceable although it may go against the terms of contract. In section 36.2, the Act will nullify any contract or agreement that prohibit and weaken the operation of the Act; and the term in contract that attempt to deter a person from taking action under this Act. Nonetheless, there is a provision under section 36.4 stated that “Nothing in this Act shall, except as provided in subsection (1), limit or otherwise affect the operation of any other law in relation to any right, title, interest, privilege, obligation or liability of a person arising under or by virtue of a contract or an agreement” (Building Construction Authority Singapore, 2005a).

The problems are likely to occur in practice when there is an overlapped of the power of adjudication regime and contractual regime. The SG contracts, including the standard form contracts have to be worded in consistent with the

Singapore Act. Some of these contracts have amended to accommodate the provision of the Act, while others have not take into consideration. The inconsistency of the underlying contract with the Singapore Act will raise legal issues before the adjudication and court proceeding. Moreover, there may be appeared some inconsistency in interpret the provisions under section 36(1) and section 36(4), which may require clarification of the court to certain extent (Teo, 2008).

The advent of adjudication regime has altered the role of architects and engineers as independent certifier in construction contracts. The court may be enforced the interim payment certificate issued by architect or engineer through summary judgement (Teo, 2008). However, the Singapore Act allowed the adjudicator to determine an adjudication application without restricted by any payment response or any assessment in relation to the progress payment that are final or binding on the parties under section 17.4. In other word, the architect no longer served as independent certifiers in a contract, but more as role of contract administrator. The conflict between contract and the Singapore Act likely to occur as the change in role of independent certifier not reflected in the contractual framework (Teo, 2008).

2.6 Hong Kong Perspective

2.6.1 Approach to adjudication

The construction industry is one of the main pillars of Hong Kong (HK) economy in 1990s. The problems of conflict in the HK construction industry exist in the same way as they found in other countries. Disputes could exist in the construction industry in a number of ways, for example, clash of commercial interest between client and contractors. In order to minimise the negative impact of disputes to the industry, the disputes need to be resolved effectively.

According to the report 'Construction for Excellence' of Construction Industry Review Committee (2001), "The resolution of disputes can be expensive and time-consuming. Given the substantial cost and disruption that a dispute as far as possible. If a dispute cannot be avoided, it should be proactively managed and resolved".

During the construction of the Airport Core Project (ACP) and Chek Lap Kok Airport between 1991 and 2004, a standard form of contract had been developed for the ACP. Under the ACP standard form of contract, a three-tiered dispute resolution method was introduced. A formal adjudication mechanism was incorporated into the three-tiered dispute resolution method. The process for the dispute resolution commenced with mediation, followed by adjudication and arbitration remained as last resort. The dispute referred to the adjudication must be either money or time issues, if not, the dispute could proceed to arbitration (Cheng, 2005).

However, the Airport Authority did not adopt adjudication in their standard form of contract for the construction of airport itself. In practice, mediation or quasi-mediation was widely adopted in the project and successfully resolve most of the disputes arisen. Furthermore, the construction of rail infrastructure Kowloon-Canton Railway Corporation was not adopted provisions of adjudication in the project but continue to employ mediation as primary method of dispute resolution (Hill & Wall, 2008).

It can be clearly seen that the mediation and arbitration are the main alternative dispute resolution methods in the HK construction industry. A review of the ACP general conditions of contract was carried out in 1998. There are only ten requests for adjudication has been served and there is only four have been resolved by adjudication (Cheng, 2005). This empirical evidence clearly indicates the position of the adjudication during the construction of the ACP.

The Government of the Hong Kong SAR has first adopted adjudication on a trial basis into a small number of its contracts. Contractual adjudication will be provided for in these contracts, without statutory underpinning. Under the contracts, the determination of the engineers is final and binding to the parties. However, the engineers' decision can be overturned when a dispute is referred to adjudication, mediation or arbitration (Hill & Wall, 2008). However, the clauses provide that the adjudication process is not compulsory and the parties may refer the dispute to mediation by agreement.

2.6.2 Application of adjudication

Hong Kong International Arbitration Centre (HKIAC) has developed HKIAC Adjudication Rules 2007, by taken into account the Airport Core Programme Rules (1992 edition) together with a number of English resources and the Conditions of Contracts Sub-Committee Paper on ADR for Public Works, Construction Adjudication Rules 2003. The Rules set out the referral process, procedures of adjudication and determination of adjudication and its associated costs (RICS Hong Kong Dispute Resolution Professional Group, 2010). The adjudication will be administered by HKIAC in Hong Kong.

Under the scheme, it is essential to acquire the consent of the parties for the adoption of adjudication as resolution method for any dispute arisen. Prior to the adjudication, the disgruntle party under the contract may need to make a written request for adjudication and served to HKIAC and other parties. The parties require appoint a mutually agreed adjudicator within fourteen days, otherwise HKIAC may

appoint an adjudicator to determine the dispute. The appointment of an adjudicator shall be confirmed in writing to the parties by HKIAC (Hong Kong International Arbitration Centre, 2008).

The Rules required the referring party to serve a copy of referral submissions to each response party and adjudicator. Upon receipt of the referral submission, the response party shall serve its response submission to all parties involved in adjudication. Both submissions served shall be in writing and accompanied by all relevant information documents to the referred matter (Hong Kong International Arbitration Centre, 2008).

The adjudicator is given the authority to open up, review and revise any decision made by Engineer. However, the power of the authority may limit by the provisions of contract or written agreement. Similarly, the parties can confer any power upon the adjudicator in adjudication. The adjudicator is not liable for any act or omission in determining the adjudication, unless the adjudication is done dishonestly (Hong Kong International Arbitration Centre, 2008).

Under the Adjudication Rules, the adjudicator's decision has to issue within 56 days of the Adjudication Commencement Date, the date when an adjudicator has been appointed. The decision of the adjudicator is final and binding on the parties and enforceable, until the disputes is resolved or referred to arbitration. The disgruntled party must referred the dispute to arbitration within ninety days after the decision was issued (Hong Kong International Arbitration Centre, 2008).

Initially, each party to the adjudication will have to deposit HK\$50,000 with HKIAC within seven days of the Adjudication Commencement Date. The adjudicator would be able to recover any expenses and adjudication fees from the money deposited with HKIAC. The adjudicator has the right to determine his fees and expenses and the proportions in which the parties shall pay its fees and expenses. Written request is necessary to dispute on the allocation and amount of fees of adjudication determined by adjudicator. The reasonable amount of the adjudication fees and expenses will be determined by HKIAC upon receipt of the written request (Hong Kong International Arbitration Centre, 2008).

2.6.3 Challenge of adjudication

2.6.3.1 Contractual adjudication

Various forms of adjudication are in operation in other countries, for example UK, NSW, NZ and SG. These countries have adopted a statutory adjudication scheme to resolve the disputes arisen in the construction contract. Unlike others, there is no statutory right to adjudicate in HK. The adjudication of HK is derived its authority through the written agreement of the parties (RICS Hong Kong Dispute Resolution Professional Group, 2010).

The adjudication scheme in HK is worked in voluntary basis and not underpinned by statutory. The decision of the adjudicator is binding on the parties until the dispute is referred to arbitration or settled by agreement. The award of adjudication is not temporarily binding on the parties as the party can refuse to comply with the determination and proceed to arbitration (Hill & Wall). In contrast, most of the adjudication regimes do provide the temporary binding effect on the determination of adjudication.

2.7 Malaysia's Current Development

There is trend in worldwide construction industry to shift from the rigid traditional forms of dispute resolution to alternative dispute resolutions. Along with the introduction of adjudication regimes, UK, NSW, NZ and SG have enjoyed some success in terms of expediting payment and improving cash flow of respective construction industry. The successful of these countries has urge Construction Industry Development Board (CIDB) to develop the "Construction Industry Payment and Adjudication Act" to resolve non-payment issues in the construction industry.

CIDB under the charge of the Minister of Works is working together with the industry players through a steering committee. It is necessary to consider the culture, characteristics of industry stakeholders and other unique inheritance in drafting adjudication and payment bill (Che Munaaim, 2009). The concept of the CIPAA is the privilege and purview of the Ministry of Works (MBAM, 2010).

However, Attorney General had issued two oral directives that dealt with the policy and concepts of CIPAA, where the CIPAA is confined to progress payment disputes and the Kuala Lumpur Regional Centre for Arbitration (KLRCA) is responsible for the nomination of adjudicators. As a result, a revised compromised proposed CIPAA had submitted to facilitate the Attorney General's directives. However, the KLRCA has proposed amendments to the CIPA Bill to the Attorney General for tabling on the same day (MBAM, 2010).

KLRCA's has proposed several amendments to the CIPA Bill originally drafted by CIDB (KLRCA, 2010a). On the other hand, CIDB has raised their critics and opposition to the amendments through joint memorandum by the industry stakeholders (MBAM, 2010).

2.8 Conclusion

During economy downturn, there are a movement towards adjudication in the whole world. Several countries have incorporated adjudication provisions in their standard form contracts. The objective for introduction of adjudication is to expedite dispute resolution and enforce the right of contractual parties to payment in the construction industry.

UK is the first country enforced statutory adjudication in the construction industry. The standard form contracts in UK industry are mandatory to provide adjudication provision in the contracts. The success of the UK adjudication regime has prompted the adoption of adjudication in construction industry in other countries. Adjudication regime in UK has been studied and became model in formulating adjudication regime in respective countries.

Other forms of adjudication regimes are noticed in some of the Commonwealth Countries. NSW and SG adjudication regimes are substantially different from the UK scheme. Both security payment schemes are similar in their operation and focus solely on the payment claim disputes. In contrast, NZ security payment legislation is more resemble to UK. It provides the right of adjudication to all types of claim arisen under the construction contracts, which fall under definition of construction works. There is no system of statutory adjudication in HK and currently trialling a scheme of contractual adjudication.

These countries have proofed the success of adjudication in expediting payment and improve cash flow in the construction industry. This has motivated the adoption of adjudication as primary mean of dispute resolution in other part of the world. For example, Malaysia government has now proposed statutory adjudication to increase cash flow and improve dispute resolution efficiency within the construction industry. The adjudication soon to be introduced in Malaysia and will be enacted under Construction Industry Payment and Adjudication Act (Noushad, 2006).

CHAPTER 3

METHODOLOGY

3.1 Introduction

Creswell (2008) was defined research as a process of steps used to collect helpful information and to have further understanding with an issue or topic through analysis of collected data. On the other hand, methodology is defined as the analysis of the principles or procedures of inquiry in a particular field (Merriam-Webster Dictionary ©2010).

It is important to differentiate between method and methodology in research. Method is defined as the range of techniques used to collect evidence in a research, while methodology concern with the research strategy (Henn et al., 2009). A systematic approach has to be developed in a research to have better understanding and appreciate the study carried out.

This chapter has identified the research strategies available and select research method appropriate for the research. Also, details of each research methods adopted in the research are described. The methods of research involved in the research are highlighted in the Chapter 1, which are literature review and documentary analysis.

3.2 Research Strategy

3.2.1 Quantitative research

Quantitative research is a research strategy that emphasizes quantification in the collection and analysis of data. Bryman (2008) has identified the characteristics of quantitative research:

- Adaption of deductive approach to study the relationship between theory and research;
- It has incorporated the practices and standard of the natural scientific model and of positivism in particular;
- It embodies a view of social reality as an external, objective reality.

The methods employed in the quantitative research are most typically the sample survey and the experimental research (Creswell, 2009; Henn et al., 2009).

In conclusions, quantitative research is a type of study in which the researcher decides what to study; asks specific and narrow questions; collect quantifiable data from participants; analyses it using statistics (Creswell, 2008).

3.2.2 Qualitative research

Qualitative research is a research strategy that usually emphasis words rather than quantification in the collection and analysis of data. The characteristics of qualitative research are in contrast to quantitative research (Bryman, 2008).

- Highlighting an inductive approach to the relationship between theory and research
- It has rejected the practices and norm of the natural scientific model and of positivism in particular in preference for an emphasis on the ways in which individuals interpret their social world; and

- It embodies a view of social reality as a constantly shifting emergency property of individual's creation

The typical research methods employed in qualitative research methods are in-depth interviews and participants observations, ground theory, ethnography, case study, phenomenological research, and narrative research (Henn et.al, 2009)

In conclusions, qualitative research is a type of study, which the researcher relies on the views of participants; ask broad and general questions; collect data consisting largely of word or text from participants; described and analyses these words; and conducts the inquiry in a subjective (Creswell, 2008).

3.2.3 Mixed methods research

Mixed methods research refers to research that combined methods associated with both quantitative and qualitative research (Bryman, 2008). Different methods may be employed to achieve different objectives within the research (Henn et al., 2009). There are three general strategies in mixed methods research, which are sequential mixed methods, concurrent mixed methods and transformative mixed method (Creswell, 2009).

Henn et al. (2009) are recognized the advantages of mixed methods research:

- Overcome any deficiencies of one particular research method;
- Gain the individual strengths of particular methods and compensate for the particular flaws and limitation;
- Gain complete overview of the matter under investigation by viewing from a variety of different angles and perspectives.

3.3 Selection of Research Methodology

The concepts of the research are being study before selection of the appropriate research method for this study. The author able to appreciate the concepts of the research and developed his idea on the research method. The suitable research method for this study is qualitative research, which the author believed that it able to study and examine his concerns in broader perspective.

After understanding the concept of qualitative research, literature review and documentary analysis are the suitable type of research in this study.

3.4 Literature Review

Literature review is a systematic, explicit, and reproducible method for identifying, evaluating and interpreting the existing journal articles, books and other documents produced by researchers, scholars and practitioners. In practice, all researchers will conduct literature review in the research process, notwithstanding the sources of information (Blaxter et al., 2006; Creswell, 2008; Fink, 1998)

Through literature review, it may be able to establish theoretical roots of the study carried out. Further, the relationship between the ideas and existing literature can be clarified and identified. Besides this, the literature review can enhance and consolidate knowledge base of researchers toward the issues (Blaxter et al., 2006, Creswell, 2008). One of the notable purposes of literature review is, provides a framework for integration of findings with the existing findings (Randolph, 2009).

There are five steps in conducting a literature review of a study regardless of whether the study is quantitative or qualitative (Creswell, 2008). These five steps have been adopted in reviewing the literature of this study. These steps are:

1. Identify key terms for searching

2. Locate literature
3. Review the literature selected
4. Develop a theoretical and conceptual framework
5. Writing a literature review

The key terms for the study have been identified at the early stage of this study. The key terms are important to locate literature through Internet database and in a library. Examples of the key terms used in the literature for this study are “adjudication”, “dispute resolution”, “construction industry” and “payment”. After identified the key terms of the study, the literature is located either through academic library and online database, such as ScienceDirect and IEEE Xplore.

The major part of the literature review is to evaluate and review the literature selected. It is crucial to ensure the literature selected is relevant to the topic and problem of study. The next step is to organise the relevant literature and developed theoretical and conceptual framework for the literature. The information of the study will be sorted under main themes and theories, such as approach to adjudication, application of adjudication and challenge of adjudication. Last but not least, write a literature review that reports summary of the literature studied.

3.5 Documentary analysis

Martella et al. (1999) defined document analysis as a method of obtaining information and making conclusion about a phenomenon. It is the process gain understanding through reading for research purposes and considers a range of related questions (Blaxter et al., 2006). It deals with the systematic examination of internal organisational sources, external sources and private sources (Tan, 2007). The major advantage of document analysis is that it allows continuations of the research by other researchers (Martella et al., 1999).

The documentary analysis is focused on the study of provisions under security payment acts of studied countries. The provisions of the security payment

acts were studied repetitively and comprehensively. Also, the published journals and some private documents were studied to comprehend the approach, application and limitation of adjudication. These contribute to the result and discussion in Chapter 4.

3.5.1 Sources of documents

Documents can further classified according to a variety of criteria. Henn et al. (2009) has classified the characteristics among the documents, such as between public and private documents, primary and secondary documents and solicited and unsolicited documents.

3.5.1.1 Public and private documents

Public documents are intended for public use and mostly produced by governments and their agencies. There are four types of public documents, such as actuarial records on the public, political and judicial record, other government records and mass media (Henn et al., 2009). Bryman (2008) stated that the state is the main sources of information and texture materials for the resources. It produces statistical information, as well as texture material of potential interest, such as Acts of Parliament.

Private documents are those documents not originally produced for public consumption and for private usage (Henn et al., 2009). Nonetheless, some of these documents are in public domain, such as press release, annual reports and mission statement, whether in printed form or on the internet (Bryman, 2008). However, it is hard to assure that the private documents are free from any error or distortion.

3.5.1.2 Primary and secondary documents

Primary documents are ‘first hand’ materials that are written or collected by those who actually witness the event that they write. Some of the examples are court record, contracts, letters, memorandum, reports and etc. In contrast, secondary documents are those that are produced after the event or summary of primary materials. Secondary documents may include the journals, newsletter, newspaper and etc (Henn et al., 2008).

3.5.1.3 Solicited and unsolicited documents

Solicited documents are those that are produced for the purpose of research and at the request of the research. On the other hand, unsolicited documents are those produced for a purpose other than research (Henn et al., 2008).

3.6 Data Analysis

According to Creswell (2008), “analysing qualitative data requires understanding how to make sense of text and images so that you can form answer to your research questions” (p.243). There are five steps used in analysing qualitative data: prepare and organise the data for analysis, explore and code the data in analysis, describe findings and build themes, represent findings, and interpret the findings (Creswell, 2008).

3.6.1 Prepare and organise the data

Large amount of information will be gathered during a qualitative study. Therefore, organisation of data is critical in the study. In this study, the materials of the study is

organised and classified by participants and locations. It is necessary to keep duplicated copy of the data collected. The data collected will be read through and divide it into parts for easy tracking.

3.6.2 Explore and coding data

It is necessary to explore the information collected in the literature review to obtain a general sense of data. The data collected is examined and read through several time to have better understanding. Later, the data will be coding and divide into text segments. The segments will be coded and determine whether there is an overlap in data collected. Lastly, the codes are going to group under a broad theme.

3.6.3 Describing findings and build themes

The data collected from the literature review will be study and analyse in detail to describe what have discovered in the data. Subsequently, a broad theme will develop to categorise the idea of the data.

3.6.4 Represent findings

The findings in the study are displaying in tables. A comparison table will be creating to compare the findings from the data analysed.

3.6.5 Interpretation of findings

Interpretation in qualitative research is the personal view on the data collected and compared with the past studies in literature review (Creswell, 2008). The interpretation of the findings will fall under heading “Conclusion and Recommendation” in this study. This section will include the review on the major findings and how it related to the issues, personal views compared or contrast with the literature and recommendation for future research.

3.7 Conclusion

In this chapter, the author was presented the research methodology adapted in collection of data. The research process in the study was established and appreciated by the author. The research can be carried out in three ways, which are quantitative research, qualitative research and mixed method research. The differences between these studies was known and identified by the author.

Qualitative study was adapted in this study. Literature review and documentary analysis were chosen as the research methodology of the study. The purposes of reviewing literature were identified in this chapter. The steps in conducting literature review were discussed in subsection 3.2.

The literature selected has to be study and analysis. The steps used in analysing qualitative research were summarized under section 3.3 in this chapter. The author believed that the methodology used in the study would be able to achieve the aim of this study.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Introduction

The research method for this study is discussed in last chapter. The methodology to be carried out is determined by the author to accord with the significant of study. Literatures selected are examined and several questions on adjudication regimes in the studied countries are being raised.

Queries relate to the adjudication regimes in respective countries to be identified in this chapter. The adjudication legislations of the respective countries are being study in order to have better understanding on their provisions for these queries. It is interesting to distinguish their differences in countering the queries raised by the author.

Malaysia proposed adjudication regimes to be studied in this chapter. CIDB and Kuala Lumpur Regional Centre for Arbitration (KLRCA) have drafted adjudication bill respectively. The proposed bills are being analysed and discuss their provisions in handling the concerns raised. Also, the notable distinction provisions under the contract are study in this chapter.

4.2 Queries on the implementation of adjudication regimes

4.2.1 Freedom of Contract

It is common that the provision of adjudication will overrule the contract terms. The question is ‘will the adjudication Act restrain the concept of freedom of contract / contract out the adjudication Act in respective construction industry’?

Table 4.1: Provisions relate to freedom of contract

Country	Provisions in respective adjudication legislation
UK	<i>No such provisions.</i>
NSW	<p><u>Building and Construction Industry Security of Payment Act 1999</u></p> <p>3(4). <i>It is intended that this Act does not limit:</i></p> <p><i>(a) any other entitlement that a claimant may have under a construction contract, or</i></p> <p><i>(b) any other remedy that a claimant may have for recovering any such other entitlement.</i></p> <p>34(1). <i>The provisions of this Act have effect despite any provision to the contrary in any contract.</i></p> <p>34(2). <i>A provision of any agreement (whether in writing or not):</i></p> <p><i>(a) under which the operation of this Act, or is purported to be, excluded, modified or restricted (or that has the effect of excluding, modifying or restricting the operation of this Act), or</i></p> <p><i>(b) that may reasonable be construed as an attempt to defer a person from taking action under this Act,</i></p> <p><i>is void.</i></p>
NZ	<p><u>Construction Contracts Act 2002</u></p> <p>12. <i>This Act has effect despite any provision to the contrary in any agreement or contract.</i></p>
SG	<p><u>Building and Construction Industry Security of Payment Act 2004</u></p> <p>36(1). <i>The provisions of this Act have effect notwithstanding any provision to the contrary in any contract or agreement.</i></p> <p>36(2). <i>The following provisions in any contract or agreement (whether in</i></p>

	<p><i>writing or not) shall be void:</i></p> <p><i>(a) a provision under which the operation of this Act or any part thereof is, or is purported to be, excluded, modified, restricted or in any way prejudiced, or that has the effect of excluding, modifying, restricting or prejudicing the operation of this Act or any part thereof;</i></p> <p><i>(b) a provision that may reasonably be construed as an attempt to deter a person from taking action under this Act.</i></p>
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4.2.1.1 Observations

The practice statutory adjudications are not intended to restrain the freedom of contract. The parties are still free to agree on any progress payment provisions such as payment by instalments, stage payments or other periodic payment under the contract. The adjudication Acts just provide default provisions to the contract where the parties failed to agree on a mechanism for payment. The Acts are nullifying any unfair conditional payment provisions under the construction contract.

Also, the Acts provide additional right to the parties to refer disputes arising under the contract to adjudication. The provision of adjudication in construction contract may not be contracted out. However, UK legislation remained silent whether it allows the parties to contract out the provisions of adjudication or not. Nonetheless, it is implied that there is no contracting out where the Scheme for Construction Scheme shall apply when there is no provisions of adjudication under the contract.

In conclusion, these adjudication Acts have common understanding to this issue. They do not permit the parties to contract out the Act, which oppose to the concept of freedom of contract. Nonetheless, the parties are free to agree on other provisions under the contract.

4.2.2 Adjudication Timeframe

Construction disputes referred to adjudication required to resolve within tight timeframe. Adjudicator has to come out a determination within 7 business days, 10, 14, 20, 28, 30, or even 42 days, despite a simple or complex dispute. The question is ‘Aren’t the default time frame allow for the adjudication too short in resolving construction disputes?’

Table 4.2: Provisions relate to adjudication timeframe

Country	Provisions in respective adjudication legislation
UK	<p><u>The Scheme for Construction Contracts</u></p> <p>19(1). <i>The adjudicator shall reach his decision not later than—</i></p> <p><i>(a) twenty eight days after the date of the referral notice mentioned in paragraph 7(1), or</i></p> <p><i>(b) forty two days after the date of the referral notice if the referring party so consents, or</i></p> <p><i>(c) such period exceeding twenty eight days after the referral notice as the parties to the dispute may, after the giving of that notice, agree.</i></p>
NSW	<p><u>Building and Construction Industry Security of Payment Act 1999</u></p> <p>21(3). <i>Subject to subsections (1) and (2), an adjudicator is to determine an adjudication application as expeditiously as possible and, in any case:</i></p> <p><i>(a) within 10 business days after the date on which the adjudicator notified the claimant and the respondent as to his or her acceptance of the application, or</i></p> <p><i>(b) within such further time as the claimant and the respondent may agree.</i></p>
NZ	<p><u>Construction Contracts Act 2002</u></p> <p>46(2). <i>An adjudicator must determine a dispute —</i></p> <p><i>(a) within 20 working days after the end of the period referred to in section 37(1) during which the respondent may serve on the adjudicator a written response to an adjudication claim;</i></p> <p><i>(b) or within 30 working days after the end of the period referred to in that section if the adjudicator considers that, even though the parties to</i></p>

	<p><i>the adjudication do not agree, further time for the determination of the dispute is reasonably required; or</i></p> <p><i>(c) within any further time that the parties to the adjudication agree.</i></p>
SG	<p><u>Building and Construction Industry Security of Payment Act 2004</u></p> <p>17(1). <i>An adjudicator shall determine an adjudication application –</i></p> <p><i>(a) within 7 days after the commencement of the adjudication, if the adjudication relates to a construction contract and the respondent -</i></p> <p><i>(i) has failed to make a payment response and to lodge an adjudication response by the commencement of the adjudication; or</i></p> <p><i>(ii) has failed to pay the response amount, which has been accepted by the claimant, by the due date; or</i></p> <p><i>(b) by in any other case, within 14 days after the commencement of the adjudication or within such longer period as may have been requested by the adjudicator and agreed to by the claimant and the respondent.</i></p>

4.2.2.1 Observations

The adjudication procedures subject to a tight statutory timeframe, an adjudicator requires to determine adjudication within prescribed period in the Act. The intention of the Act is understandable as it would be able to expedite payment and improving cash flow of the contract parties. The practice countries able to enjoy some success with the speedy dispute resolution provided under the Act.

There is shorter timeframe provided under the SG and NSW adjudication regimes, as they are concern only disputes with progress payment. On the other hand, longer timeframe allocated by UK and NZ as all types of dispute under construction contracts can refer to adjudication. It is understandable as longer time required to determine the disputes relate to rights and obligation of parties under the contract.

In some scenarios, it did appear that the allocated timeframe insufficient to handle complex construction disputes. Therefore, there is provision in the statutory adjudication where the time of adjudication can be extend with the consent of the

dispute parties. A considerable extension of times would allow a more detailed examination of a dispute, where the dispute is substantial.

4.2.3 Adjudication Cost

In the past, arbitration is known as quicker and cheaper dispute resolution compare with litigation. However, it started to lose its possession as primary alternative dispute resolution in the worldwide recently. Adjudication is regarded as fast track system, which is being quick and cheap. The question is ‘will the adjudication quick and cheap for a long period?’

Table 4.3: Provisions relate to adjudication cost

Country	Provisions in respective adjudication legislation
UK	<p><u>The Scheme for Construction Contracts</u></p> <p><i>25. The adjudicator shall be entitled to the payment of such reasonable amount as he may determine by way of fees and expenses reasonable incurred by him. The parties shall be jointly and severally liable for any sum which remains outstanding following the making of any determination on how the payment shall be apportioned.</i></p>
NSW	<p><u>Building and Construction Industry Security of Payment Act 1999</u></p> <p><i>28(3). An authorised nominating authority may charge a fee for any service provided by the authority in connection with an adjudication application made to the authority. The amount that may be charged for any such service must not exceed the amount (if any) determined by the Minister.</i></p> <p><i>29(3). The claimant and respondent are jointly and severally liable to pay the adjudicator’s fees and expenses.</i></p>
NZ	<p><u>Construction Contracts Act 2002</u></p> <p><i>56(1). An adjudicator may determine that costs and expenses must be met by any of the parties to the adjudication (whether those parties are or are not, on the whole, successful in the adjudication) if the adjudicator</i></p>

	<p><i>considers that the party has caused those costs and expenses to be incurred unnecessarily by –</i></p> <p><i>(a) bad faith on the part of that party; or</i></p> <p><i>(b) allegations or objections by that party that are without substantial merit.</i></p>
SG	<p><u>Building and Construction Industry Security of Payment Act 2004</u></p> <p>30(1). <i>The costs of any adjudication shall not exceed such amount as may be prescribed by the Minister.</i></p> <p>30(2). <i>An adjudicator shall, in making his determination in relation to any adjudication application, decide which party shall pay the costs of the adjudication and, where applicable, the amount of contribution by each party.</i></p>

4.2.3.1 Observations

Statutory adjudication in the studied countries allows adjudicator to determine the cost for the adjudication proceeding. NSW and SG adjudication governments do provide a provision where adjudication cost shall not exceed amount determined by the Minister. Yet, there are no actual guidelines on the bound of the adjudication cost incurred. Furthermore, cost arising in adjudication much depends on the nature of the dispute referred to.

The notable distinction of the adjudication from arbitration is the shorter proceeding timeframe confined in the Act. Usually, the costs arising in proceeding are time-related cost such as submission of documents, adjudication fees and expenses. Therefore, it is anticipated that the adjudication cost can be reduced by the shorter timeframe allowed in proceeding. Therefore, the adjudication may be able to stand out as cheaper and quicker resolution compares to other dispute resolution methods available.

Nonetheless, it is difficult to affirm that the adjudication would be able to be ‘quicker and cheaper’ for a long period. But, it is ascertain that it is a quicker and cheaper dispute resolution at the moment.

4.2.4 Legal representatives

Increasing involvement of lawyers in arbitration has led to more adversarial and operates in similar ways of court procedures. The question is ‘will lawyer participate very as a counsel in adjudication procedures?’

Table 4.4: Provisions relate to legal representatives

Country	Provisions in respective adjudication legislation
UK	<p><u>The Scheme for Construction Contracts</u></p> <p><i>16(1). Subject to any agreement between the parties to the contrary, and to the terms of paragraph (2) below, any party to the dispute may be assisted by, or represented by, such advisers or representatives (whether legally qualified or not) as he considers appropriate.</i></p>
NSW	<p><u>Building and Construction Industry Security of Payment Act 1999</u></p> <p><i>21(4A). If any such conference is called, it is to be conducted informally and the parties are not entitled to any legal representation.</i></p>
NZ	<p><u>Construction Contracts Act 2002</u></p> <p><i>67(1). Any party to a dispute that has been referred to adjudication may be represented by the representatives (whether legally qualified or not) that the party considers appropriate.</i></p>
SG	<p><u>Building and Construction Industry Security of Payment Act 2004</u></p> <p><i>16(5). Where an adjudicator has called for a conference of the parties to an adjudication, a party to the adjudication shall not be represented by more than 2 representatives (whether legally qualified or otherwise) unless the adjudicator permits otherwise.</i></p>

4.2.4.1 Observations

The involvement of legal representatives in adjudication inevitably would lead to a more adversarial proceeding. Arbitration has suffered with the participation of lawyers in proceeding and distorts its originally intentions. New South Wales government outlaw the involvement of legal representatives during conference, while others do not.

The purpose of the NSW is clear, which to avoid adding any unnecessary cost or any expanding of scope during adjudication (Risgalla & Smithis, 2008). Representation by lawyer should not be encouraged, as they tend to distort the nature of adjudication proceeding. The adjudication intended to be quicker and simpler, very often, the lawyer questions on the legal liabilities, rights and obligations of the parties. It is not uncommon that an adjudicator unable to deliver his determination on this matter within the tight timeframe.

On the other hand, involvement of legally qualified representatives may be helpful in an adjudication proceeding. An experience construction lawyer is helpful in addressing some construction and contractual issues as in arbitrations. The involvement of legal representatives may not compromise the intention of adjudication as the adjudication proceedings to be carried out in accordance with the statutory provisions.

4.2.5 Adjudication Ambush

Adjudication ‘ambush’ is not uncommon in the construction disputes. Very often, the claimant leave delay and disruption claims till the end of the contract and spend months preparing the case. Respondents always found that it is not enough time to prepare payment schedule and response to the payment claims. The question is ‘is there any provisions in the adjudication Acts to eliminate the adjudication ambush?’

Table 4.5: Provisions relate to adjudication ambush

Country	Provisions in respective adjudication legislation
UK	<i>No such provision</i>
NSW	<p><u>Building and Construction Industry Security of Payment Act 1999</u></p> <p><i>4. A payment claim may be served only within:</i></p> <p><i>(a) the period determined by or in accordance with the terms of the construction contract, or</i></p> <p><i>(b) the period of 12 months after the construction work to which the claim relates was last carried out (or the related goods and services to which the claim relates were last supplied),</i></p> <p><i>whichever is the later.</i></p> <p>20(2B). <i>The respondent cannot include in the adjudication response any reasons for withholding payment unless those reasons have already been included in the payment schedule provided to the claimant.</i></p> <p>25(4). <i>If the respondent commences proceedings to have the judgement set aside, the respondent:</i></p> <p><i>(a) is not, in those proceedings, entitled:</i></p> <p><i>(i) to bring any cross-claim against the claimant, or</i></p> <p><i>(ii) to raise any defence in relation to matters arising under the construction contract, or</i></p> <p><i>(iii) to challenge the adjudicator’s determination, and</i></p> <p><i>(b) is required to pay into the court as security the unpaid portion of the adjudicated amount pending the final determination of those proceeding.</i></p>
NZ	<p><u>Construction Contracts Act 2002</u></p> <p>37(1). <i>A respondent may serve on the adjudicator a written response to</i></p>

	<p><i>the adjudication claim –</i></p> <p><i>(a) within 5 working days after receiving that claim; or</i></p> <p><i>(b) within any further time that the parties to the adjudication agree; or</i></p> <p><i>(c) within any further time that the adjudicator may allow if the adjudicator considers that, in the circumstances, the additional time is reasonably required to enable the respondent to complete the written response</i></p> <p><i>79. If any proceedings for the recovery of a debt under section 23 or section 24 or section 59, the court must not give effect to any counterclaim, set-off, or cross-demand raised by any party to those proceedings other than a set-off of a liquidated amount if –</i></p> <p><i>(a) judgement has been entered for that amount; or</i></p> <p><i>(b) there is not in fact any dispute between the parties in relation to the claim for that amount</i></p>
SG	<p><u>Building and Construction Industry Security of Payment Act 2004</u></p> <p><i>10(4). Nothing in subsection (1) shall prevent the claimant from including, in a payment claim in which a respondent is named, an amount that was the subject of a previous payment claim served in relation to the same contract which has not been paid by the respondent if, and only if, the first-mentioned payment claim is served within 6 years after the construction work to which the amount in the second-mentioned payment claim relates was last carried out, or the goods or services to which the amount in the second-mentioned payment claim relates were last supplied, as the case may be.</i></p> <p><i>15(3). The respondent shall not include in the adjudication response, and the adjudicator shall not consider, any reason for withholding any amount, including but not limited to any cross-claim, counterclaim and set-off, unless –</i></p> <p><i>(a) where the adjudication relates to a construction contract, the reason was included in the relevant payment response provided by the respondent to the claimant; or</i></p> <p><i>(b) where the adjudication relates to a supply contract, the reason was provided by the respondent to the claimant on or before the relevant date.</i></p>

4.2.5.1 Observations

Based on the literatures studied, the author aware of various means of adjudication ambush can be presented. An adjudication ambush can be mount by either claimant or respondent. Other than UK, other practice countries have eliminated the possibility of adjudication ambush by expressly stated the conditions for submissions of a payment claim and adjudication response.

NSW adjudication regime has conscious to the adjudication ambush in the construction contract. The Act constraint claimant from mounting an adjudication ambush by provide statutory period that a payment claim can be deferred. In addition, the respondent is prohibited to raise any defence with counter-claim, or any other matters under the contract, or by challenging determination of adjudicator. These actions could further delay payment to the claimant, which is opposing the objective of the Act. Similarly, both SG and NZ have confine the defence raised by the respondent in adjudication.

4.2.6 Applicable of oral contract

Adjudication regimes practiced in Singapore and UK repeal the rights of oral contract for adjudication. The question is ‘should the right of oral contract be eliminated due to lack of concrete evidence for the agreement, which inclusion of oral agreement in the adjudication can prolong the determination process?’

Table 4.6: Provisions relates to applicable of oral contract

Country	Provisions in respective adjudication legislation
UK	<p><u>Housing Grants, Construction and Regeneration Act 1996</u></p> <p><i>107(1). The provisions of this Part only where the construction contract is writing, and any other agreement between the parties as to any matter is effective for the purposes of this Part only if in writing</i></p> <p><i>107(2). There is an agreement in writing –</i></p>

	<p><i>(a) if the agreement is made in writing (whether or not it is signed by the parties),</i></p> <p><i>(b) if the agreement is made by exchange of communication in writing, or</i></p> <p><i>(c) if the agreement is evidenced in writing.</i></p>
NSW	<p><u>Building and Construction Industry Security of Payment Act 1999</u></p> <p><i>7(1). Subject to this section, this Act applied to any construction contract, whether written or oral, or partly written and partly oral, and so applies even if the contract is expressed to be governed by the law of a jurisdiction other than New South Wales.</i></p>
NZ	<p><u>Construction Contracts Act 2002</u></p> <p><i>9. Subject to sections 10 and 11, this Act applies to every construction contract (whether or not governed by New Zealand law that –</i></p> <p><i>(c) is written or oral, or partly written and partly oral.</i></p>
SG	<p><u>Building and Construction Industry Security of Payment Act 2004</u></p> <p><i>4(1). Subject to subsection (2), this Act shall apply to any contract that is made in writing on or after 1st April 2005, whether or not the contract is expressed to be governed by the law of Singapore.</i></p>

4.2.6.1 Observations

UK and SG adjudication regimes only apply to construction contract in writing, or at least evidence in writing. These adjudication acts is not intended to deal with complicated dispute, which questions on the evidential of contract. In case of dispute arising in oral contract, the parties may pursue their rights through other dispute resolutions available.

NSW and NZ have taken different approach, where their adjudication regime applies to construction contract whether is written or oral, or partly written and partly oral. It is common that principals and contractors default in payment, and enhances their cash flow at expenses of subcontractors and suppliers (Brand & Davenport, 2010). In NSW, subcontractors provide mostly labour for construction industry (Risgalla & Smithies, 2008). Besides, NZ experiences default payment most in lower

tier in construction industry (Ramanchandra & Rotimi, 2011). Particularly, there are some sub-contracts are still in oral form. Therefore, such provision of NSW and NZ adjudication regimes to include oral construction contract within ambit of the Acts is clear.

4.3 Construction Industry Payment and Adjudication Bill

KLRCA has raised some arguments with the CIDB preliminary draft CIPA Bill. On the other hand, CIDB and relevant parties are against with the proposed amendments by KLRCA. The tabling of CIPA Bill by Parliament is subject to a stalemate as both KLRCA and CIDB unable to reach a mutual scheme at present.

There are few aspects raised by KLRCA's CIPA Bill, such as limiting the scope of adjudication under the CIPA Bill; selection, qualification and fees of adjudicators; review of adjudication decision; security by way of Payment Bond and Suspension of Work; contracting out of the CIPA Bill; and regulations and exemption. The differences in CIPA Bill and KLRCA's CIPA Bill are being identified and compare, which possibly answer the queries raised by the author earlier. Also, some notable amendments proposed by KLRCA are study and analysis through.

4.3.1 Freedom of contract

Table 4.7: Different provisions under CIPA Bill and KLRCA's CIPA Bill relate to freedom of contract

CIPA Bill	KLRCA's CIPA Bill
<p><i>5(1). Unless otherwise expressly permitted in this Act, the provisions of this Act shall have effect notwithstanding any provision to the contrary in any construction contract.</i></p> <p><i>5(2). Unless otherwise expressly permitted in this Act, any provision in a construction contract which excludes, modifies or restricts the operation of this Act is void.</i></p>	<p><i>5(1). Unless otherwise agreed by the parties pursuant to section 5(2) of this Act, the provisions of this Act shall have effect and shall apply to any construction contract.</i></p> <p><i>5(2). With the exception of section 6 of this Act, the parties may agree to exclude, modify or restrict the operation of this Act or any part thereof in respect of any construction contract.</i></p>

4.3.1.1 Discussion

KLRCA inspires the concept freedom of contract by providing an amendment to the proposed CIPA Bill (KLRCA, 2010b). Under KLRCA's CIPA Bill, the parties able to contract out the Act through agreement. However, CIDB is against to such provision under KLRCA's CIPA Bill. In CIDB proposed CIPA Bill, it does not allow the parties to exclude the provisions of Act in the construction contract. In the joint memorandum submitted by CIDB, it critic the amendments of KLRCA is not realistic as there are unequal bargaining power of contracting parties (MBAM, 2010).

One outstanding contention in the provision of KLRCA's CIPA Bill is worth to highlight here. It gives the parties' right to exclude the Act, but with exception to section 6 that deal with prohibition of conditional payment. There is a clash where KLRCA inspired freedom of contract, but made the section 6 of the Bill mandatory

to the parties although the Bill has been contracted out. The provision to contract out the Bill is not pragmatic simply by the reason to encourage freedom of contract.

The author has the same perception as CIDB. In the construction industry, it is not uncommon that a dominant party may take advantage on others in a contract. It is possible for them to contract out the CIPAA, which can put them liable in disputes in certain circumstances. Therefore, it is opposed to the intentions of the CIPA Bill to expedite payment, provide remedies to recover payment and the rights to refer adjudication for disgruntled party.

4.3.2 Adjudication timeframe

Table 4.8: Different provisions under CIPA Bill and KLRCA’s CIPA Bill relate to adjudication timeframe

CIPA Bill	KLRCA’s CIPA Bill
<p>26(1). <i>Subject to section 31(4) of this Act, the adjudicator shall decide the dispute and serve the adjudication decision to the parties within -</i></p> <p><i>(a) forty two (42) working days from the service of the adjudication response or reply to the adjudication response (if any); or</i></p> <p><i>(b) forty two (42) working days from the time prescribed for the service of the adjudication response if none has been served; or</i></p> <p><i>(c) such further time as agreed to by the parties;</i></p> <p><i>failing which the adjudication decision is void.</i></p>	<p>22(1). <i>Subject to section 24(4) of this Act, the adjudicator shall decide the dispute and serve the adjudication decision to the parties within –</i></p> <p><i>(a) Forty five working days from the service of the adjudication response, or reply to the adjudication response, whichever is the last served;</i></p> <p><i>(b) Forty five working days from the time prescribed for the service of the adjudication response if none has been served; or</i></p> <p><i>(c) Such further time as agreed to by the parties;</i></p> <p><i>failing which the adjudication decision is void and of no effect.</i></p>

4.3.2.1 Discussion

Similarly, the proposed CIPA Bill provides statutory time bound for the adjudication process. Generally, there is not much difference with the KLRCA's CIPA Bill. CIDB proposed forty two working days for the adjudicator to determine the adjudication, while latter suggested forty five working days. There is one common provision under the proposed CIPA Bill and KLRCA's CIPA Bill, where both of them allow the time bound to be extended with consent of the parties.

However, there is a flaw in the provision of the KLRCA's CIPA Bill. The author suggests that the proposed timeframe of the Bill should be shorter as the KLRCA confine adjudication to only progress payment disputes. Moreover, the question on evidential of oral contract that time consuming does not exists under the KLRCA's CIPA Bill. The timeframe should model on the precedent adjudication regimes, such as SG and NSW in KLRCA's Bill

Therefore, the author recommend that CIPA Bill to adhere to the original proposed timeframe if the Bill permits all types of claim to be refer to adjudication in contract. On the other hand, shorter timeframe should be provided if the CIPA Bill confines the claim to only progress payment dispute, in order to have fully benefit of adjudication.

4.3.3 Adjudication Cost

Table 4.9: Different provisions under CIPA Bill and KLRCA's CIPA Bill relate to adjudication cost

CIPA Bill	KLRCA's CIPA Bill
<p><i>29(1). The adjudicator in making the adjudication decision shall decide which party shall pay the adjudicator's fees and expenses including the proportion and amount of the fees and expenses.</i></p> <p><i>29(2). Each party shall bear its own costs in any event including the costs of representation in any adjudication proceedings or adjudication review under this Act.</i></p>	<p><i>23. The adjudicator in making the adjudication decision shall decide which party shall pay the costs and expenses of the adjudication including the proportion and amount of such costs and expenses.</i></p>

4.3.3.1 Discussion

The adjudicator has the power to determine the costs and expenses of the adjudication payable by the party. CIDB proposed CIPA Bill expressly stated that the party is liable for the costs of representation in any adjudication proceedings. On the other hand, KLRCA's proposed CIPA Bill remained silence in the cost of representation.

The KLRCA's CIPA Bill implied that the cost of representation might liable to the defeated party in adjudication proceedings, yet, subject to determination of the adjudicator. The provision in the CIDB proposed CIPA Bill is favourable as it may lessen the continuously involvement of legal representatives in the adjudication. Participation of legal representatives along the adjudication proceeding can incur higher cost and make the adjudication proceeding uneconomic. The author believes that by way of impose cost of representation on each party, can reduce the frequently

involvement of lawyer in adjudication. Employment of legal representatives can result in considerable consultation fees on the party, although a favourable determination awarded in adjudication. The number of representatives can be reduced indirectly with such provision.

In addition, the proposed Bill should provide some guidelines on the adjudication cost. This can provide an insight into the adjudication cost more likely to arise for various disputes refer to adjudication. The statistic for the cost can easily obtain from former disputes resolved through arbitration by KLRCA. Therefore, it is necessary to provide a ‘standard schedule of adjudication cost’ for the contract parties to forecast the cost likely to incur before initiate adjudication.

4.3.4 Legal representatives

Table 4.10: Different provisions under CIPA Bill and KLRCA’s CIPA Bill relate to legal representatives

CIPA Bill	KLRCA’s CIPA Bill
<i>12(3). A party to the adjudication proceedings may self represent or be represented by representatives that the party considers appropriate.</i>	<i>11(3). A party to the adjudication proceedings may self represent or be represented by representatives that the party considers appropriate.</i>

4.3.4.1 Discussion

KLRCA and CIDB able to reach common understanding in this issue. The proposed CIPA Bill does not expressly prohibit the involvement of legal representatives in the adjudication. There are pros and cons if the parties are allow employing legal representatives during adjudication. It increases the adjudication cost, while extends the scope of submission. However, an experienced construction lawyer may helpful in some cases.

The author is in dilemma whether permission of legal representatives in proposed CIPA Bill is practical or not in adjudication. Nonetheless, he suggests that the proposed CIPA Bill has to place filtration on the participation of legal representatives in adjudication. Legal representatives should allow in adjudication for all types of disputes other than progress payment disputes. Legal representatives may helpful in debates the disputes related to contractual arrangement of the construction contract. An experienced lawyer would be able to provide valuable opinions and expedite the determination of adjudication.

Contrary, legal representatives should prohibit in adjudication relates to progress payment disputes. The adjudication progress payment dispute is relatively simple, as an adjudicator only has to ensure a party get paid for his works done under a construction contract. It is not necessary to put forward any questions on legal obligation and rights under the contract. A lawyer may raise a defence by questioning on the obligation of the other parties under the contract, such as default in serving notice of adjudication and conditions of notice. This can further delay the determination of adjudication and severely affect the cash flow of other party.

In conclusions, the proposed CIPA Bill should consider to adapt dual scheme in filtering the representatives permitted during adjudication. Legal representatives should prohibit in progress payment disputes, but not other types of disputes.

4.3.5 Adjudication ambush

Table 4.11: Different provisions under CIPA Bill and KLRCA's CIPA Bill relate to adjudication ambush

CIPA Bill	KLRCA's CIPA Bill
<p><i>19(2). The adjudication response shall be made in writing and answer the adjudication claim. The adjudication response may include a cross claim by the respondent provided the cross claim was included in the payment response where the claimant has previously served a payment claim under this Act. The cross claim shall similarly comply with the requirements of section 18 (2) of this Act as if it is a claim.</i></p>	<p><i>15(2). The adjudication response shall be made in writing and answer the adjudication claim.</i></p>

4.3.5.1 Discussion

CIDB proposed CIPA Bill allow the respondent to include cross claim in the adjudication response, provided such cross claim has been included in the payment response previously served. This provision possibly may allow the respondent to lodge cross-claim or any defence related in adjudication. Other practice countries have experienced with ambush adjudication either by a claimant or respondent.

KLRCA's CIPA Bill able to eliminate the possibility of adjudication ambush mount by the respondent by disallows the inclusion of cross claim in adjudication response. The respondent can simply raise any cross claim in the adjudication response to further delay payment to the claimant, which is not the intention of the proposed CIPA Bill. However, KLRCA does not aware the possibility of a claimant to mount an adjudication ambush by preparing the payment claim over a period and make the respondent fail to response to such numerous payment claim.

In conclusions, the prohibition of the cross claim in the adjudication should be preserved as proposed by KLRCA. However, it is necessary to make reference to the NSW in limiting the period that a payment claim on construction work done can be deferred.

4.3.6 Application of oral contract

Table 4.12: Different provisions under CIPA Bill and KLRCA's CIPA Bill relate to applicable of oral contract

CIPA Bill	KLRCA's CIPA Bill
<i>3(2). This Act shall apply to every construction contract whether made in writing or otherwise.</i>	<i>3. This Act shall apply to every construction contract made in writing (whether or not the contract is expressed to be governed by the law of Malaysia) that concerns construction work at an identified site located wholly or partly within the territory of Malaysia.</i>

4.3.6.1 Discussion

KLRCA critics the inclusion of oral contracts in the proposed CIPA Bill. KLRCA argue that the adjudication was not intended to deal with the oral contract, which difficult evidential questions may, arisen (KLRCA, 2010a). Nonetheless, CIDB firmly believe that this is a backsliding proposal based on the UK Housing Grants Construction and Regeneration Act 1996. The UK has passed the Local Democracy, Economic Development and Construction Act 2009 to amend the UK Act in 2009. The amendment may include oral and partly oral and written construction contract within the Act (MBAM, 2010).

In Malaysia, there are still many sub-contracts in oral form (Noushad, 2006a). For the sake of fairness, these contract parties should be given the opportunity to pursue their rights under the adjudication. Moreover, the proposed CIPA Bill allows the parties to extend the timeframe in the adjudication if any difficulties arise in accessing the evidential of oral contract. NZ has included oral or written contract under the adjudication act, still, enjoy some success in adjudication with shorter timeframe allows in adjudication.

4.4 Other notable amendments by KLRCA

4.4.1 Application of adjudication

The KLRCA proposed to confine the application of adjudication to only progress payment disputes in the construction contract. The intention of KLRCA is perceivable as the introduction of the CIPA Bill is to improve cash flow and provide speedy dispute resolution. The nature and restricted timeframe in the adjudication have urged the adjudication should be confined to progress payment dispute only.

CIDB proposed CIPA Bill allows all types of disputes to be referred to adjudication. Some disputes arise under the contract, such as professional negligence, rights and obligations of the contract are not cash flow related. Thus, these disputes are not necessary to be adjudicated that subject to tight time bound.

However, it creates imbalance if progress payment disputes solely entitled to be adjudicated. Under confined adjudication, claimant who entitle to progress payment only allow to initial adjudication. Therefore, a dual adjudication scheme is proposed (Davenport, 2007) where can resolve progress payment disputes and other types of disputes in separate scheme under adjudication. The author thinks that the proposed CIPA Bill should make a reference to this dual adjudication system, to improve the efficiency of adjudication.

4.4.2 Interpretation of “construction work”

KLRCA has different interpretation on the construction work under the CIPA Bill. KLRCA’s CIPA Bill proposed that petrochemical, petroleum and gas sectors should be excluded from the coverage of the Bill. It argued that these industries are not likely to suffer serious cash flow problems. Also, KLRCA proposed to preclude the construction contract of low rise occupier residential and sensitive matters involving the Ministry of Defence (KLRCA, 2010b). KLRCA has struck out the inclusion of procurement of construction materials, equipment or workers in construction contract as originally proposed by CIPA Bill (KLRCA, 2010a).

Contrary, CIDB is against the KLRCA’s CIPA Bill. In the CIDB’s joint memorandum on CIPAA, it argued that these construction contracts should be included in the coverage of CIPAA. Further, it continued to critic the proposal of KLRCA as the relevant consultants and construction suppliers want to be included in the CIPAA (MBAM, 2010).

The author is agreed with the certain point of views in KLRCA’s CIPA Bill. The exclusion of the petrochemical, oil and gas sectors from CIPAA is reasonable. The principals of these construction contracts are normally government agencies or well-established companies; default payment is not likely to occur in these industries. Inclusion of residential occupiers in the CIPAA would be unfair to them, since they would be unprepared for their responsibilities under CIPAA (Kennedy, 2008). The doubt on this provision is, why it should be confined to low rise residential building other than high rise?

Yet, the author disagrees to exclude the construction contract of related goods and services. In fact, these stakeholders are exposed to the risk of default payment as others. Although these contracts have incorporated the provision of dispute resolution method, but may not as efficient as adjudication.

4.4.3 Payment bond

KLRCA has critics the inclusion of payment bond within the proposed CIPA Bill. Payment bond is intended to protect private sector contractors under the head work contract. Head work contract means a construction contract made between the developer of the site and the contractor carrying out work. The payment bond can be in form of bank guarantee, insurance bond or security deposit where its value equal to the combined value of the performance bond and limit of retention money under the head work contract.

The provision of payment bonds will only increase the costs of development (KLRCA, 2010b). The author suspects that the end user will be the one who bear the extra cost arisen under the head work contract at the end. The developer will shift the burden of payment bond to the end user indirectly through sales and purchase agreement. Therefore, the provision of payment bond is not necessary as the unpaid party able to recover the unpaid adjudicate amount in High Court. The unpaid party can request High Court to grant a judgement for a debt and may able to recover the payment as statutory debt in the court.

However, there is another concern on the provision of payment bond in construction contracts. In the absence of payment bond, an unpaid party may expose to the risk of unable to recover payment although a court judgement is granted. It happens when the employer become insolvency and the unpaid party only able to claim the outstanding pay from employer's assets. It is no guarantee on the full amount will be paid as it depends on the fund raised from the sale of employer's asset (Chong, H.Y., personal communication, August 19, 2011).

There is dilemma in the provision of payment bond in head work construction contract. The author claims that extensive investigation is necessary to determine the practicable of the payment bond in the construction contracts.

4.5 Conclusion

The fourth and fifth objective was achieved in this Chapter four. The adjudication regimes of UK, NSW, NZ and SG are examined and evaluated through. There were totally six questions were raised by the author in this chapter:

1. Freedom of contract
2. Adjudication timeframe
3. Adjudication cost
4. Legal representatives
5. Adjudication ambush
6. Applicable of oral contract

The author tried to answer the queries on the practicality of the adjudication in the construction industry of respective countries. It provided insights into the different provisions of the adjudication regimes in each country in confronting the queries raised by the author.

Subsequently, the CIPA Bill and KLRCA's CIPA Bill were examined and evaluated. Similarly, the author was examined relevant provision related to the queries in these bills. The provisions of respective bills were compared and analysed through. The author was discussed on the relevant provisions and comment on the practicability of the CIPA Bill by make a cross-reference to the practice adjudication regimes.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Conclusion and recommendations is the last chapter of the research. This chapter describes the findings of the research and draw conclusions on the five research objectives. The research has studying on the trend of adjudication in overseas construction industry as well as its application in respective countries. The challenges of adjudication in practice countries are identifying in this research. Doubts on the implementation of adjudication has recognized in the research. Thus, a comprehensive study has carried out to have thoroughly understanding of the present arrangement of overseas adjudication regime to confront the hesitations. The proposed CIPA Bill in Malaysia is examining and evaluating in order to have a depth insight on the arrangement of the Bill in resolving the doubts. Adjudication regime is drafted in considering the nature of the construction industry and revised from time to time to cope the evolution of the industry. As summary, adjudication has incorporating and practicing in the construction industry and able to resolve disputes effectively.

5.2 Study on the trend of adjudication in overseas construction industry

The first objective of the research is to study the trend of adjudication in overseas, such as UK, NSW, NZ, SG and HK. This objective is achieved through a detailed literature review on the existing journal articles, books and other documents produced by researchers. Based on literature studied, it appears that the practice countries have enjoyed some advantages from the adjudication. Prior to the introduction of adjudication, these countries had learned it in a hard way during financial crisis.

Literature study aided in review the practicing dispute resolution methods before adjudication in the construction industry. In addition, the concerns of the construction industry on the dispute resolution are clarified in the Chapter 2. In conclusions, the industry sought for a dispute resolution method, which is cheaper, quicker and binding on the parties.

5.3 Determination of the application of adjudication in overseas' adjudication regime

The second objective is to determine the application of adjudication in overseas adjudication regimes. The literature review is employed to identify the application of adjudication in research countries. There are two types of adjudication arrangement suspected, which are statutory adjudication and contractual adjudication. UK, NSW, NZ and SG practice statutory adjudication, while HK has adapted contractual adjudication in the construction industry.

In addition, the documentary analysis is applied to recognise the application of adjudication. The public documents, such as acts of parliament and government published report are studied and analysed thoroughly. Some of the private documents, such as company statements, newsletter and circulation documents are examined to comprehend the application of adjudication in respective countries. There are some few aspects being study such as:

- Application of adjudication
- Default provision for payments
- Adjudication of disputes
- Enforcement of adjudication

5.4 Identification of the challenges of adjudication in practice countries

The third objective is to identify the current challenges of adjudication in the practice countries. This can be achieved through literature review as other researchers have identified the limitations of each of the adjudication regimes. Some of the recognised challenges in the studied countries are:

- UK – Provision of contract to be in written agreement, where the adjudication act do not applied to other form of contract other than written agreement; allocation of cost of adjudication as there is no actual guideline for the cost allocation in adjudication
- NSW – Possibility of adjudication ambush mount by either claimant or respondent; imbalance of the act, as only party who has carried out construction work or supplies goods and services can initiate adjudication
- NZ – Doubts on the inclusion of residential construction contract in the adjudication act; exclusion of related good and services in construction work
- SG – Interface between security payment act and underlying contractual framework
- HK – Contractual adjudication, which is worked on voluntary basis and not underpinned by statute

5.5 Understanding of the arrangement of overseas adjudication regime to overcome doubts of its implementation

The fourth objective is to understand the arrangement of overseas adjudication regime to overcome doubts identified by the author. The author has raised the questions on the implementation of adjudication, such as

- Freedom of contract – will the adjudication Act restrain the concept of freedom of contract / contract out the adjudication Act in respective construction country?
- Adjudication timeframe – aren't the default time frame allow for the adjudication too short in resolving construction disputes?
- Adjudication cost – will the adjudication quick and cheap for a long period?
- Legal representatives – will lawyer participate very as a counsel in adjudication process?
- Adjudication ambush – is there any provisions in the adjudication Acts to eliminate the adjudication ambush?
- Oral contract – should the right of oral contract be eliminated due to lack of concrete evidence for the agreement, which inclusion of oral agreement in the adjudication can prolong the determination process?

The documentary analysis is applied to analysis thoroughly the security payment acts of the study countries. The provisions in the security payment acts are examined and interpreted. Lastly, the author has observed the intentions of such provisions and related it to the doubts raised.

5.6 Examination and evaluation of the proposed CIPA Bill in Malaysia

The fifth objective of the research is examining and evaluating the proposed CIPA Bill in Malaysia. The current development of statutory adjudication in Malaysia is recognised. The CIPA Bill is in its

The provisions of the CIDB proposed CIPA Bill is comprehended thoroughly as well as KLRCA's CIPA Bill. The difference of the provisions in these bills are identified and possibly answered to the doubts raised during the examination of overseas adjudication regimes. Moreover, the author has commended on these provision and recommended solutions for the doubts as follow:

- Freedom of contract, it should not be inspired in the construction contracts and contracting out the Act is not permissible
- Adjudication timeframe, the time allocated for the adjudication process should take into consideration of the types of dispute refers to adjudication
- Adjudication cost, the cost of representation bear by each party can lessen the number of representatives and involvement of legal representatives indirectly. It is necessary to provide guidelines on the adjudication cost prior to the initiation of adjudication
- Legal representatives, the involvement of lawyer should confine to the other disputes related to rights and obligations of the contract. On the other hand, legal representative should prohibit in the progress payment disputes
- Adjudication ambush, the CIPA Bill should aware the possibility of adjudication ambush. Cross claim should not be allowed in the adjudication response, while it is necessary to limit the period that a payment claim on the construction work done can be deferred
- Oral contract, the CIPA Bill should not confine the application of adjudication to written contract where there are still many sub-contracts in oral form

The notable amendments proposed by KLRCA are discussed and recommended. The amendments and recommendation for the proposed KLRCA are as follow:

- Application of adjudication. For sake of fairness, it should not only confine to payment dispute but to all types of disputes under the construction contracts. It may consider the ‘dual scheme’ adjudication as proposed in Australia
- Interpretation of ‘construction work’. Exclusion of petrochemical, oil and gas sectors is acceptable as practice in overseas adjudication regimes. There is a doubt on the exclusion of low rise residential occupier construction work, while high rise building is included. Exclusion of related goods and services industries is not practicable in CIPA Bill as these industries exposed to default payment as well
- Payment bond. There is dilemma in the provision of payment bond in construction contracts. Extensive investigation is necessary to determine the practicable and impacts of the payment bond provision

5.7 Recommendation for further research

There is a potential to conduct further research on this research topic. The following recommendations are recommended for further research:

1. Study on the development of adjudication in practice countries through expert interviews with speakers and journalists of respective countries, other than relies on secondary analysis
2. A comprehensive study on the impacts of the statutory adjudication on the construction stakeholders in construction industry
3. Research on the practicability and suitability of proposed CIPA Bill in Malaysia construction industry and awareness of construction stakeholders to adjudication

Findings in this research could serve as a preliminary reference for the above-recommended further research.

5.8 Learning outcome

This research had enabled the author in depth understanding on the application of adjudication in the construction industry. The overseas adjudication regimes were determined and examined as well. During the process of research, the doubts of the adjudication and solutions were recognised. Last but not least, it contributed to the comprehending of current adjudication development in Malaysia.

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APPENDICES

APPENDIX A: Record of Supervision/Meeting

APPENDIX B: Joint Memorandum by the Industry Players on the Construction
Industry Payment & Adjudication Act (CIPAA)

APPENDIX C: Explanatory Statement for KLRCA's Bill