

## SUBSTITUTING INVALID CONTRACT TERMS: THEORY AND PRELIMINARY EMPIRICAL FINDINGS

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### Abstract

*The law often lays down mandatory rules, from which the parties may deviate in favor of one party but not the other. Examples include the invalidation of high liquidated damages and the unenforceability of excessive non-compete clauses in employment contracts. In these cases, the law may substitute the invalid term with a moderate arrangement; with a punitive arrangement that strongly favors the protected party; or with a minimally tolerable arrangement (MTA), which preserves the original term as much as is tolerable.*

*The article revisits the choice between the various substitutes. Based on theoretical analysis and a series of new empirical studies, it argues that the incidence of MTAs should be rather limited. It demonstrates that people find moderate substitute arrangements more attractive than the alternatives. It also points to two overlooked incentive effects of the substitute arrangement (in addition to its impact on the drafting of contracts). First, the applicable substitute strongly influences customers' inclination to challenge excessive contract terms once a dispute arises. Second, when the invalidation of an excessive term is discretionary, the applicable substitute can affect decision-makers' inclination to invalidate excessive clauses in the first place.*

### 1. INTRODUCTION

For many decades, the primary means of regulating market transactions has been disclosure duties; but mounting evidence suggests that disclosure duties are largely ineffective (Radin 2013, pp. 219–20; Ben-Shahar and Schneider 2014; Willis 2006; Marotta-Wurgler 2009, p 341). More recently, considerable attention has been given to nudges—“low-cost, choice-preserving, behaviorally informed approaches to regulatory problems” (Sunstein 2014, p. 719)—as a non-intrusive way to influence people’s behavior in desirable ways (Thaler and Sunstein 2009; Zamir and Teichman 2018, pp. 177–85); but the efficacy of nudges in the context of markets is doubtful, because suppliers can, and do, counter their impact (Barr, Mullainathan, and Shafir 2009, p. 25;

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Bubb and Pildes 2014; Willis 2013, pp. 1200–10; Stern 2016). As a result, there is a growing interest lately in mandatory regulation of the content of transactions. Examples of such mandatory regulation include usury laws; minimum-wage statutes; statutes that impose liability on construction firms for defects in buildings that they build and sell; and the unenforceability of unconscionable contract terms.

Although the debate about the very need and legitimacy of mandatory regulation of the content of transactions has a long pedigree, relatively little scholarly attention has been given to the design of mandatory rules. With a few exceptions (Kimball and Pfennigstorf 1964; Korobkin 2003, pp. 1247–90), scholars have only recently begun to address questions associated with the design of such rules (Ben-Shahar 2011; Furth-Matzkin 2017; Ben-Shahar and Porat 2019; Zamir and Ayres 2019). One of the key questions pertains to the optimal substitutes for unenforceable contractual clauses. In this context, it is useful to distinguish between *bidirectional* and *unidirectional* mandatory rules. When the law lays down a *bidirectional* mandatory rule, it tolerates no deviation; that is, it applies notwithstanding any divergent contractual clause. For example, the rule that a court will not grant specific performance of a contractual obligation to provide personal services is bidirectionally mandatory (Kronman 1978. Pp. 369–76.), as is the denial of insurance coverage for willful acts (Cal. Ins. Code § 533; Fischer 2014). But much more often the law contents itself with *unidirectional* immutability—namely, allowing the parties to deviate from the rule in favor of one party (e.g., the tenant or employee) but not the other (e.g., the landlord or employer) (on the choice between bidirectional and unidirectional mandatory rules, see generally Zamir and Ayres 2019). Examples of such minimal standards include the invalidation of unreasonably large liquidated damages (Restatement (Second) of Contracts § 356); standard, statutory insurance policies which may be deviated from in favor of the insureds, but not to their detriment (e.g., California Standard Form Fire Insurance Policy, Cal. Ins. Code § 2070 (2018); Standard Fire Insurance Policy of the State of New York, N.Y. Ins. Law § 3404(f) (Consol. 2010)); and the unenforceability of non-compete clauses in employment contracts that are unreasonably broad in terms of time, area, or line of business (e.g., Fla. Stat. Ann. § 542.335 (2018); La. Rev. Stat. § 23:921 (2017)). In those cases—which are the focus of this article—the question arises as to what arrangement should substitute the invalid term.

In a thought-provoking article, Omri Ben-Shahar (2011, p. 869) has drawn attention to this question, and cogently suggested that there are three possible answers: “(1) the most reasonable term; (2) a punitive term, strongly unfavorable to the overreaching party; and (3) the minimally tolerable term, which preserves the original term as much as is tolerable.” For example, when unreasonably large liquidated damages are deemed unenforceable, they may be replaced by an award of damages that the injured party is entitled to under the default remedy rules; by denying the injured party’s right to any damages whatsoever; or by awarding her the highest amount of damages that would be considered valid under the liquidated-damages/penalty distinction. We label these three options *Moderate*, *Penalty*, and *Minimally Tolerable Arrangement* (MTA), respectively.

Ben-Shahar demonstrated that the MTA is fairly prevalent (for example, when courts apply the doctrine of partial enforcement of unreasonable terms), and discussed the policy considerations for and against using it—primarily from an economic perspective. In a nutshell, he argued that when the issue is one of incentivizing efficient behavior by

the parties, the court should implement the most efficient arrangement—which is ordinarily the most reasonable and moderate as well. In contrast, when the issue is purely distributive—as in the case of the price—there are good reasons to adopt the MTA, which is closest to what the parties would have agreed upon, given the unenforceability of the contractual term. However, as Ben-Shahar acknowledges, there is a serious concern that applying the MTA would incentivize suppliers to use excessive and invalid terms, knowing that many customers will yield to them, and in the worst-case scenario, these would be replaced by the MTA. Hence when the bounds of permissible contracting are readily known yet still violated by the supplier, the supplier should be deterred with administrative and/or contractual sanctions—including a substitute that is more pro-customer than the MTA, or possibly even punitive.

The present Article revisits this theoretical discussion, questions some of its implicit assumptions, and takes first steps to examining them empirically. Thus, in section 2 we argue that according to Ben-Shahar’s own criteria, the incidence of MTA should be rather limited. This is because only a small minority of contractual terms are purely distributive, and even in those cases, MTA is usually inappropriate because it creates undesirable incentives for contract drafting.

The Article then describes the results of six empirical studies of issues that have not been addressed by Ben-Shahar: the prevailing judgments regarding the desirability of alternative substitutes; the impact of the substitutes on customers’ inclination to challenge excessive terms once a dispute with the supplier arises; and the substitutes’ impact on the judicial inclination to invalidate excessive terms when such invalidation is discretionary. A total of 1,028 people—736 MTurk master workers from the United States and 292 Israeli law students—took part in these studies.

Thus, section 3 describes the findings of three new vignette studies that we conducted to elicit people’s judgments about the desirability of the possible substitutes. The prevailing judgments are interesting in their own right, and are also important because they plausibly influence the legal doctrine in at least two ways. First, inasmuch as those judgments are shared by legal policymakers such as legislators and judges, they are likely to shape the law. Second, even legal policymakers who do not share the prevailing judgments may well follow them anyway—or at least take them into account—for principled as well as instrumental reasons. In two of the three studies the participants were laypersons, and in the third they were legally trained people. In general, we found that both laypersons and jurists saw *Moderate* as significantly more appropriate than either *Penalty* or MTA substitutes.

Section 4 focuses on the incentive effect of the substitutionary arrangement on customers’ decision-making once a dispute arises and they are informed about the law. Our vignette study shows that the substitute arrangement may affect customers’ inclination to challenge an excessive term not only because customers’ expected reward under *Penalty* is greater than under *Moderate* (which in turn is greater than under MTA), but also because the three substitutes may be perceived as expressing varying degrees of condemnation of the supplier’s use of unenforceable terms—thereby influencing customers’ inclination to stand up for their rights.

Section 5 challenges the implicit assumption that the enforceability of contractual terms is predetermined and exogenous to the choice of the substitute arrangement. Very often, the annulment of excessive terms is discretionary, and in employing their

discretion, judicial decision-makers may be influenced by the content of the substitutionary arrangement. We offer several alternative hypotheses about the possible impact of the substitute arrangement on the inclination to annul excessive terms, and examine these hypotheses with two vignette studies: one featuring a within-subjects design, and the other a between-subjects design. Our main finding is that the choice of substitute may indeed affect the inclination to invalidate excessive terms, but that this effect varies from one person to another. In the within-subjects study, we found that people were more inclined to invalidate an excessive term when the substitute arrangement was the one they favored in the abstract. In the between-subjects design, we found that people’s inclination to invalidate an excessive term was statistically significantly greater under a *Moderate* substitute than under an MTA.

The upshot of our more nuanced theoretical analysis and new empirical findings is that the case for MTA substitutes is considerably weaker than previously claimed. First, other things being equal, legal norms should preferably be consistent with prevailing normative judgments, which is not the case with MTAs. Second, in terms of the incentives created by the substitute arrangement, previous analyses have focused on only one of the three *dramatis personae* involved in the drama (the supplier) while overlooking the other two (the customer and the judge). Our findings suggest that, not only MTAs create undesirable incentives for the drafting of contracts by suppliers (as previously noted), but are also likely to create problematic incentives in terms of customers’ inclination to challenge excessive terms and judicial decision-makers’ disposition to invalidate them. We readily concede, however, that our empirical findings are preliminary, and further studies are necessary to examine the generality and external validity of our results.

A final comment about the applicability of our analysis is in order. We focus on transactions between commercial sellers of products and providers (or purchasers) of services—including retailers, insurers, lenders, landlords, and employers (collectively labeled “suppliers”)—and individual or commercial clients—including consumers, insureds, tenants, borrowers, and employees (collectively labeled “customers”). However, much of the analysis may be relevant to other spheres in which one party controls the drafting of the contract, be they commercial, consumer, or even private.

## 2. REVISITING THE THEORETICAL ANALYSIS

As previously noted, when the law renders contractual terms—but not the entire contract—unenforceable, the question arises as to which arrangement should substitute the invalid term. Schematically, there are three possible answers to this question: *Penalty*, *Moderate*, and MTA (Ben-Shahar 2011, pp. 876–78). A penalty substitutes the invalid term with an arrangement favoring the party whose interests the law is seeking to protect. For example, if a lender charges an interest rate that exceeds a statutory cap, that clause may be replaced by a zero-percent interest.<sup>1</sup> The primary advantage of this option is that it deters the inclusion of overreaching clauses in contracts. Such

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<sup>1</sup> For example, under California law, for some loans, if an excessive rate is charged “for any reason other than a willful act,” the lender forfeits all interest and charges on the loan and may collect only the principal amount; and if any amount is charged willfully in excess of the charges permitted by law, the lender forfeits even the principal. Cal. Fin. Code div. 9 §§ 22751 and 22750, respectively (2018).

deterrence is particularly warranted when suppliers knowingly use unenforceable terms to mislead customers about their legal entitlements. This typically occurs when the drafter of the contract is a repeat player, as in typical consumer and commercial (but not private) contracts. Such a drafter is more likely to know the law and should be incentivized to acquire information about it. A penalty substitute may be used instead of, or in conjunction with, administrative or criminal sanctions for including invalid clauses in a contract (Zamir and Ayres 2019, pp. \*\*\_\*\*). However, this option is troubling and arguably unfair when neither party knew, or had reason to know, that the contractual term in question was invalid. While penalty substitutes score high on deterrence, they are the least respectful of the parties' freedom of contract (inasmuch as this freedom is meaningful in contracts where the relevant mandatory rules apply), and they may also incentivize the parties to behave inefficiently when performing their contractual obligations. For example, substituting an excessive liquidated damages clause with no entitlement to any damages for breach of contract would drastically reduce the incentive to keep contractual promises.

Another possibility is to apply the default rule that would govern the transaction in the absence of any contractual arrangement—a *moderate* arrangement (Lawrence 2017, § 1–102:294). Thus, if a contract unconscionably denies the customer's entitlement to any remedy for breach of contract by the supplier, the customer would be entitled to the remedies ordinarily available to the injured party. Such default rules are typically deemed fair and reasonable. They usually reflect the expectations of most parties in the relevant type of contract, and are therefore presumably efficient (Zamir 1997, pp. 1753–55). However, a moderate substitute less effectively deter suppliers, because it assures them that even if the customer exercises her legal rights (which, in many contexts, is not very likely), the supplier's position would be no worse off than in the absence of any clause. Also, if the unenforceable clause is purely distributive—i.e., distributes the contractual surplus between the parties unfairly, but does not create any incentive for their behavior—the efficiency argument in favor of the moderate arrangement arguably disappears (Ben-Shahar 2011, p. 872). Arguably, when it comes to purely distributive terms, there is not even a distributive reason to adopt a penalty or a moderate substitute, because the supplier, who controls the wording of the entire contract, can take advantage of its superior bargaining power elsewhere in the contract—possibly in an inefficient manner (Ben-Shahar 2011, pp. 897–98; Johnson & Lipsitz 2018).

The third possibility is to replace the invalid clause with a *minimally tolerable arrangement* (MTA)—namely a term that would favor the drafter to the greatest extent, and still be deemed enforceable. For example, assume that under the default remedy rules, the supplier would be entitled to \$10,000 in damages for the customer's breach; liquidated damages of up to \$20,000 would be considered tolerable; and the contract sets a penalty of \$30,000 for the customer's breach. According to the present option, the supplier would be entitled to liquidated damages of \$20,000. The main advantage of MTAs is that they entail the smallest curtailment of the parties' freedom of contract (Sullivan 2009, pp. 1129, 1158–59; Ben-Shahar 2011, pp. 879–80). It has also been argued that since MTAs best mimic the parties' agreement given the mandatory rule, they are also the most efficient in the sense that they save the parties the cost of opting out of the default (Ben-Shahar 2011, pp. 872–73, 879). One may, however, question the latter claim, because—contrary to the case of designing default rules—when it comes to

the design of substitutes for invalid contractual terms, *ex hypothesi* the cost of drafting has already been incurred (on setting MTAs as default rules, see Ben-Shahar 2009). In any event, the greatest drawback of MTAs are the “perverse incentives” they create for suppliers to include unenforceable terms in contracts (Sullivan 2009, p. 1161), thereby exploiting customers’ ignorance of the law, their disinclination to engage in confrontation with suppliers, and so forth (see also section 4 below). Another drawback is that, inasmuch as mandatory rules aim to preclude unfair and inefficient contract clauses (that result from information problems, or other traditional or behavioral market failures), MTAs may be less fair and less efficient than moderate substitutes (although, if the parties know best what arrangement would maximize the contractual surplus, while the mandatory rule is inefficient, MTAs are likely to be more efficient than other substitutes). Finally, another limitation of MTAs is that determining their content may be more challenging for the courts than determining the substance of the moderate or penalty substitutes—especially when the doctrine in question is a vague, value-based standard, such as unconscionability (Ben-Shahar 2011, pp. 883–85).

While useful and illuminating, this analysis calls for some comments. First, reality is sometimes more complex than implied by the elegant tripartite taxonomy. It is sometimes unclear whether a given solution should be considered a moderate arrangement or a penalty (or both) (Sullivan 2009, p. 1161). Such is the case when a given trade usage is more favorable to the supplier than the statutory or judge-made default rule. Two pertinent examples are non-compete and arbitration clauses. When a court strikes down an excessive non-compete clause or an unfair arbitration clause, and substitutes them with no restriction on the employee’s freedom of occupation, or no compulsory arbitration—are these instances of moderate substitutes (in accordance with the legal default rules), or of penalties (given that reasonable and fair arbitration and non-compete clauses are prevalent in the trade)? (Ben-Shahar 2011, pp. 876–77). To take another example, consider a case where a contract first sets the supplier’s liability in broad terms, and then lists a series of exclusions to that liability—some of which are deemed unconscionable. Striking down an exclusionary clause while leaving the broad liability intact may be described as a moderate solution (Ben-Shahar 2011, p. 876), but in reality may be a penalty (if the remaining liability is broader than the default or prevalent arrangement).

The tripartite taxonomy is also schematic in the sense that the three possible substitutes are sometimes nothing more than three dots on a continuum. In the interest-rate example, suppose that in a given type of loan, the prevailing annual rate is 10%, and there is a statutory cap of 20%. When a contract stipulates an annual interest rate of 30%, the penalty substitute can be not only anywhere between 0% to 10%, but actually *lower* than 0%—that is, the statute may exempt the borrower from repaying the principal, or any part thereof (Cal. Fin. Code div. 9 § 22750), and it may impose additional administrative or even criminal sanctions on the lender, including revocation of the lender’s license (Small Loans Act, ALA. CODE § 5-18-9. Similarly, in this example the substitute may be set at any rate between 10 and 20%—namely, at an intermediate level between the moderate and minimally tolerable arrangements. Nevertheless, for the purpose of our general and relatively abstract discussion, the tripartite taxonomy is very useful, so we will keep using it.

If we turn to the substantive question, as previously noted, Ben-Shahar has focused on the desirability of MTAs. He concluded that MTAs are the most appropriate substitute when the invalidated clause is purely distributive, but that this conclusion should be qualified when the invalid clause is incorporated in the contract in bad faith, to deter such incorporation (Ben-Shahar 2011, p. 901–04). With regard to the first part of that conclusion, one may wonder what proportion of unenforceable clauses are merely distributive. The main examples of unenforceable clauses Ben-Shahar discusses are arbitration clauses, liquidated damages, non-compete clauses, warranty disclaimers, conditions for recovery of insurance benefits, and prices (including interest rates). However, with the exception of prices and interest rates, all these examples refer to clauses that are not purely, or even primarily, distributive. Arbitration clauses affect the extent to which the customer can effectively obtain a legal remedy against the supplier, so they clearly impact the supplier’s behavior throughout the life of the contract (Reuben 2003). Liquidated damages are a poster child of the incentives created by contract remedies—including the promisor’s decision whether or not to perform the contract and, consequently, the extent of the promisee’s reliance on the expected performance (Schwartz 1990). Non-compete clauses affect the extent to which an employer might be willing to share trade secrets with its employees and the effort that employees put into their work—not to mention their negative externalities in terms of reduced competition (Prescott, Bishara, and Starr 2016, pp. 379–89; Ben-Shahar 2011, pp. 896, 901). Warranties and warranty disclaimers are primarily about incentives, as they affect the investment in production and maintenance of goods, the sharing of information about the goods’ qualities and the buyer’s needs, the purchase of insurance, and so forth (Zamir 1991, pp. 70–82). Finally, conditions for the recovery of insurance benefits are equally about incentives for the insured, who must meet them in order to recover (and for the insurer, who can rely on their non-fulfillment to avoid paying the insurance benefits) (Cummins and Tennyson 1996, p. 30). We are thus left with the price (including interest rates), which is purely distributive. In fact, according to standard economic analysis, when the impact of a rule is purely distributive, there is presumably no justification for interference in the first place, as standard economic analysis focuses on maximizing overall social utility, rather than its distribution.<sup>2</sup>

Thus, even before considering the second qualification (bad faith inclusion of unenforceable terms in the contract), the case for MTA appears to have a rather limited application. Not only are the great majority of contractual terms not purely distributive, but the inclination to invalidate purely distributive contractual terms is often weaker. Unlike most contractual terms, which tend to be “invisible” (Rakoff 1983), price is

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<sup>2</sup> A case in point is price discrimination by monopolies. When a monopoly charges a uniform supra-competitive price, it decreases aggregate social utility, because such pricing eliminates mutually beneficial transactions that would have been made otherwise, thus creating a deadweight loss. However, a monopoly that charges each customer its reservation price maximizes both its profits (by completely appropriating the consumer surplus) and allocative efficiency (by executing all profitable transactions) (Mankiw 2018, pp. 303–08). To be sure, this analysis is rudimentary, and a more sophisticated one would lead to more nuanced conclusions. However, it conveys the basic point that, under the Kaldor-Hicks criterion of efficiency (which is generally employed in economic analysis of law), only aggregate social utility—rather than its distribution—is what ultimately counts (Zamir & Medina 2010, pp. 14–15, 17–18).

often the most salient feature of the contract. Customers are much more likely to know how much they are expected to pay for the goods or services that they buy than the liquidated damages that are to be paid in case of breach; the conditions they must meet in order to recover insurance benefits; or whether or not the contract includes an arbitration clause (and what it means). This is not to say that price terms, which may be complex and obscure (Bar-Gill 2012, pp. 18–21), should not be regulated on the grounds of market failures, fairness, distributive justice, or paternalism (as they sometimes are) (Atamer 2017; Zamir and Mendelson 2019, pp. \*\*\_\*\*). However, since most contractual terms are not purely distributive, and purely distributive terms are less likely to be regulated in the first place, it does mean that the case for MTAs has only a rather narrow application.

Turning to the second qualification, Ben-Shahar rightly points out that MTAs create a strong incentive to insert excessive and unfair terms into the contract. One way to negate this incentive is to impose administrative or criminal sanctions against the inclusion of invalid terms in contracts (Ben-Shahar 2011, pp. 877, 883–84, 902–03)—but these are not used very often. Another way to achieve the same goal is to avoid using an MTA whenever the supplier includes an unenforceable term in the contract deliberately and in bad faith (Ben-Shahar 2011, pp. 883, 901–04). Ben-Shahar points out that identifying such inclusions is easier when the borderline between tolerable and intolerable arrangements is clear; the excessive term is egregious; the supplier is experienced; and the offending term is not prevalent in the relevant trade (Ben-Shahar 2011, 903–04).<sup>3</sup> However, as he implicitly recognizes (Ben-Shahar 2011, p. 904), it is unclear why the appropriate test is one of deliberate or bad-faith behavior. If the inclusion of an unenforceable term in the contract is viewed as a sort of accident that should have been prevented *ex ante*, the issue is not one of deliberate or bad-faith behavior, but rather of identifying the least cost avoider. Since this is almost invariably the supplier who drafts the contract, MTA appears to be inappropriate in most cases, even for purely distributive contract terms (at least as long as administrative or criminal sanctions for including invalid terms are not commonly imposed).

Thus far, we revisited the question of what arrangements should substitute invalid contract terms within the limits set by the previous literature. The following parts of the Article discuss three elements that are missing from the above analysis: the prevalent judgments about the relative desirability of the various substitutes; the effect of the substitute on customers' inclination to challenge excessive clauses; and its effect on the judicial inclination to invalidate contract clauses.

### **3. DESIRABILITY OF SUBSTITUTE ARRANGEMENTS: PREVALENT JUDGMENTS**

Section 2 described the three possible substitutes for unenforceable contract terms, examined their merits and demerits, and concluded that the MTA substitute is desirable only in relatively few cases. The remainder of this Article examines three further aspects of the decision between the three substitutes. In this section, we examine the

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<sup>3</sup> However, one may question the last of these criteria: the prevalence of a certain term in a given trade does not necessarily indicate good faith, as all suppliers may knowingly use the same unenforceable terms; and the fact that a term is novel may actually indicate that the supplier was unaware of its invalidity.



prevailing judgments among laypersons and legally trained people about the desirable substitute. Of course, the fact that most people view a given substitute as more desirable than others does not mean that it is indeed more desirable, since prevailing judgments may be wrong. However, gaining insights into prevailing judgments is not only interesting in its own right, but important for legal policymaking. First, inasmuch as legal policymakers share the normative judgments of the public at large—and all the more so, of legally trained people—such judgments may explain existing legal doctrine. Second, from a normative perspective, legal policymakers should take the prevailing judgments into account, for principled and pragmatic reasons. As a matter of principle, even if deviations from citizens’ preferences are justified when those preferences are misinformed, incoherent, or trumped by more important principles of justice (such as the protection of minority rights), “the presumption of democracy is that there be a close correspondence between the laws of a nation and the preferences of citizens who are ruled by them” (Rehfeld 2009, p. 214). At the pragmatic level, there is evidence to suggest that the perceived fairness of the justice system is key to its effectiveness: to achieve legitimacy and compliance, legal rules should be consistent with prevailing moral intuitions (although this claim is contested; for a recent discussion, see Symposium: How Law Works 2017). Moreover, even if one doubts that legal policymakers *should* pay much heed to public attitude on such issues, in a liberal democracy one would expect that elected policymakers *would actually* pay heed to their constituencies’ attitudes in a bid to enhance their popularity. Either way, this is an important issue.

In light of all this, this section describes three vignette studies of prevailing judgments about the desirability of substitute arrangements. It then discusses the implications of the findings.

### 3.1. Study 1: Three Options, Laypersons

Study 1 elicited peoples’ judgments about the appropriate substitute arrangement for unenforceable contract terms. We hypothesized that most respondents would find the *Moderate* arrangement more desirable than either of the other two (*Penalty* or *MTA*)—irrespective of the efficiency arguments that might support the latter. This hypothesis was based, in part, on previous studies that have demonstrated that people’s normative judgments tend to rely on notions of fairness, with little attention to incentives (Baron and Ritov 1993; Zamir and Teichman 2018, pp. 436–43).

The study was conducted on Amazon’s *Mechanical Turk* (MTurk)—an internet platform that facilitates online surveys and randomized experiments, and is widely used in judgment-and-decision-making studies.

**Participants.** The participants in Study 1 were 120 *Master Workers*—namely, people who regularly participate in studies on MTurk and have demonstrated consistent success in performing a wide range of assignments. The participants, who were all from the United States, were paid \$1.20 for their participation. Twelve participants who failed one or both of the attention questions (described below) were excluded from the analysis. Of the remaining 108, 61 were male, 46 were female, and one preferred not to indicate gender. Their mean age was 39.01 (SD=10.87). A total of 79% of the participants had attended college, or had higher education. Forty-six percent had an

annual income of less than \$30,000; 35% earned between \$30,000 and \$60,000 per year; and 19% had a yearly income of over \$60,000. Two participants had a law degree, and three had some legal education (a total of 4.6%). The participants were asked to rate themselves on Ideological Worldview and Religiosity scales of 0–100: the average ideological worldview was 40.44 (SD=29.99), (where 0 was Liberal and 100 Conservative), and the average religiosity was 24.03 (SD=33.02) (where 0 was Not at all religious and 100 Strongly affiliated with religion).

***Design and Procedure.*** In the first part of the study, participants were presented with four decision problems (*Non-compete*; *Brokerage fee*; *Interest rate*; and *Contingent fee* (see Appendix). In each case, they were informed about the contractual clause, the prevailing contractual arrangement, and the legal rule that invalidates excessive arrangements. For example, in *Non-compete* the description was:

A non-compete clause in employment contracts is one that restricts the employee's freedom to move to another employer in the same trade, or to start a new business that would compete with the employer. Such clauses are considered valid only if deemed reasonable in terms of the geographical area and duration that they apply to. Assume that in a certain jurisdiction, the customary length of this restriction is one year from the end of the employment relationship, and that courts do not ordinarily approve of such clauses with a duration of more than two years.

The other three vignettes dealt with the standard brokerage fee in real-estate transactions and the unenforceability of unconscionable fees; the prevailing interest rate in a given type of loans and the unenforceability of unconscionable rates; and the common contingent fee rate, which courts are authorized to invalidate if it is unreasonably high.

Participants were then asked whether they would enforce a clause that exceeded the minimally tolerable arrangement—in the above example, a non-compete clause of four years—or declare it void and unenforceable. After answering this question, they were asked to assume that they have decided to invalidate the clause, and to choose among three possible arrangements as a substitute for the invalidated clause: a pro-customer, *Penalty* arrangement; the prevailing, *Moderate* arrangement; or a pro-supplier, *Minimally Tolerable Arrangement*. For example, in the *Non-compete* problem, the three options were as follows:

[**Penalty**] Since the non-compete clause was found to be void, the employee is not subject to any restriction.

[**Moderate**] Since the non-compete clause was found to be void, the employee should be subject to the customary restriction of one year.

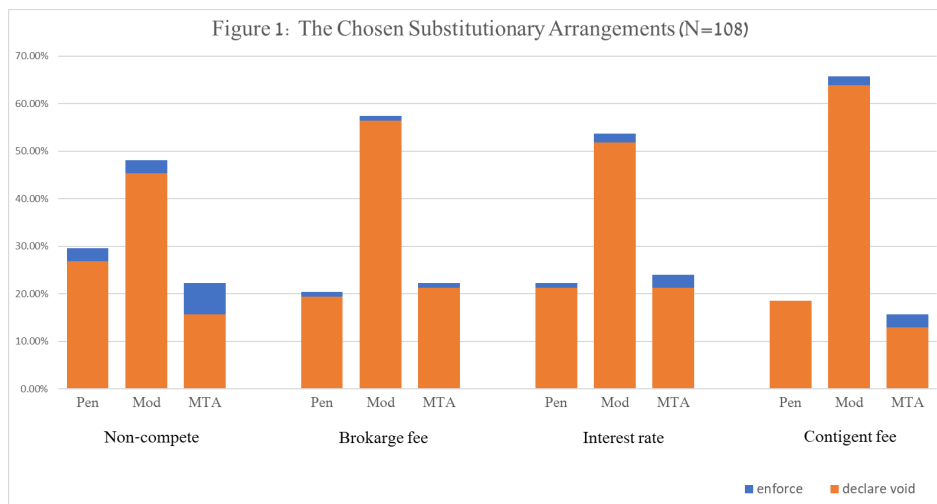
[**MTA**] Since the non-compete clause was found to be void, the employee should be subject to the minimally tolerable clause—namely, two years.

Participants were randomly assigned to one of two orders of presentation of the three options: *Penalty-Moderate-MTA*, or *MTA-Moderate-Penalty*. Two of the four decision problems included an additional question that served as an attention check.

After completing the first part of the study, participants were asked to provide demographic details about themselves, and then to complete the *Individualism* and

*Formalism* components of the Contractual Attitude Scale (see Appendix). The Contractual Attitude Scale is a questionnaire that measures peoples' attitudes to key conflicts in relation to contracts, two of which are individualism vs. solidarity, and formalism vs. anti-formalism (Katz 2019). The *Individualism* attitude scale consists of items that measure the extent to which the resolution of contractual disputes should be informed by values of mutual consideration, compassion, and solidarity. It includes items such as: "People should be prevented from entering into unfair contracts," and "In contract disputes, judges should take into account the power inequalities between the parties." The *Formalism* attitude scale comprises items that measure the degree to which the law should follow the written contract to the letter, and the extent to which judicial discretion should be used to avoid unfair outcomes. It comprises items such as "When interpreting a written contract, the focus should be on the written word, rather than the parties' presumed intentions based on other evidence," and "The law should be clear and unequivocal, in order to limit judicial discretion as much as possible." The participants were asked to indicate the extent to which they agree with each statement, using a 7-point Likert scale that ranged from Strongly disagree to Strongly agree. The items of both attitude scales were provided in a single list in random order.

**Results.** Unsurprisingly, a great majority of participants thought that the excessive contractual clause should be declared void and unenforceable (*Non-compete*: 88%,  $\chi^2(1)=62.26$ ,  $p<0.001$ ; *Brokerage fee*: 97.2%,  $\chi^2(1)=96.33$ ,  $p<0.001$ ; *Interest rate*: 94.4%,  $\chi^2(1)=85.33$ ,  $p<0.001$ ; *Contingent fee*: 95.4%,  $\chi^2(1)=88.93$ ,  $p<0.001$ ). Figure 1 displays the chosen substitute arrangement when suppliers failed to comply with the mandatory rule and the term was declared void and unenforceable. The figure includes the participants who thought that the contractual clause should be enforced, as well as those who thought that it should be invalidated.<sup>4</sup>



<sup>4</sup> Presentation order of options had a marginally significant effect on participants' answers ( $\chi^2(2)=5.69$ ,  $p=0.06$ ). However, this effect was driven by the changes in the *Penalty* and *MTA* answers, while the ratio of participants who opted for the *Moderate* option remained intact ("Penalty first" – *Penalty*: 26.3%, *Moderate*: 56.2%, *MTA*: 17.4%; "MTA first" – *Penalty*: 18.7%, *Moderate*: 56.2%, *MTA*: 25%).

As Figure 1 shows, the same pattern was found in all decision problems: participants supported the *Moderate* substitute considerably more than either the *Penalty* or the MTA (*Non-compete*:  $\chi^2(2)=11.56, p=0.003$ ; *Brokerage fee*:  $\chi^2(2)=28.22, p<0.001$ ; *Interest rate*:  $\chi^2(2)=20.22, p<0.001$ ; *Contingent fee*:  $\chi^2(2)=51.17, p<0.001$ ).<sup>5</sup> The same is true of the combined results of all decision problems ( $\chi^2(2)=102.26, p<0.001$ ).<sup>6</sup>

The average score on the *Individualism* attitude scale was 5.26, on a scale of 1 to 7, where 1 represents an extremely individualistic attitude, and 7 an attitude of extreme solidarity (SD=0.99,  $\alpha=0.77$ ). On the *Formalism* attitude scale, the average score was 3.66, where 1 represents an extremely formalistic attitude, and 7 an extremely non-formalistic one (SD=1.05,  $\alpha=0.75$ ). However, no significant association was found between participants' score on the *Individualism* attitude scale and the substitutionary arrangement that they chose in any of the four decision problems. Similarly, in three out of four decision problems there was no association between the participants' score on the *Formalism* attitude scale, and their chosen substitutionary arrangement.<sup>7</sup>

### 3.2. Study 2: Two Options

The results of Study 1 may have been driven by participants' substantive preference for the *Moderate* substitute, by the *compromise effect*, or both. The compromise effect refers to peoples' tendency to choose intermediate rather than extreme options. For example, when consumers were asked to choose between a mid-range and a low-end camera, they were equally divided between the two types. However, when they were asked to choose among those two cameras and an additional high-end camera, 72% chose the mid-range option (Simonson and Tversky 1992). Outside the market sphere, the compromise effect may explain decision-making in the political sphere (Herne 1997), and in adjudication (Kelman, Rottenstreich, and Tversky 1996). To isolate participants' substantive preferences, in Study 2 we presented each participant with two options only.

**Participants.** A total of 122 MTurk master workers from the United States participated in Study 2 in return for \$1. People who had taken part in Study 1 were excluded. Seven participants who failed one or both of the attention questions were excluded from the analysis. Of the remaining 115, 75 were male and 40 were female. Their average age

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<sup>5</sup> The difference between the substitute arrangements remains significant when we exclude the MTA from the analysis (*Non-compete*:  $\chi^2(1)=4.76, p=0.029$ ; *Brokerage fee*:  $\chi^2(1)=19.05, p<0.001$ ; *Interest rate*:  $\chi^2(1)=14.1, p<0.001$ ; *Contingent fee*:  $\chi^2(1)=28.58, p<0.001$ ), and when we exclude the *Penalty* arrangement (*Non-compete*:  $\chi^2(1)=10.32, p=0.001$ ; *Brokerage fee*:  $\chi^2(1)=16.79, p<0.001$ ; *Interest rate*:  $\chi^2(1)=12.19, p<0.001$ ; *Contingent fee*:  $\chi^2(1)=33.14, p<0.001$ ). No significant connection was found between the participants' demographic attributes (gender, levels of education, income, religiosity, and ideological worldview) and the substitute arrangement that they chose in any of the four decision problems.

<sup>6</sup> When analyzing only participants who declared the excessive clauses void, the results were basically the same.

<sup>7</sup> A statistically significant connection was found in the *Non-compete* decision problem ( $F(2,105)=3.78, p=0.026$ ). Post hoc comparisons using the Tukey HSD test indicated that participants who chose *Penalty* were less formalistic than those who chose *Moderate* ( $p=0.022$ ). Even in this decision problem, the other comparisons were not statistically significant.

was 38.25 (SD=9.24). A total of 67% of the participants had attended college or had higher education. Forty-eight percent had an annual income of less than \$30,000, 35% earned between \$30,000 and \$60,000 per year, and 17% had a yearly income of over \$60,000. No participant held a law degree, but four (3.5%) had some legal education. The mean ideological worldview on the 0 (Liberal) to 100 (Conservative) scale was 36.66 (SD=30.63), and the mean religiosity on the 0 (Not at all religious) to 100 (Strongly affiliated with religion) scale was 24.54 (SD=34.67).

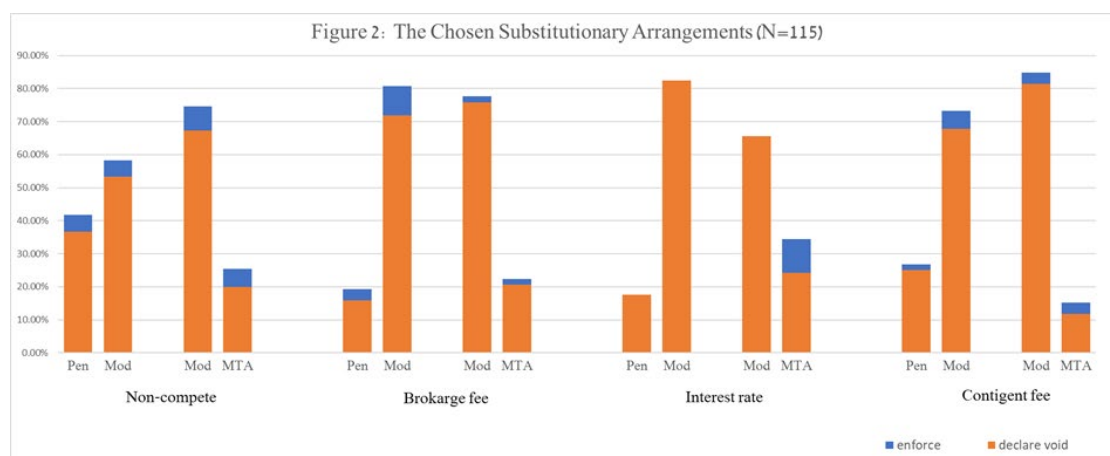
**Design and Procedure.** All participants in Study 2 were presented with the same four decision problems as in Study 1: *Non-compete*, *Brokerage fee*, *Interest rate*, and *Contingent fee*. After indicating whether or not they would enforce the excessive arrangement or declare it void, they were asked to assume that they have invalidated that arrangement, and now had to choose between two substitutionary arrangements. In two out of the four decision problems, participants had to choose between *Penalty* and *Moderate* arrangements (the *Penalty/Moderate Condition*), and in the other two they had to choose between an MTA and a *Moderate* arrangement (the *MTA/Moderate Condition*). In each condition, the order of substitute arrangements was randomized. Thus, each participant was presented with one of six combinations of decision problems as depicted in Table 1, in a randomized order.

**Table 1:** Combinations Used in Study 2

	<i>Penalty/Moderate Condition</i>		<i>MTA/Moderate Condition</i>	
1	<i>Non-compete</i>	<i>Brokerage fee</i>	<i>Interest rate</i>	<i>Contingent fee</i>
2	<i>Non-compete</i>	<i>Interest rate</i>	<i>Brokerage fee</i>	<i>Contingent fee</i>
3	<i>Non-compete</i>	<i>Contingent fee</i>	<i>Interest rate</i>	<i>Brokerage fee</i>
4	<i>Interest rate</i>	<i>Contingent fee</i>	<i>Non-compete</i>	<i>Brokerage fee</i>
5	<i>Brokerage fee</i>	<i>Contingent fee</i>	<i>Non-compete</i>	<i>Interest rate</i>
6	<i>Interest rate</i>	<i>Brokerage fee</i>	<i>Non-compete</i>	<i>Contingent fee</i>

As in Study 1, two of the four decision problems included an attention question, and at the end of the survey, participants were asked to provide demographic details about themselves.

**Results.** As in Study 1, a great majority of participants opined that the excessive contractual term should be declared void and unenforceable (*Non-compete*: 88.7%,  $\chi^2(1)=68.89$ ,  $p<0.001$ ; *Brokerage fee*: 92.17%,  $\chi^2(1)=81.82$ ,  $p<0.001$ ; *Interest rate*: 93%,  $\chi^2(1)=92.25$ ,  $p<0.001$ ; *Contingent fee*: 93%,  $\chi^2(1)=85.23$ ,  $p<0.001$ ). Figure 2 displays the preferred substitutionary arrangement. The figure includes both participants who thought that the original term should be enforced and those who thought that it should be declared void.



Across all four decision problems, participants exhibited a clear and highly statistically significant preference for the *Moderate* substitute over either *Penalty* or *MTA* (Pen/Mod:  $\chi^2(1)=50.71, p<0.001$ ; MTA/Mod:  $\chi^2(1)=60.54, p<0.001$ ).<sup>8</sup> In seven out of the eight decision tasks, the results were statistically significant (*Non-compete*: MTA/Mod:  $\chi^2(1)=13.25, p<0.001$ ; *Brokerage fee*: Pen/Mod:  $\chi^2(1)=21.49, p<0.001$ ; MTA/Mod:  $\chi^2(1)=17.65, p<0.001$ ; *Interest rate*: Pen/Mod:  $\chi^2(1)=24.02, p<0.001$ ; MTA/Mod:  $\chi^2(1)=5.59, p=0.02$ ; *Contingent fee*: Pen/Mod:  $\chi^2(1)=12.07, p=0.001$ ; MTA/Mod:  $\chi^2(1)=28.49, p<0.001$ ). In the *Penalty/Moderate* condition of the *Non-compete* decision problem, the results were in the same direction, but not statistically significant ( $\chi^2(1)=1.67, p=0.2$ ).<sup>9</sup>

### 3.3. Study 3: Legally Trained Subjects

To examine whether the judgments made by laypersons in Study 1 are shared by legally trained people, Study 3 presented two of the four decision-problems used in Study 1—*Interest rate* and *Non-compete*—to advanced-years LL.B. and LL.M. students. In addition to legal training, participants in Study 3 differed from those of Study 1 (and Study 2) in that they were Israeli, rather than U.S. residents.<sup>10</sup> This difference was potentially significant. Although the questionnaire (translated into Hebrew) referred to “some country” or “some legal system”—rather than to Israel or Israeli law specifically—participants were familiar with Israeli law, and this may have influenced

<sup>8</sup> Arguably, the compromise effect could still influence the participants when they made a choice in a one of the conditions (*Penalty/Moderate* or *MTA/Moderate*), if they had previously been presented with a decision problem in the other condition. However, the overall results were statistically significant even when one analyzes only the decision problems where participants have not yet encountered the third possible substitute, and were therefore not primed by its existence (Pen:  $\chi^2(1)=7.72, p=0.005$ ; MTA:  $\chi^2(1)=18.05, p<0.001$ ).

<sup>9</sup> When analyzing only participants who declared the excessive clauses void, the results were basically the same. No significant connections were found between most of the participants’ demographic attributes and the substitutionary arrangement that they chose in most of the decision problems. Only in *Contingent Fee* did the gender and score on the Ideological Worldview scale were statistically significantly associated with the preference of *Moderate* over *MTA*—such that this preference was stronger for female and more liberal respondents ( $\chi^2(1)=7.28, p=0.007$ ;  $t(57)=-2.15, p=0.036$ , respectively).

<sup>10</sup> For this reason, we did not use *Brokerage fee* and *Contingent fee*, since brokerage fees are hardly ever regulated in Israel, and contingent fees rarely are.

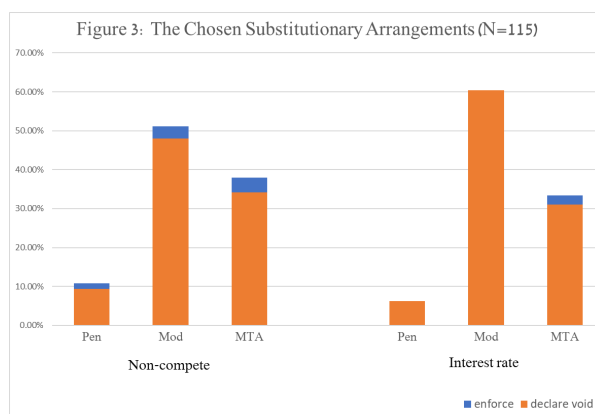
their responses. Specifically, Israeli courts often limit the scope of excessive non-compete clauses to the extent needed to render them “reasonable and proportional” given the employer’s legitimate interests (AES Systems Inc. v. Saar, 54(3) P.D. 850 (2000)). While it is not absolutely clear whether, in doing so, Israeli courts apply a *Moderate* or an MTA substitute, the latter does appear to be the case (AES Systems, pp. 877–78). Clearly, they do not annul the clause altogether, as they would under a *Penalty* substitute. As for interest rates, the Israeli statute that regulates non-bank loans (as the loan was described in the vignette) sets maximum caps on the effective interest rate. The statute authorizes the courts to adjust the contractual rate to those caps, “or to set a lower rate,” to order the lender to pay back to the borrower the amounts that had been charged that were in violation of the statutory cap, “and to hand down any other order that would appear to be just in the circumstances” (Regulation of Non-Bank Loans Law, 1993, Sections 5 and 9(b)). Thus, while the MTA appears to be the first option, the courts have considerable discretion in shaping the substitutionary arrangement. Notably, while non-compete clauses are regularly discussed in the first-year contract law course, it is considerably less likely that the participants in Study 3 were familiar with the details of the Regulation of Non-Bank Loans Law. Thus, we cautiously hypothesized that in the present study there would be a shift, relative to Study 1, from *Penalty* to MTA—at least in the *Non-compete* scenario.

**Participants.** A total of 144 third- and fourth-year LL.B. and LL.M. students at the Faculty of Law of the Hebrew University in Jerusalem took part in Study 3. They were recruited by e-mail invitation. To encourage participation, five participants were randomly selected to win a prize of NIS 180 each (one NIS roughly equals US\$.25). Fifteen participants who failed the attention question were excluded from the analysis. Of the remaining 129 participants, 64 were male, 63 were female, and two did not indicate their gender. The average age was 26.32 (SD=3.44). As in the previous studies, participants rated themselves on the Ideological Worldview and Religiosity scales. The mean ideological worldview on the 0 (Liberal) to 100 (Conservative) scale was 32.86 (SD=22.38), and the mean religiosity on the 0 (Not at all religious) to 100 (Strongly affiliated with religion) scale was 37.63 (SD=38.35). The average score on the *Individualism* attitude scale (on a scale of 1 to 7, where 1 represents an extreme individualistic attitude and 7 an extreme solidarity approach) was 4.73 (SD=0.97,  $\alpha=0.72$ ).

**Design and Procedure.** In the first part of the Study, participants were presented with two randomly ordered decision problems, *Non-compete* and *Interest rate*, similar to those used in Study 1 (see Appendix). With regard to each one of them, they were first asked whether they would enforce the clause that exceeded the minimally tolerable arrangement; and then to assume that they have invalidated it and to indicate which of the three substitutes, in their view, is most appropriate (using two randomized orders of the three options: *Penalty-Moderate-MTA* or *MTA-Moderate-Penalty*). The participants were then asked about their support for the invalidation of unreasonable non-compete clauses in employment contracts, or excessive interest rates in loan contracts (hereinafter – the *General support* question). Participants marked their answers to this question on a 7-point Likert scale, where 1 meant “Strongly oppose”

and 7 “Strongly support.” The *Interest-rate* decision problem then contained a comprehension check question. After completing the first part of the study, participants were asked to provide demographic details about themselves (including a self-ranking on the Ideological Worldview and the Religiosity scales), and to complete the Individualism component of the Contractual Attitude Scale.

**Results.** As in studies 1 and 2, a great majority of participants responded that they would invalidate the excessive contractual arrangement (*Non-compete*: 91.5%,  $\chi^2(1)=88.75$ ,  $p<0.001$ ; *Interest rate*: 97.7%,  $\chi^2(1)=117.28$ ,  $p<0.001$ ). Figure 3 shows the substitute that the respondents found most appropriate (presentation order of options had no significant effect). As hypothesized, legally trained Israeli participants were less supportive of *Penalty*, and more supportive of MTA compared with laypersons in the U.S.—most likely because they were influenced by existing law in Israel. However, as in Studies 1 and 2, participants supported *Moderate* considerably more than either *Penalty* or MTA (*Non-compete*:  $\chi^2(2)=32.7$ ,  $p<0.001$ ; *Interest rate*:  $\chi^2(2)=56.98$ ,  $p<0.001$ ).<sup>11</sup>



A one-way between-subjects ANOVA yielded significant associations between the scores on the *General support* question and the substitutionary arrangement found most appropriate in both the *Non-compete* and *Interest rate* decision problems ( $F(2,126)=4.53$ ,  $p=0.013$ ;  $F(2,126)=4.02$ ,  $p<0.02$ , respectively). Post hoc comparisons using the Tukey HSD test indicated that participants who found *Moderate* the most appropriate substitute expressed significantly greater support for the invalidation of excessive contractual arrangements than those who found MTA the most appropriate in both *Non-compete* and *Interest rate* ( $p=0.016$ ;  $p=0.023$  accordingly). The other comparisons were not statistically significant. The score on the *Individualism* attitude scale correlated with the level of support—such that participants with a more individualistic attitude were less supportive of invalidating unreasonable terms ( $r=0.42$ ,  $p<0.001$ ).

<sup>11</sup> The difference between the substitute arrangements remains significant when we exclude MTA from the analysis (*Non-compete*:  $\chi^2(1)=33$ ,  $p<0.001$ ; *Interest rate*:  $\chi^2(1)=56.98$ ,  $p<0.001$ ). When we exclude *Penalty*, the difference between Moderate and MTA remains significant in *Interest rate* ( $\chi^2(1)=10.12$ ,  $p<0.001$ ), but not in *Non-compete* ( $\chi^2(1)=2.51$ ,  $p=0.113$ ).



A one-way between-subjects ANOVA yielded a significant association between participants' score on the *Individualism* attitude scale and their preferred substitutionary arrangement in *Interest rate* ( $F(2,126)=5.31, p=0.006$ ), but not in *Non-compete*. Post hoc comparisons using the Tukey HSD test indicated that participants who found *Moderate* the most appropriate substitute were statistically significantly more pro-solidarity than those who thought MTA to be the most appropriate ( $p=0.04$ ). The other comparisons were not statistically significant.<sup>12</sup>

### 3.4. Discussion

In all three studies, the *Moderate* substitute was judged to be more desirable than either *Penalty* or MTA by laypersons from the United States and by legally trained people from Israel, alike. Study 2 indicated that this judgment is not primarily a product of the compromise effect.

The finding that—unlike all other comparisons—subjects' preference for *Moderate* over *Penalty* was not statistically significant in *Non-compete* in Study 2 is not surprising. In the other three decision-problems—*Brokerage fee*, *Interest rate*, and *Contingent fee*—adopting *Penalty* meant depriving the broker, the lender, and the lawyer of any remuneration for the benefit they conferred upon the homeowner, the borrower, and the client, respectively. This result may seem rather drastic and arguably unfair. In contrast, the elimination of a *Non-compete* obligation does not appear to be drastic or unfair for the employer—in fact, the absence of such obligation is usually the legal default rule (and many States impose formal restrictions on deviating from it) (Estlund 2006, p. 391).

The weaker support for *Penalty* in Study 3, compared to the corresponding decision-problems in Study 1 is not surprising either. It is likely due to the familiarity of the participants in Study 3 with Israeli law, which generally employs the MTA substitute for vacated non-compete clauses, and describes MTA as the first possible substitute in the case of excessive interest rates. People tend to believe that the existing state of affairs is desirable (Eidelman and Crandall 2012).

The greatest support for the *Moderate* substitutes, which connotes notions of fairness and reasonableness, is consistent with participants' overall high scores on the *Individualism* attitude scale: mean scores of 5.26 and 4.73 out of 7 in Studies 1 and 3, respectively, where 1 represents an extreme individualistic attitude and 7 an extreme solidarity approach. A similar phenomenon is apparent in the association found in Study 3 between participants' score on the *Individualism* attitude scale and their support for invalidating unreasonable terms, as well as their preferred substitutionary arrangement in *Interest rate*.

One limitation of the three studies is that the participants were not necessarily a representative sample of the entire population—whose attitudes may differ from those

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<sup>12</sup> When analyzing only participants who declared the excessive clauses void, the results were basically the same. No significant connections were found between most of the demographic attributes of the participants and the substitutionary arrangement that they chose in most of the decision problems. Only in *Non-compete* was the score on the Ideological Worldview scale statistically significantly associated with the preference for the substitute arrangements ( $F(2,126)=5.24, p=0.007$ ). A post hoc comparisons using the Tukey HSD test indicated that more liberal participants preferred *Penalty* arrangement over *Moderate* and MTA more strongly ( $p=0.014$  and  $p=0.005$ , respectively).

of MTurk responders (and Israeli law students). MTurk subjects from the United States are more representative of the U.S. population than in-person convenience samples that are often used by experimental researchers, in part because they are considerably younger and more liberal than the U.S. adult population as a whole (Berinsky, Huber, and Lenz, 2012; Huff and Tingley 2015). While it is certainly desirable to examine the same questions with a representative sample (and possibly with samples from various societies), the significance of this limitation should not be overstated. Although some concerns have been raised about whether liberals and conservatives recruited through MTurk share the same psychological dispositions as their counterparts in the general public, MTurk samples have been found to “closely mirror the psychological divisions of liberals and conservatives in the mass public” and “produce substantively identical results with only minor variation in effect sizes” (Clifford, Jewell, and Waggoner 2015, p. 1). Thus, by taking into account the subjects’ ideological worldview and other demographic characteristics, one can cautiously gain insight into the prevailing attitudes in the population as a whole (Levay, Freese, and Druckman 2016).

At any rate, as stated at the outset, our findings do not carry direct normative implications, since the prevailing judgments may be unsound. Inasmuch as our findings do represent common judgments, however, they may explain why the *Moderate* substitute is very often adopted by the law; and inasmuch as the law should follow the prevailing normative judgments for principled or instrumental reasons, they also provide a normative support for prescribing this substitute.

At this point, one might wonder how come MTAs, which gained little support in our studies, are nevertheless fairly prevalent. Our conjecture is that MTAs have an intuitive appeal in negotiated contracts between similarly situated parties—the archetype of contracts under classical contract theory. When the terms of such contracts are for some reason deemed unacceptable, replacing them with minimally acceptable arrangements—entailing the least curtailment of the parties’ freedom—appears to be sensible. However, this is no longer the case with most modern contracts to which substantive mandatory rules apply. Such contracts are unilaterally drafted by employers, lenders, and other suppliers, who enjoy superior bargaining power. When it comes to such contracts—including the contracts described in Studies 1–3—most people (and jurists) support the moderate substitute.

## **4. CUSTOMERS’ INCENTIVES**

### **4.1. Background and Motivation**

As explained in section 2 above, a key incentive effect of the substitute arrangement pertains to the drafting of contracts by suppliers. Suppliers are most likely to use excessive, unconscionable, and invalid clauses in their contracts under MTA, and least likely to do so under *Penalty*. At the same time, the substitute arrangement is considerably less likely to influence customers’ contracting decisions, because very often they are unaware of the contract details and do not know what the law is.

Another straightforward—yet hitherto overlooked—effect of the substitute arrangement relates to the inclination of customers to challenge potentially (or even definitely) unenforceable terms *ex post*. While customers hardly ever read standard-form contracts before contracting with suppliers (Bakos, Marotta-Wurgler, and Trossen 2014; Ayres and Schwartz 2014), they are much more likely to do so once a dispute

arises (Becher and Unger-Aviram 2010; Furth-Matzkin 2017, pp. 35–40; Furth-Matzkin 2019; Becher and Zarsky 2019). Similarly, while at the contracting stage customers are often ignorant of the legal norms governing their transaction, once a dispute arises with the supplier, they may seek professional legal advice, or at least consult with friends or surf the web for legal information (Furth-Matzkin 2017, pp. 35–40). That said, even customers who believe that a contractual term that the supplier relies upon is unenforceable may not exercise their rights. Given the characteristic disparities between many suppliers and customers in terms of resources and sophistication; the unpleasantness of confrontation; the monetary and non-monetary costs of litigation; and the indeterminacy of many legal norms, many customers yield to the supplier even if the law is (or is likely to be) on their side (Schmitz 2016; Arbel and Shapira 2019, p. 7). At that point, the substitute arrangement may have a significant impact on the probability that litigation will ensue, as the decisions of both parties whether to take the matter to court is influenced by the expected remedy or sanction. We focus on the influence of the substitutes on customer’s decision to challenge the allegedly invalid term (without which, no litigation, or even dispute, arises).

Consider again the loan example discussed above, where the prevailing annual interest rate is 10% and there is a statutory cap of 20%. Suppose further that a borrower who has taken out a loan of \$10,000 for one year, with an annual interest of 30%, faces difficulties repaying it. If she does not challenge the contractual interest rate, she would have to repay \$13,000. If she challenges the interest rate and prevails in court, under MTA she would have to pay only \$12,000; under *Moderate* only \$11,000; and under *Penalty* of 0% interest-rate, only \$10,000. Other things being equal, borrowers are more likely to exercise their rights if by doing so they are expected to gain (or avoid losing) \$3,000 (under *Penalty*), than if they are only expected to gain \$2,000 (under *Moderate*), and certainly if they are expected to gain only \$1,000 (under MTA). This is all the more true of the borrower’s attorney, who is more likely to take the case the higher the expected reward, because his or her fee often depends on the outcome of handling the case. Inasmuch as there is a problem of under-enforcement of customers’ rights—and as previously noted, there are good reasons to believe that such a problem does exist, especially in the case of underprivileged and unsophisticated tenants, borrowers, employees, and consumers—this analysis provides a potent argument in favor of *Penalty* (or at least *Moderate*), and against MTA (compare the economic justification for supra-compensatory damages when the probability of enforcement is smaller than one, known as the “multiplier principle.” Craswell 2003, pp. 1167–69).

Since this incentive effect is obvious, we have not gone to the trouble of studying it empirically. However, we have conducted an experimental study to examine whether the substitutionary arrangement might have an expressive effect that would influence customers’ inclination to challenge excessive terms, beyond the amount of money or other tangible advantages that are at stake.

According to expressive theories of law, the law influences people’s behavior not only by imposing duties and conveying rights, but also by expressing attitudes, shaping public perceptions, and sometimes imposing “expressive harms” (Cooter 1998; Anderson and Pildes 2000; McAdams 2015). For example, it has been shown that the availability of specific performance may influence people’s assessments of the morality of breach of contract, which in turn influences their contractual decisions (Depoorter

and Tontrup 2012). We hypothesized that, by prescribing a penalty substitute, the law expresses greater condemnation of suppliers' inclusion of excessive terms in their contracts. Such condemnation may increase customers' assessment of their chances to prevail in court or arouse indignation toward suppliers, which consequently will encourage customers to challenge such terms. Conversely, when the law adopts an MTA, it expresses a more permissive and lenient attitude toward the inclusion of invalid terms in the contract, which may in turn discourage hesitant customers from challenging them (and *Moderate* might lie somewhere in between).

To be sure, when customers contemplate whether to challenge an excessive term, they should take into consideration the effect of the substitutionary arrangement on the judge who will decide the case—an issue we directly examine in Studies 5 and 6. In study 4 we do not directly examine the thought process of customers, but one may assume that at least the more sophisticated customers do take this issue into account.

#### **4.2. Study 4: Customers' Inclination to Challenge Contractual Terms**

Study 4 set out to examine customers' inclination to challenge excessive interest rates under the three substitutionary rules in a between-subjects design, where the disputed sum was the same in all three conditions.

**Participants.** A total of 230 MTurk master workers from the United States took part in this study in return for \$1. Four participants who failed the attention question were excluded from the analysis. Of the remaining 226, 123 were male, 100 were female, and three did not indicate gender. Their average age was 39.64 (SD=10.26). Seventy-eight percent of the participants had attended college or had higher education. Thirty-four percent had an annual income of less than \$30,000, 45% earned between \$30,000 and \$60,000 per year, and 21% had a yearly income of over \$60,000. Three participants had a law degree, and seven had some legal education (a total of 4.4%). The mean ideological worldview on a 0 (Liberal) to 100 (Conservative) scale was 37.84 (SD=29.36), and the mean religiosity on a 0 (Not at all religious) to 100 (Strongly affiliated with religion) scale was 25.32 (SD=33.59). The average score on the *Individualism* attitude scale (on a scale of 1 to 7, where 7 represents extreme solidarity approach) was 5.16 (SD=1.2,  $\alpha=0.87$ ), and the average score on the *Formalism* attitude scale (on a scale of 1 to 7, where 7 represents an extreme anti-formalistic attitude) was 3.46 (SD=1.13,  $\alpha=0.78$ ).

**Design and Procedure.** As shown in the Appendix, in the first part of Study 4 participants were initially presented with a brief explanation of the concept of principal and interest in loans; informed that the prevailing annual interest rate for a given type of loan in their jurisdiction is 20%; and advised that according to the law, "excessive and unconscionable" interest rates are void. The vignette went on to say that the courts in their jurisdiction have long struggled with the question of when an interest rate should be considered excessive. With regard to this type of non-bank loans, the courts have usually ruled that an annual interest in excess of 30% is excessive and void, but on occasion they found even higher rates reasonable and valid, and on other occasions lower rates to be excessive and void.

The vignette then described the outcome of a declaration that a given interest rate is excessive and void—which varied between the three conditions: *Penalty* (no interest), *Moderate* (prevailing interest), and MTA (minimally tolerable interest). To ensure that the participants understood the outcome, the initial description was followed by a comprehension question that they had to answer correctly before proceeding with the questionnaire.

Participants were then asked to imagine that they had taken out a loan of the said type in an amount that varied across the three conditions: \$5,000 in *Penalty*, \$10,000 in *Moderate*, and \$20,000 in MTA—with an annual interest rate of 40%. The amount of interest to be paid after one year, in addition to the principal, was also stated—namely, \$2,000, \$4,000, and \$8,000 for *Penalty*, *Moderate*, and MTA, respectively. The vignette further instructed participants to assume that after getting advice about the law, they decided to repay only the principal amount (in *Penalty*), the principal amount plus \$2,000 (i.e., 20% of the principal) (in *Moderate*), or the principal amount plus \$6,000, namely 30% (in MTA)—which they believed they were legally required to pay. In response, the lender insisted that the participant must pay the remaining balance of \$2,000, and the participant-borrower had to choose between two options: (1) paying the difference of \$2,000 up to the contractual interest rate of 40%, or (2) going to court and arguing that the contractual interest rate was void, and therefore s/he only had to pay the principal amount (in *Penalty*), or the principal amount plus 20% interest (in *Moderate*), or the principal amount plus 30% (in MTA)—as he or she had already done (hereinafter – the *Choice* question). Table 2 summarizes the numerical details of the three conditions.

**Table 2:** Details of Conditions in Study 4

Condition	Principal	Prevailing Interest Rate	Tolerable Interest Rate	Contract Interest Rate	Contract Interest	Amount Demanded	Amount Repaid	Amount in Dispute
Penalty	5,000	20%	30%	40%	2,000	7,000	5,000	2,000
Moderate	10,000	20%	30%	40%	4,000	14,000	12,000	2,000
MTA	20,000	20%	30%	40%	8,000	28,000	26,000	2,000

After choosing between the two options, participants answered two more questions. First, they assessed the chances that, if they went to court, the court would rule that the contractual interest was excessive and void, on a 0–100 scale, where 0 meant that there was no chance, and 100 that there was absolute certainty that the court would so rule (the *Chance* question). Second, they expressed their opinion about the extent to which the law, as previously described, denounces the charging of excessive interest and treats it as wrong and reprehensible (the *Denounce* question). Participants marked their answers on a 1–7 scale, where 1 meant that the law does not denounce excessive interest charges at all, and 7 means that it does so very strongly.

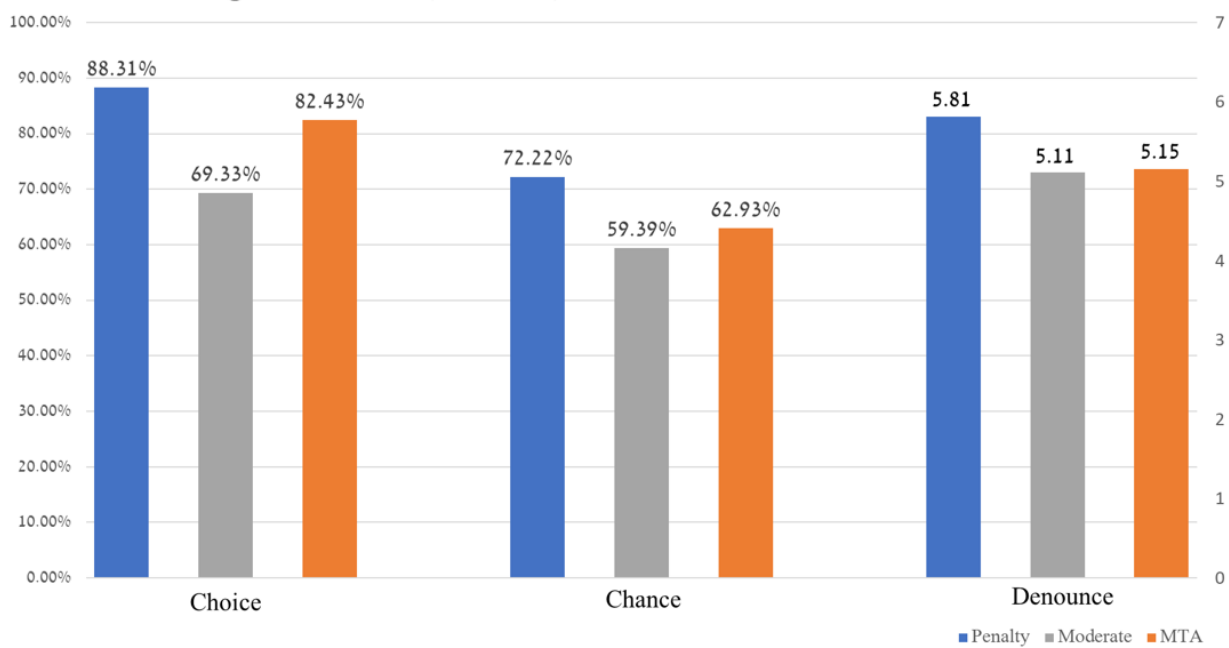
After completing the first part of the study, participants were asked to provide demographic details about themselves (including self-ranking on the *Ideological Worldview* and *Religiosity* scales), and to complete a contractual attitude scale that included the *Individualism* and *Formalism* items, as well as an attention check.

**Results.** The outcomes of invalidating the contractual interest rate—*Penalty*, *Moderate*, or MTA—significantly affected all three dependent variables of *Choice*, *Chance*, and

*Denounce*. Participants' inclination to exercise their rights, their assessments of their chances to win, and their assessments of the extent to which the law denounces excessive interest rates, were generally highest under *Penalty*, and lowest under *Moderate*. Figure 4 presents the percentage of participants that challenged the lender's claim, and the mean estimates of *Choice* and *Chance* (on 1–7 scales). With regard to *Choice*, overall the differences between the three conditions were statistically significant, as was the difference between *Penalty* and *Moderate* ( $\chi^2(2)=8.96, p=0.011, \chi^2(1)_{\text{Pen-Mod}}=8.23, p_{\text{Pen-Mod}}=0.004$ ; the differences between MTA and the other two arrangements were not statistically significant).

The mean estimated chances of the court invalidating the contractual interest rate were 72.22 in *Penalty*, 59.39 in *Moderate*, and 62.93 in MTA. A one-way between-subjects ANOVA yielded significant associations between the scores in *Chance* and the condition ( $F(2,223)=7.68, p=0.001$ ). Post hoc comparisons using the Tukey HSD test indicated that in the *Penalty* condition participants assessed their chances of winning the case as significantly higher than under *Moderate* or MTA ( $p=0.001$  and  $p=0.018$ , respectively). The difference between *Moderate* and MTA was not statistically significant.

Figure 4: *Choice*, *Chance*, and *Denounce* in each Condition



Columns of *Choice* represent the percentage of participants who challenged the lender's claim in each condition; Columns of *Chance* represent the mean estimated chances of the court invalidating the contractual interest rate; Columns of *Denounce* represent the mean estimated degree to which the law denounces the charging of excessive interest (on a 1–7 scale, where 1 means No denouncement, and 7 Strong denouncement).

The mean answers to the *Denounce* question (on a 1–7 scale, where 1 meant No denouncement, and 7 Strong denouncement) were 5.81 in *Penalty*, 5.11 in *Moderate*, and 5.15 in MTA. A one-way between-subjects ANOVA yielded significant associations between the scores in *Denounce* and the condition ( $F(2,223)=10.24, p<0.001$ ). Post hoc comparisons using the Tukey HSD test indicated that in the *Penalty*

condition, participants believed that the law denounces charging excessive interest rates significantly more than under *Moderate* or MTA ( $p < 0.001$ ;  $p = 0.001$ , respectively). Again, the difference between *Moderate* and MTA was not statistically significant.

Finally, strong correlations were found between *Chance* and *Denounce* ( $r = 0.48$ ,  $p < 0.001$ ), between *Chance* and *Choice* ( $t(224) = -9.08$ ,  $p < 0.001$ ), and between *Denounce* and *Choice* ( $t(224) = -3.55$ ,  $p < 0.001$ ). The scores on the attitude scales did not bear a statistically significant correlation with the answers to the *Chance* question, but the scores on the *Individualism* attitude scale did correlate with the answers to *Denounce* ( $r = 0.14$ ,  $p = 0.035$ ): participants with a stronger solidarity attitude thought the law denounced excessive interest to a greater extent. In addition, participants with stronger *solidarity* and *non-formalistic* attitudes were more likely to challenge the lender's claim ( $t(224) = -3.52$ ,  $p = 0.001$ ;  $t(224) = -2.2$ ,  $p = 0.029$ , respectively).<sup>13</sup>

### 4.3. Discussion

The findings of Study 4 indicate that even when the disputed sum is the same in absolute terms, customers' reported inclination to challenge an excessive interest rate in a loan contract is affected by the applicable substitute arrangement, such that this inclination is stronger under a penalty substitute. Conceivably, this is because people perceive the legal condemnation of excessive interest rates to be stronger under a penalty arrangement. Such a perception can arouse indignation, increase the assessed chances of winning in court, and thus encourage customers to challenge the contractual term. The findings also reveal associations between people's individualistic attitudes and their answers to the *Denounce* and *Choice* questions. This may be because more individualistic people are less inclined to perceive the law as condemning excessive interest rates, and therefore less disposed to challenge them.

It should be noted that the concerns over the demographic differences between MTurk workers and the general U.S. population—as discussed in the context of Studies 1–3—are considerably less germane to the present Study (or to Studies 5 and 6), because in Studies 4–6 we used an experimental design. It has been shown that MTurk workers are comparatively more attentive to study materials, and importantly, that they produce similar results in treatment effects as subjects in other representative and unrepresentative platforms (Mullinix et al. 2015; Irvine, Hoffman & Wilkinson-Ryan 2018).

It should be conceded, however, that the strong associations found between participants' answers to the *Choice*, *Chance*, and *Denounce* questions do not prove causality between the three. While it is possible that the greater inclination to challenge the excessive interest rate under *Penalty* was due to a more optimistic assessment of obtaining a favorable ruling (which, in turn, was due to a higher assessment of the legal condemnation of such rates in this condition), and/or that the stronger perceived legal condemnation aroused indignation that directly prompted participants to challenge the interest rate, it may also be the case that the answers to the *Chance* and *Denounce* questions were an ex-post rationalization of the decision that participants had made in *Choice* (and other causal connections between the three variables are also conceivable).

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<sup>13</sup> No significant connection was found between the participants' gender, level of education, income, religiosity, or ideological worldview, and their answers to the *Choice*, *Chance* and *Denounce* questions.

More importantly, some of the variance in the inclination to challenge the excessive interest rate among the three conditions in Study 4 may have been due to the different proportions between the disputed sum of money (\$2,000) and the principal of the loan—\$5,000, \$10,000, or \$20,000. From a purely rational perspective, these proportions should not affect customers' decision whether to challenge the disputed term. However, one should take into account the phenomenon of *diminishing sensitivity*, namely, the decreasing impact of any given change on people's perceptions, judgments, and decisions, the further away the change is from the reference point (Zamir and Teichman 2018, pp. 85–86). A familiar manifestation of this phenomenon is that consumers may go out of their way to buy a product for \$20 instead of \$25, but not do so to buy a product for \$495 instead of \$500 (Thaler 1980, pp. 50–51). In the present context, it is possible that the strongest inclination to challenge the excessive interest rate in the *Penalty* condition was due to the fact that in that condition the dispute was over an amount equivalent to 40% of the principal, whereas in the other two conditions it amounted to only 20% (in *Moderate*) or 10% (in MTA) thereof.

However, the observation about diminishing sensitivity does not detract from our key argument about the plausible effect of the substitute arrangement on customers' reported inclination to challenge overreaching contract terms. This is for several reasons. First, when the perceived stakes are greater, the borrower may reasonably assume that it would be *more difficult* to prevail in court, so he or she would be less inclined to challenge the excessive interest. Thus, inasmuch as people's inclination to exercise their rights (in *Choice*) are explained by its strong association with the assessment of their chances to prevail in court (in *Chance*), it cannot be primarily attributed to diminishing sensitivity. Therefore, the strong correlation between the answers to *Chance* and *Denounce*, suggests that the greatest implicit condemnation of excessive interest rate under *Penalty* played a major role in people's answers to *Choice*.

Second, we readily concede that the expressive effect of the substitute arrangement plays a secondary role. The primary factor is the actual, tangible difference between the outcomes of the three substitutes, in any given case. The *Penalty* substitute offers the customer a larger reward than *Moderate*, which in turn provides a larger reward than that of MTA—and the larger the reward, the more likely the customer is to challenge an excessive term. In this regard, the fact that the proportion between the scope of the dispute and the scope of the transaction is largest under *Penalty* and smallest under MTA is not an artifact of the study's design, but an inherent feature of the substitutes.

Of course, ascertaining the precise effects of the various substitutes, the generality of those effects, and the underlying mechanisms, would require much more work. Among other things, neither the expressive effect of the substitute nor diminishing sensitivity account for the fact that the inclination to challenge the excessive interest rate under MTA was not less than under *Moderate* (in fact, it was higher—albeit not statistically significantly so). All we wanted to demonstrate in Study 4 was that, even when one compares between cases with the same stakes, the substitute arrangement may influence customers' inclination to challenge an excessive contractual term—and this indeed has been established.



## 5. THE ENDOGENEITY OF UNENFORCEABILITY

### 5.1. Background and Motivation

Previous studies—most notably Ben-Shahar’s article—have focused on the impact of the substitute arrangement on suppliers’ drafting of contracts. Section 4 broadened this perspective to include the impact of the substitute on customers’ inclination to challenge excessive terms once a dispute arises. This section further expands the view by examining the effect of the substitute on the inclination to invalidate excessive contractual clauses, when doing so is discretionary—as when the mandatory norm uses standards such as unconscionability or unreasonableness. Ancillary goals of the studies described below were to examine the generality of the findings of Studies 1 and 2 in a legislative, rather than judicial, context; to test whether this inclination depends on the type of contract: consumer or commercial (in Study 5); whether it depends on the judged desirability of the substitute in the abstract; and whether it depends on people’s contractual attitudes as gauged in the *Individualism*, *Formalism*, and *Egalitarianism* attitude scales (the latter two only in Study 6). While the participants in Study 5 were laypersons from the United States, those in Study 6 were advanced-years law students from Israel.

As in the previous studies, the emphasis was on people’s conscious, deliberative judgments, rather than their unconscious and intuitive ones. Of the four decision problems used in studies 1 and 2 (*non-compete*, *brokerage fee*, *interest rate*, and *contingent fee*), studies 5 and 6 used *interest rate*, because it is the closest to being purely distributive (whereas the other three much more obviously affect the parties’ behavior)—and is therefore the one in which Ben-Shahar’s key insight is most relevant (as discussed in section 2).

We had no clear hypothesis about the effect of the substitute arrangement on the subjects’ inclination to invalidate a high interest rate. In fact, we considered several conflicting hypotheses. One was that participants would be most inclined to invalidate an exorbitant interest rate under MTA, because it involves the smallest intervention in the parties’ agreement, and is therefore more respectful of the parties’ freedom of contract than the other two substitutes. In borderline cases, in particular, when decision-makers hesitate whether to invalidate a contractual term, they might be more willing to do so under MTA, knowing that the outcome of their decision is less consequential than under *Moderate* or *Penalty* (but then, participants might be less willing to curtail freedom of contract when doing so would make little practical difference). Another possibility was that if participants care primarily about the ex post fairness of the contractual terms (as arguably indicated by the results of Studies 1, 2, and 3), they would be most inclined to invalidate the high interest rate under *Moderate*. Such an inclination may stem from viewing the other two alternatives as less desirable, on the grounds that they are either overly punitive (*Penalty*) or overly lenient (MTA) toward the lender. It may also be perceived as a sort of compromise between the two extremes. Conversely, if participants wish to punish and deter lenders, and to help borrowers as much as possible, they might be most inclined to invalidate the interest rate in the *Penalty* condition. Finally, if participants believe that they should not be influenced by the substitute arrangement when determining whether a certain rate is excessive and unconscionable, they would be equally inclined to invalidate the interest rate in all three substitute conditions. Of course, it is also possible that the impact of the substitute

varies across decision-makers, depending on which of the above arguments appeal to them most.

The attractiveness of any of the four possibilities may further be affected by whether participants are primarily considering consumer loans, or commercial ones. Arguably, the reasons to invalidate excessive interest rates in the *Penalty* condition are stronger for consumer contracts, while the reasons to do so under the MTA are more compelling for commercial contracts. This is because commercial customers are arguably more capable of protecting themselves against overreaching contract clauses than consumers. However, it may also be claimed that the distinction between consumer and commercial contracts is more relevant to the initial decision whether to invalidate certain contract clauses than to the issue of the substitute.

There is no *necessary* correlation between people's opinion about the relative desirability of the three substitutes in the abstract and their inclination to invalidate high interest rate under each one of them. Even people who find *Penalty* or *Moderate* the most desirable substitute may feel more comfortable invalidating a high interest rate if the substitute is MTA, because the ramifications of a possible misjudgment on their part would be less severe, just as a person might be more inclined to convict the defendant in criminal proceedings if the punishment is less harsh (Tonry 2009; Greenblatt 2008; Guttel and Teichman 2012). Concomitantly, even people who would have legislated MTA as the substitute, once the legislature has set a *Penalty* substitute might take it as a signal that charging a high interest rate is especially deplorable, so they would be more inclined to invalidate high interest rates under *Penalty*, just as some people are more inclined to convict a defendant in criminal proceedings when the punishment is more severe (Jones, Jones, and Penrod 2015; Zamir, Harlev, and Ritov 2017, pp. 138–41). Of course, if some people follow the former reasoning and others the latter, then across the population as a whole there may be no discernible association between people's judgment of the desirability of the substitutes and their inclination to invalidate a high interest rate under each substitute.

Finally, in Study 5 we sought to test whether people whose attitudes are closer to the individualism end on the *Individualism* attitude scale would be more inclined to invalidate high interest rates under any of the substitutes. In keeping with the association we found in Study 3 between the subjects' scores on the *Individualism* attitude scale and preferred substitute arrangement, and their support for invalidating unreasonable terms in Study 3, we hypothesized that, if there is an association between people's *preferred substitute* and their inclination to invalidate high interest rates, there would also be an association between more individualistic attitudes and the inclination to invalidate excessive interest rates. Specifically, more individualistic people would be more inclined to invalidate high interest rates under MTA, while less individualistic ones would be more inclined to do so under *Penalty*. In Study 6, we set out to test comparable hypotheses about the association between people's scores on the *Individualism*, *Formalism*, and *Egalitarianism* components of the Contractual Attitude Scale, their *preferred substitute*, and their inclination to invalidate high interest rates under each of the substitutes.

## 5.2. Study 5: Judicial Inclination to Invalidate Excessive Contract Terms: Within Subjects

Study 5 sought to examine the effect of the substitute arrangement on the subjects' inclination to invalidate overreaching contractual terms, as well as various variables that might influence this effect, using a within-subjects design.

**Participants.** A total of 264 MTurk *Master Workers*—152 were males and 112 females—took part in the study in return for \$1. Sixty-four percent of the participants had attended college or had higher education. The mean age was 40.16 (SD=11.01). Thirty-three percent had an annual income of less than \$30,000, 45% earned between \$30,000 and \$60,000 per annum, and 22% had a yearly income of over \$60,000. As in the previous studies, the participants were asked to rate themselves on the Ideological Worldview and Religiosity scales of 0–100. The average ideological worldview was 39.84 (SD=29.73), where 0 was Liberal and 100 Conservative; and the average religiosity 25.03 (SD=34.27), where 0 was Not at all religious and 100 Strongly religious. The average score on the *Individualism* attitude scale was 5.24 (SD=1.25;  $\alpha=0.89$ ) where 1 represents an extreme individualistic attitude and 7 an extreme solidarity approach.

**Design and Procedure.** The study consisted of three parts: questions about the substitute arrangement, demographic details, and the *Individualism* attitude scale (see Appendix). In the first part, participants were initially informed that in many jurisdictions, there are statutes that authorize the courts to declare “excessive and unconscionable” interest rates void. It was further explained that, in this context, courts “balance the view that abusive interest rates unfairly enrich lenders and adversely affect borrowers against freedom of contract and the recognition that invalidating high interest rates may prevent some borrowers from getting credit in the first place.” It was then added that the outcomes of invalidating excessive interest rates vary from one jurisdiction to another, such that the substitutionary arrangement may be “a penalty arrangement” (borrower pays only the principal), “a moderate arrangement” (borrower pays the principal plus the prevailing interest), or “a minimally tolerable arrangement” (borrower pays the principal plus interest at the highest rate that would still be considered tolerable).

Two presentation orders of the three arrangements were counterbalanced between subjects: *Penalty-Moderate-MTA* or *MTA-Moderate-Penalty*. Following this description, the first question (*Comprehension*) asked participants to assume that “for a given type of loans in a certain jurisdiction, the prevailing annual interest rate is 15%” and that “the courts in that jurisdiction have long ruled that an annual interest exceeding 30% is excessive and unconscionable and therefore void and unenforceable.” Based on these assumptions, they were asked to indicate what the outcome of invalidating an interest rate of 45% would be under each of the three substitutes, on scales of 0 to 45 percent. Participants could not proceed with the questionnaire until they had answered all three questions correctly (the correct answers being *Penalty*: 0%; *Moderate*: 15%; *MTA*: 30%). The order of the three substitutionary arrangements was the same as in the initial description.

The *Comprehension* question served two purposes. First, we wanted to ensure that the participants understood the meaning of the three substitutes. Second, while all participants were told that the 45% interest rate was voided in a lawsuit filed by “Loans Ltd., a credit company,” half of them were told that the lawsuit was filed against “John, a borrower” and the other half against “John Construction Ltd., a borrower.” The difference between the two conditions had no bearing on the *Comprehension* question, but could affect the answers to the ensuing questions. Specifically, if people judge consumer and commercial loans differently, then—although the type of loan was not indicated in the following questions—the version used in *Comprehension* might serve as a sort of *priming*, thereby affecting those judgments.<sup>14</sup>

In the next question (*Legislator*), participants were asked to imagine that they were members of a legislative body that is drafting a new statute authorizing courts to invalidate excessive interest rates. They were asked which of the three outcomes of such invalidation—*Penalty*, *Moderate*, or MTA—they would include in the statute.<sup>15</sup>

In the third question (*Judge*), participants were asked to imagine that they were serving as a judge in a jurisdiction where courts were authorized to invalidate excessive interest rates. They were then asked under which of the three arrangements they would be most inclined to invalidate a high interest rate. In addition to *Penalty*, *Moderate*, and MTA, they had a fourth option—namely, that their inclination to invalidate the high interest rate would be unaffected by the outcome of such invalidation (*Indifferent*). Four variations of the order of the four answers were used: *Penalty-Moderate-MTA-Indifferent*; *MTA-Moderate-Penalty-Indifferent*; *Indifferent-Penalty-Moderate-MTA*; *Indifferent-MTA-Moderate-Penalty* (for each participant, the order of the three arrangements was the same as in the initial description).<sup>16</sup>

Finally, in the fourth question (*General support*), participants were asked whether they support or oppose the invalidation of excessive and unconscionable interest rates in loans. They marked their answers on a 7-point Likert scale, where 1 meant Strongly support and 7 Strongly oppose. The first part of the questionnaire was followed by a set of demographic questions, and the 7-item *Individualism* attitude scale.

**Results.** The order of presentation of the three substitutionary arrangements had no significant effect on any of the responses. In the *Legislator* question, participants expressed the greatest support for *Moderate* (114 out of 264; 43.2%), followed by *Penalty* (94; 35.6%), and MTA (56; 21.2%). The differences between MTA and *Penalty*, and between MTA and *Moderate* were statistically significant ( $\chi^2(1)=9.63$ ,  $p=0.002$ ;  $\chi^2(1)=19.79$ ,  $p<0.001$ , respectively), whereas the difference between

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<sup>14</sup> Priming is a process in which exposure to one stimulus—be it sensory information (such as a visual image) or a concept—unconsciously influences the subsequent response to the same stimulus, and related ones (Förster and Liberman 2007).

<sup>15</sup> Each participant was presented with the three options in the same order as in the *Comprehension* question.

<sup>16</sup> Participants who opted for *Moderate* were asked a follow-up question—namely, under which of the remaining two arrangements, *Penalty* or MTA, would they be least inclined to invalidate the high interest rate.

*Moderate* and *Penalty* was not ( $\chi^2(1)=1.92, p=0.17$ ). The greatest support for *Moderate* in a legislative context replicated the greatest support that was found in Studies 1, 2, and 3 for this substitutionary arrangement in a judicial context.<sup>17</sup> Whether participants read the commercial or consumer version of the *Comprehension* question had no statistically significant effect on their choice of preferred substitute arrangement ( $\chi^2(2)=3.21, p=0.2$ )<sup>18</sup>—which may indicate either that such effect does not exist, or that the manipulated priming was too weak.

The average score on the *Individualism* attitude scale (where 1 represents an extreme individualistic attitude, and 7 an extreme solidarity approach) was 5.58 for those who chose *Penalty* as the preferred substitute, 5.28 for those who chose *Moderate*, and 4.59 for those who chose MTA. A one-way between-subjects ANOVA yielded a significant association between a more individualistic attitude and the preferred substitutionary arrangement ( $F(2,261)=11.87, p<0.001$ ). Post hoc comparisons using the Tukey HSD test indicated that the mean scores for *Penalty* and *Moderate* were significantly greater than for MTA ( $p<0.001$  for both), while the difference between *Penalty* and *Moderate* was not statistically significant ( $p=0.19$ ).

In response to the *Judge* question, only 51 of the 264 (19.3%) participants indicated that their inclination to invalidate a high interest rate would not be affected by the substitutionary arrangement. Among the large majority of 213 participants (out of 264—i.e., 80.7%) who indicated that they would be affected by the substitute, 83 (39%) were most inclined to invalidate a high interest rate under *Moderate*; 71 (33.3%) were most inclined to do so under *Penalty*; and 59 (27.7%) under MTA.<sup>19</sup> The differences between the three substitutionary arrangements were not statistically significant ( $\chi^2(2)=4.06, p=0.13$ ). These results do not support any of the four hypotheses presented above. The reported inclination to invalidate an excessive interest rate was certainly not unaffected by the substitutionary arrangement, nor was it statistically significantly the strongest under any of the substitutes—*Penalty*, *Moderate*, or MTA.

However, there was a strong association between participants' inclination to invalidate an excessive interest rate under each of the substitutes (in *Judge*), and their preferred substitute (in *Legislator*), as shown in Table 3. Excluding the 51 participants who indicated that their inclination to invalidate a high interest rate would not be affected by the substitute arrangement, 158 of the remaining 213 (74.2%) were most inclined to invalidate the high interest rate if the substitute arrangement was the one they would support as legislators. This association was highly statistically significant ( $\chi^2(4)=157.42, p<0.001$ ).

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<sup>17</sup> The difference between *Penalty* and *Moderate* in Studies 1 and 2 was in the same direction as in the present study—but was larger and statistically significant.

<sup>18</sup> Surprisingly, participants who read the commercial-borrower version of *Comprehension* were *less* inclined to support MTA than those who read the consumer-borrower version—but this result was only marginally statistically significant ( $\chi^2(1)=3.15, p=0.08$ ).

<sup>19</sup> Of the 83 respondents who were *most* inclined to invalidate a high interest rate under *Moderate*, 48 were the *least* inclined to invalidate under the MTA in the follow-up question (*see supra* note 16), and 35 under *Penalty*. Arguably, we could classify the respondents into five, rather than four, categories (by splitting *Moderate* into the two sub-categories). However, since the question about the weakest inclination was a follow-up question, and no such follow-up question was presented to those who had chosen *Penalty* or MTA, it appears more appropriate to focus on the four options initially presented.

**Table 3.** Results of Experiment 5: Inclination to invalidate by preferred substitute

		Preferred substitute as legislator		
		Penalty	Moderate	MTA
Inclination to invalidate as judge	Penalty	54	11	6
	Moderate	5	69	9
	MTA	8	16	35
	Indifferent	27	18	6

There was also a statistically significant association between the participants' inclination to invalidate a high interest rate under any of the substitutes, and their score on the *Individualism* attitude scale, such that participants who were most inclined to invalidate a high interest rate under *Penalty* scored highest (5.76 on a 1 to 7 scale, where 1 stands for extreme individualism and 7 for extreme solidarity); those under *Moderate* second (5.2); and those under MTA third (5.1). A one-way between-subjects ANOVA yielded a significant association between solidarity attitudes and the substitutionary arrangement ( $F(3,260)=7.46, p<0.001$ ). Post hoc comparisons using the Tukey HSD test indicated three significant effects between *Penalty* and the other options ( $P_{Pen-Mod}=0.025, P_{Pen-MTA}=0.013, P_{Pen-Ind}<0.001$ ); the other comparisons were not statistically significant.

Finally, in response to the *General support* question, there was a strong support for the invalidation of excessive interest rates in loans. The average answer was 5.82 (SD=1.74), where 1 indicated Strong opposition and 7 meant Strong support (53.4% of the participants marked 7, and 28.4% marked 5 or 6).<sup>20</sup> The different conditions in *Comprehension* (consumer or commercial) had no significant effect on participants' support for invalidating rules. The score on the *Individualism* attitude scale correlated with the level of support, such that participants with a more individualistic attitude were less supportive of invalidating rules ( $r=0.41, p<0.01$ ). There was also a significant association between the answers to the *General support* and *Legislator* questions. The average scores on *General support* were 6.44, 5.79, and 4.86 for participants who supported *Penalty*, *Moderate*, and MTA in *Legislator*, respectively. A one-way between-subjects ANOVA yielded significant associations between the score on *General support* and the subject's choice of preferred substitute in *Legislator* ( $F(2,261)=17.58, p<0.001$ ). Post hoc comparisons using the Tukey HSD test indicated that the mean scores for *Penalty* and *Moderate* were significantly greater than for MTA ( $p<0.001$  for both). The difference between the *Penalty* and *Moderate* was statistically significant ( $p=0.01$ ). Similarly, there was a significant association between the answers to the *General support* and *Judge* questions. The average scores in *General support* were 6.37, 5.89, and 5.14 for participants who were most inclined to invalidate a high interest rate under *Penalty*, *Moderate*, and MTA, respectively. The score of those who reported that they would not be affected by the substitute arrangement was 5.74. A one-way between-subjects ANOVA yielded a significant association between the score in

<sup>20</sup> In the questionnaire 1 indicated strong support and 7 meant strong opposition. Here, to avoid unnecessary confusion, we reversed the direction of the scale in order to align it with the *Individualism* attitude scale.

*General support* and the substitute under which participants would be most inclined to invalidate excessive interest rates in *Judge* ( $F(3,196)=6.23, p<0.001$ ). Post hoc comparisons using the Tukey HSD test indicated two significant effects: between MTA and *Moderate* and between MTA and *Penalty* ( $P_{MTA-Mod}=0.03, P_{MTA-Pen}<0.001$ ). The other comparisons were not statistically significant.<sup>21</sup>

### 5.3. Study 6: Judicial Inclination to Invalidate Excessive Contract Terms: Between Subjects

Study 6 sought to examine the effect of the substitute arrangement on people's inclination to invalidate overreaching contractual terms (as well as various variables that might influence this effect) in a between-subjects design. Since it is quite difficult to fully comprehend the meaning of the various substitutes in a between-subjects design, we conducted Study 6 with senior law students, and used a more detailed vignette.

**Participants.** A total of 148 advanced-years LL.B. students at the Faculty of Law of the Hebrew University in Jerusalem participated in this study. They were recruited by invitation to take part in a survey distributed by professors of second-year courses (not the authors of this study), or by e-mail messages sent to third- and fourth-year LL.B. students. To encourage participation, ten participants were randomly selected to win a prize of NIS 200 each. Thirty-five participants who failed one of the attention questions, or provided incoherent answers, were excluded from the analysis.<sup>22</sup> Of the remaining 113 participants, 45 were male, 67 were female, and one did not indicate gender. The average age was 25.12 ( $SD=2.87$ ). As in the previous studies, participants rated themselves on the Ideological Worldview and Religiosity scales. The mean ideological worldview on the 0 (Liberal) to 100 (Conservative) scale was 34.73 ( $SD=21.88$ ), and the mean religiosity on the 0 (Not at all religious) to 100 (Religious to a great extent) scale was 30.88 ( $SD=34.62$ ). The average score on the *Individualism* attitude scale (on a scale of 1 to 7, where 1 represents an extreme individualistic attitude and 7 an extreme solidarity approach) was 4.78 ( $SD=0.88, \alpha=0.67$ ). The average score on the *Formalism* attitude scale (on a scale of 1 to 7, where 1 represents an extreme formalistic attitude and 7 an extreme non-formalistic one) was 4.59 ( $SD=0.86, \alpha=0.67$ ). The average score on the *Egalitarianism* attitude scale (on a scale of 1 to 7, where 1 represents an extreme egalitarian attitude and 7 an extreme non-egalitarian one) was 3.48 ( $SD=1.16, \alpha=0.73$ ).

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<sup>21</sup> No significant connections were found between most of the demographic attributes of the participants and the *Legislator*, *Judge*, and *General support* questions. A significant correlation was found between the score on *General support* and the score on the Ideological Worldview scale—in that participants with a more conservative attitude were less supportive of invalidating rules ( $r=-0.26, p<0.001$ ). In addition, a one-way between-subjects ANOVA yielded significant connections between the score on the Ideological Worldview scale, and the choice of preferred substitute in *Legislator* ( $F(2,261)=5.74, p=0.004$ ). Post hoc comparisons using the Tukey HSD test indicated that the mean scores for MTA was significantly higher (i.e., a more conservative attitude) than for *Penalty* ( $p=0.003$ ).

<sup>22</sup> By “incoherent answers,” we mean that the answer to the *Judicial-Decision* question was at odds with their answer to the *Threshold* question (see Appendix). For example, it is incoherent to indicate that one would not rule in favor of the borrower when the contractual interest rate is 40% (in the former question), but would rule in her favor if the interest rate was, say, 30% (in the latter question).

***Design and Procedure.*** The study consisted of three parts: questions about the substitute arrangement, demographic details, and the *Individualism, Formalism, and Egalitarianism* attitude scales (see Appendix for an English translation of the Hebrew questionnaire). In the first part, participants were initially asked to imagine that they were taking part in drafting a new law that would authorize the courts to invalidate excessive interest rates, especially when lenders exploit borrowers' hardship. The law should stipulate the outcome of invalidating an excessive interest rate, and participants were asked which of three possible outcomes they would choose: *Penalty, Moderate, or MTA* (in that order, or in a reverse one).

The participants were then told that poor people find it difficult to get credit from banks, because the latter are afraid that they would be unable to repay the loan—so poor people are compelled to borrow from other sources. The participants were further told that “in some country,” a market for non-bank loans has emerged, aimed at people who have been injured and are filing a tort claim against the injurer.<sup>23</sup> In these cases, the expected damages are used as collateral to ensure the loan is repaid: if and when damages are received, the money is first used to repay the loan. Lenders examine the prospects of a successful lawsuit in advance, and issue loans only if they assess these prospects to be high, and the anticipated damages as sufficient to repay the loan. Usually, such loans include compound interest that is calculated on a monthly basis. The mechanism of calculating the interest is usually rather complex, such that at least some of the borrowers do not understand the overall cost of the loan they take. Even allowing for the fact that a small portion of the loans are not fully repaid, or not repaid at all (because the sum of damages awarded is too low), the average interest that lenders charge in this type of loans is very high—usually several times higher than the prevailing interest in bank loans.

Participants were then asked to assume that in the said country there is a law that authorizes courts to invalidate excessive interest rates. The outcomes of such invalidation were labeled *Penalty, Moderate, or MTA*—varying across the three conditions in a between-subjects design. Next, to confirm the participants' attention and comprehension, they were presented with a comprehension question similar to the one used in Study 4 (see Appendix), which they had to answer correctly before proceeding with the questionnaire.

The questionnaire then described a scenario in which Jane, an old lady who was injured due to medical negligence, has received a loan of \$8,000 under the arrangement described above, which was to be repaid if she wins the lawsuit. A year later, the legal proceedings ended, and she won damages of \$18,000—one-third of which were used to pay the lawyer's fee and expenses. She then learned that the amount she owed the loan company, including compound interest, was \$11,200 (an effective annual interest of 40%). Participants were asked to imagine that they were serving as a judge in a legal

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<sup>23</sup> The description was roughly based on the common practice of *litigants third-party funding* (LTPF), which was recently described in Avraham and Sebok (2019). In LTPF, corporations provide plaintiffs with financial support by lending them money in a nonrecourse loan, where the expected damages are used as collateral. The lenders screen the loan applications and determine the sum of the loan such that they do not bear a significant risk that the loans will not be repaid.



dispute between Jane and the loan company, in which Jane argued that the interest rate was excessive, exploiting her hardship. Accordingly, she argued that the contractual interest should be invalidated, and that she should repay a reduced amount, which varied across the three conditions: principal only (\$8,000) in the *Penalty* condition; principal plus a reasonable and fair interest (which, she argued, was 15%), in the *Moderate* condition (totaling \$9,200); or, in the MTA condition, the principal plus interest at the highest rate that the lender could charge that would not be considered excessive—which she argued was 30% (for a total of \$10,400). The company argued that the interest was not excessive, given the high risk that the tort claim would be dismissed and the loan would not be repaid at all.

After reading this description, participants were first asked to indicate whether they would rule in favor of Jane or the loan company. Then—depending on their answer to that question—they were asked whether they would have ruled in favor of Jane had the contractual annual interest been lower (for participants who ruled in favor of Jane) or higher (for those who ruled in favor of the company). Specifically, they were asked to indicate the lowest interest rate beyond which they would invalidate the contractual interest. These questions were followed by another comprehension question, and a question about participants' support for the invalidation of excessive interest rates in loans, especially when the lender exploits the borrower's hardship (*General support*).

After completing the first part of the study, participants were asked to provide demographic details about themselves, and to complete the *Individualism*, *Formalism*, and *Egalitarianism* attitude scales.

**Results.** The order of presentation of the three substitutionary arrangements had a significant effect on the answers to the *Legislator* question ( $p=0.013$ ), such that participants who first saw the *Penalty* substitute tended to prefer it more than those who saw the MTA first, and vice versa (in both orders, *Moderate* scored the highest support).<sup>24</sup> Across both orders, 54 of the 113 (47.8%) participants preferred *Moderate*; 38 (33.6%) preferred *Penalty*; and 21 (18.6%) opted for the MTA. The differences between MTA and *Moderate*, and between *Penalty* and MTA, were statistically significant ( $\chi^2(1)=14.52, p<0.001$ ;  $\chi^2(1)=4.9, p=0.027$ , respectively)—while the difference between *Moderate* and *Penalty* was only marginally statistically significant ( $\chi^2(1)=2.78, p=0.095$ ). The greatest support for *Moderate* in a legislative context replicated the results of Studies 1, 2, 3, and 5. There were no statistically significant associations between the Contractual Attitude scale and the answers to the *Legislator* question—however, this may be due to the small number of participants.

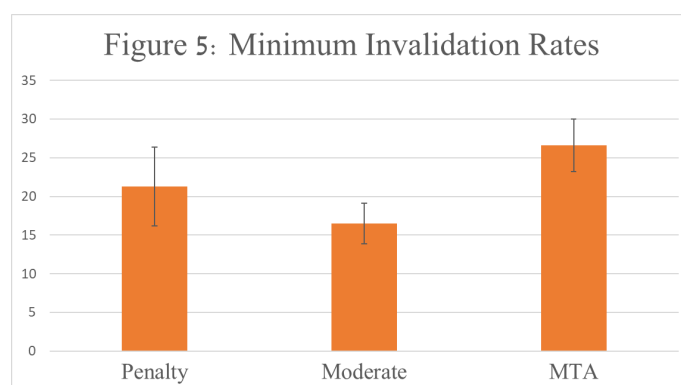
In the *Judicial decision* question, only 10 of the 113 participants (8.8%) ruled in favor of the loan company. Evidently, from an Israeli perspective, an interest rate of 40% is deemed excessive and unacceptable (even though the vignette explicitly referred to “some country,” the borrower's name—Jane—is not an Israeli name, and the loan

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<sup>24</sup> In the *Penalty-first* condition, out of 60 participants, 26 chose *Penalty* as their preferred substitute, 28 opted for *Moderate*, and only 6 chose MTA. In the *MTA-first* condition, 12 preferred *Penalty*, 26 *Moderate*, and 15 MTA.

was set in “dollars” rather than Israeli currency).<sup>25</sup> There was no statistically significant difference in this respect between the three conditions, which should plausibly be attributed to a ceiling effect.

Conversely, the condition did have a significant effect on participants’ response to the follow-up *Threshold* question—namely, the lowest interest rate that would prompt them to invalidate the contractual interest as excessive. The average minimal rates were 21.3% (SD=15.2), 16.5% (SD=7.9), and 26.6% (SD=10.4) under the *Penalty*, *Moderate*, and MTA conditions, respectively. This result is highly statistically significant ( $F(2,110)=7.27, p=0.001$ ). Post hoc comparisons using the Tukey HSD test indicated a highly statistically significant effect between *Moderate* and MTA ( $p=0.001$ ); while the other comparisons were not statistically significant ( $p=0.179$  for *Penalty* and *Moderate*;  $p=0.117$  for *Penalty* and MTA).<sup>26</sup> The mean minimum rates and 95% confidence intervals for each substitute arrangement are shown in Figure 5. Interestingly, the mean interest rate above which the Israeli participants indicated that they would invalidate the interest in the contract between Jane and the loan company, in the MTA condition (26.6%), was lower than the minimally tolerable interest according to Jane’s own argument (30%).



In two of the three conditions (*Penalty* and *Moderate*), the minimum invalidation rate was lowest when the substitute arrangement matched participants’ preferred substitute in the *Legislator* question (the key finding of Study 5)—but the interaction effect between the preferred substitute (in *Legislator*) and the minimal rate in *Threshold* under each of the three conditions was not statistically significant ( $p=0.14$ ).<sup>27</sup> Similarly,

<sup>25</sup> According to Section 5 of the Israeli Regulation of Non-Bank Loans, 1993, the statutory cap for non-bank loans is 2.25 times the average overall cost of non-indexed bank loans. In 2018, when Study 6 was conducted, the average cost of bank loans was under 3.5%—meaning that the statutory cap for non-bank loans was less than 8%.

<sup>26</sup> When comparing between *Moderate*, and *Penalty* and MTA together, the difference is statistically significant ( $t(111)=3.2, p=0.002$ ).

<sup>27</sup> The average of minimal rates at which participants would invalidate the contractual interest, depending on their favored substitute arrangement in the *Legislator* question, was as follows:

		Preferred Substitute in <i>Legislation</i>		
		Penalty	Moderate	MTA
Condition	Penalty	13.22	22.34	31
	Moderate	17.38	15.38	17.11

there were no statistically significant correlations between the participants' scores on the Contractual Attitude Scale and the minimum rate. However, these findings should be taken with caution, given the small number of participants.

Finally, in response to the *General support* question, participants expressed strong support for the invalidation of excessive interest rates. The average answer was 5.4 (SD=1.47), where 1 indicates strong opposition and 7 strong support (26.5% of the responders marked 7, and 52.2% marked 5 or 6).<sup>28</sup> The score on the *Individualism* attitude scale correlated with the level of support—such that participants with a more individualistic attitude were less supportive of invalidating rules ( $r=0.34, p<0.001$ ). The score on the *Egalitarianism* attitude scale correlated with the level of support as well—such that participants with a more egalitarian attitude were more supportive of invalidating excessive rates ( $r=-0.19, p=0.047$ ).<sup>29</sup> There was also a significant association between the answers to the *General support* and *Legislator* questions. The average scores on *General support* were 6.08, 5.24, and 4.57 for participants who supported *Penalty*, *Moderate*, and MTA in *Legislator*, respectively. A one-way between-subjects ANOVA yielded highly significant associations between the score on *General support* and the choice of preferred substitute in *Legislator* ( $F(2,110)=8.73, p<0.001$ ). Post hoc comparisons using the Tukey HSD test indicated that the differences between the mean scores for *Penalty* and both *Moderate* and MTA were statistically significant ( $p=0.014$  and  $p<0.001$ , respectively). Similarly, a significant correlation was found between the answers to the *General support* question and the minimum rate for invalidation across all conditions ( $r=-0.29, p=0.002$ ).<sup>30</sup>

#### 5.4. Discussion

Studies 5 and 6 aimed to test the hypothesis that the substitute arrangement may affect judicial inclination to invalidate overreaching contract terms, when such invalidation is discretionary. As expected, the associations between individualistic attitudes, support of MTA, and reluctance to invalidate excessive terms, found in Studies 1 and 3, were replicated in Studies 5 and 6. The scores on the *Individualism* attitude scale in Studies 5 and 6 correlated with the level of support of invalidating rules. In addition, in Study 5, people who were less individualistic were significantly more inclined to invalidate excessive interest rates under the *Penalty* arrangement than under the MTA.

The key finding of Study 5, using a within-subjects design, was that the reported inclination to invalidate excessive interest rates in loans is strongly connected to the applicable substitute arrangement. While the choice of substitute may not affect the

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MTA	27.16	26.12	26.43
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<sup>28</sup> In the scale of *General support*, 1 indicated strong support and 7 strong opposition. Here to avoid unnecessary confusion, we reverse the direction of the scale to align it with the *Individualism* attitude scale.

<sup>29</sup> The score on the *Formalism* attitude scale was not significantly correlated with the level of support ( $r=0.14, p=0.145$ ).

<sup>30</sup> No significant connections were found between most of the demographic attributes of the participants and the *Legislator*, *Threshold*, and *General support* questions. A significant correlation was found between the score on *General support* and the score on the Ideological Worldview and Religiosity scales, such that more conservative and more religious participants were less in favor of invalidating rules ( $r=-0.22, p=0.018$ ;  $r=-0.21, p=0.024$ , respectively).

inclination to invalidate excessive rates across the entire population, it does appear to affect individual decision-makers, depending on their judgment about the preferred substitute: participants were clearly more inclined to invalidate excessive rates when the substitute was the one they preferred most. Participants who favored *Penalty* in the abstract (and who also scored highest on the *Individualism* attitude scale—meaning that on the spectrum between strong individualism and strong solidarity, their attitude was the closest to the latter) were much more inclined to invalidate high interest rates under this rule, while participants who supported MTA in the abstract (and who scored lowest on the *Individualism* attitude scale), were much more inclined to invalidate interest rates under that rule.

It appears that participants view the three substitutes as qualitatively different from one another. Participants who preferred the MTA—presumably because they were reluctant to intervene in the agreed rate—were naturally less inclined to intervene when the outcome of such invalidation was harsher: *Moderate* or *Penalty*. This disinclination is consistent with the finding that these participants showed the most individualistic approach on the *Individualism* attitude scale. It is less obvious why participants who (as legislators) preferred *Penalty* or *Moderate* were not more inclined to invalidate high interest rates under MTA (as judges). After all, even if one prefers *Penalty* or *Moderate* in the abstract, in borderline cases, at least, one could feel more comfortable invalidating a contractual interest rate if the outcome of such invalidation is less severe—namely, MTA. With regard to participants who preferred the *Moderate* substitute, one possible answer might be that they prioritize ex post substantive fairness of the contractual terms over considerations of deterrence and freedom of contract, so they were more reluctant to invalidate high interest rates when they deemed the outcome to be less fair (under either *Penalty* or MTA). As for those who preferred the *Penalty* substitute—possibly because they abhor the charging of excessive interest rates—they were less inclined to implement a law that they find deficient and ineffectual.

However, the findings of Study 5 should be interpreted with caution. For one thing, in the real world judges are not asked to indicate which legal regime they would have adopted before making their decision under the existing legal regime. The very fact that the participants in Study 5 answered the *Legislator* question before answering the *Judge* question may have influenced how they answered the latter. Moreover, in Study 5 participants answered the *Judge* question in a *comparative mode*—that is to say, they were required to rate their comparative inclination to invalidate the excessive interest rate under the three possible substitutes, rather than make a decision under a single, given rule—as judges ordinarily do. Indeed, the association found in Study 5 between participants' answers to the *Legislator* and *Judge* questions was not replicated in Study 6, which used a between-subjects design. While it is not uncommon in judgment-and-decision-making studies that effects that are found in a within-subjects design are not found in a between-subjects design (Hsee et al. 1999), this is a cause of concern with regard to the external validity of the results of Study 5 (in addition to the general caveats about the external validity of vignette studies of judicial decision-making with lay participants, and the issue of the generality of the findings with regard to other contractual clauses, and other types of contracts). However, the results of Study 6 did not contradict those of Study 5 in this respect, and the lack of association between the

responses to the *Legislator* and *Threshold* decisions in Study 6 should be taken with caution, given the relatively small number of participants.

The key finding of Study 6, conducted with legally trained participants in a between-subjects design, was that the inclination to invalidate excessive interest rates—as measured by the participants’ determination of the lowest rate above which they would invalidate the contractual term—depended on the substitute arrangement. Specifically, participants were more inclined to invalidate the excessive interest under a *Moderate* substitute than under an MTA. Arguably, this result falls in line with people’s greatest support for the *Moderate* substitute, found in Studies 1, 2, 3, 5, and 6. Possibly, this may indicate that people care more about ex post fairness of the contractual terms than about deterrence (which would suggest the *Penalty* option) or about freedom of contract (which would suggest MTA).

Arguably, there was a mismatch between people’s assessment of the chances of judicial invalidation of excessive interest rates when they considered the issue from a borrower’s perspective (in Study 4), and when they considered it from the perspective of a judge (as suggested by the results of the other studies). As borrowers, people assessed these chances as highest in the *Penalty* condition. Conversely, as judges, they were actually most inclined to invalidate excessive interest rates in the *Moderate* condition. They were certainly more inclined to do so under *Moderate* than under MTA in Study 6 (whereas the difference between MTA and *Penalty* was not statistically significant). And if it is true that people tend to prefer *Moderate* over the other substitutes (as shown in Studies 1–3), and are most inclined to invalidate excessive clauses under their favorite substitute (as shown in Study 5), then, again, it appears that as judges they would be most inclined to invalidate excessive terms under *Moderate*. However, this observation should be made with an abundance of caution, since the mode of assessment varied considerably across the six studies.

In summary, while we would hesitate to draw any definitive conclusions about the impact of the substitute arrangement on judicial inclination to invalidate excessive contractual terms based on the findings of Studies 5 and 6, these findings do lend support to the argument that the substitute arrangement may indeed have such an effect. Further studies may advance our understanding of this issue. However, even before such studies are carried out, we maintain that this is a potentially important consideration that must not be ignored when designing the arrangements for substituting invalid contract terms.

## 6. CONCLUSION

Mandatory regulation of the content of contracts entails choosing a substitute arrangement in lieu of the invalidated contractual term. Schematically, the three possible substitutes are a pro-customer, penalty arrangement; a moderate arrangement; and a pro-supplier, minimally tolerable arrangement. We have critically examined the arguments offered in support of MTAs, and found that, at best, they can justify such substitutes only in uncommon cases.

Previous studies have focused on the impact of the choice of the substitute arrangement on the drafting of contracts by suppliers. The six empirical studies reported here advance our understanding of this important choice in several respects. First, they suggest that laypersons and legally-trained people alike tend to prefer moderate—rather

than penalty, or minimally tolerable—substitutionary arrangements. Second, they demonstrate that customers' reported inclination to challenge excessive terms is the strongest under a penalty substitute—even when the monetary stakes under such a substitute are the same as under the alternative ones. Third, they show that the choice of substitute may affect the judicial inclination to invalidate excessive terms, when such invalidation is discretionary. Specifically, participants were more inclined to invalidate excessive terms when the substitute was the one they preferred in the abstract, and, consistently, were more inclined to invalidate excessive terms under a moderate substitute than under a minimally tolerable one. On a more general level, we found considerable support—among laypersons and legally-trained people alike—for mandatory regulation of the content of contracts. This support correlated with contractual attitudes in favor of solidarity between the contracting parties.

Our findings are preliminary. We examined specific clauses in particular types of transactions. More studies are needed, therefore, to establish the generality of our findings. Specifically, there is much to be learned about the variables that affect customers' likelihood of challenging exorbitant contract clauses, and about possible differences between consumer and commercial contracts. Moreover, there is a concern about the external validity of these results, as is always the case with vignette studies. For example, we did not examine many factors that may affect people's preferred substitute, customer's inclination to challenge the contract in court, and judges' disposition to invalidate excessive terms. Among these are the extent to which the contract term deviates from the reasonable arrangement; the drafting party's awareness of the existence of the mandatory rule; the fairness of the contract as a whole; and the moral value embedded in the mandatory rules. In addition, there may well be a discrepancy between people's reported inclination to challenge excessive interest rate in court and their actual behavior, and similarly laypersons' inclination to invalidate excessive rates under varying substitutionary arrangements may differ from that of professional judges. Future research should therefore use other methods, manipulate additional variables, and examine other populations to study the judgments, decision-making, and behavior of suppliers, customers, legislators, and judges.

On the whole, our theoretical analysis and empirical findings provide a richer account of the choice of substitutes for invalid contract terms. They considerably weaken the case for MTA substitutes. MTA substitutes strengthen the incentive to include invalid terms in contracts; contrary to what one might expect, they do not increase judicial inclination to invalidate excessive contractual clauses; and they can diminish customers' inclination to challenge such clauses.

That said, the multiplicity of relevant considerations and the diversity of situations call for careful examination of all available substitutes, in a bid to adopt the most appropriate one in any given case. Specifically, one should take into account the goals of any mandatory rule and other aspects of its design. For example, the substitute's influence on the judicial inclination to invalidate excessive terms (as suggested by Studies 5 and 6) is considerably less important if the law allows the judge little or no discretion whether to invalidate the contractual term. To take another example, the more the law uses other means to deter the incorporation of invalid terms in contracts (such as imposing criminal or administrative sanctions), the less it is imperative to use penalty substitutes to attain that goal. The law may also leave the choice of the substitute to the

judicial decision-makers, thus allowing them to make more nuanced decisions, taking into account the specific characteristics of each case (as is already done in some contexts in some legal systems).<sup>31</sup> Inasmuch as decision-makers are more willing to invalidate excessive terms when the substitute is the one they are most in favor of (as suggested by the results of Study 5), such choice may increase the inclination to invalidate excessive terms, because it would allow the decision-maker to replace the invalid term with his or her favorite substitute.

## APPENDIX

### Study 1: Vignettes and Questions

#### Non-compete

A non-compete clause in employment contracts is one that restricts the employee's freedom to move to another employer in the same trade, or to start a new business that would compete with the employer. Such clauses are considered valid only if deemed reasonable in terms of the geographical area and duration that they apply to. Assume that in a certain jurisdiction, the customary length of this restriction is one year from the end of the employment relationship, and that courts do not ordinarily approve of such clauses with a duration of more than two years.

Imagine that you are serving as a judge in a dispute between an employee and an employer in that jurisdiction, in a case involving an employment contract drafted by the employer that included a non-compete clause of four years' duration.

1. Would you enforce the clause, or rather declare it void and unenforceable?
  - enforce the clause.
  - declare the clause void and unenforceable.
  
2. Assume that, in line with existing precedents, you have decided that the four-year restriction was unreasonably long, and therefore void and unenforceable. Now you have to determine whether the employee should be subject to a non-compete obligation—and if so, for how long. Which of the following three options would you choose?

**[Penalty]** Since the non-compete clause was found to be void, the employee is not subject to any restriction.

**[Moderate]** Since the non-compete clause was found to be void, the employee should be subject to the customary restriction of one year.

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<sup>31</sup> See the Israeli Regulation of Non-Bank Loans Law, 1993, cited above. Similarly, according to Section 19(a) of the Israeli Standard-Form Contracts Law, 1982, “[w]here a court, in a proceeding between a supplier and a customer, finds that a condition is unduly disadvantageous, it shall annul it in the contract between them or vary it to the extent necessary to eliminate the undue disadvantage involved.”

**[Minimally tolerable]** Since the non-compete clause was found to be void, the employee should be subject to the minimally tolerable clause—namely, two years.

### **Brokerage fee**

Most homeowners use a real estate broker when selling a home. In a certain jurisdiction, the standard broker's fee is 6%, which is split between the listing agent and the buyer's agent. Assume that a broker's fee that is unconscionably high is considered void and unenforceable. Depending on the circumstances (the value of the property, the characteristics of the homeowner, etc.), fees in excess of 10% are ordinarily considered void and unenforceable.

Imagine that you are serving as a judge in a dispute between a homeowner and broker, in a case where the standard-form brokerage contract, drafted by the broker, set a fee of 14%.

1. Would you enforce the 14% fee, or rather declare it void and unenforceable?
  - enforce the 14% fee.
  - declare the 14% fee void and unenforceable.
  
2. Assume that, in line with existing precedents, you have decided that the 14% fee was unconscionably high, and therefore void and unenforceable. Now you have to determine whether the homeowner should pay a brokerage fee—and if so, what it should be. Which of the following three options would you choose?

**[Penalty]** Since the contractual fee was found to be void, the homeowner should pay no fee whatsoever.

**[Moderate]** Since the contractual fee was found to be void, the homeowner should pay the standard fee of 6%.

**[Minimally tolerable]** Since the contractual fee was found to be void, the homeowner should pay the maximum tolerable fee—namely, 10%.

### **Interest rate**

Assume that for a given type of loans in a certain jurisdiction, the prevailing **monthly** interest is 3%. The courts in that jurisdiction have long ruled that charging unreasonably high interest rate is unconscionable, and therefore void and unenforceable. A monthly interest rate in excess of 6% is ordinarily considered unconscionable, and is therefore void and unenforceable.

Imagine that you are serving as a judge in a dispute between a lender and a borrower, in a case where the standard-form loan agreement, drafted by the lender, set a monthly interest of 9%.

1. Would you enforce the monthly interest of 9%, or rather declare it void and unenforceable?
  - enforce the 9% monthly interest rate.
  - declare the 9% monthly interest rate void and unenforceable.
  
2. Assume that, in line with existing precedents, you have decided that the monthly interest rate of 9% was unconscionably high, and therefore void and unenforceable.



Now you have to determine whether the borrower should pay an interest on her loan—and if so, at what rate. Which of the following three options would you choose?

**[Penalty]** Since the contractual interest rate was found to be void, the borrower should pay no interest whatsoever.

**[Moderate]** Since the contractual interest rate was found to be void, the borrower should pay the prevailing interest rate of 3%.

**[Minimally tolerable]** Since the contractual interest rate was found to be void, the borrower should pay the maximum tolerable rate—namely, 6%.

3. Which of the following statements is correct according to the above description?

- It has long been ruled that charging no interest on loans is unconscionable.
- It has long been ruled that whatever the agreed interest rate might be, the courts would enforce it.
- It has long been ruled that a monthly interest rate in excess of 6% is ordinarily unconscionable.
- It has long been ruled that a monthly interest rate in excess of 4% is ordinarily unconscionable.

### **Contingent fee**

Lawyers who represent people who were injured in an accident usually charge their clients on a contingency basis, with the common contingent fee being one-third (33%) of the recovery. Courts are authorized to invalidate unreasonably high contingent fees, and, depending on the circumstances, usually find contingency fees in excess of 50% unreasonably high, and therefore void and unenforceable.

Imagine that you are serving as a judge in a dispute between a lawyer and her client, in a case where the agreed contingent fee was set at 60%.

1. Would you enforce the contingent fee of 60%, or rather declare it void and unenforceable?

- enforce the 60% contingent fee.
- declare the 60% contingent fee void and unenforceable.

2. Assume that, in line with existing precedents, you have decided that the 60% contingent fee was unconscionably high, and therefore void and unenforceable. Now you have to determine whether the client should pay a fee—and if so, what it should be. Which of the following three options would you choose?

**[Penalty]** Since the agreed fee was found to be void, the client should pay no contingent fee whatsoever.

**[Moderate]** Since the agreed fee was found to be void, the client should pay the common fee of 33%.

**[Minimally tolerable]** Since the agreed fee was found to be void, the client should pay the maximum tolerable fee—namely, 50%.

3. What is the common contingent-fee rate according to the above description?

- One-fifth of the recovery.
- One-quarter of the recovery.
- One-third of the recovery.
- One-half of the recovery.

#### Study 4: Vignette and Questions

When borrowers take loans from commercial lenders, they usually repay the principal amount plus an agreed interest. Assume that for a given type of non-bank loans in your jurisdiction, the prevailing annual interest rate is 20%. According to the law, “excessive and unconscionable” interest rates are void and unenforceable. The courts in your jurisdiction have long struggled with the question when should an interest rate be considered excessive. As regards the said type of non-bank loans, the courts have usually ruled that an annual interest exceeding 30% is excessive and void, but sometimes they found even higher rates reasonable and valid, and lower rates excessive and void. Under the law, when a court declares a given interest rate excessive and void, the borrower has to pay [**Penalty**: the principal amount only, without any interest / **Moderate**: the principal amount plus the prevailing interest rate / **Minimally tolerable**: the principal amount plus interest at the highest rate that would still be considered tolerable].

Please read the following statements and mark whether each one of them is correct according to the above description:

When a court declares that a given interest rate is excessive and void, the borrower has to pay the principal amount only, without any interest.	correct	incorrect
When a court declares that a given interest rate is excessive and void, the borrower has to pay the principal amount plus the prevailing interest rate.	correct	incorrect
When a court declares that a given interest rate is excessive and void, the borrower has to pay the principal amount plus interest at the highest rate that would still be considered tolerable. <sup>32</sup>	correct	incorrect

Imagine that you needed money and took a loan of the type described above in the amount of [**Penalty**: \$5,000 / **Moderate**: \$10,000 / **Minimally tolerable**: \$20,000], with an annual interest rate of 40%. That is, after one year you had to repay the principal amount plus [**Penalty**: \$2,000 / **Moderate**: \$4,000 / **Minimally tolerable**: \$8,000]. After getting advice about the law, you decided to repay the principal amount [**Penalty**: only / **Moderate**: loan plus \$2,000 (20% of the principal amount) / **Minimally tolerable**: loan plus \$6,000 (30% of the principal amount)], which you

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<sup>32</sup> The order of the three questions was randomized. Participants could only proceed with the questionnaire when they had answered all three questions correctly.

believe you are legally required to pay. In response, the lender insisted that you must pay the remaining difference of \$2,000.

Assume that, at this point, you have two options. Please mark the one you would choose:

\_\_\_ to pay the difference of \$2,000 up to the contractual interest rate of 40%.

\_\_\_ to go to court and argue that the contractual interest rate is void and therefore you only have to pay [**Penalty**: the principal amount, without any interest / **Moderate**: an interest rate of 20%, as you did / **Minimally tolerable**: an interest rate of 30%, as you did].

What are, in your opinion, the chances that, if you would avoid paying the difference and go to court, the court would accept your argument that the contractual interest rate is excessive and void? Please mark your assessment on a scale of 0 to 100, where 0 means that there is no chance that your argument would be accepted and 100 means that there is absolute certainty that it would.

To what extent does the law, as described above, denounce the charging of excessive interest and treat it as wrong and reprehensible? Please mark your answer on a 1–7 scale, where 1 means that the law does not denounce the charging of excessive interest at all, and 7 means that it very strongly denounces it.

### STUDY 5: VIGNETTE AND QUESTIONS

When borrowers take loans from commercial lenders, they usually repay the principal amount plus an agreed interest. In many jurisdictions, there are statutes that authorize the courts to declare that “excessive and unconscionable” interest rates are void and unenforceable. In implementing these statutes, the courts balance the view that abusive interest rates unfairly enrich lenders and adversely affect borrowers against freedom of contract and the recognition that invalidating high interest rates may prevent some borrowers from getting credit in the first place.

The outcomes of a judicial finding that a given interest rate is excessive and void vary from one jurisdiction to another. There are three possible arrangements, each of which is adopted in certain jurisdictions. Specifically, when the interest rate is found excessive and void, the outcome set by the statute is one of the following —

- a. *A penalty arrangement*: the borrower has to pay only the principal amount.
- b. *A moderate arrangement*: the borrower has to pay the principal amount plus the prevailing interest rate in the relevant market.
- c. *A minimally tolerable arrangement*: the borrower has to pay the principal amount plus interest at the highest rate that would still be considered tolerable (rather than excessive and void).

[**Comprehension**] Assume that for a given type of loans in a certain jurisdiction, the prevailing annual interest rate is 15%. The courts in that jurisdiction have long ruled

that an annual interest exceeding 30% is excessive and unconscionable and therefore void and unenforceable.

Imagine that in a lawsuit filed by Loans Ltd., a credit company, against [**commercial**: John Construction Ltd. / **consumer**: John], a borrower, the court held that the contract interest of 45% is excessive and void. What interest should [**commercial**: John Construction Ltd. / **consumer**: John] pay under each of the statutory arrangements described above, following the court's decision?

- Under a **penalty arrangement** [**commercial**: John Construction Ltd. / **consumer**: John] should pay: (0% ... 45%).
- Under a **moderate arrangement** [**commercial**: John Construction Ltd. / **consumer**: John] should pay: (0% ... 45%).
- Under a **minimally tolerable arrangement** [**commercial**: John Construction Ltd. / **consumer**: John] should pay: (0 ... 45%).<sup>33</sup>

[**Legislator**] Imagine that you are a member of a legislative body that enacts a new statute that would authorize the courts to invalidate “excessive and unconscionable” interest rates. What outcome of such invalidation would you include in the statute? Please mark one option:

- a. *A penalty arrangement*: the borrower has to pay only the principal amount.
- b. *A moderate arrangement*: the borrower has to pay the principal amount plus the prevailing interest rate in the relevant market.
- c. *A minimally tolerable arrangement*: the borrower has to pay the principal amount plus interest at the highest rate that would still be considered tolerable (rather than excessive and void).

[**Judge**] Imagine that you are serving as a judge in a jurisdiction where courts are authorized to invalidate excessive and unconscionable interest rates. How would your inclination to invalidate a high interest rate be affected, if at all, by the outcome of such invalidation? Please mark one option:

I would be **most inclined** to invalidate the high interest rate under **the penalty arrangement**.

I would be **most inclined** to invalidate the high interest rate under **the moderate arrangement**.<sup>34</sup>

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<sup>33</sup> The above three questions were presented in two different sequences (1, 2, 3, or 3, 2, 1) in this and in the following questions—with each subject seeing the same order throughout. Respondents could only proceed to the next question after answering all parts of the Comprehension question correctly.

<sup>34</sup> Respondents who chose this answer were asked a follow-up question:

- I would be least inclined to invalidate the high interest rate if the outcome of such invalidation is
- the penalty arrangement.
  - the minimally tolerable arrangement. [Order of options randomized].

\_\_ I would be **most inclined** to invalidate the high interest rate under **the minimally tolerable arrangement**.

\_\_ My inclination to invalidate the high interest rate **would not be affected** by the outcome of such invalidation.<sup>35</sup>

4. In general, do you support or oppose the invalidation of excessive and unconscionable interest rates in loans? Please mark your answer on a scale of 1 to 7, where 1 means that you strongly support such invalidation, and 7 that you strongly oppose it (1 ... 7).

### Study 6: Vignettes and Questions

**[Legislator]** Imagine that you are taking part in drafting a new law that will authorize the courts to invalidate excessive interest rates, especially when lenders exploit borrowers' hardship. The law should stipulate the outcome of invalidating an excessive interest rate. Which of the following three outcomes would you choose?

\_\_ **Penalty:** The borrower should only repay the principal, with no interest, to deter lenders from charging excessive interest rates.

\_\_ **Moderate:** The borrower should repay the principal plus the prevailing interest in loans of the same type, so that the interest is reasonable and fair.

\_\_ **Tolerable.** The borrower should repay the principal plus the highest interest rate that would still be considered tolerable (as opposed to excessive and void), so as not to infringe upon freedom of contract and the market for loans.<sup>36</sup>

Poor people find it difficult to get credit from banks, because banks are afraid that they may not be able to repay the loan, so they are compelled to borrow money from other sources. Assume that in some country, a market for non-bank loans has emerged for people who have been injured in an accident and are filing a tort claim against the injurer. In these cases, the damages that the borrower is expected to get from the lawsuit are used as a sort of collateral to ensure that the loan is repaid: if and when damages are received, the money is first used to repay the loan. The practice is that lenders examine the prospects of the claim in advance, and issue loans only if they estimate these prospects to be high, and that the amount of damages would be enough to repay the loan. Usually, such loans include monthly interest, and a compound interest calculated on a monthly basis. The mechanism of calculating the interest is usually rather complex, such that at least some of the borrowers do not understand the overall cost of the loan they are taking. Even after taking into account that a small portion of the loans are not fully repaid, or not repaid at all (because the sum of damages awarded is too low), the average interest that lenders charge for this type of loans is very high. Usually,

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<sup>35</sup> Four orders—1, 2, 3, 4 / 3, 2, 1, 4 / 4, 1, 2, 3 / 4, 3, 2, 1—were used. The order of options 1 to 3 was the same as in *Comprehension*.

<sup>36</sup> Participants were randomly assigned to one of two orders of presentation of the three options: *Penalty-Moderate-Tolerable*, or *Tolerable-Moderate-Penalty*.

borrowers pay an effective interest that is several times higher than the prevailing interest in bank loans to private individuals.

Assume further, that in the said country there is a law that authorizes courts to invalidate excessive interest rates. According to that legislation, when a court invalidates an excessive interest rate, the borrower should repay the principal [**Penalty**: with no interest (the *Penalty* outcome) / **Moderate**: plus interest that is reasonable and fair in the circumstances (the *Moderate* outcome) / **Minimally tolerable**: plus interest at the highest rate that the lender could charge and still not be considered excessive (the *Tolerable* outcome)].

[**Comprehension-1**] Please read the following statements and, in each case, mark whether it is correct or incorrect:

In the country described above, when a court invalidates excessive interest, the borrower must repay the principal amount with no interest.	correct	incorrect
In the country described above, when a court invalidates excessive interest, the borrower must repay the principal amount plus interest that is fair and reasonable in the circumstances.	correct	incorrect
In the country described above, when a court invalidates excessive interest, the borrower must repay the principal amount plus interest at the highest rate that the lender could charge that would still not be considered excessive. <sup>37</sup>	correct	incorrect

[**Judicial Decision**] Assume that Jane, an old lady who was injured due to medical negligence, has received a loan of \$8,000 under the arrangement described above, which will be repaid if she wins her lawsuit. After a year from receiving the loan, the legal proceedings ended, and she won damages of \$18,000. One-third of this sum was paid to the lawyer for his fee and expenses. It then transpired that the sum she should pay in repayment of the loan, including compound interest, is \$11,200 (i.e., an effective annual interest of 40%). Imagine that you are serving as a judge in the legal dispute between Jane and the loan company. Jane argues that this is an excessive interest rate that was set while taking advantage of her hardship. Therefore, it should be invalidated and she should repay the principal [**Penalty**: with no interest, that is only \$8,000 / **Moderate**: plus interest that is reasonable and fair in the circumstances, which she claims is 15%, that is only \$9,200 / **Minimally tolerable**: plus interest at the highest rate that the lender could charge and still not be considered excessive, which she claims is 30%, that is only \$10,400]. The company argues that the interest is not excessive given the high risk it undertook that the claim would be dismissed and the loan would not be repaid at all. How would you decide the case?

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<sup>37</sup> The order of the three questions was randomized. Participants could only proceed with the questionnaire when they answered all three questions correctly.

\_\_\_ I would rule in favor of Jane and invalidate the contractual interest of 40%, so that Jane would have to repay the loan [**Penalty**: with no interest / **Moderate**: plus interest that is reasonable and fair in the circumstances / **Minimally tolerable**: plus interest at the highest rate that the lender could charge and still not be considered excessive].

\_\_\_ I would rule in favor of the loan company, so that Jane would have to repay the loan according to the contract.

[**Threshold**] [a follow-up question whose wording depended on whether the participant ruled in favor of Jane or the company]:

Would you rule in favor of Jane and invalidate the contractual interest, so that Jane would have to repay the loan [**Penalty**: with no interest / **Moderate**: plus interest that is reasonable and fair in the circumstances / **Minimally tolerable**: plus interest at the highest rate that the lender could charge and still not be considered excessive], had the contractual annual interest been [**in favor of Jane**: lower / **in favor of the company**: higher]? Please indicate the lowest interest rate beyond which you would invalidate the contractual interest: \_\_\_ percent per year.

[**Comprehension-2**] Assume that, in the country described in the previous questions, the reasonable and fair interest in a given type of loans is 15% per annum, and the courts have ruled that interest rates above 30% are excessive and therefore void. According to the law of that country (which you have applied in the previous questions), if a contract sets an annual interest of 45%, the outcome of invalidating the contractual interest is:

\_\_\_ that the borrower must repay the principal, with no interest.

\_\_\_ that the borrower must repay the principal, plus the reasonable and fair interest of 15%.

\_\_\_ that the borrower must repay the principal, plus interest at the highest rate that the lender could charge and would still not be invalidated as being excessive—namely, 30%.

[**General**] In general, do you support the invalidation of excessive interest rates in loans, especially when the lender exploits the borrower's hardship? Please mark your answer on a scale of 1 to 7, where 1 means that you strongly support such invalidation, and 7 that you strongly oppose it.

### **Studies 1, 3, 4, 5, and 6: Individualism, Formalism, and Egalitarianism Attitude Scales**<sup>38</sup>

Following are statements on various contract issues. Please read each of the statements carefully, as the details matter. Using the 7-point response scale, please indicate the

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<sup>38</sup> The *Individualism* attitude scale was included in all Studies except for Study 2. The *Formalism* attitude scale was included in Studies 1, 4, and 6. The *Egalitarianism* attitude scale (translated into Hebrew) was used in Study 6.

degree to which you agree or disagree with each statement.<sup>39</sup> Please note that when evaluating the statements, you should not refer to the law as it currently stands, or to other people's views about what the law should be—but rather, based on your own opinion as to what the law should be.

**[Individualism Attitude Scale]<sup>40</sup>**

1. When the bargaining power of the parties is unequal (as, for example, between a landlord and a tenant), the contract should be interpreted in a manner that rectifies this inequality.
2. A contracting party should be obligated to be considerate of the other party when the latter encounters difficulties in executing the contract.
3. People should be prevented from entering into unfair contracts.
4. A person should be prevented from taking advantage of another person's recklessness to enter into an unfair contract with him or her.
5. Retailers should be required to allow consumers to retract a transaction shortly after making it.
6. In contract disputes, judges should take into account the power inequalities between the parties.

**[Formalism Attitude Scale]**

1. The court should decide contractual disputes according to the formal contract, even if during the contractual relationship the parties did not insist on executing it to the letter.
2. When interpreting a written contract, the focus should be on the written word, rather than the parties' presumed intentions based on other evidence.
3. The court should interpret contracts so as to fulfill the parties' intentions—even if these intentions deviate from the literal meaning of the contract.
4. A person who signs a contract is entitled to rely on verbal promises given by the other party, even if these are not explicitly stated in the contract.
5. A person is bound by whatever is written in a contract, even if he or she signed it without reading it.
6. The law should be clear and unequivocal, in order to limit judicial discretion as much as possible.

**[Egalitarianism Attitude Scale]**

1. A private individual who advertises an apartment for rent should be allowed to refuse renting it to any person for any reason, including on grounds of gender, race, or religion.
2. A person should be allowed to refuse to give private lessons to students of a different ethnic group, even if this is due to racial prejudice.

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<sup>39</sup> The scales described the possible answers as follows: 1 – Strongly disagree; 2 – Disagree; 3 – Slightly disagree; 4 – Neither agree nor disagree; 5 – Slightly agree; 6 – Agree; 7 – Strongly agree.

<sup>40</sup> When two or three attitude scales (and the attention question) were used in the same study, all items were included in a single list, in random order.



3. Insurance firms should be prohibited from charging members of minorities higher rates, even if these minorities run a higher risk of damage to their property than for the rest of the population.
4. Banks should be allowed to provide loans on substantially better terms to upper-class borrowers than to middle-class ones.
5. Employers should be prohibited from asking female job candidates whether they are pregnant, or plan to become pregnant.
6. Commercial firms should be entitled to refuse to service clients who live in remote locations.

**[Attention Question]<sup>41</sup>**

1. For this statement please select the answer “Slightly agree”. It evaluates the validity of the questionnaire.

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<sup>41</sup> The attention question was used in Studies 4 and 6.

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