

4-29-2020

The Impossibility Doctrine in Commercial Contracts: An Empirical Analysis

Uri Benoliel

Follow this and additional works at: <https://brooklynworks.brooklaw.edu/blr>



Part of the [Commercial Law Commons](#), [Contracts Commons](#), and the [Law and Economics Commons](#)

Recommended Citation

Uri Benoliel, *The Impossibility Doctrine in Commercial Contracts: An Empirical Analysis*, 85 Brook. L. Rev. (2020).

Available at: <https://brooklynworks.brooklaw.edu/blr/vol85/iss2/3>

This Article is brought to you for free and open access by the Law Journals at BrooklynWorks. It has been accepted for inclusion in Brooklyn Law Review by an authorized editor of BrooklynWorks.

The Impossibility Doctrine in Commercial Contracts

AN EMPIRICAL ANALYSIS

Uri Benoliel[†]

INTRODUCTION

The doctrine of impossibility—under which a party is excused from performing a contract if a supervening event prevents compliance with the agreement¹—is fundamental in American contract law.² According to the conventional economic analysis of this doctrine, courts should not categorically excuse a party from fulfilling the contract when performance becomes impossible. Instead, courts should assign the loss caused by non-compliance to the contracting party who is the best risk bearer for said loss.³ As Professors Richard Posner and Andrew

[†] Faculty of Law, College of Law & Business. J.S.D. (UC Berkeley); LL.M. (Columbia University). I am grateful to Ricardo Ben-Oliel, Lisa Bernstein, Hanoch Dagan, Shahar Dillbary, and Robert Hillman for invaluable comments on earlier drafts of this article.

¹ ROBERT A. HILLMAN, *PRINCIPLES OF CONTRACT LAW* 354 (3d ed. 2014) (“When a supervening event, like [a] fire, makes performance impossible, contract law may excuse performance under the doctrine of ‘impossibility of performance.’”); ERIC A. POSNER, *CONTRACT LAW AND THEORY* 160 (2011) [hereinafter POSNER, *CONTRACT LAW AND THEORY*] (“Where it is impossible to comply with a condition, the party is excused from compliance.”); 30 SAMUEL WILLISTON & RICHARD A. LORD, *A TREATISE ON THE LAW OF CONTRACTS* 366 (4th ed. 2004) (“A contracting party has no duty to perform an obligation in the agreement if performance is rendered impossible . . . through no fault of its own . . .”).

² Rebecca H. Marek, *Continuity for Transatlantic Commercial Contracts After the Introduction of the Euro*, 66 *FORDHAM L. REV.* 1985, 2011 n.194 (1998) (“The doctrine of impossibility is well established in both English and American common law.” (quoting Gerhard Wagner, *In Defense of the Impossibility Defense*, 27 *LOY. U. CHI. L.J.* 55, 58 (1995))); John W. Hinchey & Erin M. Queen, *Anticipating and Managing Projects: Changes in Law*, *CONSTRUCTION LAW.*, Fall 2006, at 26, 26 (“The doctrine of impossibility has existed under American and English common law for centuries.”); S. Joe Welborn & Ryan Stringfellow, *“What Do We Do Now”: Advising Your Construction Industry Client When He Receives a Notice of Default and 48 Hours to Cure*, *CONSTRUCTION LAW.*, Winter 2014, at 24, 30 (2014) (same).

³ See, e.g., Richard A. Posner & Andrew M. Rosenfield, *Impossibility and Related Doctrines in Contract Law: An Economic Analysis*, 6 *J. LEGAL STUD.* 83, 117 (1977); Marta Cenini et al., *Law and Economics: The Comparative Law and Economics of Frustration in Contracts*, in *UNEXPECTED CIRCUMSTANCES IN EUROPEAN CONTRACT LAW* 33, 34 (Ewoud Hondius & Christoph Grigoleit eds., 2011) (“Efficiency requires allocating the risk to the

Rosenfield state in their widely cited article on the impossibility doctrine, “[E]conomic analysis suggests that the loss should be placed on the party who is the superior (that is, lower-cost) risk bearer.”⁴ Similarly, in their fundamental book, Professors Robert Cooter and Thomas Ulen assert, “If the impossibility doctrine in contract law were efficient . . . it would assign liability to the party who can bear the risk that performance becomes impossible at least cost.”⁵

The traditional economic analysis furthermore suggests that the superior risk bearer model is beneficial for both parties. The logic of this argument is as follows: by assigning the risk of non-performance to the cheapest risk bearer, the economic model minimizes the costs of remote risks.⁶ In doing so, the model maximizes the overall surplus from the contract, which can be divided by the parties.⁷

While the theoretical debate over the economic model is extensive,⁸ there are no systematic empirical studies aimed at directly exposing the parties’ actual preferences for the model. More specifically, no studies concentrate on the frequency with

parties who can bear it at least cost.”); ROBERT B. COOTER, JR. & THOMAS ULEN, *LAW AND ECONOMICS* 350 (6th ed. 2014); THOMAS J. MICELI, *THE ECONOMIC APPROACH TO LAW* 118 (2d ed. 2009) (economic theory suggests to “assign the risk to the superior risk bearer.”); Shirley R. Brener, *Outgrowing Impossibility: Examining the Impossibility Doctrine in the Wake of Hurricane Katrina*, 56 *EMORY L.J.* 461, 471 (2006) (noting the superior risk bearer model is “widely adopted in law and economics circles”); Robert A. Hillman, *Contract Excuse and Bankruptcy Discharge*, 43 *STAN. L. REV.* 99, 107 (1990) (“Economic analysts of law, for example, posit that courts should allocate the risk of an extraordinary event to the party better able to insure against it or to avoid it (the ‘superior risk bearer’)”); Urs Schweizer, *Breach Remedies, Performance Excuses, and Investment Incentives*, 28 *J.L. ECON. & ORG.* 717, 719 (2012) (“An early investigation of performance excuses from the law and economics perspective is due to Posner and Rosenfield (1977) who suggest that discharge should be allowed where the promisor is the superior risk bearer.”); Avishai Shachar, *From Income to Consumption Tax: Criteria for Rules of Transition*, 97 *HARV. L. REV.* 1581, 1593 n.52 (1984) (“Economic analysis suggests that the resulting loss should be placed on the superior risk bearer, that is, the party who can more efficiently insure against the particular risk in question.” (citing Posner & Rosenfield, *supra*, at 117)).

⁴ Posner and Rosenfield, *supra* note 3, at 117. Notably, according to Google Scholar, Posner and Rosenfield’s article was cited more than 600 times in scholarly writing. See Search for “Impossibility and Related Doctrines in Contract Law: An Economic Analysis,” *GOOGLE SCHOLAR*, [https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Impossibility+and+Related+Doctrines+in+Contract+Law%3A+An+Economic+Analysis&btnG=\[https://perma.cc/M98H-ZVRV\]](https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Impossibility+and+Related+Doctrines+in+Contract+Law%3A+An+Economic+Analysis&btnG=[https://perma.cc/M98H-ZVRV]).

⁵ COOTER, JR. & ULEN, *supra* note 3, at 350 (emphasis omitted).

⁶ *Id.* at 351 (“Interpreting the impossibility doctrine to assign liability to the lowest-cost risk bearer minimizes the costs of remote risks.”); Cenini et al., *supra* note 3, at 34–35 (noting under the superior risk bearer model, “the cost of remote risks would be minimi[z]ed”).

⁷ COOTER, JR. & ULEN, *supra* note 3, at 351–52 (“Minimizing the cost of remote risks maximizes the surplus from the contract, which the parties can divide between them.”); Cenini et al., *supra* note 3, at 34–35 (stating the contractual surplus, generated by the superior risk bearer model, “would be divided between the parties”).

⁸ See *infra* notes 47–53 and accompanying text.

which real-world contracts incorporate this model. This article aims to fill this research void. Focusing on the preferences of sophisticated parties to commercial contracts, this article indicates that the majority of contract parties prefer not to adopt the economic model.⁹ Instead, most parties prefer to be governed by the doctrine of impossibility, which lacks the traditional economic calculus.¹⁰

This article is structured as follows: Part I will provide a theoretical context for the empirical test of this study. First, it will briefly review the legal impossibility doctrine. Second, it will present the conventional economic analysis of the doctrine. Third, it will outline the significant differences between the legal doctrine and the economic analysis. Part II will present the empirical test of this study. It will review the data and discuss the methodology used for empirically testing the preferences of contract parties for the economic model. It will furthermore present the results of the test. Part III will respond to potential criticism of the results.

I. THEORETICAL BACKGROUND

A. *The Impossibility Doctrine: An Overview*

The rule of impossibility may discharge a party from its contractual obligations if a supervening event prevents its fulfillment of the contract.¹¹ For example, assume that an owner of a music hall promises to allow a musician to use the hall in order to perform a concert.¹² After the contract is made and just before the date set for the concert, the hall is destroyed by a fire, with no fault on the part of the owner. According to the doctrine,

⁹ See *infra* Section II.E.

¹⁰ See *infra* Sections I.C, II.E.

¹¹ See sources cited *supra* note 1.

¹² This example is based on the famous case of *Taylor v. Caldwell*. See *Taylor v. Caldwell* (1863) 122 Eng. Rep. 309 (K.B.); see also Curtis Bridgeman, *Reconciling Strict Liability with Corrective Justice in Contract Law*, 75 *FORDHAM L. REV.* 3013, 3035 (2007) (“The most famous impossibility case in which the defendant’s nonperformance was excused is *Taylor v. Caldwell*.”). Notably, this case originated the impossibility doctrine. See, JOHN EDWARD MURRAY, JR., *MURRAY ON CONTRACTS* § 113 (5th ed. 2011), LexisNexis (“The modern doctrine of impossibility of performance emerged from the case of *Taylor v. Caldwell* in 1863.”); Christopher J. Bruce, *An Economic Analysis of the Impossibility Doctrine*, 11 *J. LEGAL STUD.* 311, 323 (1982) (“The origin of the doctrine of impossibility lies in the case of *Taylor v. Caldwell*.”); Cenini et al., *supra* note 3, at 34 n.1 (“[*Taylor v. Caldwell*] is generally recognised as the first case involving impossibility as a defence . . .”).

the owner may be excused from performing his promise since the fire prevents the fulfillment of said promise.¹³

Under the doctrine of impossibility, three central categories of supervening events may discharge a promisor from the contract:¹⁴ (1) in a personal service contract, the death of the promisor, which prevents the performance of the service;¹⁵ (2) a change of law, after the contract has been made, which legally prevents compliance with the contract;¹⁶ or (3) the destruction of the subject matter of the contract—for example by a hurricane, flood or fire—which renders the fulfillment of the agreement physically impossible.¹⁷

A promisor who seeks to be excused under the impossibility rule must meet three central conditions: First, the promisor did not explicitly agree in the contract to assume the risk that performance will be prevented by the supervening event.¹⁸ Second, the promisor had no fault in the occurrence of that event.¹⁹ And third, the

¹³ HILLMAN, *supra* note 1, at 354 (“When a supervening event, like [a] fire, makes performance impossible, contract law may excuse performance under the doctrine of ‘impossibility of performance.’”).

¹⁴ See, e.g., *Specialty Tires of Am., Inc. v. CIT Grp./Equip. Fin., Inc.*, 82 F. Supp. 2d 434, 438 (W.D. Pa. 2000); *Straus v. Kazemekas*, 124 A. 234, 238 (Conn. 1924); *Ky. Lumber & Millwork Co. v. George H. Rommell Co.*, 78 S.W.2d 52, 54 (Ky. 1934); *Hous. Auth. of Bristol v. E. Tenn. Light & Power Co.*, 31 S.E.2d 273, 276 (Va. 1944).

¹⁵ *CNA Int’l Reinsurance Co. v. Phoenix*, 678 So. 2d 378, 380 (Fla. Dist. Ct. App. 1996) (“[D]eath renders a personal services contract impossible to perform.”); *Comdisco Disaster Recovery Servs., Inc. v. Money Mgmt. Sys., Inc.*, 789 F. Supp. 48, 52 (D. Mass. 1992) (“[I]t is implied as a condition of the contract that the death of that person . . . shall excuse performance.” (citation omitted)).

¹⁶ *Newport News & Miss. Valley Co. v. McDonald Brick Co.’s Assignee*, 59 S.W. 332, 334 (Ky. 1900) (“If subsequently to the making of contracts a statute is enacted which makes the performance of the contract unlawful, a legal impossibility supervenes, which releases the promisor from his obligation” (citation omitted)).

¹⁷ *Chase Manhattan Bank v. Traffic Stream (BVI) Infrastructure Ltd.*, 86 F. Supp. 2d 244, 255 (S.D.N.Y. 2000) (“Impossibility excuses a party’s performance only when the destruction of the subject matter of the contract or the means of performance makes performance objectively impossible.”); *Downs v. Rosenthal Collins Grp., L.L.C.*, 2011 IL App (1st) 1090970, ¶ 39 (Ill. App. Ct. 2011) (“Impossibility of performance is a contractual doctrine excusing performance where performance is rendered objectively impossible due to destruction of the subject matter of the contract” (internal quotation marks and citation omitted)); *Krause v. Bd. of Trs. of Sch. Town of Crothersville*, 70 N.E. 264, 266 (Ind. 1904) (“As to a general covenant, it is the law that the destruction of the subject-matter of the contract, thereby creating a physical or natural impossibility inherent in the nature of the thing to be performed . . . will discharge the covenant”).

¹⁸ *Opera Co. of Bos. v. Wolf Trap Found. for Performing Arts*, 817 F.2d 1094, 1098 (4th Cir. 1987) (noting that under the impossibility doctrine, the promisor “will be excused, unless he . . . expressly agreed in the contract to assume the risk of performance, whether possible or not”); *Jones v. Lujan*, No. 90-4173, 1991 U.S. App. LEXIS 13687, at *5 (10th Cir. June 25, 1991) (“[A] party to a contract that is impossible to fully perform may nonetheless be held to that contract if he agreed to assume the risk of the impossibility.”).

¹⁹ *Hellenic Lines, Ltd. v. United States*, 512 F.2d 1196, 1211 (2d Cir. 1975) (stating the impossibility doctrine applies “when the promisor is not ‘in contributing fault’” (quoting RESTATEMENT (FIRST) OF CONTRACTS § 457 (AM. LAW INST. 1932))); *Partridge v. Presley*, 189 F.2d 645, 648 (D.C. Cir. 1951) (noting under the impossibility doctrine, the “promisor will be excused unless . . . the impossibility was due to his fault”).

promisor neither knew nor had reason to know, at the time the contract was made, of the circumstances that prevented compliance with the contract.²⁰

Notably, the impossibility doctrine, which is the focus of this article, should be distinguished from two other related fundamental contract law doctrines that may excuse a party from its promise: frustration of purpose and commercial impracticability.²¹ The frustration of purpose rule differs from the impossibility doctrine in that the supervening event, the one that triggers the rule, does not prevent fulfilment of the agreement, but destroys the expected value of performance.²² In the case of commercial impracticability, performance is literally possible, as opposed to a case triggering the impossibility doctrine; however, obeying the agreement becomes too costly.²³

²⁰ Roy v. Stephen Pontiac-Cadillac, Inc., 543 A.2d 775, 778 (Conn. App. Ct. 1988) (“One additional requirement, however, applies when a party claims a contract is void due to existing impossibility: [T]he party seeking to use the doctrine must show that he did not know or have reason to know the facts that made performance impossible.” (alteration in original) (emphasis omitted) (internal quotation marks and citation omitted)); Franconia Two, LP v. Omniguru Sys., Inc., 82 Va. Cir. 256, 259 (2011) (“The impossibility doctrine is subject to several important limitations. . . . [A] promisor who seeks to use impossibility as an excuse for nonperformance . . . must neither know nor have reason to know of the relevant government action.”).

²¹ See Peoplesoft U.S.A., Inc. v. Softeck, Inc., 227 F. Supp. 2d 1116, 1119 (N.D. Cal. 2002) (noting that the impossibility and frustration of purpose doctrines “are somewhat similar to each other”); Burlington N. & Santa Fe Ry. v. Kansas City S. Ry., 45 F. Supp. 2d 847, 852 (D. Kan. 1999) (“Over time, the terms ‘impossibility’ and ‘impracticability’ have become somewhat interchangeable.”); P.J.M. Declercq, *Modern Analysis of the Legal Effect of Force Majeure Clauses in Situations of Commercial Impracticability*, 15 J.L. & COM. 213, 215 (1995) (“In the field of excuse for nonperformance, three different concepts are implicated: physical impossibility, frustration of purpose and commercial impracticability.”).

²² Lloyd v. Murphy, 153 P.2d 47, 50 (Cal. 1944) (“Although the doctrine of frustration is akin to the doctrine of impossibility of performance . . . frustration is not a form of impossibility Performance remains possible but the expected value of performance to the party seeking to be excused has been destroyed by a fortuitous event”); Kubinec v. Top Cab Dispatch, Inc., No. SUCV201203082BLS1, 2014 WL 3817016, at *7 (Mass. Super. Ct. June 25, 2014) (“The difference [between the doctrines of impossibility and frustration of purpose] . . . lies in the effect of the supervening event. Under frustration of purpose, [p]erformance remains possible but the expected value of performance to the party seeking to be excused has been destroyed by [the] fortuitous event.” (second and third alterations in original) (quoting Chase Precast Corp. v. John J. Paonessa Co., 566 N.E.2d 603, 606 (Mass. 1991))); Perry v. Champlain Oil Co., 134 A.2d 65, 66 (N.H. 1957) (stating the frustration of purpose is different from the impossibility doctrine “in that it assumes the possibility of literal performance but excuses performance because supervening events have essentially destroyed the purpose for which the contract was made”).

²³ See Declercq, *supra* note 21, at 216 (“In a case of commercial impracticability, performance is still possible and the purpose of the contract can still be fulfilled. However, due to a change in circumstances, the performance of the promisor’s obligations has become economically senseless.”).

B. *The Economic Analysis of the Impossibility Doctrine*

The traditional economic analysis suggests that if performance becomes impossible, courts should allocate the risk of non-compliance to the party who is better able to bear that risk.²⁴ In order to identify that party, the economic approach suggests examining three main questions:²⁵ First, who among the parties was in a better position, when the contract was made, to estimate the probability that the event preventing contract compliance would occur? Second, who was better able to estimate the magnitude of the loss that materialized due to the supervening event? And third, who was in a better position to insure at least cost the risk that the supervening event would occur, either by purchasing an insurance policy or by self-insuring the risk? Self-insurance by a company can take several alternative forms, including diversification of a risk across different business activities²⁶ or charging a higher price from customers to offset any losses caused by the risk.²⁷

To illustrate, the conventional economic analysis suggests that in a typical employment contract, the employer is usually the optimal bearer of the risk of the loss it suffers by the unexpected death of an employee.²⁸ First, the employer is usually better able than the employee to estimate the magnitude of loss caused to it by the death of said employee.²⁹ The employer is also able to self-insure against such event relatively cheaply,³⁰ for example, by contracting with many other employees and thereby diversifying the risk of an employee's death. In addition, estimating the

²⁴ See sources cited *supra* note 3.

²⁵ Posner & Rosenfield, *supra* note 3, at 117 (“To determine which party is the superior risk bearer three factors are relevant—knowledge of the magnitude of the loss, knowledge of the probability that it will occur, and (other) costs of self- or market-insurance.”).

²⁶ See *id.* at 111 (“[T]he performer can often self-insure at low cost simply by diversifying the risk across the full range of his contractual obligations.”); *id.* at 95 (“[The owners of a company can self-insure against risks] by holding a diversified portfolio of common stocks”); see also Eric D. Beal, *Posner and Moral Hazard*, 7 CONN. INS. L.J. 81, 88 (2000) (noting that the party who can self-insure a risk is “the party who could better spread the risk of loss”).

²⁷ See Posner & Rosenfield, *supra* note 3, at 93 (“[A company] may be able to eliminate the risk of . . . [relevant] contingencies simply by charging a higher price—in effect, an insurance premium—to all of its customers; [The company] may in short be able to self-insure.”); *id.* at 101 (“[A Company] could have spread the risk of . . . [contractual] contingencies among all of [its] customers in [its] price . . . , thereby providing effective and inexpensive self-insurance.”); see also Michael I. Meyerson, *The Efficient Consumer Form Contract: Law and Economics Meets the Real World*, 24 GA. L. REV. 583, 618–19 (1990) (“[A business] can then eliminate many risks through self-insurance, simply by charging all customers a higher price.”).

²⁸ Posner & Rosenfield, *supra* note 3, at 100.

²⁹ *Id.* (“[T]he employer is better able to estimate the cost to him . . . if the employee dies”).

³⁰ *Id.* (noting the employer “can usually self-insure against” the employee’s death).

probability of the employee's death is generally no more difficult for the employer than for the employee.³¹ As a result, the economic analysis suggests that if the employer were to seek damages, alleging that the employee's death breached the employment contract, the employee's estate should be discharged from contractual liability.³²

C. *A Distinction Between the Impossibility Doctrine and the Economic Analysis*

The analysis under the legal impossibility rule differs from the traditional economic analysis of the rule. When the conditions of the legal rule are met, an excuse from performance is given to the promisor categorically, that is, without examining whether or not it is the best risk bearer among the parties.³³ On the other hand, under the economic model, an excuse is not categorically given to the promisor, even if the conditions of the legal doctrine are met.³⁴ According to this model, the loss of non-performance is assigned to the better risk bearer, either the promisee or the promisor.³⁵ Consequently, if the promisor is the optimal risk bearer, it will not be discharged from its obligations, even if it has a valid claim under the legal doctrine.³⁶ To illustrate, assume that an owner of a music hall is unable to fulfill their contractual obligation to rent the hall to a musician since unexpected lighting ignited a fire that destroyed the hall.³⁷ Under the economic model, the owner of the music hall (the promisor) will not be excused from their contractual obligation to rent the hall to a musician (the promisee) if the owner bears the risk of fire at a lesser cost than the musician, for example, by easily purchasing fire insurance that covers liability for contract

³¹ *Id.* ("Estimating life expectancy is in general no more (if no less) difficult for the employer than for the employee.").

³² *Id.* ("If the employer were seeking damages as a result of the employee's death, alleging that death had caused a breach of the employee's obligations under the contract, the contract should also be discharged."). Presumably, the employee-promisor would also be excused under the doctrine of impossibility in this scenario.

³³ See *supra* Section I.A.

³⁴ For the legal conditions of the impossibility doctrine, see *supra* Section I.A.

³⁵ See *supra* Section I.B.

³⁶ Donald J. Smythe, *Impossibility and Impracticability*, in 6 ENCYCLOPEDIA OF LAW AND ECONOMICS: CONTRACT LAW AND ECONOMICS 207, 209 (Gerrit De Gees ed., 2d ed. 2011) (According to the traditional economic analysis, "the party should not be excused if it is the superior risk bearer"); Cenini et al., *supra* note 3, at 35 ("[I]f it is the promisor who is the superior risk bearer, their performance failure will be considered as a normal breach of contract and will require expectation damages to be paid.").

³⁷ See *supra* note 12 and accompanying text.

breach.³⁸ In such case, the owner's failure to fulfill their contractual obligation constitutes a breach of contract for which they are liable in damages to the musician.³⁹ Conversely, under the legal doctrine, the owner is excused from performing the contract since the fire rendered performance impossible.⁴⁰ In addition, the owner is not only freed from performing their specific contractual obligation but also from the duty to pay breach of contract damages to the musician.⁴¹

Remarkably, the results of the economic model may differ from the results of the legal doctrine quite frequently, and not only in isolated cases. According to the economic model, the promisor is normally the best risk bearer.⁴² This is because it is, *inter alia*, frequently better able to estimate the probability that an event preventing it from fulfilling its obligations would occur, and therefore may also be able to insure the loss from said event at a lower cost.⁴³ As the promisor is normally the superior risk bearer, the outcome of the economic model may often be that the promisor will not be discharged from complying with the contract.⁴⁴ The results under the legal doctrine, however, may often be opposite. The doctrine, by its nature, excuses the promisor from performing the contract when compliance becomes impossible.⁴⁵ By doing so, the doctrine usually assigns the risk of non-performance to the promisee and not to the promisor.⁴⁶

³⁸ See COOTER, JR. & ULEN, *supra* note 3, at 351.

³⁹ See, e.g., Posner & Rosenfield, *supra* note 3, at 83 ("Ordinarily the failure of one party to a contract to fulfill the performance required of him constitutes a breach of contract for which he is liable in damages to the other party.")

⁴⁰ See HILLMAN, *supra* note 1, at 354–55.

⁴¹ See, e.g., Brener, *supra* note 3, at 466 ("If the promisor is excused from performance by reason of impossibility, he is not only freed from his specific contractual obligation, but also from his obligation to pay any typical breach damages to the promisee.")

⁴² Posner & Rosenfield, *supra* note 3, at 110 ("The performing party to a contract is generally the superior risk bearer.")

⁴³ *Id.* at 110–11 ("The performing party to a contract is generally the superior risk bearer. Typically, though not invariably, he is better able . . . to estimate the probability of its occurrence . . . [T]he performer can often self-insure at low cost simply by diversifying the risk across the full range of his contractual obligations."). In addition, the promisor is assumed to be at least as able as the promisee to estimate the magnitude of loss if a supervening event occurs. *Id.* at 111 ("Often, too, [the promisor] is at least as able as the payor to estimate the magnitude of the loss if the event occurs.")

⁴⁴ See *id.* at 110–11 ("In many individual . . . cases economic analysis . . . will fail to yield a definite answer . . . as to which party is the superior risk bearer. . . . But as long as the performer is *generally* the superior risk bearer, assigning the risk to him in cases of doubt—that is, refusing discharge in those cases—can be expected to yield correct results more often than the contrary rule."); see also Cenini et al., *supra* note 3, at 35–36 (noting the results of the superior risk bearer "in most cases" would be the same as the results "that would have been achieved under the *pacta sunt servanda* principle," namely that the promisor is always liable for his breach).

⁴⁵ See Posner & Rosenfield, *supra* note 3, at 90; see also *supra* Section I.A.

⁴⁶ Paul L. Joskow, *Commercial Impossibility, the Uranium Market and the Westinghouse Case*, 6 J. LEGAL STUD. 119, 153 (1977) ("[A] . . . rule of discharge

II. THE EMPIRICAL TEST

The efficiency of the superior risk bearer model has been a source of intense theoretical debate and controversy among legal scholars.⁴⁷ Opponents of the model present several major theoretical arguments against its application by courts.⁴⁸ First, the model is impossible to apply in practice since courts often do not have all the relevant economic information needed to identify who is the superior risk bearer.⁴⁹ Second, courts may often be unable to determine which of the parties is the optimal bearer of risk since both parties may be able to bear the risk at a similar cost.⁵⁰ Third, judges may find it difficult to identify the optimal risk bearer⁵¹ given that they often lack the necessary

inherent in the impossibility doctrine shifts the burden of some of these risks to the promisee.”); Posner & Rosenfield, *supra* note 3, at 90 (“[I]nvoicing impossibility or some related notion, the law could treat the failure to perform as excusable and discharge the contract, thereby in effect assigning the risk to the promisee.”); *see also* Wagner, *supra* note 2, at 65 (“By excusing the promisor’s non-performance in specific situations, the impossibility defense assigns some risk of loss to the promisee.”). For the historical progress of the impossibility doctrine, *see generally* William Herbert Page, *The Development of the Doctrine of Impossibility of Performance*, 18 MICH. L. REV. 589 (1920); David E. Rosengren & Jared Cohane, *The Impossibility Doctrine—Still Hazy After All These Years: Part I*, 2 AM. COLL. CONSTRUCTION LAW. J. 63 (2008).

⁴⁷ *See, e.g.*, Jennifer Camero, *Mission Impracticable: The Impossibility of Commercial Impracticability*, 13 U.N.H. L. REV. 1, 22–23 (2014); Melvin A. Eisenberg, *Impossibility, Impracticability, and Frustration*, 1 J. LEGAL ANALYSIS 207, 253 (2009); Sheldon W. Halpern, *Application of the Doctrine of Commercial Impracticability: Searching for “The Wisdom of Solomon,”* 135 U. PA. L. REV. 1123, 1160–61 (1987); Alan O. Sykes, *The Doctrine of Commercial Impracticability in a Second-Best World*, 19 J. LEGAL STUD. 43, 93 (1990); George G. Triantis, *Contractual Allocations of Unknown Risks: A Critique of the Doctrine of Commercial Impracticability*, 42 U. TORONTO L.J. 450, 476 (1992).

⁴⁸ *See* sources cited *supra* note 47.

⁴⁹ MELVIN A. EISENBERG, FOUNDATIONAL PRINCIPLES OF CONTRACT LAW 657 (2018) (“Posner and Rosenfield’s [superior risk bearer] test would be virtually impossible to apply in practice.”); Daniel T. Ostas & Frank P. Darr, *Understanding Commercial Impracticability: Tempering Efficiency with Community Fairness Norms*, 27 RUTGERS L.J. 343, 352 (1996) (“Although the efficient insurer hypothesis may make some sense in terms of abstract logic, it becomes problematic in its pragmatic application. . . . The court typically does not have enough information.”); Bruce, *supra* note 12, at 321 (“In many cases, however, the court will be unable to determine which of the parties is the superior risk bearer . . . because the court lacks sufficient information.”); Sykes, *supra* note 47, at 93 (“But it is exceptionally difficult to formulate a default rule of contract law that limits discharge to the circumstances in which it is efficient—to administer such a rule, the courts will typically require more information than is reasonably available to them.”).

⁵⁰ Bruce, *supra* note 12, at 321; Camero, *supra* note 47, at 22–23 (“[T]he application of the superior risk bearer test is unworkable. Information and insurance costs are often similar for both parties, making the determination of the cheaper insurer irresolvable”); *see also* Eisenberg, *supra* note 47, at 253 (noting that both contract parties have a similar capacity to self-insure a relevant risk by charging premium for taking the risk or by hedging the risk); POSNER, CONTRACT LAW AND THEORY, *supra* note 1, at 162 (“Unfortunately, it will rarely be obvious who is the cheaper insurer. Both parties could buy insurance against asteroid strikes for—one suspects—the same price.”).

⁵¹ Triantis, *supra* note 47, at 476 (stating that the application of the superior risk bearer model suffers *inter alia* the following obstacle: “the competence of the court to

economic expertise to make such identification. Fourth, the economic model is exposed to a hindsight bias⁵² since the court is examining in retrospect who was, when the contract was formed, the superior risk bearer.⁵³

While the theoretical debate over the desirability of the economic model is vibrant, there are no systematic empirical studies aimed at directly exposing the actual opinion of real-world contract parties about the model. The purpose of this Part of the article is to empirically examine whether sophisticated parties to commercial contracts adopt the economic model in their contracts. For that purpose, this Part will analyze the frequency and content of contractual clauses that allocate between the parties the risks of non-performance due to uncontrollable circumstances. These clauses are often labeled as force majeure clauses and will be presented in the next section.

A. *Force Majeure Clause: A Brief Overview*

A force majeure clause is a contractual provision that assigns between the parties the risk that unavoidable events will prevent compliance with the agreement.⁵⁴ These events may include acts of God, such as hurricanes, tornadoes, or earthquakes.⁵⁵ These events may also include human-generated events that prevent contract performance, such as strikes,

identify the superior risk bearer”); Halpern, *supra* note 47, at 1160–61 (“One must question whether the parties themselves, let alone the courts, are equipped to make an analysis of the efficiency-relevant circumstances as they existed at the inception of the transaction.”).

⁵² A hindsight bias is the “tendency of decisionmakers to attach an excessively high probability to an event simply because it ended up occurring.” Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1523 (1998).

⁵³ Camero, *supra* note 47, at 23 (“[T]he superior risk bearer test suffers from hindsight bias . . . because the court is examining who could have insured or minimized the risk more efficiently in hindsight and with greater information than the parties had at the moment of contract formation.”); Halpern, *supra* note 47, at 1160–61 (“Efficient rule-making [under the superior risk bearer model] at contracting time thus requires an ex ante determination of the relevant factors and the appropriate and optimal balance. When a dispute arises, however, judgments are made ex post.” (footnote omitted)).

⁵⁴ *Corestar Int’l PTE. Ltd. v. LPB Commc’ns., Inc.*, 513 F. Supp. 2d 107, 120 n.8 (D.N.J. 2007) (“A force majeure clause is, [a] contractual provision allocating the risk if performance becomes impossible or impracticable, [especially] as a result of an event or effect that the parties could not have anticipated or controlled.” (emphasis omitted) (quoting *Force Majeure Clause*, BLACK’S LAW DICTIONARY (8th ed. 2004))); *Dyco Petroleum Corp. v. ANR Pipeline Co.*, No. 86-C-1097-C, 1988 U.S. Dist. LEXIS 18317, at *10 (N.D. Okla. Sept. 1, 1988) (“A force majeure clause is a provision in a contract excusing performance by a party under specified circumstances. A force majeure clause defines the areas of unforeseeable events that might excuse nonperformance within the contract period.” (citations omitted)); see also *Pillsbury Co. v. Wells Dairy, Inc.*, 752 N.W.2d 430, 440 (Iowa 2008); *OWBR LLC v. Clear Channel Commc’ns., Inc.*, 266 F. Supp. 2d 1214, 1222 (D. Haw. 2003); *Moore v. Jet Stream Invs., Ltd.*, 261 S.W.3d 412, 419–20 (Tex. App. 2008).

⁵⁵ David Gurnick & Tal Grinblat, *Be Prepared—Managing Catastrophic Risks in Franchise Systems*, 21 FRANCHISE L.J. 128, 132 (2002).

terrorism, or wars.⁵⁶ To illustrate, a force majeure clause may state:

Either Party shall be excused from any delay or failure in performance required hereunder if caused by reason of any occurrence or contingency beyond its reasonable control, including, but not limited to, acts of God, acts of war, fire, insurrection, strikes, lock-outs or other serious labor disputes, riots, earthquakes, floods, explosions, or other acts of nature.⁵⁷

Force majeure clauses are normally enforced by courts.⁵⁸ Hence, if the parties want to contractually adopt the economic model of the impossibility doctrine, they can design a force majeure clause that directs parties or courts to assign uncontrollable force majeure risks to the better risk bearer. Such an assignment, which adopts the economic model, could take two main forms. First, the parties could easily draft a simple force majeure clause that includes a general statement whereby the risk of non-performance due to force majeure is assigned to the party who is the superior bearer of said risk. Such a clause will guide the parties or courts to identify the superior risk bearer after an uncontrollable event has rendered performance impossible. Alternatively, the parties could specify *ex ante*, in the contract, the name of the party who will assume the risk of non-performance of each specific obligation and for each specific type of uncontrollable event. Such specific assignment would be based on identifying the superior risk bearer for each obligation and event during contract negotiations.

By assigning uncontrollable risks in one of these two forms, both of which implement the economic model, the parties would essentially contract around the legal impossibility doctrine,⁵⁹ which lacks the economic calculus.⁶⁰ Such contracting around is legally achievable since the impossibility doctrine is only a default, non-mandatory rule.⁶¹

⁵⁶ *Id.*

⁵⁷ Immune Therapeutics, Inc., Exclusive Agency Agreement (Form 8-K), at Ex. 10.1 art. 11 (Nov. 15, 2016), 2016 WL 06681833.

⁵⁸ See, e.g., Princeton Homes, Inc. v. Virone, 612 F.3d 1324, 1332 (11th Cir. 2010) (“[F]orce majeure clauses broader than the scope of impossibility are enforceable.” (emphasis omitted)); Sherwin Alumina L.P. v. AluChem, Inc., 512 F. Supp. 2d 957, 966 (S.D. Tex. 2007) (“Force majeure clauses in contracts are enforceable under Texas law.” (citations omitted)).

⁵⁹ See *Wis. Elec. Power Co. v. Union Pac. R.R. Co.*, 557 F.3d 504, 507 (7th Cir. 2009) (“Modern contracting parties often do contract around the [impossibility] doctrine The clauses in which they do this are called force majeure (‘superior force’) clauses.”).

⁶⁰ See *supra* Section I.A.

⁶¹ *Wis. Elec. Power Co.*, 557 F.3d at 506 (“Parties can, however, contract around the [impossibility] doctrine, because it is just a gap filler”); *Commonwealth Edison v. Allied-General Nuclear Servs.*, 731 F. Supp. 850, 855 (N.D. Ill. 1990) (“[T]he doctrine of impossibility is an ‘off-the-rack’ provision that governs only if the parties have not drafted a specific assignment of the risk otherwise assigned by the provision.”).

Accordingly, the frequency with which sophisticated parties to commercial contracts opt out of the impossibility rule and adopt the alternative economic model via a force majeure clause can indicate how beneficial this model is for the parties. If most of the agreements contract around the default rule and embrace the model via a force majeure clause, then the model may indeed be beneficial for both parties. Otherwise, the efficiency of the economic model for the parties may be dubious.

In addition, a contractual adoption of a force majeure clause that reflects the economic model may indicate that the parties believe that the legal outcome of the model is clearer than that of the traditional impossibility rule, thereby increasing the probability of a settlement in case of force majeure.⁶² Conversely, if the parties prefer to stick to the default impossibility rule, it may indicate that they do not perceive the economic model as a clearer solution that increases the probability of a settlement.

B. *The Theoretical Hypothesis*

While the traditional economic analysis suggests that the superior risk bearer model is beneficial for both parties,⁶³ the hypothesis of this article is different. This study predicts that parties to a commercial contract are unlikely to adopt the economic model within their contract since the model has two significant shortcomings.

To begin with, the application of the model might be prohibitively costly.⁶⁴ This is because the three basic questions for identifying the superior risk bearer—namely, who is better able to predict the probability of the relevant risk, estimate the magnitude of relevant loss, and insure the relevant risk⁶⁵—

⁶² For the general economic argument that settlement rates are higher when the law is certain, see, for example, Richard E. Levy & Robert L. Glicksman, *Agency-Specific Precedents*, 89 TEX. L. REV. 499, 574 (2011) (“[L]egal uncertainty . . . makes settlement more difficult because parties may entertain substantially different assessments of the likely outcome of litigation.”); Larry E. Ribstein, *From Efficiency to Politics in Contractual Choice of Law*, 37 GA. L. REV. 363, 403 (2003) (“[G]reater certainty about their rights gives parties more incentive to settle.”).

⁶³ See *supra* notes 6–7 and accompanying text.

⁶⁴ See Camero, *supra* note 47, at 23 (“[A]scertaining which party was able to minimize the risk or insure against it creates an administrative nightmare. Given the nature of the information necessary to determine the superior risk bearer, determining and collecting the relevant information is difficult, [and] time-consuming” (footnotes omitted)); Sykes, *supra* note 47, at 93 (“But it is exceptionally difficult to formulate a default rule of contract law that limits discharge to the circumstances in which it is efficient—to administer such a rule, the courts will typically require more information than is reasonably available to them.”).

⁶⁵ Posner & Rosenfield, *supra* note 3, at 117.

include too many complex sub-questions that need to be examined.⁶⁶ To illustrate, the following major non-exclusive questions could be examined under the economic model, and their answers may often be time-consuming to reach, and difficult to quantify:

1. Which contract party has superior professional skill vis-à-vis the risk that rendered performance impossible?⁶⁷ The existence of professional expertise can serve as an indication that a party can more effectively estimate the likelihood of a risk within its professional domain. For example, a company that specializes in drilling would be better able than its client, a non-drilling company, to estimate the probability of encountering rocks deep below the surface of the earth that render a drilling contract impossible.⁶⁸

2. Which party has superior previous experience vis-à-vis the relevant risk? A mature company's superior experience can serve as an indication that that company can more easily estimate the probability of a potential risk than a newer company, lacking previous risk-related experience.⁶⁹ Such previous experience may also indicate that the more established company can identify more easily mechanisms to self-insure against a potential risk based on its previous experience.⁷⁰

⁶⁶ Andrew Kull, *Mistake, Frustration, and the Windfall Principle of Contractual Remedies*, 43 HASTINGS L.J. 1, 47 (1991) (“[T]he determination of superior risk-bearing capacity depends on so many additional variables, many of them difficult to establish conclusively, that it will normally be impossible for contracting parties to predict with confidence how a future court might decide the issue.”); Halpern, *supra* note 47, at 1165 (“Where we face the problem of allocating risks [under the superior risk bearer model] . . . , too many factors are present to allow us to point to one, and only one, optimal analytic framework.”); Ostas & Darr, *supra* note 49, at 352 (“Although the efficient insurer hypothesis may make some sense in terms of abstract logic, it becomes problematic in its pragmatic application. In most cases, it is extremely difficult to infer which of the two parties was the more efficient insurer. . . . [T]he factors that determine efficiency in insurance seem quite complex and idiosyncratic.”).

⁶⁷ Cf. Richard C. Chen, *A Contractual Approach to Investor-State Regulatory Disputes*, 40 YALE J. INT’L L. 295, 332 (2015) (“[W]ith regard to risk appraisal, the investor would be better positioned to evaluate risks that relate more closely to its specific business.”).

⁶⁸ Posner & Rosenfield, *supra* note 3, at 101 (“[A] driller, was better able than his customer to estimate the probability of encountering rock deep below the surface of the earth”); see also RICHARD POSNER, *ECONOMIC ANALYSIS OF LAW* 113 (9th ed. 2014) [hereinafter POSNER, *ECONOMIC ANALYSIS OF LAW*] (asserting a contractor’s professional knowledge about the fire hazards of buildings under construction serves as indication that they are a more superior bearer than their client of a risk that a fire, caused through no fault of the contractor, will render the performance of the contract impossible).

⁶⁹ See Posner & Rosenfield, *supra* note 3, at 108 (“[T]he ability to estimate the probability of the drought—suggests placing the risk on the rancher (depending, however, on the particular cattle owner’s prior experience in the region)”).

⁷⁰ See *id.* at 93 (“Depending on . . . [a party’s] prior experience with contingencies such as occurred in the contract . . . , [he] may be able to eliminate the risk of such

3. Which party had superior physical control over the subject matter of the contract that was affected by a relevant risk?⁷¹ Such superior control can indicate who was better able to estimate the probability that the object would be affected by the risk. To illustrate, assume that during the performance of an independent contractor agreement to build a skyscraper, a fire destroyed a significant part of the building, through no fault of the independent contractor.⁷² The fact that the independent contractor, as opposed to their client, had physical control over the skyscraper while building it can indicate that the contractor was better able than the client to estimate the probability that a fire would render performance impossible.⁷³

4. Which party can diversify its portfolio of ownership over different firms more effectively? Such capacity to diversify can indicate who is the better self-insurer of the relevant risk. For example, the owners of a public firm facing a relevant risk can often self-insure the risk by holding a diversified portfolio of securities in many other firms whose earnings would not be affected by said risk.⁷⁴ In contrast, it is often more difficult for the owners of a closely held corporation to diversify their risks because their holdings in the corporation frequently reflect a significant fraction of their assets.⁷⁵

5. Which party, among the two, can enter into additional contracts with other parties who are unlikely to be affected by the relevant risk? Such contracting ability can indicate who is the better self-insurer of the relevant risk. To

contingencies simply by charging a higher price—in effect, an insurance premium—to all of its customers; [he] may in short be able to self-insure.”)

⁷¹ See Eyal Zamir, *Toward a General Concept of Conformity in the Performance of Contracts*, 52 LA. L. REV. 1, 87 (1991) (“The factors that tend to make the promisor a ‘superior risk bearer’ [include] . . . her control of the object prior to its delivery . . .”).

⁷² This example is based on, POSNER, *ECONOMIC ANALYSIS OF LAW*, *supra* note 68, at 113; see also POSNER, *CONTRACT LAW AND THEORY*, *supra* note 1, at 162.

⁷³ See POSNER, *ECONOMIC ANALYSIS OF LAW*, *supra* note 68, at 113 (“[T]he contractor generally is better placed for fire protection than the owner because he controls the premises . . .”); see also POSNER, *CONTRACT LAW AND THEORY*, *supra* note 1, at 162 (“Insurers would rather deal with the party in control of the structure than the party that does not control the structure.”).

⁷⁴ Posner & Rosenfield, *supra* note 3, at 92 (“[A] corporation’s shareholders might eliminate the risk associated with some contract the corporation had made by holding a portfolio of securities in which their shares in the corporation were combined with shares in many other corporations whose earnings would not be (adversely) affected if this particular corporation were to default on the contract. This would be an example of self-insurance.”); COOTER, JR. & ULEN, *supra* note 3, at 351 (“[T]he investors in a factory subject to an earthquake hazard can spread risk by purchasing stocks from companies in different locations (‘portfolio diversification’).”)

⁷⁵ Posner & Rosenfield, *supra* note 3, at 93–94 (“It is generally more difficult for the owners of a closely held corporation to diversify away the risks associated with their holdings in the corporation, for often those holdings represent a large fraction of their net assets.”).

illustrate, assume that the performance of a transportation contract between a mining company and a trucker was rendered impossible when the mining company's store was destroyed unexpectedly.⁷⁶ The potential fact that the trucker could easily enter into transportation contracts with other customers who were unlikely to be affected by the store's destruction could serve as an indication that the trucker is a superior self-insurer of the loss caused by non-performance.⁷⁷

6. Which party holds a market position that allows it to charge higher prices from its customers more easily?⁷⁸ This charging capability indicates who is better able to insure the relevant risk since high prices serve as an insurance premium, thereby allowing a party to self-insure against a contract risk.⁷⁹

7. Which party can more easily purchase single market insurance that aggregates many risks, including the one that materialized by a supervening event? Such purchasing capability can indicate who is the better insurer of the risk. For example, assume that a shipping company signs a transportation contract with a shipper and that an unexpected war, which forces the transportation route to close, prevents the shipping company from performing the contract.⁸⁰ In such case, the potential fact that the shipping company, as opposed to the shipper, can purchase single market insurance that covers non-performance of multiple voyages would serve as an indication that the shipping company is the superior insurer among the contract parties.⁸¹

8. Which company, among the contract parties, is larger? The fact that one party is bigger than the other is an indication that it can bear a contractual risk more effectively.⁸²

⁷⁶ For a similar example, see *id.* at 105.

⁷⁷ See *id.* (“[The trucker] could spread the risk by contracting to supply hauling services to customers who were engaged in other businesses and hence were unlikely to be affected by the [mine] closing.”); see also POSNER, *ECONOMIC ANALYSIS OF LAW*, *supra* note 68, at 112 (“[A driller] should also be able to self-insure at low cost [against unexpectedly difficult soil conditions] if he does a lot of drilling in different areas and if the risks of encountering unexpectedly difficult conditions are independent.”).

⁷⁸ For example, a party who faces less competition may charge higher prices. Cf. Yongmin Chen & Michael H. Riordan, *Price-Increasing Competition*, 39 RAND J. ECON. 1042, 1044 (2008) (“[L]ess competition necessarily results in higher prices.”).

⁷⁹ Posner & Rosenfield, *supra* note 3, at 93 (“[A party] may be able to eliminate the risk of such contingencies simply by charging a higher price—in effect, an insurance premium—to all of its customers; [That party] may in short be able to self-insure.”).

⁸⁰ For a similar example, see *id.* at 103–04.

⁸¹ *Id.* at 104 (noting that a shipping company would be the superior risk bearer since, among other reasons, it “could, if it desired, purchase in a single transaction market insurance covering multiple voyages.”).

⁸² Mark S. Beasley et al., *Enterprise Risk Management: An Empirical Analysis of Factors Associated with the Extent of Implementation*, 24 J. ACCT. & PUB. POLY 521, 529 (2005) (“Enterprises that are larger . . . are more likely to be further into [enterprise

This is because large firms, as opposed to small firms, benefit from economies of scale when implementing risk management plans.⁸³

The fact that too many complex questions and sub-questions need to be examined under the traditional economic model is not the only reason this article hypothesizes that parties to commercial contracts are unlikely to adopt this model. Not only is examining all these questions too costly, but doing so yields uncertain results.⁸⁴ This uncertainty persists because the answers to the numerous questions for identifying the superior bearer may often point in opposite directions.⁸⁵ For example, a party that has superior experience—directly related to a relevant risk—may appear to be better situated to estimate the likelihood of the risk and its magnitude of loss. The other party—being a large public firm with many alternative customers—may appear to be better able to self-

risk management] implementation than smaller firms . . .”); L. Lee Colquitt et al., *Integrated Risk Management and the Role of the Risk Manager*, 2 RISK MGMT. & INS. REV. 43, 54 (1999) (“Also apparent from the results of the survey is the tendency for the level of risk management integration to be affected by the size of the firm . . .”); Nadine Gatzert & Michael Martin, *Determinants and Value of Enterprise Risk Management: Empirical Evidence from the Literature*, 18 RISK MGMT. & INS. REV. 29, 36 (2015) (“A positive correlation of company size with the extent of the risk management system has also been shown previously.” (citation omitted)); Nargess Mottaghi Golshan & Siti Zaleha Abdul Rasid, *Determinants of Enterprise Risk Management Adoption: An Empirical Analysis of Malaysian Public Listed Firms*, 6 WORLD ACAD. SCI., ENGINEERING & TECH. 242, 243 (2012) (“[L]arger firms are more likely to implement integrated risk management concepts than smaller firms.”); Donald Pagach & Richard Warr, *The Characteristics of Firms That Hire Chief Risk*, 78 J. RISK & INS. 185, 206 (2011) (“[W]e find that firms appear to implement [enterprise risk management] when they are larger . . .”).

⁸³ See sources cited *supra* note 82

⁸⁴ Daniel T. Ostas, *Postmodern Economic Analysis of Law: Extending the Pragmatic Visions of Richard A. Posner*, 36 AM. BUS. L.J. 193, 234–35 (1998) (“In many, if not most, cases it is very difficult to determine which of the two parties could more efficiently take insurance. . . . Hence, traditional [Economic Analysis of Law] appears to have identified a factor in excuse cases, but that factor is not sufficiently robust to guide the courts.”); John Eloffson, Note, *The Dilemma of Changed Circumstances in Contract Law: An Economic Analysis of the Foreseeability and Superior Risk Bearer Tests*, 30 COLUM. J.L. & SOC. PROBS. 1,13 (1996) (“An equally fundamental problem with superior risk bearer tests is that they generally fail to produce predictable results.”); Triantis, *supra* note 47, at 476 (noting the identification of the superior risk bearer is unpredictable and not obvious); Wagner, *supra* note 2, at 88–89 (“The serious objection to [the superior risk bearer model], however, is its indecisiveness. . . . [I]t seems questionable whether it is possible to identify one of the parties as the ‘better insurer’ of the risk of non-performance.”).

⁸⁵ Michael J. Trebilcock, *The Role of Insurance Considerations in the Choice of Efficient Civil Liability Rules*, 4 J.L. ECON. & ORG. 243, 253 (1988) (“Posner and Rosenfield acknowledge that often (I would be inclined to argue, typically) the criteria they propose for identifying the most efficient insurer will point in opposite directions . . .”); Triantis, *supra* note 47, at 476 (the economic criteria for identifying the superior bearer “often point in opposing directions.”); Camero, *supra* note 47, at 22–23 (“Other relevant factors such as the party best able to estimate the probability of the supervening event and the best party able to estimate the event’s resulting loss often result in conflicting conclusions as to which party is the superior risk bearer.”).

insure the same risk.⁸⁶ Similarly, a party that has superior physical control over the subject matter of the contract that was affected by a relevant risk may be perceived, at first analysis, to be better positioned to evaluate the chances that the object would be affected by the risk.⁸⁷ However, the other party may have superior professional skill related to the risk, indicating that it may be better positioned to evaluate the risk.⁸⁸

In sum, since the application of the superior risk bearer model is costly, and the results of the model are uncertain, this article predicts that most firms are unlikely to adopt this model.⁸⁹

C. Data

The sample of this empirical study is based on 1,926 commercial contracts governed by U.S. law and included as exhibits to Form 8-K filings with the Securities and Exchange Commission (SEC).⁹⁰ Accordingly, the sample includes only commercial contracts in which at least one of the parties is a sophisticated company that is legally required to report to the SEC. These are normally companies with more than \$10

⁸⁶ See Ostas, *supra* note 84, at 234 (“At times, one party may appear to be better situated to estimate the likelihood and severity of potential losses while the other party may appear to be better able to diversify the risks.”).

⁸⁷ See *supra* notes 71–73 and accompanying text.

⁸⁸ See *supra* notes 67–68 and accompanying text.

⁸⁹ See also Kull, *supra* note 66, at 46–47 (“[N]o rational contracting party would willingly adopt [the superior risk bearer model], given the near impossibility of predicting which party would later be found by the court to have been the superior risk bearer with respect to the risk in question.”).

⁹⁰ For more details about Form 8-K, see *infra* notes 117–119 and accompanying text. For the same methodological approach of analyzing contracts contained as exhibits to Form 8-K filings with the SEC, see Theodore Eisenberg et al., *Arbitration’s Summer Soldiers: An Empirical Study of Arbitration Clauses in Consumer and Nonconsumer Contracts*, 41 U. MICH. J.L. REFORM 871, 880 (2008); Theodore Eisenberg & Geoffrey P. Miller, *Damages Versus Specific Performance: Lessons from Commercial Contracts*, 12 J. EMPIRICAL LEGAL STUD. 29, 43 (2015) [hereinafter Eisenberg & Miller, *Damages Versus Specific Performance*]; Theodore Eisenberg & Geoffrey P. Miller, *Do Juries Add Value? Evidence from an Empirical Study of Jury Trial Waiver Clauses in Large Corporate Contracts*, 4 J. EMPIRICAL LEGAL STUD. 539, 550 (2007) [hereinafter Eisenberg & Miller, *Do Juries Add Value?*]; Theodore Eisenberg & Geoffrey P. Miller, *The English Versus the American Rule on Attorney Fees: An Empirical Study of Public Company Contracts*, 98 CORNELL L. REV. 327, 349 (2013); Theodore Eisenberg & Geoffrey Miller, *Ex Ante Choices of Law and Forum: An Empirical Analysis of Corporate Merger Agreements*, 59 VAND. L. REV. 1975, 1983 (2006); Theodore Eisenberg & Geoffrey P. Miller, *The Flight from Arbitration: An Empirical Study of Ex Ante Arbitration Clauses in the Contracts of Publicly Held Companies*, 56 DEPAUL L. REV. 335, 348 (2007) [hereinafter Eisenberg & Miller, *The Flight from Arbitration*]; Theodore Eisenberg & Geoffrey P. Miller, *The Flight to New York: An Empirical Study of Choice of Law and Choice of Forum Clauses in Publicly-Held Companies’ Contracts*, 30 CARDOZO L. REV. 1475, 1487 (2009).

million in assets.⁹¹ This sample covers a ten-year period from January 1, 2009 to January 1, 2019. The contracts for this period were located via Westlaw's commercial law sample agreement search engine.⁹² The Westlaw sample agreements database has contracts included in SEC filings during the sample period.⁹³

The subject matter of commercial contracts examined in this study is highly heterogeneous and includes the following: distribution, agency, consulting, management services, cooperation, independent contractor, marketing, licensing, financing, and manufacturing agreements.⁹⁴ The major types of contracts, as reflected in the contracts' titles, are shown in Table 1.

⁹¹ See Securities Exchange Act of 1934 § 12(g), 15 U.S.C. § 78l(g); see also *Fact Answers*, U.S. SEC. & EXCHANGE COMMISSION, <https://www.sec.gov/about/laws.shtml#secexact1934> [<https://perma.cc/5JF4-GXZ4>].

⁹² See *Draft with Confidence Using Sample Agreements*, THOMSON REUTERS, <https://blog.legalsolutions.thomsonreuters.com/legal-research/reference-attorney-tips/07-22-13/> [<https://perma.cc/T7PG-F2P2>].

⁹³ *Summer Associate Research Guide: Locate Model Forms and Sample Documents for Drafting*, LOY. U. CHI. SCH. L., http://lawlibguides.luc.edu/summer_associate_research/forms [<https://perma.cc/WZ5G-C35L>] (“[In Westlaw] you will find more than one million executed business agreements culled from the SEC’s EDGAR database.”).

⁹⁴ A commercial contract, as opposed to a consumer or employment contract, is typically an agreement between two or more business entities. See Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law*, 113 YALE L.J. 541, 543 (2003) (“Even a theory of contract law that focuses only on the enforcement of bargains must still consider the entire continuum from standard form contracts between firms and consumers to commercial contracts among businesses.”); Edward A. Zelinsky, *Deregulating Marriage: The Pro-Marriage Case for Abolishing Civil Marriage*, 27 CARDOZO L. REV. 1161, 1198 (2006) (“Consumer contracts differ from commercial contracts between businesses.”); see also Joshua M. Silverstein, *Using the West Key Number System as a Data Collection and Coding Device for Empirical Legal Scholarship: Demonstrating the Method Via a Study of Contract Interpretation*, 34 J.L. & COM. 203, 261 (2016).

Type	Number	Percentage	Type	Number	Percentage
Agency	235	12.20	Transportation Services	41	2.13
Distribution	234	12.15	Exporter Services	40	2.08
Consulting or Advisory	198	10.28	Development	39	2.02
Management Services	152	7.89	Administration Services	38	1.97
Cooperation	111	5.76	Purchase	36	1.87
Marketing	81	4.21	Supply	27	1.40
Independent Contractor	78	4.05	Storage	24	1.25
Financing	65	3.37	Research	14	0.73
Licensing	61	3.17	Advertising	6	0.31
Manufacturing	53	2.75	Assignment	6	0.31
Terminal Services	46	2.39	Pipeline Services	4	0.21

Table 1. Number and Percentage of Contracts by Type (sample size $n = 1,926$)

A random examination of the industries of the companies that filed these contracts with the SEC indicates that they are also heterogeneous and include, for example, the following: advertising, agriculture, banking, beverages, biological products, business services, cosmetics, electricity, hotels and motels, management services, medical instruments, metal mining, patents, pharmaceuticals, real estate, restaurants, software, television, transportation, and wholesale.⁹⁵

D. Methodology

In order to examine whether the sample contacts embraced the superior risk bearer model in cases where uncontrollable events cause failure in performance, the following steps were taken: First, an in-depth review of the full text of random commercial contracts in the sample was conducted. The purpose of this review was to identify terms commonly associated with clauses that allocate the risks of non-performance due to uncontrollable events, commonly labeled as force majeure clauses.⁹⁶ Second, based on this in-

⁹⁵ The companies' industries were located via the EDGAR company search engine. See *EDGAR: Company Filings*, U.S. SEC. & EXCHANGE COMMISSION, <https://www.sec.gov/edgar/searchedgar/companysearch.html> [<https://perma.cc/8BH6-2FLD>].

⁹⁶ See *supra* Section II.A.

depth review, an online search was conducted, using Westlaw's Terms and Connectors search engine, for contracts containing terms that are associated with such risk-allocation clauses.⁹⁷ This search included the terms "force majeure" or "perform! /s beyond /s control."⁹⁸ Contracts that did not include these terms were coded "0." Contracts that included these terms were coded "1." In order to verify that the search results for terms associated with a force majeure clause were related to the allocation of uncontrollable risks, a manual examination of all the contracts that were coded "1" was conducted. All the contracts in which the content of the search terms was unrelated to a clause intended to allocate uncontrollable risks were coded "0."⁹⁹ Finally, all the risk-allocation clauses in the contracts that were coded "1" were thoroughly read and analyzed in an effort to examine whether these clauses incorporate the superior risk bearer model.

E. Results

Out of 1,926 contracts, 1,271 (66%) did not include a force majeure clause that allocates uncontrollable risks. This result indicates that most parties prefer not to contract around the default allocation of risks provided under the impossibility doctrine. By maintaining the governance of the default doctrine, which lacks the economic calculus, the parties signal their preference not to adopt the economic model. Otherwise, the parties would have drafted a force majeure clause that embraces the economic model.

In addition, even among the minority of contracts that did include a force majeure clause, many contracts did not seem to clearly embrace the superior risk bearer paradigm. Out of 655 contracts that included a force majeure clause, 461 (70.4%) included a general one-size-fits-all statement that excuses *any* of the parties from performing the contract in case of force majeure. To illustrate, a typical clause stated broadly, "*Neither Party* shall be liable for any delay in performing its obligations under this Agreement, if such delay is caused by

⁹⁷ For a similar methodological approach applied on a "specific performance" clause, see Eisenberg & Miller, *Damages Versus Specific Performance*, *supra* note 90, at 44.

⁹⁸ The "!" symbol was used to search for words with multiple endings, and the "/s" symbol was used to search for terms used in the same sentence. See *Search Tips*, WESTLAW, [https://1.next.westlaw.com/Search/Home.html?transitionType=Default&contextData=\(sc.Default\)](https://1.next.westlaw.com/Search/Home.html?transitionType=Default&contextData=(sc.Default)) (found by clicking "Search Tips" under the search bar).

⁹⁹ Out of 675 contracts that contained the terms "force majeure" or "perform! /s beyond /s control," twenty did not have a relevant force majeure clause.

circumstances beyond the Party's reasonable control"¹⁰⁰ Furthermore, out of 655 contracts that included a force majeure clause, 318 (48.5%) included a general one-size-fits-all statement that seems to excuse a party from performing all its obligations, including payment obligations, if a force majeure renders performance impossible. To illustrate, a force majeure clause in the sample stated, *inter alia*, "Neither Party shall be liable to the other Party for any delay or omission in the performance of *any obligation* hereunder, where the delay or omission is due to any cause or conditions beyond the reasonable control of the Party obligated to perform"¹⁰¹

Each of these one-size-fits-all general statements located in the sample does not seem to directly reflect the economic model. This is for two central reasons. First, according to the economic model, the identification of the superior risk bearer is based on a fact-specific analysis.¹⁰² Namely, the superior bearer is the more efficient bearer of the *particular* risk under *particular* circumstances.¹⁰³ The contextual economic model, as opposed to the one-size-fits-all statements in the sample, neither categorically excuses any party from performing the contract nor unconditionally excuses the performance of any obligation. Second, while most force majeure clauses in the sample excused any party from performing its promise, under the economic model a promisor should frequently not be excused, since it is often presumed to be the superior risk bearer.¹⁰⁴

In addition, the results of this study also indicate that the force majeure clauses in the sample are not a mere boilerplate that varies marginally, if at all, among different contracts.¹⁰⁵ First, from a technical perspective, the number of words in the force majeure clauses varied, ranging from 21 to

¹⁰⁰ KEMET Elect. Corp., Development and Cross-Licensing Agreement between NEC TOKIN Corporation and KEMET Electronics Corporation (Form 8-K), at Ex. 10.1 art. 21.4 (May 8, 2013) (emphasis added), 2013 WL 11148290.

¹⁰¹ Rosewind Corp., Distribution Agreement between Ampio Pharmaceuticals, Inc. and FBM Industria Farmaceutica, Ltda. (Form 8-K), at Ex. 10.7 art. 12.8(a) (June 8, 2015), 2015 WL 6650078 (emphasis added).

¹⁰² Cenini et al., *supra* note 3, at 36 ("Posner and Rosenfield demanded that a fact-finder undertake an articulate inquiry about who is the superior risk bearer."); MICELLI, *supra* note 3, at 121 ("[Optimal risk sharing] will have to be weighed on a case-by-case basis.").

¹⁰³ Posner & Rosenfield, *supra* note 3, at 90 ("Superior risk bearer' is to be understood here as the party that is the more efficient bearer of the particular risk in question, in the particular circumstances of the transaction.").

¹⁰⁴ See *supra* notes 42–44 and accompanying text.

¹⁰⁵ *But see* Omri Ben-Shahar & John A.E. Pottow, *On the Stickiness of Default Rules*, 33 FLA. ST. U. L. REV. 651, 680 (2006) ("Complex transactions are often governed by industry-standard boilerplate terms, which vary little, if at all, across contracts.").

1,126.¹⁰⁶ The variance in the number of words is illustrated in Figure 1, which represents the frequency distribution histogram of the number of words in these force majeure clauses.

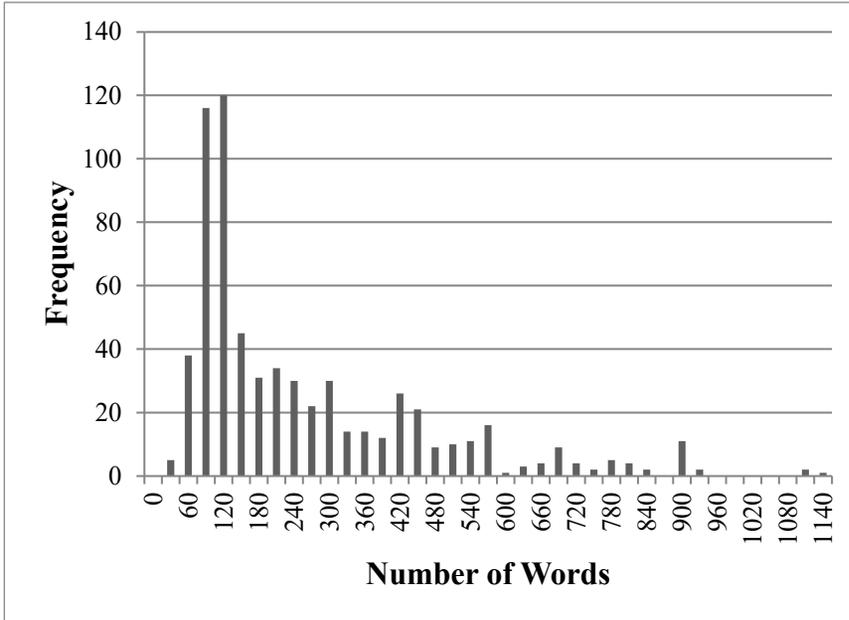


Figure 1. Frequency distribution histogram for the number of words in force majeure clauses

This variance in the form of the force majeure clauses may indicate that these clauses are not based on a single or very few standardized boilerplate clauses that are merely copied by public firms without any deliberation.

Furthermore, from a substantive perspective, the content of the force majeure clauses in the sample varied in many aspects. In order to illustrate the difference between the content of the force majeure clauses, this article will focus on three different demonstrative statements that appeared in the force majeure clauses: (1) the excused party is required to

¹⁰⁶ Whenever the term “force majeure” was defined in the contract, separately from the force majeure clause, the word count included the definition of the term. *See* Cubed, Inc, Oasis Marketing Solutions, LLC Master Services Agreement (Form 8-K), at Ex. 10 art. 10(g) (May 7 2014), 2014 WL 10875509 (the force majeure clause includes 21 words and there is no contractual definition for the term force majeure). *But see* PAR Petrol. Corp., Storage and Services Agreement Between Tesoro Hawaii, LLC and Barclays Bank PLC (Form 8-K), Ex. 10 art. 1.1, 9 (Sept. 27. 2013), 2013 WL 11194145 (the contractual definition of the term force majeure and the force majeure clause includes 1,126 words).

notify the other party about the existence of force majeure; (2) the non-excused party has a right to terminate the contract in case the excused party fails to perform the contract due to force majeure; and (3) the excuse from performing the contract is temporary, namely it is valid until the force majeure event ceases. Table 2 shows the frequency and percentage of all the different combinations for statements (1), (2), and (3) in the force majeure clauses studied in this article.

Statement Combination	Frequency	Percentage
Statement (1) only	99	15.11%
Statement (2) only	23	3.51%
Statement (3) only	37	5.65%
Statements (1) & (2)	41	6.26%
Statements (1) & (3)	105	16.03%
Statements (2) & (3)	13	1.98%
Statements (1), (2) & (3)	114	17.4%
None of the statements (1), (2) or (3)	223	34.05%

Table 2. Frequency and Percentage of Statements 1, 2 & 3 in Force Majeure Clauses

Finally, the results of this study show that not even one of the contracts analyzed in this study used any term associated with the traditional economic model, such as “superior risk bearer,” “lowest-cost risk bearer” or “cheapest risk bearer.”¹⁰⁷ This result may reinforce the conclusion that parties to commercial contracts typically prefer not to adopt the traditional economic model. Otherwise, they would be expected to use terms that are associated with the model in their contracts. These terms are widely-used in published scholarly writing.¹⁰⁸ This writing includes some basic educational contract law and law and economics books, which were probably made available to

¹⁰⁷ These results were obtained via Westlaw’s commercial law sample agreement search engine. *See supra* note 92. Other terms associated with the economic model that were not found in the sample agreements include “best risk bearer,” “optimal risk bearer,” “reduce the risk at least cost,” “spread the risk at least cost,” “cheapest insurer,” “cheaper insurer,” “superior risk avoider,” “superior insurer,” and “bear the risk at least cost.”

¹⁰⁸ As of October 1st, 2019, a search in Google Scholar’s search engine for the term “superior risk bearer” yields 557 results. *See* Search for “Superior Risk Bearer,” GOOGLE SCHOLAR, [https://scholar.google.co.il/scholar?hl=iw&as_sdt=0%2C5&q=%22superior+risk+bearer%22&btnG=\[https://perma.cc/X7J4-ZS8A\]](https://scholar.google.co.il/scholar?hl=iw&as_sdt=0%2C5&q=%22superior+risk+bearer%22&btnG=[https://perma.cc/X7J4-ZS8A]).

numerous lawyers, including the ones who assisted SEC filing companies to draft their commercial contracts.¹⁰⁹

III. POTENTIAL CRITICISM AND RESPONSE

The major result of this study shows that the majority of the contracts considered do not include a force majeure clause, thereby signaling the preference of the parties not to opt out from the default impossibility rule.¹¹⁰ Critics of this result might argue that the parties in the sample did not contract around the default rule due to a variety of psychological biases, mainly the status quo bias.¹¹¹ This bias means, in our context, that contract parties may prefer to stick to the default impossibility rule rather than contractually opting out of that rule and switching to the arguably more efficient economic model.¹¹² This concern is unlikely in the sample of this study. As stated earlier in this article, the sample includes only commercial contracts in which one of the parties is a sophisticated company that is legally required to report to the SEC. These are normally companies with more than \$10 million in assets.¹¹³ Consequently, it is reasonable to assume that the other party to the sample commercial contracts of this study is likely to be a relatively sophisticated business entity as well, given the high screening and qualification standards implemented by sophisticated SEC-filing companies. These sophisticated parties are probably backed by high-volume attorneys. To illustrate, a cross-licensing

¹⁰⁹ For the usage of the term “superior risk bearer” and the like in basic contract law books, see, for example, HILLMAN, *supra* note 1, at 354–55 (using the terms “superior risk bearer” and “superior risk avoider”). For the usage of these terms in seminal law-and-economics books, see, for example, COOTER, JR. & ULEN, *supra* note 3, at 351 (using the term “lowest-cost-risk-bearer”); POSNER, *ECONOMIC ANALYSIS OF LAW*, *supra* note 68, at 112 (using the term “cheaper insurer”); MICELI, *supra* note 3, at 118 (using the “term superior risk bearer”).

¹¹⁰ See *supra* Section II.E.

¹¹¹ Brett H. McDonnell, *Sticky Defaults and Altering Rules in Corporate Law*, 60 SMU L. REV. 383, 390 (2007) (“The basic argument is that due to a variety of behavioral biases in decisionmaking, people will tend not to opt out of a prevailing default rule, even though the rule may be inefficient.”).

¹¹² Russell Korobkin, *The Status Quo Bias and Contract Default Rules*, 83 CORNELL L. REV. 608, 625 (1998) (“[P]eople systematically favor maintaining a state of affairs that they perceive as being the status quo rather than switching to an alternative state, all else being equal.”); William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7, 8 (1988) (“Faced with new options, decision makers often stick with the status quo alternative”); see also Ben-Shahar & Pottow, *supra* note 105, at 682 (“It is sometimes cheap and desirable to offer terms that differ from the default rules or the standard terms used in the market. But the proposal of new and otherwise unfamiliar terms may also raise suspicions and scare away potential counterparties. Default rules and the standard boilerplate terms may stick more than we think, and more than they should.”).

¹¹³ See *supra* note 91.

agreement located in the sample includes a notices clause which states that a copy of each notice delivered during the contract should be sent to the following leading law firms, separately representing each party: Cravath, Swaine & Moore LLP and Skadden, Arps, Slate, Meagher & Flom LLP.¹¹⁴ Similarly, a cooperation agreement in the sample includes a notices clause under which a copy of any notice should be sent to the following high-volume law firms: Davis Polk & Wardwell LLP, and Debevoise & Plimpton LLP.¹¹⁵ Such high-volume attorneys are normally unlikely to continuously stick to an inefficient default rule given their highly competitive business environment.¹¹⁶

The concern that the parties in the sample stick to the default impossibility rule since they are paralyzed by psychological biases is unlikely for another reason. The agreements analyzed in this study are based on contracts contained as exhibits to Form 8-K filings with the SEC. Form 8-K filings include information that is considered to be “material.”¹¹⁷ This information must specifically include the entry of the filing company into a “material definitive agreement.”¹¹⁸ This agreement is defined as an agreement that provides for obligations or rights that are “material” to the filing company.¹¹⁹ Since the contracts in the sample are important to the filing company, it is likely that they were seriously examined during the negotiation and drafting by companies’ personnel, including in-house counsel, and by well-qualified outside attorneys.¹²⁰ Such serious examination is likely to debias

¹¹⁴ Altra Indus. Motion Corp., Intellectual Property Cross-License Agreement (Form 8-K), at Ex. 10.4 art. 7.c (Oct. 1, 2018), 2018 WL 04699088. Cravath, Swaine & Moore LLP is ranked #1 according to Vault national law firm ranking and Skadden, Arps, Slate, Meagher & Flom LLP is ranked #3 according to this ranking. See 2020 *Vault Law 100*, VAULT (2019), <https://www.vault.com/best-companies-to-work-for/law/top-100-law-firms-rankings> [<https://perma.cc/22YJ-NQ5F>].

¹¹⁵ Blount Int’l Inc., Cooperation Agreement (Form 8-K), Ex. 10.1 art. 8 (Dec. 10, 2015), 2015 WL 8532156. Davis Polk & Wardwell LLP is ranked #7 according to Vault national law firm ranking and Debevoise & Plimpton LLP is ranked #18 according to his ranking. See 2020 *Vault Law 100*, *supra* note 114.

¹¹⁶ See, e.g., Stephen J. Choi & G. Mitu Gulati, *Innovation in Boilerplate Contracts: An Empirical Examination of Sovereign Bonds*, 53 EMORY L.J. 929, 936 (2004) (“Our results indicate that big shifts in standardized contract terms are associated with the high-volume attorneys . . .”).

¹¹⁷ U.S. Sec. & Exch. Comm’n, Office of Inv’r Educ. & Advocacy, Investor Bulletin: How to Read an 8-K, U.S. SEC. & EXCHANGE COMMISSION (May 2012), <https://www.sec.gov/investor/pubs/readan8k.pdf> [<https://perma.cc/5URZ-Y4RV>].

¹¹⁸ Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date, Exchange Act Release No. 49,424, 82 SEC Docket 1480 (Mar. 18, 2004), <https://www.sec.gov/rules/final/33-8400.htm> [<https://perma.cc/F3FM-Y7QD>].

¹¹⁹ *Id.*

¹²⁰ See Eisenberg & Miller, *Do Juries Add Value?*, *supra* note 90, at 582; see also Eisenberg & Miller, *The Flight from Arbitration*, *supra* note 90, at 349; Geoffrey P. Miller, *Bargains Bicoastal: New Light on Contract Theory*, 31 CARDOZO L. REV. 1475, 1477 (2010).

potential cognitive biases of decision makers in the company. In addition, since contracts contained as exhibits to Form 8-K filings are “material,” their drafting may increase the drafter’s exposure to potential liability towards company shareholders. This potential liability may decrease the probability of a paralyzing status quo bias. The parties, being concerned about the potential liability to the shareholders, are likely to make an effort to draft an efficient force majeure clause and thereby minimize their liability exposure. The parties are unlikely to stick to the default impossibility rule if the superior risk bearer model is a more efficient alternative.

Critics may further argue that the sample contracts did not include a force majeure clause that incorporates the economic model since uncontrollable risks, such as earthquakes or floods, are remote and therefore do not justify spending the costs of drafting such a clause. This critique should not be accepted. First, the drafting costs of a clause that reflects the economic model should not be exaggerated. The parties could easily draft a short clause that mimics the economic model and states: If an uncontrollable risk renders performance impossible, the liability for non-performance should be assigned to the superior bearer of said risk. Second, the sophisticated parties that comprise the sample of this study, accompanied by, presumably, highly qualified attorneys, are repeat players who sign contracts recurrently. They could have therefore offset the drafting costs of a short superior risk bearer clause by internalizing the arguable benefits of the clause in their repeated transactions.¹²¹ Third, although uncontrollable risks may be remote, their economic consequences on the sample contracts examined in this study may be significant. These risks may discharge a party, under the default impossibility rule, from performing the contract.¹²² Such discharge may have significant economic implications on the parties since the sample contracts are, by definition, important enough to be considered “material.”¹²³ These significant potential economic implications

¹²¹ Cf. Choi & Gulati, *supra* note 116, at 947; see also Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms*, 73 CALIF. L. REV. 261, 304 (1985) (noting a large law firm “may be able to confine the benefits [of contract innovation] to its own set of clients”); Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or the “Economics of Boilerplate”)*, 83 VA. L. REV. 713, 740 (1997) (“Atomistic contracting may fail to yield an optimal degree of . . . innovation . . . [L]aw firms may mitigate these problems by diffusing some learning benefits and by internalizing network and learning externalities.”).

¹²² See *supra* Section I.A.

¹²³ See *supra* notes 117–119 and accompanying text.

are likely to induce the parties to draft a short contract clause that mimics the economic model if the model is efficient.

Finally, critics may argue that the sample contracts did not include the economic superior risk bearer model since larger companies in each contract rejected the economic model for self-interested reasons, while ignoring the overall efficiency of the model. According to this argument, these large companies are normally the superior risk bearers, and therefore are likely, under the economic model, to be liable in impossibility scenarios. Consequently, these firms prefer to design a contract that maintains the default impossibility doctrine, under which they may avoid contractual liability.

The response to this critique is threefold: First, the assumption that larger firms as such are the superior risk bearers is questionable. As shown in this article, according to the economic model, there are many different factors that may indicate who is the superior risk bearer, such as who has superior professional skills, who has superior previous experience, and who has superior physical control over the subject matter of the contract.¹²⁴ The size of the company is only one of the numerous factors indicating who is the superior bearer.¹²⁵ Second, large firms may often be unable to dictate an inefficient force majeure contract rule given that their market environment is often competitive. Competition may compel firms to offer efficient force majeure contract terms.¹²⁶ Third, even assuming that large companies are the superior risk bearers and have monopolistic bargaining power, they would have preferred to adopt the economic model if the model was more efficient than the default impossibility rule. If the superior risk bearer model was more efficient, it would minimize the costs of remote risks.¹²⁷ Hence, by adopting this model, the parties could have maximized the overall surplus from the contract.¹²⁸ This surplus could have been divided by the parties.¹²⁹ The large firms, having monopolistic bargaining power, could have extracted this

¹²⁴ See *supra* Section II.B.

¹²⁵ See *supra* notes 82–83 and accompanying text.

¹²⁶ Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203, 1213 (2003) (“In a competitive market, then, all contracts should be efficient.”); Lucian A. Bebchuk & Richard A. Posner, *One-Sided Contracts in Competitive Consumer Markets*, 104 MICH. L. REV. 827, 827 (2006) (“The usual assumption in economic analysis of law is that in a competitive market without informational asymmetries, the terms of contracts between sellers and buyers will be optimal . . .”).

¹²⁷ See *supra* note 6 and accompanying text.

¹²⁸ See *supra* note 7 and accompanying text.

¹²⁹ See *supra* note 7 and accompanying text.

surplus by increasing their contract price.¹³⁰ Consequently, the large monopolistic firms could have benefitted from the increased surplus of the superior risk model if such surplus was indeed generated by the model.¹³¹

CONCLUSION

The conventional economic analysis of the impossibility doctrine suggests that when performance becomes impossible, courts should allocate the non-performance loss to the superior risk bearer of said loss. This article empirically tested the economic prediction. It did so by examining how real-world contracts allocate the risks of force majeure loss. By examining 1,926 commercial contracts filed with the SEC, this article found that most contracting parties prefer not to adopt the traditional economic model. More specifically, the majority of contracts did not include a force majeure clause, thereby revealing the preference of the parties not to contract around the default allocation of risks provided under the legal impossibility doctrine. In addition, even in the minority of the contracts that included a force majeure clause, many did not seem to embrace the economic model. The results of the study, therefore, cast significant doubt on the validity of the existing economic analysis of the impossibility doctrine.

¹³⁰ See, e.g., Douglas G. Baird, *The Boilerplate Puzzle*, 104 MICH. L. REV. 933, 941 (2006) (“Even a monopolist looks for efficient warranty terms. Using inefficient terms compromises the monopolist’s ability to extract rents. She is much better off providing quality goods and efficient terms and charging as much as she can from them.”); Schwartz & Scott, *supra* note 94, at 552–54 (“Bargaining power instead is exercised in the division of the surplus, which is determined by the price term. Parties jointly choose the contract terms so as to maximize the surplus, which the price may then divide unequally.”).

¹³¹ Schwartz & Scott, *supra* note 94, at 54.