ENHANCING CONTRACTUAL INTEGRITY IN THE CONSTRUCTION SECTOR

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ABSTRACT

The construction sector is a vital driver of foreign investment and global economic growth, with India experiencing a significant influx of foreign direct investment (FDI) in recent years. This growth trend is expected to continue, with China, the United States, and India leading global construction expansion by 2030. Within the realm of construction contracts, the concept of liquidated damages plays a crucial role in addressing delays and breaches. These clauses offer a structured mechanism for compensating parties affected by breaches, reducing disputes, and minimizing litigation costs. However, their enforceability hinges on reasonableness and the genuine pre-estimation of potential damages. Indian law provides guidance on the permissibility and limitations of liquidated damages, emphasizing reasonableness and burden of proof. Additionally, mathematical principles like the Hudson and Emden Formulas have emerged to quantify unliquidated damages more precisely. This text highlights the construction sector's significance, the importance of reasonable liquidated damages clauses, and evolving methodologies for assessing damages, emphasizing the sector's pivotal role in global economic development.

Keywords: Construction sector, Foreign direct investment (FDI), Liquidated damages, Contractual breaches, Legal framework, Economic growth

I. CONSTRUCTION SECTOR: A KEY DRIVER OF FOREIGN INVESTMENT AND GLOBAL GROWTH

A construction contract is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use[2]. One of India's top ten industries for

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[2] "Construction Contracts" (Ministry of Company Affairs)

attracting foreign direct investment (FDI) is construction (infrastructure). Over the past two years, FDI inflows into the construction sector—which includes infrastructure projects—have increased significantly, to USD 26209 million.[3] According to PriceWaterCoopers' Global Construction 2030 research, China, the United States, and India will lead the way and account for 57% of all global growth in 2030, with the total value of construction production increasing by 85%.[4]

II. WHAT ARE LIQUIDATED DAMAGES

Liquidated damages refer to a predetermined amount of money that parties agree upon in a contract to be paid as compensation in the event of a breach. It is a form of financial penalty that serves to protect the non-breaching party from potential losses or damages caused by the breach. The purpose of liquidated damages is to provide a fair and reasonable estimate of the actual harm that may result from the breach, making it easier to determine the appropriate compensation.

The concept of liquidated damages is commonly used in various types of contracts, such as construction agreements, real estate contracts, service contracts, and prenuptial agreements. In construction contracts, for example, liquidated damages may be specified to account for delays in project completion, ensuring that the party responsible for the delay compensates the other party for any resulting losses or additional costs incurred.

For liquidated damages to be enforceable, they must be a reasonable estimate of the potential harm caused by the breach. Courts may review the liquidated damages clause to ensure it is not excessive or punitive, as that would be considered a penalty rather than a genuine estimate of damages. If the amount specified is deemed unreasonable, the court may reduce or invalidate the liquidated damages provision.

It is important to note that liquidated damages are distinct from punitive damages, which are intended to punish the breaching party rather than compensate the non-breaching party. Liquidated damages serve as a means of allocating risk and providing a measure of certainty in contractual relationships, allowing parties to anticipate and mitigate potential losses in the event of a breach.

[3] "FACT SHEET ON FOREIGN DIRECT INVESTMENT (FDI) INFLOW" (Government of India 2022)
[4] Robinson MG, "Future of Construction" (Oxford economics 2021)

III. IMPORTANCE OF LIQUIDATED AND ASCERTAINED DAMAGES IN CONSTRUCTION CONTRACTS

Traditionally, the risk of completing construction projects on schedule rests on the contractor. This results from the contractor's obligation to plan the project's timeline, supervise subcontractors, and create the tools and techniques for construction[5]. Therefore, flaws that could cause a delay or increased expenditures are seen as unacceptable[6] The failure to properly administer the contract (that is, poor contract administration) is one of the major causes of construction disputes, according to Arcadis's 2018[7] global report on construction disputes. This shows that better contractual instructions are required to reduce disputes, which had an average global value of USD 43.4 million and an average duration of 14.8 months in 2017[8]. These reasons contribute to the widespread use of liquidated and ascertained damages (LADs) in building contracts. The existence of a clause in the contract referring to liquidated damages ensures that the client will be compensated with an agreed-upon amount in the event that the contractor is accountable for unavoidable project delays. Due to the avoidance of the need for attorneys, witnesses, and experts to establish damages through a drawn-out and expensive procedure, it lowers the costs associated with litigation and proving damages[9]. In construction contexts like those in developing nations, where time overruns in construction projects are common, LAD clauses are especially important. The enforcement of such a clause can, however, be problematic and clients must ensure that the LAD amount is not a penalty. A sum inserted as LAD must be a true pre-estimate of damages in order for it to be enforceable. However, LADs are frequently based on amounts included in earlier contracts of a similar nature and are not a true pre-estimate of the damages to be suffered by the client in many building and civil engineering contracts[10].

[5] Lynch MB, "The Employer's Risk?" (2003) <http://www.building.hk/forum/09_03employer.pdf> accessed September 10, 2023
[6] HR MT, Smith MG and Cummings MD, "Enforcement of Liquidated Damages" (1995) <https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29LA.1943-4170.0000390> accessed September 5, 2023
[7] "GLOBAL CONSTRUCTION DISPUTES REPORT 2018" (Arcadis 2018)
[8] ibid
[9] ibid (n1)
[10] Seeley MI, *Quantity Surveying Practice* (2nd edn, ed Globe Press London 1984)

IV. Pre-Contractual Agreements on Liquidated Damages: Permissibility and Limitations

In accordance with Section 74 of the Indian Contract Act, 1872,[11] parties are allowed to specify a predetermined amount, termed as liquidated damages, to be paid by a contractor to the employer in case of contractual breaches. This provision stipulates that the party aggrieved by the breach is entitled to receive the specified sum, regardless of whether actual losses can be proven. Several key principles have been established through judicial interpretation of this section: firstly, the liquidated damages must be reasonable; secondly, the burden of proving the occurrence of damage or loss rests with the claimant; thirdly, the court must determine that the liquidated damages represent a genuine pre-estimate of potential damages; fourthly, even if there is a possibility of proving actual loss, such proof is necessary; fifthly, the evidence of loss can be circumstantial, without requiring exact numerical precision; sixthly, the contractually agreed amount serves as a maximum limit for the damages awarded, not an automatic award; and finally, when parties agree on a genuine pre-estimated sum as liquidated damages, they effectively waive their right to claim an unspecified amount as damages.

V. Contracts With Pre-Determined Mechanisms For Breach Events

In some contracts, the parties stipulated at the time of execution a sum that will be paid as liquidated damages in the event that the contract is broken. A liquidated damages clause is described as "a contractual provision that determines in advance the measure of damages if a party breaches the agreement" by The Black's Law Dictionary[12]. The court may award any amount of money that is reasonable, but not more than the sum agreed upon by the parties, in such cases where the amount payable in the event of contract breach is predetermined. The question which therefore begs consideration is what quantum should be specified in the liquidated damages clause and whether the entire amount stipulated in the liquidated damages clause may be awarded in case of breach. In Kailash Nath Associates v. Delhi Development Authority another[13], the Supreme Court gave this issue considerable thought and noted that only if the pre-estimate of damages is accurate can the party alleging a breach be awarded the full amount specified in the liquidated damages clause. The court has the authority to award sums that it deems reasonable while staying within the bounds of the contract when

[11] Indian Contract Act 1872, s 74
[12] Black HC, A Dictionary of Law (1891)
[13] (2015) 4 SCC 136

determining the extent of damages sustained. The Court continued by noting that although courts have the authority to award just compensation, the liquidated damages specified in the contract would be the maximum amount and the Court could not grant any compensation above that amount.

According to the Supreme Court's ruling in the case of Kailash Nath[14], even when the parties to a contract have agreed upon a fair pre-estimate as a benchmark for damages (also known as liquidated damages), the party alleging breach must still persuade the arbitrator of the loss incurred and, in some cases, the extent to which it occurred. Is this a change from earlier established trends? In the not-too-distant past, the Supreme Court in the case of ONGC vs Saw pipes ltd[15] ruled that it would be challenging to demonstrate the precise loss or damage that the parties sustain as a result of the breach of a contract's liquidated damages clause. If the parties had pre-estimated the loss after having a clear understanding of it, it would be completely unjustified to draw the conclusion that the party who had broken the contract was not responsible for compensating the other party. It would violate the Indian Contract Act's Sections 73[16] and 74[17].

VI. Travelling Beyond Pre-Determined Amounts in the Event of Any Breach

The Supreme Court correctly acknowledged that there are contracts that do not include pre-estimated damages for all types of breaches in Steel Authority of India Limited v. Gupta Brother Steel Tubes Limited[18] and that in such circumstances, reliance cannot be placed solely on the pre-determined amount agreed upon between the parties. In this regard,

The court said that just because a contract includes a clause specifying a fixed amount of money (liquidated damages) to be paid if one party breaks the contract, it doesn't mean that this clause automatically covers every possible way the contract could be broken.

This conclusion was drawn because the liquidated damages clause in that case did not cover all possible contract breaches. While the majority of contracts contain a comprehensive liquidated damages clause, there are some situations where the contract may not include a provision for pre-determined damages, and there will always be some breaches for which there

[14] ibid
[15] (2003)5SCC 705.
[16] Indian Contract act 1872, s73
[17] Indian contract act 1872 s 74
[18] (2009) 10 SCC 63.

will be no pre-estimated damages. Although it should be noted that Section 73 of the Contract Act would serve as a guide for calculating undetermined damages (where there is no agreement as to the amount payable in the event of a contract breach), whether this opens a Pandora's box must be weighed against skilful drafting of contract clauses and tests of advocacy.

The two rules established in the renowned English case[19] on consequential damages resulting from contract breach are included in Section 73 of the Contract Act and are as follows:

- The damages that the other party should be awarded for the breach of contract should be those that can be considered to have arisen naturally, that is, in accordance with the normal course of events, from the breach of contract itself[20] or
- As the likely outcome of the contract's breach, such as may be logically assumed to have been in both parties' minds at the time the contract was made[21].

It is discernible from both judicial reasoning and various factual scenarios that liquidated damages clauses do not invariably provide full recompense to the injured party. Consequently, in the context of construction contracts, it becomes imperative for courts to give due consideration to the assessment of unliquidated damages. This endeavour, however, presents a formidable challenge. To address this issue, there has been a growing adoption of specific mathematical principles as reasonably precise instruments for quantifying losses.

VII. MATHEMATICAL PRINCIPALS USED TO CALCULATE DAMAGES

The Supreme Court's decision in the Brij Case[22] was one of the first times the Court made the observation that it would not be necessary to examine the work executed in minute detail; rather, a broad assessment of the same would be sufficient when deciding on a claim for loss of profit. The Court continued by citing Hudson's Building and Engineering Contracts[23] and noting that "the evidence given in litigation on many occasions suggests that the head office overheads and profits is between 3 to 7% of the total price of cost" for major contracts that are subject to competitive tender on a national basis.

The tests in practise are

[19] Hadley & Anor v Baxendale & Ors, [1854] EWHC Exch J70.
[20] ibid
[21] ibid
[22] AIR 1984 SC 1703.
[23] Dennys MN, Clay MR and Chambers MA, Hudson's Building and Engineering Contracts (14th edn, Sweet & Maxwell 2021)

- Hudson Formula: In Hudson's Building and Engineering Contracts[24], Hudson formula is stated in the following terms: *'(Contract head office overhead and profit percentage) X (Contract sum/Contract period) X (Period of delay)'*
- Emden Formula[25]:the Emden formula is stated in the following terms: *'(Head office overhead and profit/100) X (Contract sum/Contract period) X (Period of delay)'*
- Eichleay Formula:[26]

STEP 1

(Contract billings/Total billings for contract period) X (Total overhead for contract period) = Overhead allocable to the contract

STEP 2

(Allocable overhead/Total days of contract) = Daily overhead rate

STEP 3

(Daily contract overhead rate) X (Number of days of delay) = Amount of unabsorbed overhead

VII. COMPARISON OF LIQUIDATED DAMAGES PROVISIONS: BOSTON HARBOR PROJECT VS. CENTRAL ARTERY/TUNNEL PROJECT

Examples of the various methods used to determine liquidated damages include two significant Boston projects. The cleanup of Boston Harbour, which had become severely polluted as a result of rapid industrial development and population growth, was mandated by a court in 1986. Numerous contractors collaborated to complete the project's work, which cost over $1 billion. The Massachusetts Water Resources Authority (MWRA) established liquidated damages as a result of the contractors missing those deadlines after the court also established specific project milestones. MWRA proportionally divided each contractor agreement to determine what portion of the project each contract represented in order to determine the total damages. These numbers were then used to calculate MWRA's "extended cost" for the project, which included "the costs of construction management, design services, in-house project management costs, utilities, power, water, and the wide variety of support contractors on the site during the

[24] ibid
[25] Markanda DP, Emden's Building Contracts and Practice (9th edn, LexisNexis 2014)
[26] "Eichleay Formula - Government Contracting - Cohen Seglias" (Cohen Seglias, August 8, 2018) <https://www.cohenseglias.com/contracting-database/eichleay-formula/>

construction period." Widely referred to as the "Big Dig," the Central Artery/Tunnel Project was a huge project in Boston that required rerouting Interstate Highway 93 via a newly built tunnel in the centre of the city. The Massachusetts Highway Department (MHD) took great care in calculating the liquidated damages for this project. In contrast to the Boston Harbour cleaning effort, which applied liquidated damages to all parties, the MHD's approach included estimates of management and other related expenditures in addition to historical data that was modified for effect likelihood. This case-by-case approach decreased the possibility of successful legal challenges by ensuring that liquidated damages were calculated more accurately and specifically for each set of facts.
The MHD's method showed greater sensitivity since it took into account things like past precedents, the possibility of different outcomes, and detailed cost projections. This calculated strategy reduced the possibility of disagreements and improved the general integrity of the liquidated damages determination procedure. In the end, this meticulous approach helped to ensure easier project execution and prevented any legal obstacles, which helped to manage the Central Artery/Tunnel Project successfully.

VIII. CONCLUSION

In conclusion, the construction sector, particularly in emerging economies like India, plays a pivotal role in driving foreign investment and global economic growth. As demonstrated by the significant increase in foreign direct investment (FDI) over the past two years, construction projects, especially infrastructure development, have become magnets for capital inflow. According to PriceWaterCoopers' Global Construction 2030 research, nations like China, the United States, and India are expected to spearhead global construction growth, accounting for a substantial 57% of all anticipated expansion by 2030. This expansion signifies the sector's enduring importance and its capacity to stimulate economic activity. Within the realm of construction contracts, the concept of liquidated damages holds particular significance. Liquidated damages clauses serve as vital instruments for addressing delays and breaches in construction projects. They provide a structured mechanism for compensating parties affected by breaches, thereby reducing disputes and minimizing the need for protracted and costly litigation. However, the enforceability of these clauses' hinges on their reasonableness and their ability to genuinely pre-estimate potential damages.

The legal landscape, particularly in India, offers guidance on the permissibility and limitations of liquidated damages. Courts have emphasized the importance of reasonableness, burden of

proof, and the need for genuine pre-estimates when considering liquidated damages in construction contracts. The Indian Contract Act of 1872 provides the framework for these determinations, ensuring that parties do not use liquidated damages as punitive measures but rather as reasonable compensation for anticipated losses. Moreover, the construction industry has witnessed the emergence of mathematical principles for calculating unliquidated damages, providing a more precise approach to quantifying losses resulting from delays and breaches. These principles, including the Hudson Formula and Emden Formula, have enabled a fairer assessment of damages in complex construction projects. In practice, the choice of method for determining liquidated damages can significantly impact contract outcomes. As seen in the comparison of the Boston Harbor Project and the Central Artery/Tunnel Project, tailored approaches to calculating damages are often more pragmatic and less prone to legal challenges.

In summary, the construction sector remains a linchpin of economic growth and foreign investment. Liquidated damages clauses, when structured reasonably and in accordance with legal principles, offer essential tools for risk mitigation and dispute resolution in the industry. As the global construction landscape continues to evolve, a nuanced understanding of these clauses and their practical applications will be indispensable for all stakeholders involved in construction projects, ensuring that the sector continues to drive growth and prosperity on a global scale.

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