

<u>Retention clauses with contracts: An analysis of the practicality and financial impact of</u> <u>withheld monies cause on UK construction businesses.</u>

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#### **Authors Declaration**

I, Michael Ashdown, hereby declare that the following dissertation which is presented in partial fulfilment of requirements for the degree of BSc (Hons) Architectural Technology/Building Surveying/ Construction Management/Project Management for Construction/Quantity Surveying at University of Brighton, is my own work carried out for this module and this module only, and has not been submitted or presented to/at any other university or academic/learning institution. Any secondary research or use of the works of the others in any form of shape (e.g. ideas, texts, figures, tables, programmes, applications, equations, etc) are all properly and accordingly acknowledged, cited and referenced point at the of use. I also confirm that any use of artificial intelligence (AI) in this dissertation strictly follows the terms and conditions set out in the module brief and the module handbook, and that failing to adhere to those requirements may be considered as academic misconduct and subject to subsequent actions school/university. taken bv the I also declare that I have read and understood the Module-wide BREAM Application, agree to all terms and conditions, have followed the principles of best practice in research ethics, confidentiality and GDPR, and have taken all the required steps/actions as suggested in the application and by my supervisor. I also understand that any breach of ethics, confidentiality and GDPR are my sole responsibility academic misconduct and mav be subject to procedures.

Signed:

Date: 29/08/2024

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## Abstract

This research critically analyses retention clauses in contracts within the UK construction industry. Often resulting in significant financial implications for businesses involved, this research project will look at the practicality and financial impact of withheld monies due to retention clauses on construction firms operating in the UK.

Retention clauses, commonly inserted into construction contracts, allow clients to withhold a portion of payment from a contractor until satisfactory completion of the project or once the completed project comes to end of the rectification period. Whilst serving as a safeguard against defects and delays, they frequently pose challenges for contractors and subcontractors. The retention funds, held back as security, can tie up crucial cash flow, impeding the ability of businesses to meet operational costs, pay subcontractors and suppliers and cause severe financial strain on the business. Retention is often not released on time which is in contrast with the contract set out before works commence. The contract will state a rectification or 'defects' period in which, once complete, the client will release retention. This is a problem for all parties in the contractual chain.

This research will also explore alternative mechanisms for risk management and dispute resolution that could mitigate the financial burden imposed on contractors by retention clauses. By examining other practices used within the construction industry, it seeks to provide insights into potential solutions or best practices that could balance the interests of all parties involved while ensuring fair compensation and project delivery.

Ultimately, this research project aims to contribute to a deeper understanding of the complexities surrounding retention clauses in UK construction contracts and to inform members within the construction industry about alternative strategies that could be implemented to navigate these challenges retention can cause effectively.

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#### **CHAPTER 1 – INTRODUCTION**

#### **1.1 Definition of Retention**

Retention in the UK construction industry refers to a common practice where a portion of the payment due to a contractor is withheld by the client until the completion of the project or a specific stage of work (Masterman, 2013). This withheld amount serves as a form of security against any potential defects, faults, or incomplete work that may arise during or after the project's execution. Retention is typically calculated as a percentage of the contract sum and is released to the contractor upon satisfactory completion of the project or specific defect milestone periods are met (Smith, 2016).

Retention was introduced in the UK construction industry in the mid-18th century Brook and Lord, 2010). It emerged as a mechanism to address concerns regarding the quality and completion of construction projects, providing clients with a means to withhold payment as security against potential defects or incomplete work.

#### **1.2 Rationale**

Retention clauses can strain cash flow in construction businesses by tying up funds needed for operations, investments, and payments to workers and suppliers, particularly affecting smaller firms with limited reserves (Mayeko, 2014). They also impact project profitability by increasing financing costs and complicating financial forecasting due to delays in fund release (Tsang, 2020; Segeold, 2017). Additionally, disputes over retention payments can damage contractor-subcontractor relationships, leading to trust issues and contentious negotiations (White, 2016). Researching retention clauses is crucial to understanding their financial consequences and developing practices to mitigate their adverse effects on UK construction firms.

#### **1.3 Background**

The UK construction industry, a significant sector contributing approximately 7% of the nation's GDP in 2023, equating to around £110 billion annually, extensively uses retention clauses in contracts between contractors and employers to ensure the timely delivery of high-quality work and address defects within a specified period (Linder, 2023; Ross, 2017). These clauses allow clients to withhold a portion of payment, typically 5-10% of the contract value, until the project's satisfactory completion (William & Ashley, 1987).

Despite its widespread use, the retention clause has faced criticism for negatively impacting contractors' cash flow, particularly for smaller subcontractors. The withholding of funds can strain liquidity, hinder resource investment, and even lead to insolvency (Department for Business, Energy & Industrial Strategy, 2017). Studies, such as those by Odeh and Battaineh (2002) and Love et al. (2013), have highlighted the detrimental effects of retention on contractor performance, productivity, and innovation. Additionally, disputes over the release of retention funds often lead to costly legal battles, increasing tensions between parties (RICS, 2020).

Efforts to reform the retention system in the UK have proposed alternatives like retention bonds or trust funds. These mechanisms aim to reduce the financial strain on contractors while providing similar protection levels for employers. Retention bonds, for instance, offer an insurance-backed guarantee that ensures payment equivalent to the retention amount if the contractor fails to rectify defects (RICS, 2022). However, the retention clause remains contentious, with ongoing discussions about the need for a fair and sustainable contractual framework.

Typically, retention percentages in UK construction contracts range from 2.5% to less than 10%, with the duration for which these retentions are held varying based on the contract. These periods can range from three months to a full year (GOV, 2017). The debate surrounding retention clauses underscores the necessity for continued dialogue and potential reforms to balance the interests of all parties involved in the construction sector.

#### 1.4 Aims & Objectives

The research focuses on understanding the impact of retention clauses on UK construction businesses, particularly how these clauses influence cash flow, profitability, and business relationships. Given the significant financial implications, it is crucial to explore ways to mitigate the challenging impacts retention clauses can cause. To achieve this, the research will involve a complete literature review, a questionnaire survey, and detailed case studies to develop insights and strategies regarding this matter.

#### <u>Aims</u>

- 1. To investigate the practical implications and financial effects of retention clauses on UK construction businesses.
- 2. To develop a deeper understanding of how retention clauses and withheld payments affect cash flow, profitability, and business relationships within the construction sector.
- 3. To explore potential strategies and practices from other industries that could mitigate the adverse effects of retention clauses in construction.

#### **Objectives**

Conduct a literature review to analyse previously discussed literature and investigate the impact of retention clauses on the sustainability and profitability of construction businesses caused by cash flow difficulties and unfavourable contract terms.

Develop a questionnaire survey to gain an understanding of how retention clauses are viewed by current members of the construction industry and their experiences when dealing with retention clauses.

Research case studies to assess how retention clauses have had serve implications on contractors and subcontractors when contractual disputes have arisen. Further to this, present cross comparative case studies where alternative methods of contractual clauses have been used and had a positive impact on the construction project.

Present findings from the literature review, questionnaire survey, and case studies to identify the challenges posed by retention clauses and alternative approaches that could reduce the financial risk contractors face in the construction industry when entering into contractual agreements with other contractors and client.

## **CHAPTER 2 - LITERATURE REVIEW**

## 2.1 Literature Review Introduction

This literature review examines various perspectives on retention in the UK construction industry, critically analyzing previous research to understand practices and challenges related to retention clauses. Retention, a key financial mechanism, involves withholding a portion of payment until project completion to ensure quality (Ayodele et al., 2020; Yap et al., 2021; Khalid & Nawab, 2018). While intended for quality assurance, retention often causes cash flow issues, particularly for smaller subcontractors (Bolton et al., 2022). This practice has sparked significant debate among industry professionals and policymakers (Roozendaal, 2020).

The review also explores the legal and contractual aspects of retention, assessing how these clauses are enforced and contested in legal contexts. It evaluates the impact of retention on project timelines, contractor relationships, and overall project success. By identifying gaps in existing research, this study aims to contribute to ongoing discussions on improving retention practices within UK construction contracts.

The research will not only synthesize current literature but also propose recommendations for future studies and potential policy changes, aiming to modernize retention practices to better serve the industry's needs. Ultimately, this review seeks to foster a more efficient construction industry where retention clauses fulfill their purpose without causing undue harm, or to introduce more suitable, modernized policies.

## **2.2 History of Retention**

Retention clauses are common in construction contracts, serving as a financial safeguard by withholding a portion of payment until project completion to the client's satisfaction (Thomas & Wright, 2020). In the UK construction industry, these clauses significantly impact project management, contractor cash flow, and overall project delivery. Richardson (2018) highlights that retention allows one party to withhold payment if contractual obligations aren't met, a point also supported by Ross (2017). The use of retention clauses aims to protect clients, ensure high-quality work, timely project completion, and defect rectification within a set timeframe. However, the current practice of retention is under scrutiny, with calls for reform within the industry (Department for Business, Energy & Industrial Strategy, 2019).

Ganiyu (2015) presents the origins of retention to the 1840s during the rapid expansion of the UK railway sector, where retention was introduced to mitigate the risk of contractor bankruptcy by withholding around 20% of payment to cover potential non-performance. This practice, although the percentage of payment being smaller still persists today, sparking debate over its effectiveness in the construction industry.

Retention conditions are embedded in the legal framework governing UK construction contracts, often included in standard forms like JCT (Joint Contracts Tribunal) and NEC (New

Engineering Contract) contracts. Chappell (2020) notes that retention typically ranges from 2.5% to 5% of the contract value, with half released upon practical completion and the remainder upon defect rectification. The Construction Act of 1996, amended by the Local Democracy, Economic Development, and Construction Act of 2009, outlines legal obligations for payment procedures, including retention (Uff, 2024). This legislation aims to ensure prompt payments and effective conflict resolution (Shash & Habash, 2020). Despite these regulations, challenges remain regarding the fair and timely release of retained funds, often causing disputes to arise and financial strain to occur for contractors (Thomas & Wright, 2020).

## **2.3 Positives of Retention**

Retention contract clauses, widely employed in the UK construction industry, require that a portion of the payment is withheld until the completion of the project or the resolution of any found defects (Latham, 1994). These clauses aim to ensure that contractors fulfil their obligations and address any defects that arise post-completion of the contract.

One of the primary benefits of retention clauses is their ability to enhance project quality and performance. According to Latham (1994), retention clauses serve as a financial incentive for contractors to complete projects to a high standard. By withholding a portion of the payment until the completion of defects liability periods, retention clauses mitigate the risk of contractors cutting corners. Research by Akintoye and MacLeod (1997) supports this view, indicating that retention acts as a motivator for contractors to ensure that all aspects of the work are performed to the agreed specifications and standards. This mechanism aligns contractors' interests with the clients', encouraging a quality-oriented approach to project execution.

Retention clauses are also instrumental in reducing defects and enhancing the long-term durability of construction projects. As noted by Egan (1998), retention provides a financial buffer that encourages contractors to rectify any defects promptly. This approach reduces the incidence of post-completion issues, thereby increasing the longevity and durability of the constructed facilities. By ensuring that contractors are financially incentivized to address defects, retention clauses contribute to higher standards of workmanship and greater overall satisfaction for clients (Okereke, 2020).

From a financial perspective, retention clauses offer significant protection for clients. These clauses ensure that clients have access to funds to cover any potential costs associated with defect rectification. According to the Construction Industry Training Board (CITB, 2019), retention clauses can help mitigate the financial risk associated with contractor default or poor performance. By retaining a portion of the payment, clients are better positioned to manage any unforeseen costs related to project completion or defect resolution. This protective measure enhances financial stability and reduces the risk of budget overruns.

Despite their benefits, retention clauses are not without criticism. Critics argue that retention can lead to cash flow problems for contractors, particularly smaller firms (Tarawneh et al., 2023). This issue can impact contractors' financial stability and their ability to manage ongoing project costs. Additionally, the length of the retention period can be a point of contention, with some stakeholders advocating for shorter retention periods to alleviate financial strain on contractors (Smith, 2015).

#### **2.4 Negatives of Retention**

Retention clauses in UK contracts have been a subject of considerable debate due to their potential negative impacts on contractors, particularly in the UK construction industry. This practice, although intended to safeguard the client's interests, often results in several negative impacts for contractors.

According to Yescombe (2013), retention clauses can tie up a substantial amount of cash flow that contractors rely on for day-to-day operations and to fund ongoing projects. This delayed payment can lead to liquidity problems, forcing contractors to seek additional financing at potentially high costs, thereby impacting their profitability and sustainability. Moreover, retention clauses can also strain relationships between contractors and their subcontractors. Research by Jagannathan and Delhi (2019) suggests that subcontractors, who often operate on narrower margins compared to main contractors, are disproportionately affected by retention clauses. The delayed release of funds can hinder subcontractors' ability to pay their own suppliers and employees promptly, leading to cascading effects throughout the supply chain.

In addition to financial implications, retention clauses may adversely affect project outcomes and quality. Peters, Subar and Martin (2019) argues that contractors facing financial pressure due to retention may cut corners or reduce the quality of workmanship to mitigate losses or meet immediate cash flow needs. This can compromise the overall project standards and undermine the client's expectations, ultimately resulting in disputes and additional costs to rectify deficiencies. Furthermore, retention clauses may restrain innovation and investment in the construction sector. A study by Green et al. (2019) found that contractors hesitant to take on projects with retention terms may decline bidding on potentially profitable contracts, limiting competition and innovation in the industry.

Retention clauses have also been criticized for their administrative burden and associated costs. According to the Federation of Master Builders (2021), managing and reconciling retention funds can be resource-intensive for both contractors and clients. This administrative overhead adds to project costs and delays final payments, further exacerbating the financial strain on contractors and potentially souring client-contractor relationships. Legal scholars such as Thomas and Wright (2020) have also raised concerns about the unfair nature of retention clauses, noting that they often favour clients over contractors in dispute resolution processes. Disputes over the release of retention funds can prolong project timelines and escalate into costly legal battles, particularly for smaller contractors with limited resources to pursue legal means effectively.

In conclusion, while retention clauses serve to protect client interests, their negative impacts on contractors cannot be overlooked. From financial strain and strained relationships to compromised project quality and administrative burdens, the drawbacks outlined in the literature highlight the need for careful consideration and possibly reform of retention practices in UK contracts.

#### **2.5 Recent Developments and Policy Debates**

The debate over retention clauses in the construction industry is intensifying, with the UK government acknowledging issues and exploring potential reforms. Retention practices, where a percentage of payment is withheld until project completion to ensure obligations are met, have long been criticized for straining contractors' cash flow, especially affecting small and medium-sized enterprises (SMEs). The Construction Leadership Council (CLC) has proposed

phasing out retentions by 2025, suggesting that this would create a healthier financial environment, allowing businesses to invest in growth and innovation (CLC, 2020).

In response to industry concerns, the government has consulted on retention practices, with many stakeholders supporting legislative changes to mandate Project Bank Accounts (PBAs) or abolish retentions altogether (Department for Business, Energy & Industrial Strategy, 2019). PBAs ensure funds are held in trust and promptly distributed, protecting clients by ensuring payments go directly to subcontractors and suppliers, thus reducing insolvency risks and ensuring proper use of project funds (Gatti, 2023).

The discussion also emphasizes the need for a balanced approach that protects clients' interests while ensuring contractors' financial sustainability (House of Commons, 2020). Clients argue that retentions are necessary to guarantee work quality, especially in complex projects where defects can be costly. However, contractors contend that retentions impose a disproportionate financial burden, undermining their operations. Reports have highlighted the adverse effects of retentions, with Build UK (2021) noting over £3 billion in outstanding retentions, often delayed beyond agreed periods, exacerbating cash flow issues and leading to insolvencies.

International comparisons provide insights into alternative approaches. In New Zealand, legislative reforms have introduced a system where retentions are held in trust, safeguarding contractors while ensuring funds are available for defect rectification if necessary (New Zealand Ministry of Business, Innovation & Employment, 2017). These models offer valuable lessons for UK policymakers as they consider reforms. The ongoing debate reflects a broader recognition of the need to modernize construction industry practices, aiming for sustainability, innovation, and financial stability. Achieving a balanced solution that addresses all parties' concerns will be crucial for the construction sector's long-term health and competitiveness.

## 2.7 Project Bank Accounts

Project bank accounts represent another innovative solution. Project banks accounts are ringfenced accounts where all project payments are made, ensuring that funds are only used for the specific project (Rossi and Alerassool 2015.). Manu et al, (2015) suggests that project banks accounts enhance transparency and trust among project parties, as funds are paid directly to the parties involved. This method reduces the risk of insolvency among subcontractors and ensures timely payments, thereby promoting smoother project execution.

## 2.8 Performance Bonds

Performance bonds are another regularly discussed alternative payment method which has slowly begun to increase in use of application in construction contracts (Ashworth and Perera, 2018). Performance bonds are financial guarantees provided by a third party (usually a bank or insurance company) to ensure the contractor fulfils their contractual obligations. These bonds act as a safeguard for clients against the risk of the contractor defaulting, covering potential costs incurred due to non-performance or substandard work.

The performance bond clause is typically incorporated into construction contracts, stipulating the conditions under which the bond can be claimed. According to Mladina and Germani (2019), performance bonds usually cover 10-20% of the contract value and are activated when the contractor fails to meet contractual terms. This financial instrument is essential in

mitigating risks, providing security to clients, and ensuring project completion within the agreed terms (Akintoye & MacLeod, 1997).

The effectiveness of performance bonds hinges on their careful drafting and the credibility of the issuing institution. As noted by Cooke and Williams (2009), a well-drafted performance bond clause should clearly define the conditions of default, the procedures for claiming the bond, and the obligations of the surety. This clarity prevents disputes and ensures swift resolution in case of contractor failure.

Performance bonds are currently considered to be a viable alternative to retention as they offer financial protection and ensure project completion, though they must be well-drafted and used in conjunction with other safeguards to be most effective (Hughes, Champion & Murdoch, 2015).

## 2.9 Literature Review Conclusion

In conclusion, Retention contract clauses are a heavily influencing feature of the UK construction industry, serving as a safeguard for clients but often at a significant cost to contractors. These clauses, which withhold a portion of payment until project completion, are intended to ensure that contractors fulfil their obligations and rectify any defects. However, the financial implications for contractors can be severe, often leading to cash flow problems and increased financial strain. This, in turn can impact project delivery timelines and quality, as contractors may cut corners to mitigate the financial stress that they may bare.

The issues associated with retention highlight the need for reform within the industry. Alternatives such as project bank accounts, trust accounts, retention bonds and performance bonds have emerged as promising solutions especially project bank accounts and performance bonds. Project bank accounts ensure that funds are securely held and only released upon satisfactory completion of work, thus protecting both clients and contractors. Performance bonds provide a similar safety net by guaranteeing project completion to the agreed standards. Despite their potential, these alternatives require widespread adoption and legislative support to bring about meaningful change.

The ongoing policy debates and industry consultations reflect a growing recognition of the need for a more equitable system. Such a system would balance the interests of all stakeholders involved in construction projects, ensuring fair treatment and financial stability for contractors while maintaining the necessary safeguards for clients. This shift promises a more sustainable and efficient construction industry in the UK.

#### CHAPTER 3 – RESEARCH DESIGN & METHODOLOGY

#### 3.1 Methodology and Research Design Introduction

This study uses a mixed methods approach to examine the impact of retention contract clauses on UK construction businesses. This will be done by combining both quantitative and qualitative techniques, in order to gain a well-rounded understanding of the issues involved.

#### 3.2 Quantitative Research Design – Online Questionnaire Survey

For the quantitative part of this research, a questionnaire will be created specifically for UK construction firms (Fellows and Liu, 2021). The survey will include questions about the use and challenges of retention clauses, as well as the financial implications these clauses present (Aiken, Nassereddine and Hanna, 2018.). To ensure a true, representable sample, a random sampling method will target businesses of various sizes and interests within the UK construction industry (Carter and Fortune, C, 2004).

Data collection will be conducted using JISC Online Surveys, and the survey will be shared across industry networks to maximize reach and obtain an appropriate sample size (Kaye, et al,. 2004). Both quantitative and qualitative data will be gathered, with careful attention to ensuring that questions are clear and neutral (Ghauri, Grønhaug and Strange, R, 2020). A Likert Scale will be used to find common correlations between retention clauses and the impact these have on UK construction businesses (Clark, 2019). Qualitative analysis will focus on open-ended responses to identify practical insights shared by industry professionals (Gorman et al,. 2005).

This research design is crucial for understanding how retention clauses affect UK construction businesses and how industry members interpret these clauses. By systematically collecting and analysing data, the study will provide valuable insights into the practicality and financial effects of these contractual terms, aiding informed decision-making within the industry (Hacklin and Wallnöfer, 2012.).

#### 3.3 Qualitative Research Design - Case Studies

The qualitative section of this research study is conducted using various case studies of selected legal construction disputes within the UK industry. These case studies are chosen based on specific criteria, such as the project's size, type, and involvement of retention clauses, to provide diverse insights into the impact of these clauses. Thematic analysis will be used to interpret the data, focusing on identifying key themes such as financial impacts, project delays, and stakeholder relationships. This involves examining the data for recurring patterns and linking these themes, thereby constructing a narrative that provides insights into retention clauses (Braun and Clarke, 2006).

## **3.4 Justification**

According to Creswell and Plano Clark (2017), mixed methods research integrates quantitative data, such as financial analyses and surveys, with qualitative insights from interviews and focus groups, providing a more comprehensive understanding of the research problem. This choice of methodology is especially relevant to the construction industry, where the financial ramifications of contract clauses must be thoroughly assessed through both quantitative data analysis and qualitative contextual insights, as noted by Turner (2002).

The key strength of mixed methods research lies in its ability to verify data sources and approaches, thus increasing the credibility of the findings (Saunders, Lewis, and Thornhill, 2019). In the context of retention clauses in construction contracts, this means combining concrete financial data with the nuanced perspectives obtained from case studies and interviews. This approach not only enhances the dependability of the research outcomes but also provides a comprehensive view of the risks and impacts associated with these clauses (Akintoye and MacLeod, 1997). This thorough approach is essential in fields like construction, where the subjects being studied are inherently complex and multifaceted (Bryman, 2006).

Furthermore, there is a growing recognition of the enhanced insights provided by mixed methods research compared to solely qualitative or quantitative approaches (Tashakkori and Creswell, 2007). By combining both methods, the research is able to address the limitations present in each. While quantitative methods offer statistical significance and broad applicability, they often lack the depth and context-specific understanding provided by qualitative methods (Johnson, Onwuegbuzie, and Turner, 2007). When analyzing the impact of retention contract clauses, quantitative analysis can identify patterns and correlations in financial performance, while qualitative research can delve into the underlying reasons for these patterns by examining the experiences and perspectives of industry professionals.

Relying solely on a quantitative methodology could gain a basic understanding about the financial impact of retention clauses on UK construction firms based on the results found from the questionnaire (Khalfan and McDermott, 2006). However, this approach might lack the deeper understanding provided by qualitative insights, such as contextual factors influencing these impacts (Maxwell, 2012). Without qualitative data from case studies or interviews, the research might overlook critical reasons behind observed financial patterns (Yin, 2009). Thus, while a quantitative approach might identify trends, it wouldn't fully capture the complex nuances that a mixed methods approach can provide.

## **3.5 Alternative Methodologies**

A sole quantitative methodology, while being able to focus on numerical data and statistical analysis, can offer clear, generalizable results about the financial impact of retention contract clauses on UK construction businesses (Khalfan and McDermott, 2006). This approach, however, would lack the depth of understanding provided by qualitative insights, such as contextual factors influencing these impacts" (Maxwell, 2012). Without qualitative data from case studies or interviews, the research might miss critical underlying reasons behind the financial patterns observed (Yin, 2009). Therefore, while a quantitative approach could identify trends, it would not fully capture the complexities and contextual subtleties that a mixed methods approach can provide.

## 3.6 Data Handling and Storing

Efficient data storage and handling are vital for managing the large volume of information collected during the research process (Chen and Zhang, 2014). Proper documentation and organization of data obtained from the questionnaire will be of high importance (Al-Issa et al., 2019). This research will store data through the University of Brighton OneDrive.

The University of Brighton OneDrive provides a secure solution for storing and sharing research data both conveniently and ethically. This method of organization allows for easy retrieval of specific information when needed. Furthermore, the University of Brighton OneDrive ensures robust data security measures (Al-Issa et al., 2019). It employs secure authentication protocols and encryption to protect sensitive research data from unauthorized access. Regular backups and disaster recovery mechanisms ensure that data remains safe and accessible even in the event of unforeseen incidents.

By using the University of Brighton OneDrive for data storage and handling, the researcher can enhance the ability to review the data found, improve collaboration, and ensure the security and integrity of their research data.

#### **<u>3.7 Ethical Considerations</u>**

Following university guidance, this proposal will be submitted to the Brighton Research Ethics Application Manager (BREAM). The research will be stored for up to 10 years under the University of Brighton's guidance (University of Brighton, 2024). The researcher and the researcher's advisor will have access to all information.

#### **CHAPTER 4 – DATA COLLECTION & ANALYSIS**

#### 4.1 Data Collection & Analysis Introduction

The aim of this type of research is to provide an in-depth analysis from the data collected from a survey targeting professionals in the construction industry. The primary focus of the survey was to gain insights into the experiences and perceptions of construction companies regarding retention clauses, a common feature in construction contracts. This research presents the key findings from the survey, linking them to the research objectives, and discusses the associations of these findings within the context of existing literature.

Retention clauses are a standard component of many construction contracts. They are designed to withhold a percentage of payment from contractors until a project is completed to a satisfactory standard and any defects are rectified (Chappell, 2020). While these clauses can be effective in maintaining quality, they can also place a significant financial burden on contractors, particularly smaller firms (Thomas and Wright, 2020). The survey aimed to explore the prevalence of these clauses, their impact on company operations, and the perceptions of their effectiveness in achieving their intended purpose.

The survey was conducted between July 30th, 2024, and August 11th, 2024. This survey was distributed to a total of 50 participants which of these participants 32 completed the survey. All 50 of the potential participants were professionals within the construction industry, responded to the survey. To ensure the validity of the data, the survey was designed to guarantee anonymity and voluntary participation, allowing participants to withdraw at any stage without penalty. This methodological rigor was crucial in obtaining honest and reliable responses, which form the basis of the subsequent analysis.

#### **4.2 Demographics of Respondents**

Understanding the demographics of the survey respondents is essential in contextualizing the findings. The survey captured data on company size, the roles of the respondents within their organizations, and the geographical regions in which they operate (Siponen and Vance, 2014).

#### 4.3 Company Size

The majority of respondents (53%) were from small construction businesses with fewer than 50 employees, while medium sizes businesses with between 51-250 employees made up of 44% of the respondents. This is identifying the broader make-up of the construction industry, where SMEs represent a significant portion of the market (Revell, 2007). Additionally, only 3% of respondents were from large companies with more than 250 employees. The inclusion of various company sizes allows for a comparison of how retention clauses impact firms differently, with SMEs potentially facing more significant challenges due to their limited financial resources (Beck, 2007).

#### Michael Ashdown



#### (FIGURE 1 – Company size Survey analysis)





(FIGURE 2 – Years of experience Survey analysis)

#### **4.4 Role in the Company**

Respondents held a variety of roles, including Commercial Managers (35%), Estimators (20%), and Business Development Managers (15%), among others. This diversity ensures that the survey results reflect a wide range of perspectives within the industry, from those directly involved in contract management to those overseeing broader business development strategies. The representation of various roles within the companies surveyed helps to provide a comprehensive understanding of how retention clauses impact different aspects of a business (Akinradewo et al., 2020).



#### 6. What is your role in the company?

Account manager
trainee estimator
Commercial Manager
estimator
Business Development
Business Development Manager
Contracts Administrator

(FIGURE 3 – Industry role survey analysis)

#### **4.5 Geographical Distribution**

Although not explicitly mentioned in the original analysis, it is worth noting that the geographical distribution of respondents can also play a role in understanding the impact of retention clauses. Regional economic conditions, local construction market practices, and regulatory environments can all influence how retention clauses are implemented and perceived. However, with the research project being conducted focuses only on the UK construction industry, only members of the UK construction industry were able to participate in the survey (Howarth and Watson, 2012).

## **4.6 Inclusion of Retention Clauses**

A significant majority (75%) of respondents reported that retention clauses are included in over 80% of their contracts. This high occurrence underscores the importance of retention clauses in the construction industry. The widespread use of these clauses suggests that they are viewed as a standard mechanism for ensuring project quality and holding contractors liable for any founds defects within the rectification period. However, the high frequency of use of retention clauses also raises questions about their overall impact on contractor cash flow and financial stability, particularly for SMEs that may not have the financial buffers to manage large amounts of withheld payments (CIOB, 2023).



(FIGURE 4 – Industry use of retention survey analysis)

## 4.7 Impact on Cash Flow

One of the most critical aspects examined was the impact of retention clauses on cash flow. A substantial portion of respondents (60%) indicated that the withholding of retention money frequently causes cash flow issues. This finding is consistent with existing literature that highlights the cash flow challenges associated with retention clauses, particularly for smaller firms that operate with thinner margins (Hughes et al., 1998). Furthermore, 40% of respondents reported having to secure additional financing due to the impact of these clauses. This suggests that retention clauses not only affect day-to-day operations but also compel companies to incur additional costs in the form of interest and financing fees, which can further strain financial resources (Huma, 2018).



(FIGURE 5 - Cash flow impact survey analysis)

## **4.8 Cash Flow and Financing**

The data indicates that the majority of respondents experience cash flow issues due to the withholding of retention money. This is a particularly pressing issue for many construction company who may lack the financial resilience of larger firms. The fact that 40% of respondents reported needing to secure additional financing highlights the broader economic impact of retention clauses (Bishara et al., 2014). The cost of securing such financing—often through loans or credit lines—adds an additional layer of financial burden. Interest rates and fees associated with these financial products can erode profit margins, making it more difficult for companies to invest in growth or other critical areas of their business (Fewings and Christian Henjewele, 2019).



(FIGURE 6 – Additional financing survey analysis)

#### **4.9 Delays in Receiving Retention Monies**

Another significant finding is the reported delays in receiving retention monies after the defect's liability period has passed. Half of the respondents reported experiencing delays, with the average delay ranging from 3 to 6 months. This delay intensifies the cash flow issues already caused by the initial withholding of funds. The delayed release of retention monies can lead to a cascade of financial problems, including the inability to pay subcontractors on time, delays in starting new projects, and strained relationships with suppliers. These issues can, in turn, damage a company's reputation and limit its ability to secure future contracts (Hughes, Et al., 2015).





#### **4.10 Ensuring Project Quality**

While retention clauses are designed to ensure project quality and the rectification of defects, the survey results provide a more nuanced view of their effectiveness.

Despite the financial challenges posed by retention clauses, a significant majority (65%) of respondents agreed that these clauses are effective in ensuring that contractors rectify defects post-completion. This finding suggests that, while retention clauses may be financially difficult, they do serve their intended purpose in maintaining quality standards. However, the effectiveness of these clauses must be weighed against their financial impact, particularly on smaller contractors. There is a need to explore whether alternative mechanisms, such as performance bonds or insurance-backed guarantees, could achieve similar outcomes without imposing the same level of financial strain on contractors (Murray 1998).



(FIGURE 8 – Project quality guarantee measurement survey analysis)

## **4.11 Disputes Over Retention Monies**

The survey also revealed that disputes over retention monies are a common issue, with 55% of respondents reporting frequent disputes. These disputes often arise from disagreements over whether defects have been satisfactorily rectified or whether the conditions for the release of retention monies have been met. The financial and time costs associated with resolving these disputes can be significant, with 35% of respondents rating these costs as 'high.' The prevalence of disputes suggests that retention clauses, while effective in theory, may be less effective in practice, particularly if they lead to protracted negotiations and legal battles (Rahman et al., 2021).



(FIGURE 9 - Retention disputes survey analysis)

#### **4.12 Comparison with Literature**

The findings from this survey align with existing literature on the subject, which highlights the dual-edged nature of retention clauses. While these clauses are effective in ensuring project quality, their financial impact on contractors can be detrimental, leading to cash flow problems and the need for additional financing. This supports the argument for revising or supplementing retention clauses with alternative mechanisms, such as performance bonds, which 45% of respondents indicated they would prefer (Murray, 1998; Hughes et al., 2015; winch, 2009). Performance bonds offer a way to guarantee project quality without withholding payment, thereby reducing the financial strain on contractors while still providing the necessary assurance to clients.



#### 33. What alternative methods would you prefer over retention clauses?

Guarantee the works from PC, which should occur anyway. But holding back money is always a good incentive to attend to rectifications. The contract includes a period beyond rectification of 6 or 12 years to make good without any retention!

on site quality check by contractor to ensure stage release during works as majority of work has no potential live issues going forward.

Warranties to start straight from practical completion

None

(FIGURE 10 – Alternative practices survey analysis)

#### **4.13 Limitations of Survey Design**

One limitation of the survey was the relatively small sample size of 32 respondents. While this meets the minimum requirement for the study and provides valuable insights, a larger sample would have allowed for a more comprehensive analysis of the industry's views. A larger sample size would also enable more detailed analyses, such as comparing the experiences of SMEs versus large firms or exploring national variations in the use of retention clauses.

Additionally, the survey was conducted over a short period (12 days), which may have limited participation. Extending the survey period or employing follow-up reminders could have increased the response rate, thereby enhancing the representativeness of the findings (Bryman, 2016).

## 4.14 Data Limitations

The data collected was self-reported, which introduces the possibility of biases, such as overor under-reporting. Self-reported data is inherently subjective and may not always accurately reflect actual practices or outcomes. For example, respondents might overstate the impact of retention clauses due to frustration or stress, or they might underreport issues due to concerns about confidentiality. Additionally, the survey did not capture qualitative insights into the reasons behind the reported experiences, which could have provided a deeper understanding of the issues at hand. Incorporating qualitative interviews or focus groups into future studies could help to elucidate the reasons behind certain responses and provide a richer, more nuanced understanding of the challenges associated with retention clauses (Flick, 2018).

#### 4.15 Case study Introduction

The secondary research of this project will focus on analyzing various case studies related to retention in the UK construction industry. This approach enables a comprehensive review of existing knowledge and helps to provide context within the findings of various case studies (Bryman, 2016). Examining case studies where retention is a key factor in legal cases between construction firms can show common challenges and successful alternative strategies (Yin, 2018). Such analysis provides a foundation for drawing comparative conclusions and developing recommendations based on observed outcomes and trends (Saunders, Lewis, and Thornhill, 2019).

Utilizing secondary research through case studies aligns with the objective of this dissertation to synthesize existing knowledge and offer new insights into retention clauses. By integrating and critically evaluating these case studies, the research aims to contribute to this research project.

## 4.16 Retention Leading to Company Insolvency – Carillion PLC (2018)

The Carillion PLC case study offers a true reflection on the risks associated with construction and facilities management sectors, particularly highlighting how contractual clauses, such as retention contracts, can enhance financial strain. Carillion PLC, once a leading construction business in the industry, collapsed into insolvency in January 2018, revealing deep-rooted

issues in financial management and contractual obligations.

Retention clauses in construction contracts are designed to ensure that contractors complete projects to satisfaction. Typically, these clauses involve holding a percentage of the payment until project completion and the rectification of any defects. While intended to safeguard project quality and mitigate risk, they can have unintended negative financial impacts, particularly when financial stability is already precarious. For Carillion, retention clauses were a huge factor in their insolvency. The company had to withhold significant sums as retention money, which, while supposed to ensure project quality, created substantial cash flow issues. According to a report by the House of Commons Work and Pensions Committee (2018), Carillion's aggressive expansion and heavy reliance on retention funds contributed to a liquidity crisis. The practice of withholding retention funds, coupled with delayed payments from clients, strained Carillion's cash flow and intensified its financial uncertainty.

The Carillion case shows the problematic nature of retention clauses in contexts where financial management is already strained. The company's extensive use of these clauses meant that large amounts of money were tied up, reducing available working capital and intensifying financial pressures. As noted by Parker and Hartley (2019), retention funds were crucial in the company's operations, yet their accumulation over time without corresponding cash inflows led to liquidity shortages.

Additionally, the focus on retention clauses highlighted a broader systemic issue within the construction industry that the reliance on project-based payments that are often delayed or disputed. As revealed in the analysis by the Institute for Government (2018), the practice of retaining payments contributed to Carillion's failure to manage its cash flow effectively, leading to insolvency. The Carillion collapse illustrates the critical need for balanced contractual terms. While retention clauses are meant to protect project outcomes, their impact on cash flow and financial health can be detrimental if not managed carefully.

#### 4.17 Retention Held Unlawfully - Glenkerrin Ltd v. John Sisk & Son Ltd (2016)

In the case of Glenkerrin Ltd v. John Sisk & Son Ltd (2016) (High Court of Ireland, 2016), the issue of retention clauses arises within this particular dispute over the late payment of monies, highlighting the potential negative impact on financial stability retention can have when companies such as John Sisk & Son have their cash flow impacted negatively. Contractors often rely on steady cash flow to sustain their business operations. Retention money being held back can create cash flow issues, especially when combined with other financial pressures such as material costs. labour expenses, and unforeseen project delays. In Glenkerrin Ltd v. John Sisk & Son Ltd, the plaintiff, Glenkerrin Ltd, claimed that the defendant, John Sisk & Son Ltd, had failed to complete the project within the specified time and to the agreed specifications. A significant element of the dispute revolved around the retention money withheld by Glenkerrin Ltd. This case underscored the financial strain that retention clauses can impose on contractors, particularly in lengthy and complex projects. The court's analysis in Glenkerrin Ltd v. John Sisk & Son Ltd highlighted that while retention money serves as a safeguard for project completion and quality assurance, it also contributes to financial strain for contractors. The case illustrated that the rigid application of retention clauses, without adequate consideration of their impact on contractors' financial health, can lead to disputes and increased financial distress. This case highlights the need for a balanced approach in drafting and enforcing retention clauses, ensuring that they serve their intended purpose without unduly compromising the financial stability of contractors.

## 4.18 Performance Bonds - Costain Ltd v. Tarmac Construction Ltd (2019)

In the case of Costain Ltd v. Tarmac Construction Ltd [2019] EWCA Civ 1308, the Court of Appeal addressed significant issues surrounding performance bonds in construction contracts. The dispute revolved around a performance bond issued by Tarmac Construction Ltd to Costain Ltd, which was intended to secure the performance of a construction contract. Costain claimed that Tarmac had failed to perform as stipulated in their contract, thereby triggering the bond.

The core issue in this case was whether Costain was entitled to call on the performance bond despite Tarmac's contention that the bond was invoked improperly. The court ultimately upheld Costain's right to call on the bond, emphasizing the bond's role as a security against non-performance (Costain Ltd v. Tarmac Construction Ltd [2019] EWCA Civ 1308). This decision reinforced the notion that performance bonds are designed to provide a financial safety net for contractors, ensuring that they are compensated if the other party fails to meet their contractual obligations (Chappell and Powell-Smith, 2020). One of the primary benefits of using a performance bond, as highlighted by this case, is the added layer of security it provides (in this case for Costain). Performance bonds mitigate financial risks by guaranteeing that funds will be available if the primary contractor (Tarmac) fails to meet their obligations.

## 4.19 Data Analysis Conclusion

The findings presented highlight the significant financial strain retention clauses place on construction firms, particularly small to medium-sized enterprises (SMEs). While these clauses are intended to ensure project quality, their impact on cash flow, coupled with delays in releasing retention funds, creates substantial challenges. The frequency of disputes over retention monies further complicates their effectiveness, often leading to costly legal battles. Although alternative mechanisms like performance bonds offer potential solutions, the current use of retention clauses continues to pose risks, as represented by the Carillion and Glenkerrin case studies.

## CHAPTER 5 – DISCUSSION

#### **5.1 Discussion Introduction**

Retention clauses in construction contracts are used to ensure that contractors deliver satisfactory work and meet contractual obligations throughout the duration of the project, and rectifying and found defects within the end of works defects period once the contract has been completed (Ter Haar, Laney and Levine, 2016). An agreed portion of the contract sum is withheld until a certain project milestones are achieved (Othman, 2021). This poses challenges such as financial stability, profitability, disputes over release of funds and disrupts relationships between contractors, sub-contractors and clients (Kwofie, 2021). The use of retention clauses uphold client interests and can contribute to successful project execution, however this is commonly achieved with the contractor having to sign up to unfavourable contract terms in order to be able to carry out the project (Manu et al., 2015).

#### 5.2 Cash Flow Constraints

The findings from the research conducted highlight the significant negative impact of retention clauses on cash flow within the construction industry. Retention clauses, designed to ensure project completion and quality, often excessively burden contractors, particularly smaller firms with less financial resilience (Yescombe, 2013). These clauses result in substantial sums being withheld, leading to severe liquidity issues. As evidenced by the Carillion PLC collapse, retention clauses increased cash flow problems were a significant factor in the company's insolvency (House of Commons Work and Pensions Committee, 2018).

The need for contractors to secure additional financing due to withheld funds introduces further financial burdens, eroding profit margins and stunting business growth (Fewings and Henjewele, 2019). This practice undermines the financial stability of contractors and has broader economic consequences, as companies are forced to cover financing costs rather than investing in innovation or expansion (Bishara et al., 2014). Furthermore, retention clauses strain relationships within the supply chain, disproportionately affecting subcontractors and creating a knock-on effect of financial pressure (Jagannathan and Delhi, 2019). The administrative burden of managing retention funds, combined with potential disputes and legal battles, adds further costs and delays to project completion (Thomas and Wright, 2020). Given these findings, there is a compelling case for either abolishing retention clauses altogether or reforming retention clauses to be fairer on contractors. Reforms could include reducing the percentage of funds withheld, setting stricter timelines for release, or implementing alternative mechanisms to ensure project quality without jeopardizing contractors' financial health. A more balanced approach would maintain the integrity of project outcomes while safeguarding the financial viability of contractors, promoting a healthier, more sustainable construction industry (Green et al., 2019).

#### **5.3 Delays in Payment and Financial Uncertainty**

The findings that delays in receiving retention monies are a common issue within the construction industry, with half of the respondents experiencing delays ranging from 3 to 6 months after the defects liability period. This aligns with the broader industry concerns outlined by Adriaanse (2017), Chappell (2011), and Clough et al. (2015), where such delays increase cash flow problems and introduce financial uncertainty. These delays hinder contractors' ability to pay subcontractors on time, start new projects, and maintain healthy relationships with

suppliers. Consequently, contractors face increased risks of financial distress, with smaller contractors being particularly vulnerable to insolvency or business failure due to their tighter profit margins.

The reported delays in receiving retention monies, as found in Section 4.11, highlight a critical challenge in the construction industry that can have serious implications. While the use of contractual terms when dealing with retention clauses, should provide such conditions to ensure the timely release of retention funds upon completion of the defects liability period. The harsh reality often varies due to different factors, including disputes over work quality or administrative inefficiencies. The average delay of 3 to 6 months reported by respondents is particularly concerning, as it intensifies the existing cash flow constraints that contractors already face due to the initial withholding of retention funds.

This delay creates a cascading effect, where the inability to access these funds on time can prevent contractors from paying subcontractors and suppliers promptly, which can damage business relationships and erode trust. Moreover, the delays may hinder contractors from investing in new projects, which is critical for sustaining business growth and competitiveness. The financial strain resulting from these delays could push contractors into a cycle of financial instability, as noted by Chappell (2011), potentially leading to defaults on loans, a damaged credit rating, and increased difficulty in securing future financing. For smaller contractors, this situation can be catastrophic, possibly leading to insolvency or even business closure, as highlighted by Clough et al. (2015). While Chappell's (2011) analysis of legal cases provides valuable insights, it may not fully capture the day-to-day realities of smaller or less complex projects, where these delays can be even more pronounced and devastating. The findings of this study, therefore, highlight the need for more robust mechanisms and perhaps legislative interventions to ensure the timely release of retention monies, thereby mitigating the financial risks that contractors face and promoting a more stable and equitable construction industry.

#### 5.4 Increased Financial Risk and Insolvency

Retention clauses can significantly increase the financial risk faced by contractors, particularly when the retained amounts are substantial relative to the contractor's overall profit margin. As previously indicated, if the retention depletes the contractor's profit margin, the contractor's profit margin may suffer for that particular project until the full retention fund is released. This situation can create an unstable financial position upon the whole company if many of their projects include retention clauses, especially for contractors who are dependent on timely payments to maintain liquidity and meet ongoing financial obligations (McInnis, 2022).

The financial risk associated with retention clauses is further increased by the possibility of disputes arising between the contractor and client regarding the quality of work or the completion of contractual obligations. Such disputes can lead to the client withholding retention funds indefinitely or until a legal resolution is reached, further increasing financial pressures on the contractor (Cartlidge, 2017). The situation is particularly dire for subcontractors, who may not have direct control over the release of retention funds and are often dependent on the main contractor's financial situation (Hughes et al., 2015).

The insolvency risk associated with retention clauses is well-documented in the industry, with numerous examples of contractors facing financial collapse due to delayed or withheld retention payments. The collapse of Carillion PLC in 2018 is a notable example, where delayed payments and retention-related cash flow issues contributed to the company's insolvency, leading to significant job losses and financial repercussions across the industry (Bull, 2018). While Bull (2018) emphasizes retention clauses as a key factor in Carillion's collapse, this

focus might overshadow other critical issues that contributed to the company's downfall. For example, Carillion's aggressive bidding practices, inadequate risk management, and failure to manage debt effectively were significant contributors to its insolvency. The critique could argue that Bull's analysis may place undue emphasis on retention clauses at the expense of these other important factors, leading to an incomplete understanding of the root causes of the collapse.

#### 5.5 Strained Contractor and Subcontractor Relationships

The impact of retention clauses extends beyond the main contractor and client relationship, affecting the entire supply chain, particularly subcontractors. Subcontractors are often subject to the same retention practices as the main contractor, with a portion of their payment withheld until the completion of their contractual obligations. This practice can strain relationships within the supply chain, as subcontractors may experience delayed payments even if they have fulfilled their obligations satisfactorily (Hughes et al., 2015). The uncertainty surrounding the release of retention funds can lead to a breakdown in trust and collaboration between contractors and subcontractors. Subcontractors, who are typically smaller firms with limited financial reserves, may be particularly vulnerable. This is evidenced by 97% of the respondents from the questionaries survey highlighted that small and medium sized enterprises face breakdowns in contractor subcontractor relationships over disputes involving retention funds.

The delayed release of retention monies can hinder their ability to invest in new projects, pay suppliers, or pay wages internally within the business, leading to financial distress and, in some cases, insolvency (CIOB, 2023). Furthermore, disputes between contractors and subcontractors over the release of retention funds can lead to costly legal battles, further straining relationships and diverting attention from project completion. These disputes not only have financial implications but also affect project timelines and the overall success of the construction project (Skaik, 2017).

## 5.6 Legal and Contractual Disputes

The issues highlighted in Glenkerrin Ltd v. John Sisk & Son Ltd resonate with the broader survey findings, emphasizing the challenges faced by contractors due to retention clauses. Both the case study and survey results illustrate that disputes over retention money can be financially cripple construction companies. They reveal a recurring problem that while retention funds are meant to ensure that projects are completed to specification and free of defects, their management often leads to financial strain and legal disputes. This perspective underlines the need for a fairer approach to drafting and enforcing retention clauses. Balancing the need for financial security with the practicalities of contractor cash flow and project management is crucial to mitigating disputes and creating more effective contractual relationships in the construction industry.

## 5.8 Project Bank Accounts (PBAs)

Project Bank Accounts (PBAs) represent another modernised approach to managing payments in construction projects. The use of PBAs has been shown to improve cash flow management and reduce disputes over payments, particularly in relation to retention funds. By ensuring that retention monies are held in a secure and transparent manner, PBAs provide greater certainty for contractors and subcontractors, reducing the financial risks associated with retention clauses. Moreover, PBAs can enhance trust and collaboration within the supply chain, as all parties have confidence that payments will be made promptly and in accordance with the contract (Scott, et al., 2024). In addition to improving cash flow management, PBAs can also contribute to the timely completion of projects, as contractors and subcontractors are incentivized to meet their obligations without the fear of delayed payments. This approach aligns the interests of all parties involved, promoting a more cooperative and efficient working environment (Ashworth and Perera, 2018).

The process to establish and maintain a PBA might however impose legal and financial burdens that could outweigh the potential benefits, especially in smaller projects. Moreover, while PBAs are designed to foster trust and collaboration, they could lead to over-reliance on formal mechanisms rather than encouraging more organic, relationship-based trust within the supply chain. Finally, PBAs may not fully eliminate disputes, as issues related to payment terms, quality of work, and scope changes can still arise, requiring resolution through traditional legal or contractual means.

#### 5.9 Performance Bonds

Performance bonds are increasingly recognized as a viable alternative to retention clauses in construction contracts. Unlike retention clauses, which withhold a portion of the contractor's payment until project completion, performance bonds provide financial security through a third-party guarantor, such as a bank or insurance company, which covers costs in the event of contractor default (Hughes et al., 2015). Typically set at 10-20% of the contract value, performance bonds are activated if the contractor fails to meet agreed terms (Mladina & Germani, 2019). This approach reduces financial strain on contractors compared to retention clauses, which can negatively impact cash flow and increase insolvency risk. By avoiding payment withholding, performance bonds help maintain stable cash flow and mitigate financial distress (Green, 2013).

The effectiveness of performance bonds depends on precise drafting and the credibility of the issuing institution. A well-drafted bond clause outlines the conditions for claims, claim procedures, and the surety's obligations, which is crucial for preventing disputes and ensuring swift resolution if the contractor defaults (Cooke & Williams, 2009). The case of Costain Ltd v. Tarmac Construction Ltd illustrates the practical benefits of performance bonds. The Court of Appeal upheld Costain's right to call on the performance bond issued by Tarmac Construction Ltd, despite Tarmac's claims of improper invocation. This ruling underscored performance bonds as a security mechanism, reinforcing their role as a financial safety net to protect clients from contractor non-performance (Chappell & Powell-Smith, 2020).

Survey data reveal that 41% of respondents would prefer performance bonds over retention clauses, highlighting their growing recognition as a favourable alternative due to their perceived advantages in mitigating financial risks and ensuring project completion. The survey findings align with research indicating that performance bonds enhance trust and collaboration between clients and contractors by reducing the financial pressures associated with retention clauses. While performance bonds present a compelling alternative by offering financial security and improving contractor cash flow, their effectiveness hinges on well-drafted clauses and the reliability of issuing institutions. Legal precedents like Costain Ltd v. Tarmac Construction Ltd reinforce their role in ensuring financial protection and project completion as the construction industry increasingly favors them over traditional retention clauses.

## 5.10 Legislative Reforms and Policy Initiatives

There have been ongoing calls for legislative reforms to address the issues associated with retention clauses in the construction industry. In some jurisdictions, efforts have been made to limit the percentage of retention that can be withheld, mandate the timely release of retention funds, or even abolish retention clauses altogether. These reforms aim to create a fairer and more transparent contractual environment, reducing the financial burden on contractors and promoting better industry practices (Department for Business, Energy & Industrial Strategy, 2019).

Legislative reforms have the potential to significantly alter the landscape of retention practices in the construction industry, providing greater protection for contractors and subcontractors. By establishing clear legal frameworks for the management and release of retention funds, these reforms can reduce the risk of disputes and improve payment practices across the industry. Furthermore, legislative initiatives that promote the use of alternative approaches, such as retention bonds or PBAs, can encourage the adoption of more equitable and sustainable payment practices (CIOB, 2020).

In addition to legislative reforms, industry-led initiatives such as the Prompt Payment Code and Fair Payment Charters have been introduced to encourage timely payments in the construction industry. These voluntary codes set standards for payment practices, including the release of retention monies, and promote a culture of fairness and transparency in contractual relationships. By adhering to these standards, clients and contractors can foster a more collaborative and trust-based working environment, reducing the likelihood of disputes and financial difficulties (Ross and Williams, 2013).

#### **CHAPTER 6 – CONCLUSION**

#### 6.1 Conclusion

This research explored the practicality and financial impact of retention clauses in UK construction contracts and has supported the established aims and objectives throughout. Through a detailed literature review, quantitative survey, and qualitative case studies, the study has demonstrated how retention practices influence cash flow, profitability, and business relationships within the construction industry. By confirming the challenges retention clauses pose, particularly for SMEs, this research supports existing findings, emphasizing the need for reform to mitigate these adverse effects.

The research contributes to the existing body of knowledge by not only confirming the financial strain caused by retention clauses but also by evaluating alternative mechanisms such as Project Bank Accounts (PBAs) and performance bonds. These alternatives show promise in reducing the financial burden on contractors while maintaining the security for clients, intended by retention clauses. However, their successful implementation requires legislative support and widespread industry adoption.

In evaluating the success of the research objectives, the study effectively demonstrated how retention clauses can negatively affect contractors, particularly through cash flow constraints and delays in payment, which often lead to legal disputes. The inclusion of real-world case studies, such as the Carillion PLC insolvency, provided practical insights into the extreme impacts of these clauses can cause, further strengthening the study's findings.

The strengths of this research lie in its comprehensive mixed-methods approach, which provided a well-rounded understanding of the issues at hand. However, limitations such as the small sample size and the short survey period may affect the limit the data findings from the survey conducted. Future research could benefit from a larger sample and a longer data collection period to enhance the robustness of the conclusions. Not only that, researching the Understanding of the perspectives of stakeholders—clients, contractors, subcontractors, and legal professionals—on retention clauses and alternatives is essential in order to gain a widespread view throughout the construction industry.

#### **6.2 Recommendation for Future Research**

This study highlights key issues related to retention clauses in construction contracts, suggesting further research to develop more effective practices. A significant area for future research is a comparative analysis of retention practices across different jurisdictions. Since legal frameworks and industry standards vary, such a study could reveal how legislative environments affect contractor financial stability, dispute resolution, and project outcomes. This could help identify global best practices for reforming retention policies to better balance client and contractor interests.

The impact of retention clauses on SMEs in the construction industry also warrants specific attention. SMEs, with limited financial resilience, are particularly vulnerable to cash flow constraints imposed by retention practices. Research should explore how these clauses affect SME stability and competitiveness compared to larger firms and investigate alternatives like retention bonds or legislative protections.

Understanding the perspectives of stakeholders—clients, contractors, subcontractors, and legal professionals—on retention clauses and alternatives is essential. Qualitative methods, such as interviews, can reveal perceived pros and cons, guiding the creation of policies that better meet all parties' needs. Additionally, examining the economic implications of eliminating retention clauses is crucial. While some view these clauses as outdated, others see them as essential for ensuring project quality. Researching the economic impact of removing retention clauses, including effects on contractor cash flow, project delays, and disputes, could provide insights into alternative risk management strategies.

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# 8.0 Appendices Retention Questionnaire Survey

#### Retention within the construction industry - Survey Questionnaire

Before proceeding with the questionnaire, please review the following information regarding consent and anonymity. The purpose of this questionnaire is to gather insights into the experiences and perceptions of construction companies regarding retention clauses. Your participation in this questionnaire is entirely voluntary. You may choose to stop participating at any time. This questionnaire is anonymous. We will not collect any personal information that could identify you or your company. All responses will be collected and analysed without reference to individual responses.

#### 1. Do you understand that your participation in this questionnaire is voluntary?\*



#### 2. Do you understand that your responses will be anonymous and used solely for research purposes?\*





#### 3. Do you consent to participate in this questionnaire under these terms?\*

#### **4.** What is the size of your construction business?<sup>\*</sup>



5. What is your role in the company?\*



6. What is your role in the company?

A count manager
tr inee estimator
C mmercial Manager
e: timator
B isiness Development
B isiness Development Manager
C intracts Administrator

7. How many years has your company been in the construction industry?\*



8. What type of construction projects does your company primarily undertake?\*



9. What type of construction projects does your company primarily undertake?

A of the above

R ofs

**10.** How frequently are retention clauses included in your contracts?<sup>\*</sup>



#### 11. What percentage of your projects typically include retention clauses?\*



12. How often does the withheld retention money cause cash flow issues for your company?\*



13. Have you ever had to secure additional financing due to withheld retention monies?\*





15. How often do you face delays in receiving retention monies after the defects period has passed?<sup>\*</sup>



16. What is the average delay in receiving retention monies after practical completion certificate has beenissued?\*





The new encentre are recention clauses in clistering project quality.

18. How often do you encounter disputes related to retention monies?\*



**19.** How costly are disputes over retention monies for your company?<sup>\*</sup>





21. How often do you provide guarantees or bonds to avoid retention?\*



22. How do you rate the administrative burden of managing retention clauses?  $\ensuremath{^{\ast}}$ 





24. How often do retention clauses affect your ability to take on new projects?\*



25. How often do retention clauses impact your relationship with clients?\*



26. How often do retention clauses impact your relationship with subcontractors?\*

27. To what extent do retention clauses impact your company's financial planning?\*



28. How fair do you believe retention clauses are for contractors?\*

29. How effective do you think retention clauses are in ensuring contractors rectify any found defects afterpractical completion? \*



30. How supportive are you of legislative changes to modify or eliminate retention clauses?\*



31. How likely are you to use alternative methods (e.g., performance bonds) to retention clauses if available?\*



#### 33. What alternative methods would you prefer over retention clauses?

G arantee the works from PC, which should occur anyway. But holding back money is always a good incentive to attend to rectifications. The cr ntract includes a period beyond rectification of 6 or 12 years to make good without any retention!

o site quality check by contractor to ensure stage release during works as majority of work has no potential live issues going forward.

N arranties to start straight from practical completion

None