Legal Uncertainty and Contractual Innovation

BY YARON LEITNER

Innovative contracts are important for economic growth, but when firms face uncertainty as to whether contracts will be enforced, they may choose not to innovate. Legal uncertainty can arise if a judge interprets the terms of a contract in a way that is antithetical to the intentions of the parties to the contract. Or sometimes a judge may understand the contract but overrule it for other reasons. How does legal uncertainty affect firms' decisions to innovate? In this article, Yaron Leitner explores issues related to legal uncertainty, particularly the amount of discretion judges have and the types of evidence they consider.

Innovation — which is important for growth and prosperity — is inherently uncertain. When a firm launches a new product, it faces uncertainty regarding the product's success. Similarly, when two firms (or individuals) enter a contract containing novel terms, they face uncertainty as to whether the contract will be enforced in court. In other words, they face legal uncertainty. New contracts are important for economic growth as they enable the coordination of novel activities and relationships; however, when firms face legal uncertainty, they may choose not to innovate.[1]

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Legal uncertainty can stem from the fact that the judge interprets the contract differently from the parties' intentions when they entered the contract. It can also stem from "active judges" who understand the contract but overrule it for some other reason, such as concerns for third parties who might be affected by the underlying arrangement.

How does legal uncertainty affect the new contracts we enter? How can courts affect legal uncertainty and firms' decisions about whether to innovate? I will explore these questions and related issues in this article. In particular, I will focus on the amount and type of evidence judges consider and the amount of discretion judges have.

AN EXAMPLE OF LEGAL UNCERTAINTY

Let's begin by illustrating legal uncertainty that results from an interpretation of a word. Even a simple word such as mandatory can sometimes be ambiguous. Take the case of Eternity Global Master Funds Ltd. ("Eternity") against Morgan Guaranty Trust Company of New York and JP Morgan Chase Bank ("Morgan") in 2002.[2] Eternity lent money to Argentina (it purchased Argentina's bonds) and protected itself against the risk that Argentina would fail to meet its debt payments by purchasing credit swaps contracts from Morgan.[3] The contracts between Eternity and Morgan incorpo-

[1] Negotiable debt instruments and the limited liability corporation are examples of contractual innovations that have been important for economic growth, yet subject to significant legal uncertainty.

[2] The following description is based on the court's rulings. See *Eternity Global Master Fund Limited* v. *Morgan Guaranty Trust Company of N.Y. and JP Morgan Chase Bank,* United States District Court for the Southern District of N.Y., October 29, 2002, and June 5, 2003.

[3] Credit swaps are a common way for lenders to protect themselves against the risk that a borrower will default. These swaps usually work as follows: The buyer promises to pay fixed periodic payments. In return, if a third party defaults, the seller pays the buyer the loss due to the default. Thus, you can think of the seller as providing the buyer with long-term insurance against default in return for an annual insurance premium. In our case, Eternity was the buyer, Morgan was the seller, and Argentina was the third party.

rated terms from the *1999 ISDA Credit Derivatives Definitions* published by the International Swaps and Derivatives Association (ISDA). In particular, the contracts said that Morgan would pay Eternity should a "credit event" occur, and the definition of a credit event included a few scenarios capturing the idea that Argentina will fail (or has failed) to meet its originally agreed-upon debt obligations.[4]

A dispute between Eternity and Morgan came up when Argentina, facing financial problems, announced a "*voluntary* debt exchange," in which it offered its lenders the opportunity to exchange their debt for new loans with less favorable terms. Eternity argued this was a credit event, whereas Morgan maintained it was not. The judge, of course, had to decide.

The problem was that the definition of a credit event in the contract did not explicitly raise the possibility of a voluntary exchange, but it did raise the possibility of a *mandatory* exchange, which, according to the contract, qualified as a credit event. Morgan argued that since Eternity had the option of not exchanging its debt, the exchange was voluntary rather than mandatory; therefore, a credit event had not occurred. In contrast, Eternity argued that "mandatory" should be read to encompass situations that are "economically coercive," and therefore, Argentina's exchange offer qualified as a credit event. Eternity might have meant, for example, that even though, in principle, it had the option of not exchanging its debt, in practice, it had to do so because otherwise Argentina would not have paid anything on its original debt.

[4] Incorporating standard terms, such as those published by the ISDA, is an example of boilerplate or off-the-shelf text that reduces writing costs as well as legal uncertainty.

The judge, interestingly enough, presented two different views. At a first trial, he did not take a stand on the word mandatory and, instead, used a different reasoning to rule that a credit event had occurred.[5] However, at a later trial, he reversed himself, saying that "upon further study, the court believes its analysis was incorrect." This time, he ruled that a credit event had not occurred, basing his decision on the dictionary meaning of mandatory.

LEGAL UNCERTAINTY AFFECTS INNOVATION

Innovation May Not Take Place. When a firm is not sure whether a new technology will succeed, it may sometimes choose to stick with an old one, even though the new technology might be more efficient. Similarly, when the contracting parties are not sure how courts will interpret a new contractual term, they may choose not to incorporate it into their contract and, instead, use terms that are more familiar. In other words, they may choose not to innovate.

To illustrate the point above, go back roughly 200 years, and consider the following example: As the owner of a small business, you try to raise money to finance a project that looks very promising. The bank is willing to lend you some money but requires that you post the building and machines as collateral. This means, of course, that you cannot sell those assets without permission from the bank. It also means that if you default, the bank will take immediate possession of the assets; so it knows it will get its money back. But there is one problem: The amount the bank is willing to lend you is only half of what you need. What will you do?

[5] He ruled that the exchange qualified as a credit event because there had been an agreed-upon deferral of payments.

One option is simply to forget the project. Another option is to create a new type of mortgage contract that will allow you to raise more money without exposing the bank to too much risk of not getting its money back. One way to do it is for you to increase the amount of collateral you can post, say, by putting up your entire business as collateral; in particular, you will pledge not only the assets you own today but also the assets you may own in the future, such as inventories or accounts receivable. Since this creates more collateral, the bank will be willing to lend you more, so that you will have all the money you need to take on the new investment opportunity.

Sound like a good idea? In principle, it does. But unfortunately, the bank is not willing to lend you the extra money, saying it does not want to take the risk that the courts will not enforce this innovative contract.

In a working paper, Julian Franks and Oren Sussman discuss two cases in which companies entered contracts similar to the one above. The ultimate outcomes were very different, however.

The first case occurred in England in 1870. A steamship company called the Panama, New Zealand, and Australian Royal Mail Co. borrowed money using its "undertaking and all sums of money arising therefrom" as collateral.[6] When the case came before the courts, the judge interpreted "undertaking" as covering all of the assets owned by the company at the time of default. According to Palmer's textbook on company law, the judge essentially recognized that a mortgage can be placed not only on an object currently owned by the company but also on a class of assets that may be acquired in the future.

The second case occurred in the U.S.[7] It involved a loan made in 1839 from Winslow to a cutlery manufacturer. The borrowing company used the "machinery, tools and implements…which we may anytime purchase" as collateral for the loan. When the company went bankrupt, Winslow took possession of some of the machinery, tools, and stock in trade that were mortgaged to him under the original contract. Mitchell filed suit on behalf of all of the other creditors, claiming that Winslow was not entitled to the property and that the mortgage instrument was not valid because it was on goods that were not yet in the possession of the manufacturer. A state judge dismissed Mitchell's claim, arguing that the mortgage was properly registered and disclosed. However, superior courts later accepted the claim that this type of collateral, "the floating lien," was not a valid instrument, arguing that a mortgage could be secured only on current (existing) property. If new property were acquired, a new mortgage had to be taken out.[8] It took nearly 100 years before the restrictions against this type of security were abolished in the U.S.

In both the U.S. and England, these initial rulings had lasting effects because they became precedents for subsequent courts.

New Contracts May Set Inefficient Standards. When previous rulings set precedents for future rulings, subsequent firms face less legal uncertainty than the innovators.[9] Thus, the contract written by the innovators need not be the best one for those who use it afterward. Nonetheless, these followers may stick with the tried-and-true contract because judges will enforce this contract consistently.

To illustrate this, return to the previous example in which you wanted to borrow against your entire business. In practice, debt contracts often include covenants that give the borrower a fixed period of time to get back into compliance. In many cases, the borrower has one or two months to remedy an initial breach of contract and avoid default. This gives the borrower more time to come up with the funds and thus reduces the chances that the creditor will seize the borrower's assets if the borrower breaches the terms of the covenant.

More generally, in theory, we can think of contracts that specify the *probability* that the lender will be able to take control of the borrower's assets if the borrower defaults. In particular, in our example, suppose that rather than saying that if you default, the lender automatically takes control of your business, you want to say that the lender will take control only in half of the cases in which you default. In the other half, you will keep control, even though you have failed to pay. (This other half might correspond to cases in which you breached the contract but eventually came into compliance.) In some cases, such a contract may be optimal both for the borrower and for the lender. The lender is happy because the threat of losing the business gives the borrower the incentive to put a lot of effort into running the business, which, in turn, increases the probability that the borrower will be able to pay back the loan. The borrower is happy because he gets some protection against bad luck — situations in which he was unable to make a payment, even though he put a lot of effort into the business.[10]

When previous rulings set precedents for future rulings, subsequent firms face less legal uncertainty than the innovators.

Now suppose the contracting parties think there is a 50 percent chance the court will not enforce their contract. Assume that, in that case, the lender will not be able to take control of the business. Then it may be optimal for the parties to enter a contract that does not reflect their true intentions. The reason is that if they enter a contract that reflects their true intentions (saying that the lender takes control only in half of the cases in which the borrower defaults), and the court enforces it only half of the time, the lender will effectively gain control only in a quarter of the cases. If, on the other hand, the parties enter a contract that says if the borrower

[6] According to the Merriam-Webster online dictionary, "undertaking" means the business of an entrepreneur.

[7] *Mitchell v. Winslow*, 1843.

[8] *Jones v. Lewis Richardson*, 1845.

[9] In practice, rulings made by high courts usually bind lower courts, but a single ruling of a lower court need not become a precedent for other courts.

[10] Simply transferring control to the lender will not generally be efficient. The assets are often more valuable in the borrower's hands; however, the lender may care only about his own share.

defaults, the lender always takes control, and the court enforces it only half of the time, the lender will effectively gain control in half of the cases. This is exactly the outcome the contracting parties intended when they entered the contract, even though they specified something else in the contract.

The problem, according to Franks and Sussman, is that if previous rulings become precedents for future rulings, once the court enforces the first contract, firms in the future may prefer to enter exactly the same contract, rather than incur the cost of revising it. This is because by doing so, they can avoid legal uncertainty — they know the judge will enforce the contract. Consequently, entering a contract that says "always transfer control" may become the standard, even though the outcome involved is optimal only for the innovating firm and not for other firms.

THE EVIDENCE COURTS CONSIDER CAN AFFECT INNOVATION

We have seen how legal uncertainty can negatively affect the innovation process. Legal uncertainty, in turn, may depend on the way courts act when they face a new contract. Different judicial practices can either facilitate innovation or stand in its way.

One feature of a judicial process that might affect legal uncertainty is the amount and type of evidence courts can use to interpret an ambiguous contract. A British judge, for example, often won't take account of evidence of informal promises different from the explicit contractual terms. However, the Uniform Commercial Code, which governs commercial transactions in the U.S., directs a U.S. judge to consider such evidence when explicit contractual terms are vague. The Uniform Commercial Code also captures the idea that an agreement is to be read in light of the parties' previous transactions ("course of dealing").

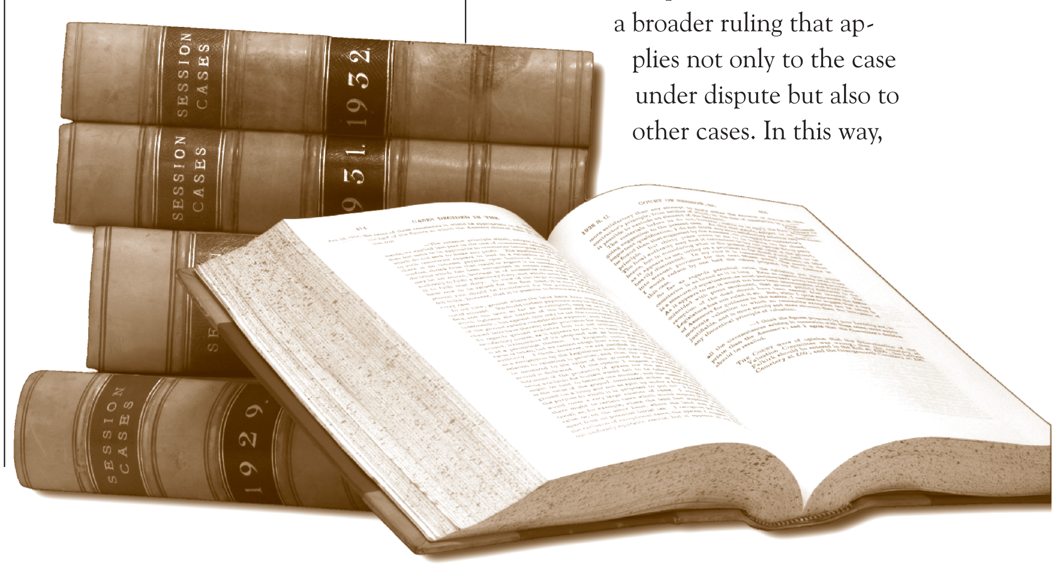
This raises many questions: Should courts consider evidence of prior negotiations between the parties to interpret an ambiguous contract? If so, should courts be allowed to consider prior negotiations to decide whether the language is actually ambiguous?

More Evidence Can Help the Judge Interpret the Agreement… As part of our current research agenda, Mitchell Berlin and I have investigated these issues as well as related ones. We start by assuming that when companies introduce new contractual terms, they face legal uncertainty; they can never be sure how courts will interpret their contract. This, as we have already seen, can keep firms from innovating. We also assume that when the judge considers more evidence, such as prior negotiations or course of dealing, he is more likely to "rule correctly." In other words, he is more likely to guess correctly the intentions the contracting parties had when they entered the contract.[11] This can motivate firms to innovate new contracts because the legal uncertainty they face is reduced.

[11] Thus, we differentiate between the *written contract* and the implicit *agreement* that reflects the parties' intentions. The assumption is that the judge is more likely to rule correctly when he looks at evidence that tells something about the specific agreement.

What we have in mind are contracts that specify future payments. You can think of the insurance contract between Eternity and Morgan or the mortgage contract from the previous section. We assume there is no disagreement between the two parties when they enter a contract. In other words, they agree on what should happen in each possible scenario. However, at a later stage, when one party has to pay, he may prefer to go to court, hoping the judge will not enforce the contract because of misinterpretation.

…But May Make It Harder to Build Precedents. While looking at more evidence may help the judge interpret the contract correctly, it may not be good for everyone. As in the previous section, what's optimal for the first firms that innovate may not be optimal for subsequent firms. In the previous example, precedents not only reduced uncertainty but they also induced subsequent firms to use inefficient contracts. In our case, the problem is that precedents may not be established at all. If the court uses evidence that is too case specific, subsequent firms or individuals using the same contractual term may not learn how the judge will interpret the novel term in *their* case. This is because the evidence used in the first case may not apply in other cases. If, instead, the court does not use case-specific evidence to interpret the contract, it needs to set a precedent, that is, a broader ruling that applies not only to the case under dispute but also to other cases. In this way,



legal uncertainty is reduced for subsequent firms.[12]

An interesting implication of the tradeoff above relates to the speed with which the innovation is adapted: When judges look at more case-related evidence, the innovation process may start earlier, but it may take more time for the innovation to be widely diffused. The intuition behind this result is that the higher the legal uncertainty firms face, the less likely they are to incorporate new terms into their contract. This is because they always have the alternative of sticking with familiar terms and old standards. When the judge is more likely to rule correctly because he looks at more evidence, it may be easier to find a company willing to be the first to innovate. That's why the innovation process may start earlier. However, after the first innovation is brought to court, it may not become easier to find another firm that will use the new terms. Thus, the innovation spreads slowly to other firms. If, on the other hand, the judge did not use evidence to interpret a contract, it could be more difficult to find a firm willing to take the first step and use an unfamiliar term. However, once a case is brought to court and the judge makes a broad ruling, more firms are likely to use the new term because they are faced with less legal uncertainty.

Irrelevant Evidence May Make Innovation More Costly. The assumption that more evidence helps the judge interpret the contract may depend on the process by which evidence is collected. In the civil law countries of Europe (e.g., France), the judge is in charge of collecting evidence; so he can make sure that only evidence relevant to the case is collected. In contrast, in the U.S., lawyers are in charge of collecting evidence. They need to collect all evidence before the trial begins; therefore they try to collect as much evidence as possible. In his article, John Langbein suggests that this process can lead to inefficiencies because lawyers may choose to collect evidence that is not relevant to the case, and that can lead the court to make wrong decisions. To prevent these mistakes, the contracting parties may try to write very detailed contracts. But when new contracts are very different from old ones, doing so may make innovation more costly.[13]

The example above shows how legal uncertainty can lead to very detailed contracts. However, in some cases, legal uncertainty can actually lead to contracts that are not as detailed as they could have been. (See *Legal Uncertainty Can Also Make Contracts More Incomplete*.)

JUDICIAL DISCRETION AFFECTS INNOVATION

Another factor that may affect legal uncertainty, and thus the innovation process, is the amount of discretion judges have when they face a contract that is not ambiguous. In England, judges have been *formalist*, adopting an attitude of deference toward the contractual agreements of private parties.[14] For example, when the London Pressed Hinge Company Limited failed in 1905, the judge concentrated control in the hands of debt holders — even though he thought it was unfair to do so — because this was what the contract said. The judge was concerned about other creditors that might be harmed, particularly suppliers or trade creditors, who were too weak to contract on their own, and whose junior position in the case of default was not a result of a deliberate contracting decision, but rather a result of their failure to contract at all. Nonetheless, the judge ruled in favor of debt holders because he thought they obtained their rights in a lawful and valid contract.[15]

In contrast, in the U.S., judges have been more active, in the sense that they intervened in the innovation process, sometimes in blunt violation of contracted agreements.[16] We have already seen one example in which the courts in the U.S. voided a contract, arguing that a mortgage could be secured only on current property. Another example relates to the failure of the Wabash Railway in 1884. Here, courts in the U.S., wanting to preserve the railroad as a going concern, violated the debt contract by allowing Wabash to appoint two of its own directors as those who would take control of the firm's assets.

Franks and Sussman suggest that the different rulings in the U.S. and England were caused by the differences in views about the appropriate role of judges, rather than the differences of opinion. In both cases, the judges thought it was unfair to concentrate control in the hands of a single person (for example, by pledging the whole

[12] Thus, a judicial precedent is a public good.

[13] According to many observers, contracts in the United States are much more detailed than contracts originating in the civil law countries of Europe. Langbein's article discusses a number of theories as to why this might be so.

[14] The English corporation was granted the right to contract freely by a series of Acts of Parliament between 1848 and 1856 (the Limited Liability Act), consolidated in the Companies Act of 1862.

[15] See Franks and Sussman.

[16] The U.S. Constitution has allocated the power to innovate new insolvency procedures away from the parties and into the hands of Congress and the federal government. (According to Article 1, Section 8, of the 1789 Constitution, "Congress shall have the power…to establish…uniform laws on the subject of bankruptcies throughout the United States.")

business as collateral). However, they intervened in the U.S., but not in England. According to Franks and Sussman, this difference in approach helps to explain why English bankruptcy law is more creditor oriented (its principal focus is to make sure debts are paid), while American law is more debtor oriented (its principal focus is on rescuing firms in distress).[17]

An important issue, then, is how much discretion judges should have. Unfortunately, there is no clear answer. However, economists have begun to explore some of the tradeoffs.

[17] To learn more about the different bankruptcy procedures, read the paper by Julian Franks, Kjell Nyborg, and Walter Torous.

Active Judges Can Protect Contracting Parties from Unforeseen Contingencies. In a recent working paper, Luca Anderlini, Leonardo Felli, and Andrew Postlewaite consider a model with active judges. They show that in some cases, active judges, who are allowed to void contracts, can actually *reduce* the legal uncertainty the contracting parties face, thereby reducing the risk of innovating. In particular, by voiding contracts, courts can protect the contracting parties from "unforeseen contingencies." The idea is that the contracting parties cannot think of everything; so enforcing the contract "as it is" may subject them to very high cost in situations that could not be foreseen when the contract was entered. One example they mention is the case of *Spalding & Sons, Incorporated v. The United States*. Spalding had a contract to harvest timber on U.S. government land, and the Bureau of Land Management cancelled the contract after a fire on adjacent property required unforeseen remedial action. When the case was brought before the court, the court upheld the Bureau of Land Management's right to cancel.

The problem, of course, is that before voiding the contract, the court must decide whether an unforeseen contingency has occurred. This may not always be that simple. Often, judges cannot rely on the contracting parties to say truthfully whether a contingency was foreseen or unforeseen because once the issue has

Legal Uncertainty Can Also Make Contracts More Incomplete

How legal uncertainty makes contracts more incomplete is illustrated in a working paper by Shurojit Chatterji and Dragan Filipovich. In their example, two individuals enter a contract that specifies which action each individual should take. The judge then enforces the contract. The problem is that the judge may choose actions different from those initially intended by the contracting parties, and this can impose a high cost on one of the two individuals. To hedge against this possibility, the individuals enter a contract that does not specify as much as it could. This gives the individual who can be negatively affected by an erroneous court ruling more flexibility to protect himself.

The logic behind this result builds on the idea that some intrinsic incompleteness — in this case arising from the judge's difficulty in figuring out the intentions of the contracting parties — can lead to further incompleteness. Douglas Bernheim and Michael Whinston show that when the contracting parties cannot specify some things in a contract, they may intentionally leave other things open, even though they could be specified at no extra cost. In their model, the judge can distinguish among some actions, but not among others. For example, he may be able to tell whether a university gave a faculty member a particular office or whether the faculty member obtained a wage increase. But he may not be able to tell whether the faculty member has put a lot of effort into providing services that benefit the university (e.g., helping in the recruiting process). Thus, the contract between the university and the faculty member can specify the obligations of the university, but it cannot specify all the obligations of the faculty member. The judge will simply not be able to learn whether the faculty member acted according to the contract, and so he will not be able to enforce it. Thus, the contract between the university and the faculty member is intrinsically incomplete.

Bernheim and Whinston show that this intrinsic incompleteness can lead to further incompleteness. In particular, the contracting parties may *choose* not to specify some of the university's obligations, even though they could be easily specified in the contract and enforced by the judge. Choosing not to specify allows the university to punish the faculty member (say, by reducing his future pay raises) if the latter shirks his obligations. At the same time, it protects the faculty member from being maltreated by the university.

The logic is as follows: If the contract specified all of the university's obligations, the faculty member could go to court if the university reneged on its contractual obligations; however, the university could not go to court if the faculty member shirked because the court would not be able to tell whether he had, in fact, done so. In contrast, if the contract left some of the university's obligations unspecified, the university could punish the faculty member if he shirked. If, instead, the university reneged, the faculty member could punish the university by exerting less effort. Thus, overall, choosing to enter such an incomplete contract could be beneficial to both parties.

come to court, the parties' interests are opposed. When judges mistakenly identify an event as unforeseen, judicial discretion has a cost. Contractual remedies that the parties had knowingly agreed to when the contract was signed are undermined. Whenever agents are concerned that a contract will not be enforced, they are less likely to innovate.[18]

CONCLUSION

We have seen that when parties face legal uncertainty, they may choose not to innovate new contractual terms and instead stick with old standards. We have also seen that the way the court rules may affect the uncertainty the contracting parties face, which, in turn, may affect the innovation process. For example, when courts look at case-specific (and relevant) evidence, legal uncertainty is reduced for the first firms that innovate. However, precedents are not established, so uncertainty is not reduced for subsequent firms.

We have also seen that allowing judges to overrule or void contracts may have ambiguous effects. On the one hand, doing so can protect the parties from unforeseen contingencies, and it can protect the interests of third parties. On the other hand, it opens the door to potential judicial mistakes that may undermine incentives and increase the legal uncertainty the parties face.

[18] In another working paper, Anderlini, Felli, and Postlewaite suggest that voiding contracts can sometimes be good for the contracting parties because it protects them from the risk that one of them will have an information advantage. For example, I might be more willing to buy a car from you if I knew the court would void the contract if I found out that you "forgot to mention" the car was involved in an accident.

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