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Liquidated Damages: Testing when in Time the Intent Test is Applied

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This research paper examines the issue of whether United States courts demonstrate a trend in preference for when in time the intent test is applied in ascertaining the validity of a liquidated damages clause. Judicial opinions dating from 1853 to 1991 formalize the study population. Retrieval of judicial opinions are from official and unofficial legal reporters for the United States. Of the 223 selected appellate court cases, 175 met the population parameters. Data derived from these judicial opinions were statistically tested by: (a) the chi-square test for binomial data, and (b) the Stuart-Cox sign test for trend analysis. Results of the chi-square test reveal that at present the courts demonstrate a preference for applying the intent test at the time of contract when construing the validity of a liquidated damages clause. Based on the Stuart-Cox sign test, the current application preference of the courts is in the direction of apply the intent test at the time of contract when determining the validity of a liquidated damages clause, there is, however no presence of a statistical trend that would allow one to conclude that this is the preferred application in the future.

Key Words: Liquidated Damages, Three-Prong Test, Intent Test

Introduction

Determining the amount of damages recoverable for a breach of contract is a difficult and expensive task (Corbin, 1964). In an attempt to fix damages in advance of a future defined breach, parties to a construction contract normally include a liquidated damages clause (Dunbar, 1959). In construction contracts, liquidated damages are usually assessed when the contractor fails to attain substantial completion by a specified date, barring excusable delays (Fleder and Smith, 1986). Substantial completion is achieved when the project is sufficiently complete, enabling the owner to take possession and use the facility for its intended purpose (Jervis and Levin, 1988). If no liquidated damages clause exists within the contract, the contractor is liable for the actual damages caused by its delay (Simon, 1979). Damages for delay are considered consequential damages because they flow naturally from the direct breach (Farnsworth, 1990; Simon, 1989). Typical delay damages include harm to future business prospects, lost credibility, and lost opportunity (Jervis and Levin, 1988).

The use of a liquidated damages clause in a contract serves the goal of efficiency and predictability and, thereby makes it easier for a party to balance the anticipated costs of performance against the risk exposure of breach (Hunter, 1986). Such clauses are best suited for situations where it is impossible to introduce evidence as to the reasonable rental value of things such as bridges, highways, and sewer systems (Acret, 1986). From the standpoint of the party who promises to pay liquidated damages, the clause creates a more definite obligation in the

event a contractual breach occurs, thus establishing a maximum limit on the contractual liability amount (Dunbar, 1959). An owner, on the other hand, may not elect to waive the liquidated damages clause in an attempt to recover actual damages due to a delay, but is still entitled to recover actual damages for breaches other than late completion (Peckar, 1972).

A contractual provision for pre-agreed damages that has been fairly negotiated, absent some unconscionable behavior such as fraud or duress, generally benefits the parties to a contract (Brizzee, 1991). However, mutual acceptance of a liquidated damages clause by the contracting parties, at the time of contract formation does not guarantee that the clause will be held valid in a court of law regardless of the label the parties place upon it (Gantt and Breslauer, 1967). Thus, a liquidated damages provision that is ruled a penalty by the court will not be enforced (Williston and Thompson, 1938). To be held valid, a liquidated damages clause must represent a good-faith effort to estimate in advance the actual damage that will probably result for pre-defined breach (Simon, 1979). In contrast, a penalty clause is not a pre-estimate of probable actual damages, but instead functions as a contractual punishment designed to prevent the breach (Sweet, 1972, et al).

The question that logically follows the above discussion is: How do the courts ascertain the legal difference between a valid liquidated damages clause and an invalid penalty provision? In determining whether a liquidated damages clause is legally enforceable, the US courts apply a three-prong test. The three-prong test includes: (a) the intent test, (b) the difficulty test, and (c) the reasonable test (Kaplan, 1977; Calamari and Perillo, 1987).

The intent test is based on the objective theory of assent. Application of this test places importance on whether the parties intended to liquidate damages in advance on the basis of the parties' acts and words (Farnsworth, 1990). The parties' actions are judged by the standard of reasonableness. The words of the parties are given their clear meaning by the courts when interpreting the contract language (Kaplan, 1977). Finally, the courts examine the circumstances surrounding the parties at the time of contract (Corbin, 1964). Thus, the intent test examines the actions, words, and circumstances of the contracting parties at the time of contract execution.

When the courts apply the difficulty test, great weight is placed on the ascertainment of the contractual damages and the degree of uncertainty involved in the estimate (Corbin, 1964). The greater the degree of difficulty in correctly calculating the accuracy of likely future damages, the more valid the liquidated damages clause becomes in the eyes of the court. Conversely, the more ascertainable or less difficult the actual damages are to estimate, the more likely the court will be to construe the agreed damages clause as a penalty provision and thus invalid. (American Jurisprudence, 22, 1964). Prentice (1937) in writing about liquidated damages, in essence maintains that the difficulty test refers to how readily capable and improbable a calculation for compensable damages will be to ascertain. The greater the improbable nature of the damages is to make certain, the more favorably the court views such a covenant as a valid operable liquidated damages provision (Prentice, 1937; American Jurisprudence, 13, 1964; Calamari and Perillo, 1987).

The reasonable test measures the liquidated damages amount in view of the actual damages suffered by the breach. Should the court construe the proposed damages as significantly greater than the actual damages, then the liquidated damages proviso is generally determined to be a

penalty provision and ruled invalid (Corbin, 1964). The reasonable test measures the probable approximation of the uncertain compensatory damages likely to occur in the future (American Jurisprudence, 13, 1964). The operative constructs used by the US judicature in its application of the reasonable test are: “reasonable forecast” or an “honest forecast” (Dunbar, 1959). Reasonableness further draws on the notion of disproportionality vis-à-vis the anticipated loss from the nonperformance. The larger the fixed sum is in relation to the anticipated loss resulting from the breach, the more likely the courts will rule the clause a penalty provision and, thus, unenforceable (Koezuka, 1990; Prentice, 1937).

Review of the Literature

Commentators on the subject of liquidated damages maintain that the courts have encountered difficulty in establishing the proper test to distinguish a valid liquidated damages clause from a penalty provision (Murray, 1974; Kaplan, 1977). The particular language used in the contract must be considered, but it is not necessarily conclusive (American Jurisprudence, 1964).

The confusion the courts have experienced in distinguishing between valid liquidated damages clauses and invalid penalty provisions arises not from an irrational legal rule, but from a failure to perceive a rational policy underlying the distinction between tests applied (Clarkson, Miller, and Muris, 1978). Before creating or similarly contracting for a contract for construction, the party should know when a liquidated damages clause will be ruled valid by the court (Dunbar, 1959). The mere labeling of a sum to be paid under a contractual liquidated or stipulated damages agreement will not prevent the court from treating the clause as a penalty provision (Williston and Thompson, 1938). The clause must be tailored to the particular type of delay to which it is expected to apply (Sweet, 1989). An improperly constructed provision for liquidated damages is subject to condemnation by the court and, thereby ruled nugatory. In the event a liquidated damages clause is ruled invalid and thus inoperable by the court, the owner must prove actual damages incurred as a result of the delay (Chirelstein, 1990). This scenario could prove costly to both the owner and the contractor since actual delay damages can be difficult, if not impossible, to measure from an evidentiary standpoint.

Although the general principles for testing the validity of a liquidated damages clause are well defined, it is the application of each test and the time in which the test is applied that creates much controversy within the scholarly literature (Gantt and Breslauer, 1967; Koezuka, 1990). The controversy supposedly exists because the courts are not entirely in agreement as to which of the three-prong test apply, or whether all three tests must apply simultaneously when construing the validity of the liquidated damages provision (Murray, 1974). Kaplan (1977) suggests that each test receives unequal treatment in application both in time the tests of applying all three prongs separately or jointly, and when in time the tests are to be applied. Murray (1974) points out that the test can be applied by the courts at three distinct points in time: (a) at the time of the original writing of the contract, (b) at the time of trial (after the damages have actually occurred), or (c) the time is undefined by the courts (no discussion within the court opinion regarding test application). Thus based upon the literature, one would conclude that presently the courts do not demonstrate any consistency or application preference in applying the three tests and when in time the courts apply the test to formulate a decision criteria for ascertaining the

validity of a liquidated damages clause.

Importance of the Study

In light of the above discourse, it is not infrequent for the prime contractor to contend that a liquidated damages clause is in actuality a penalty provision (Ward, 1985). In this context, the contractor sues the owner for the balance on account for monies held in retainage and/or relief of the liquidated damages in general. Owing to the supposed confusion by the courts in ascertaining the validity of a liquidated damages clause, the managerial problem encountered by the contractor is whether or not to pursue the legality of same. The management decision to challenge the validity of such a clause creates a business risk decision that may possibly threaten the financial position of the firm (Hardie, 1981). Within this risk decision is the inherent legal and managerial question of whether or not the construction organization should challenge the validity of a liquidated damages clause by initiating formal legal proceedings in view of the supposed uncertain preference of the courts in this area of contract law.

The managerial risk is the uncertainty of receiving a disfavorable court award as a result of the supposed inconsistencies in court decisions, thereby incurring further financial loss than otherwise would be the case. In order to make informed risk management decisions and further mitigate a degree of uncertainty, a good management decision requires probabilistic projections on the certainty of future outcomes. Despite this pervasive requirement by management, currently there exists a paucity in the literature regarding studies that apply statistical analyses to determine specifically the application preference and time of preference by the courts relative to the intent test prong (Sweet, 1972). Although the literature concerning liquidated damages is extensive, erudites on the subject appear satisfied with broad generalities encompassing statements about the extreme uncertainties in this area of law by placing reliance on interpretative qualitative analysis of past judicial decisions. Although such a priori knowledge is meritorious, it unequivocally lacks scientific investigation. Therefore, the purpose of this research study is to provide management in the construction industry with a quantitative study that empirically measures both the courts' application preference for when in time the court applies the intent test when construing the validity of a liquidated damages clause. In this effort, it is the researcher's intent to ascertain the probabilistic outcome for such an event (probabilistic pattern of preference for one time dimension) and similarly whether such a pattern of opine display a future trend.

Methodology/Limitations

This study will employ the quasi-experimental design content analysis for archival data. The sample will consist of the entire population of appellate level court cases involving an owner-contractor dispute over a liquidated damages clause in a construction contract which have occurred within the United States from 1858 through 1991. The cross-sectional data represents non-experimental correlational historical data that shall be statistically tested by the chi-square test statistic for a binomial one-way dimensional classification.

Case data will be collected using a written survey-type document by researchers and research assistants familiar with the subject matter. Questions on the data document are to be answered only from opinions issued by the court trying the case at hand. If that court's opinions do not explicitly answer a question on the data document, an *undefined* selection is to be chosen for that question. Court opinions cited from other cases which are not clearly applied to the case at hand shall have no influence on the answers selected on the data document.

Limitations

This study is confined to cases involving an owner-contractor dispute over a liquidated damages clause in a construction contract. Cases that deal with contractor-vendor, contractor-subcontractor, or non-construction disputes over liquidated damages clauses were excluded from the study. This study will consider only appellate level court cases since documentation on lower court decisions is not readily available. The two other validity test, reasonableness and difficulty, which have historically been applied by the courts, will not be a part of this study.

Research Statement

Conceptual Research Problem Statement

This study will measure the application preference for when in time the intent test has been applied by the United States' appellate courts within when the courts are attempting to ascertain the validity of liquidated damages clause in a construction contract.

Research Problem Statement

Measure the application preference for when the intent test has been applied; at time of contract formation versus at time of trial versus at time undefined.

Conceptual Research Hypothesis Statement

Court decisions for all judicature jurisdictions at the appellate level within the United States demonstrate an application preference for when in time the intent test is to be applied when determining the validity of a liquidated damages clause.

Research Hypothesis Statement

There is significant application preference for when in time the courts apply the intent test when construing the validity of a liquidated damages clause.

Results

For data reporting purposes, the population of cases was arranged chronologically and divided into 10-year intervals, as shown in Table 1. Over the population of 175 court cases included in

this study, the intent test was applied in 70 cases, or 40% of the time. The intent test was applied at the time of contract formation in 58 of the 70 cases, or 83% of the time. The intent test was applied at the time of trial in 2 of the 70 cases, or 3% of the time. The intent test was applied at time undefined in 10 of the 70 cases, or 14% of the time.

Table 1

Frequency Distribution for the Intent Test: 10-Year Intervals

	Chronological Time Intervals														
Intent Test	1858 1867	1868 1877	1878 1887	1888 1897	1898 1907	1908 1917	1918 1927	1928 1937	1938 1947	1948 1957	1958 1967	1968 1977	1978 1987	1988 1991	TOTAL
Case Count for Interval	1	1	3	11	22	25	7	4	8	10	12	20	33	18	175
Test Not Applied	1	1	1	2	12	12	4	1	5	3	8	16	24	15	105
Test Applied	0	0	2	9	10	13	3	3	3	7	4	4	9	3	70
Time of Contract	0	0	2	8	5	11	2	3	3	7	4	4	6	3	58
Time of Trial	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
Time Undefined	0	0	0	0	5	2	1	0	0	0	0	0	2	0	10

Category	%
Intent test not applied (105 / 175) =	60%
Intent test applied (70 / 175) =	40%
Intent test applied at time of contract (58 / 70) =	83%
Intent test applied at time of trial (2 / 70) =	3%
Intent test applied at time undefined (10 / 70) =	14%

Figure 1 displays the percentages of cases in which the intent test was applied in each of the 10-year intervals. The percentages were calculated from the data given in Table 2.

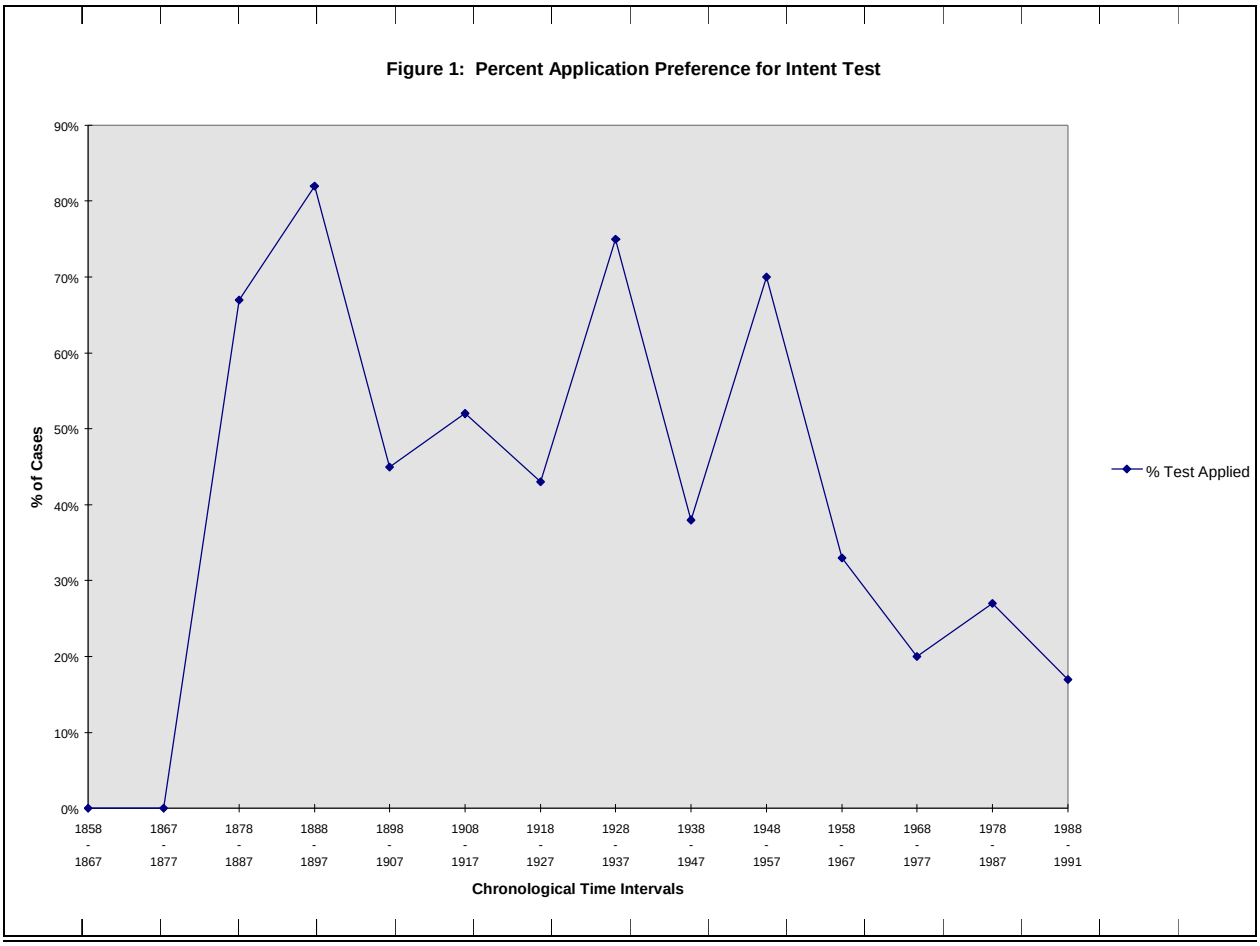

Figure 1. Percent application preference for intent test.

Figure 2 displays the percentages of cases in which the intent test was applied at the time of contract formation, time of trial, and time undefined for each of the 10-year intervals. The percentages were calculated from the data given in Table 3. The selection of *time undefined,* for when in time the intent test was applied, was chosen when it could not be determined, from the case content, whether the test was applied at the time of contract formation or at time of trial. For the one-way classification matrix shown in Table 4, a chi-square calculated statistic equaling 78.77 was calculated. The chi-square critical value with degrees of freedom two, with an ? = 0.05 criterion level of significance equaled 5.99. This statistical value of significant difference substantiates the rejection of the null hypothesis, there is no application preference for when in time the courts apply the intent test; and supports the conclusion that when the courts do apply the intent test, there exists a patterned preference by the courts for a particular when in time classification category.

Table 2

Percent Application Preference for Intent Test

Interval Number	Time Interval	Cast Count for Interval	Test Applied	% Test Applied	Test Not Applied	% Test Not Applied
1	1858 - 1867	1	0	0%	1	100%
2	1867 - 1877	1	0	0%	1	100%
3	1878 - 1887	3	2	67%	1	33%
4	1888 - 1897	11	9	82%	2	18%
5	1898 - 1907	22	10	45%	12	55%
6	1908 - 1917	25	13	52%	12	48%
7	1918 - 1927	7	3	43%	4	57%
8	1928 - 1937	4	3	75%	1	25%
9	1938 - 1947	8	3	38%	5	63%
10	1948 - 1957	10	7	70%	3	30%
11	1958 - 1967	12	4	33%	8	67%
12	1968 - 1977	20	4	20%	16	80%
13	1978 - 1987	33	9	27%	24	73%
14	1988 - 1991	18	3	17%	15	83%
	TOTALS	175	70	40%	105	60%

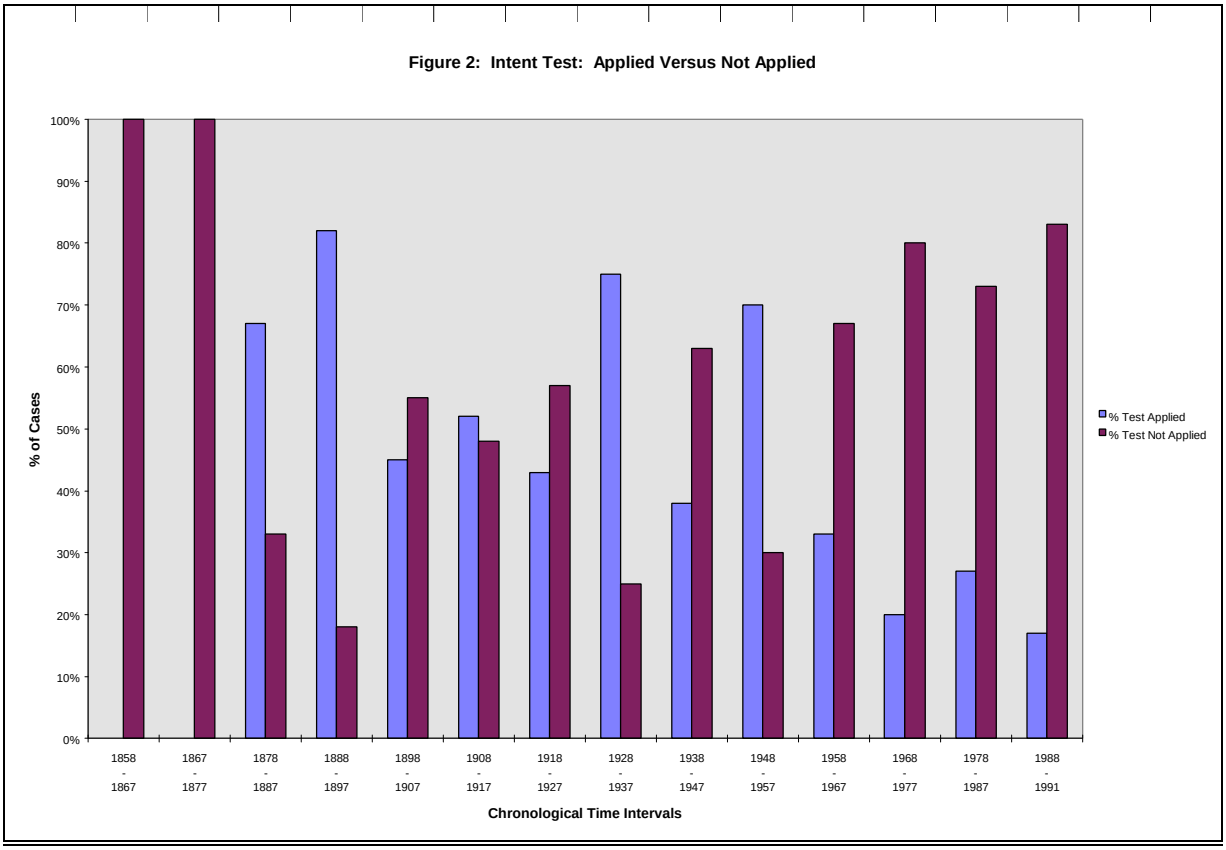

Figure 2. Percent application preference for when in time courts apply the intent test.

Table 3

Percent Application Preference for When in Time Courts Apply the Intent Test

Interval Number	Time Interval	Cast Count for Interval	Time of Contract	Time of Trial	Time Undefined
1	1858 - 1867	1	0%	0%	0%
2	1867 - 1877	1	0%	0%	0%
3	1878 - 1887	3	100%	0%	0%
4	1888 - 1897	11	89%	11%	0%
5	1898 - 1907	22	50%	0%	50%
6	1908 - 1917	25	85%	0%	15%
7	1918 - 1927	7	67%	0%	33%
8	1928 - 1937	4	100%	0%	0%
9	1938 - 1947	8	100%	0%	0%
10	1948 - 1957	10	100%	0%	0%
11	1958 - 1967	12	100%	0%	0%
12	1968 - 1977	20	100%	0%	0%
13	1978 - 1987	33	67%	11%	22%
14	1988 - 1991	18	100%	0%	0%

Table 4

Chi-Square Statistical Test: Application Preference of Courts for When in Time Courts Apply the Intent Test

Intent Test	**(f_o)**	**(f_e)**	**%** ?	**(f_o-f_e)**	**(f_o-f_e)^2**	**$\frac{(f_o-f_e)^2}{(f_e)}$**	**% split**
Time of Contract	58	23.33	149.00	34.70	1204.09	51.68	83
Time of Trial	2	23.33	91.43	-21.33	454.97	19.47	3
Time Undefined	10	23.33	57.14	-13.33	177.69	7.62	14
Totals	70	70.00				78.77	100

Note. The expected frequency of 23.30 indicates a 33.33% split in court application preference. A 33.33% split outcome represents no application preference by the courts for when in time the intent test is applied.

$f_e = \underline{(70)} = 23.30$
(3)
X^2 statistic = (32.93) + (12.84) + (4.55)
X^2 statistic = 78.77
X^2 critical = 5.99, d.f. = (3 - 1) = 2, significant, $p < 0.05$
X^2 statistic = 78.77 > X^2 table = 5.99, reject null hypothesis

A closer inspection of the data frequency counts reveals that the courts exhibit a statistically significant application preference for the when in time classification category time of contract. This nonrandom numerical deviation from the observed (f_o) and the expected (f_e) of 149%, or 34.7, represents the largest contributing numerical value to the chi-square significant value. This 149% numerical deviation in application preference in classification category time of contract is larger than would be expected by mathematical chance. This indicates that when the courts apply the intent test, to ascertain the legality of a liquidated damages clause, the preferred application time period is the classification category time of contract. A review of Figure 2 supports this conclusion. The data plot for Figure 2 is derived from the data contained in Table 3.
For the data plot contained in Figure 2, a Stuart-Cox sign test for presence of a trend was calculated for the time interval 1928 to 1991. Although the chi-square significant statistic

equaling 78.77 supports an application preference for the intent test for the classification category at time of contract, there is clearly a downward movement in time interval 1978 - 1987 for this application preference, while there simultaneously exists upward movement in the time of trial and time undefined categories. These application preference movements are subsequently followed by another upward movement in the former while simultaneously followed by downward movements in the latter period.

Figure 3 displays a plot of the application preference classification category apply intent test at time contract.

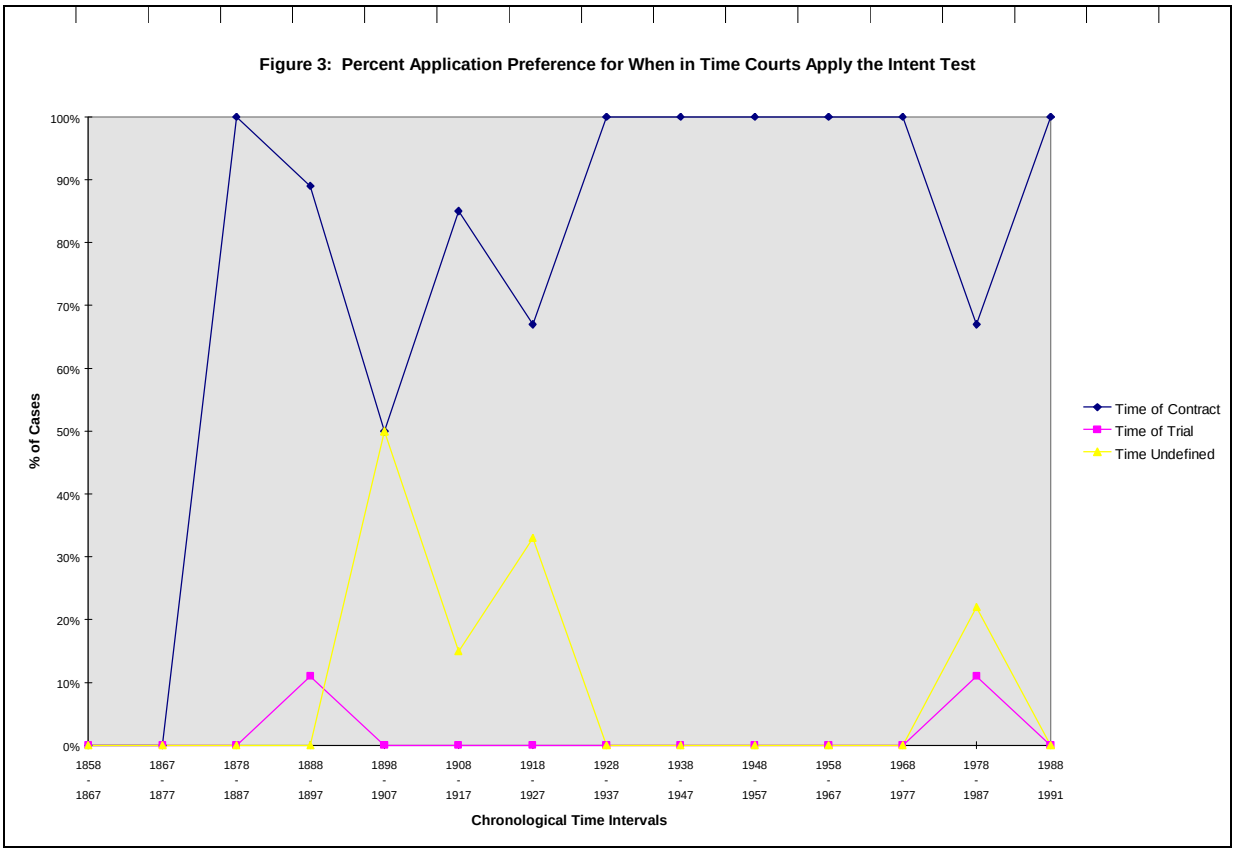

Figure 3. Intent test--applied at time of contract.

Tables 5 and 6 contain the data enumeration and calculations for the trend analysis time of contract. At $P(K \leq 313, 0.50) = 0.250$ at ?/2 = 0.025, the null hypothesis cannot be rejected because there is no trend present. It is, therefore, concluded that the data for the inspected time interval 1928 to 1991 do not indicate the presence of a trend in either direction.

Table 5

Data Compilation for Trend Analysis for When in Time Courts Apply Intent Test: Time of Contract from 1858 to 1991

Time Interval	(X_i) % Cases Time of Contract	(Y_i) Time Interval	% of Cases Time of Contract	$(X_i - Y_i)$ Sign Test
1858 - 1862	0.00	1928 - 1932	100.00	-
1863 - 1867	0.00	1933 - 1937	100.00	-
1868 - 1872	0.00	1938 - 1942	100.00	-
1873 - 1877	0.00	1943 - 1947	100.00	-
1878 - 1882	0.00	1948 - 1952	100.00	-
1883 - 1887	100.00	1953 - 1957	100.00	0
1888 - 1892	66.67	1958 - 1962	0.00	+
1893 - 1897	100.00	1963 - 1967	100.00	0
1898 - 1902	100.00	1968 - 1972	100.00	0
1903 - 1907	16.67	1973 - 1977	100.00	-
1908 - 1912	60.00	1978 - 1982	66.67	-
1913 - 1917	100.00	1983 - 1987	0.00	+
1918 - 1922	100.00	1988 - 1991	100.00	0

Table 6

Data Calculation for Trend Analysis for When in Time Courts Apply Intent Test: Time of Contract from 1928 to 1991

Time Interval	(X_i) % Cases Time of Contract	(Y_i) Time Interval	% of Cases Time of Contract	$(X_i - Y_i)$ Sign Test
1928 - 1932	100.00	1963 - 1967	100.00	+
1933 - 1937	100.00	1968 - 1972	100.00	0
1938 - 1942	100.00	1973 - 1977	100.00	0
1943 - 1947	100.00	1978 - 1982	66.67	+
1948 - 1952	100.00	1983 - 1987	0.00	+
1953 - 1957	100.00	1988 - 1991	100.00	0

Statistical Hypothesis:
H_o: There is no trend present in the data.
H_1: There is either an upward trend or downward trend.
n?= 13, n = 3, K = 3 positive differences, ? /2 = 0.025

Test Statistic:
P (K $\leq$ 3? 3, 0.50) = 0.1250 * 2 = 0.250
P = 0.250 > ? /2 = 0.025
Decision: Cannot reject null hypothesis; there is no trend present in the data.

Conclusions

Occurrence of the application of the intent test at the time of contract in 83% of the court cases in the study supports the hypothesis statement by demonstrating an association between the application of the intent test at the time of contract and validity of liquidated damages clauses in construction contracts. The graphical representation of the percentage of cases in which the intent test was applied (Figure 1), however, exhibits disparity in the data in two time frames, from 1858 through 1887 and from 1928 through 1947. For the time period from 1858 through 1887, only five cases were found, an average of 1.7 cases per 10-year interval. For the time period from 1928 through 1947, only 12 cases were found, an average of six cases per 10-year interval. By comparison, the average case count for all of the other 10-year intervals is 17.6 cases per interval. These calculations are presented below Table 1. The columns containing the data for the intervals in question are shown shaded in Table 1. If these intervals were omitted from Figure 1, the percentage of cases in which the intent test was applied would vary between approximately 70% and 90%, substantially decreasing the variation between the intervals.

The most consistent time of application of the intent test, based on the results of the study, was found to be at the time of contract formation. This outcome agrees with the legal literature and similarly supports the experimental hypothesis. Of these cases in which the intent test was applied, the application preference was at the time of contract formation (83% of the time) (Table 1).

In comparison to the overall percentages of application, the interval percentages, in Figure 2, display when in time the intent test has been applied over time increments of 10 years each. This graphical representation provides a technique for observing increasing or decreasing trends that may have occurred during the measurement period. Although no obvious trends are apparent from Figure 2, the graph indicates that in the majority of the intervals, the intent test was applied at the time of contract formation. This consistent preference for the time of contract formation by the court further supports the historical importance of the intent test, as applied in view of future damages.

Based on the results of this study, a drafter of a contract for construction has good reason to create a liquidated damages clause with careful attention. The study confirms the importance of the intent test, applied primarily at the time of contract formation. To satisfy this test, a drafter of a liquidated damages clause in a construction contract must be prepared to prove the stipulated amount is an accurate pre-estimate of probable damages that would occur from the breach. Maintaining documentation to support calculations of probable damages would provide critical support for the validity of the liquidated damages amount if the clause were to be challenged in court.

The secondary issue of the application of the intent test at time of trial, which requires that the stipulated amount be proportionate to actual damages, is difficult, if not impossible, of estimation. Because the intent test has been applied most often at the time of contract formation, and accurate estimation of actual damages at the time of trial is improbable.

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