General theory of legal design in law and economics framework of commercial contracting

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Abstract
We need law and economics to do the scientific measurement necessary for legal design to be seen as on the stage of science. Law and economics—which is the application of economic theory, especially microeconomic theory, to the analysis and the practice of law—is a valid tool and approach to reflect on what should be empirically investigated in the practice of legal design. The neoclassical (mainstream) theoretical foundation of economic analysis of law is, however, at times far from reality as it often predicts uncooperative and even selfish behaviour. In real life people do cooperate, have empathy, emotions and even behave in an altruistic way. For those reasons, behavioural law and economics and conventional wisdom are needed to complement the teachings from standard theory in the field of commercial contracting.

Keywords
Law and economics, theoretical basis for legal design, behavioral economics < theoretical perspectives, contract theory < theoretical perspectives, commercial contracting < topics

Is law and economics the valid tool for assessing the total impact of legal design in commercial contracts?
The idea of legal design is to make judicial information, services and products more approachable and understandable via using user-centred design. A more user-centred approach to law is reached by combining design methods as well as the latest innovations in the field of law and technology. Other fields of science are used to find the best practical solutions to legal challenges at hand. The legal design approach is highly interdisciplinary in its nature as its users try to learn from other fields of science and have a dialogue with them in order to find new best practices that can be applied to law.

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In my work as a lawyer, I have seen that contracts have become greatly comprehensive and complex. Frequently I have witnessed that lawyers are hesitant in deleting excessive clauses from contracts. These contracts may have been around for a long time, and senior lawyers or in-house counsel may have added more and more clauses over time. Such a process, where clauses are added, or kept for even remote contingencies—but hardly ever any clauses are deleted—creates more comprehensive contracting which is neither ethical nor efficient. There exists a great need to modify commercial contracting services, products and processes with plain language, visuals and user-centred design. I am interested in understanding the impact of legal design in commercial contracting. In order to conduct an empirical study, one needs to know what precisely is required to be investigated, and which elements need to be monitored and why. Getting scientifically measured some of the various effects of legal design, will facilitate its use, as then procedures and decisions can be grounded with quantitative, empirical data:

“When you can measure what you are speaking about, and express it in numbers, you know something about it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely, in your thoughts advanced to the stage of science.”

— Lord Kelvin (Kelvin, 1883)

We need law and economics to do the scientific measurement necessary for legal design to be seen as on the stage of science. Law and economics—which is the application of economic theory, especially microeconomic theory, to the analysis and the practice of law—is a valid tool and approach to reflect on what should be empirically investigated in the practice of legal design when measuring the total impact of it in commercial contracting. The neoclassical (mainstream) theoretical foundation of economic analysis of law is, however, at times far from reality as it often predicts uncooperative and even selfish behaviour. In real life people do cooperate, have empathy, emotions and even behave in an altruistic way. For those reasons, behavioural law and economics and conventional wisdom are needed to complement the teachings from standard theory in the field of commercial contracting.

Currently, no empirical studies have been conducted in the field of legal design—and in particular of commercial contracts—that build on the economic analysis of law. I see here something regrettable that needs to be changed! Economic analysis of law is a valid tool to understand the purpose and expectations of legal design, and therefore it needs to be tested empirically.

This paper is divided into four different sections. In the first section, I rely on the rational choice theory to grasp the essence of legal design especially as applied to commercial contracts. In the second section, I discuss further the transaction and opportunity costs of negotiation and contracting. In the third section, I cover the impact of signalling. In the fourth, and last section of the paper, I analyse the application of innovation theory and game theory to legal design approach.

**Rational choice theory versus “Study man as he is” (Posner, 1993)**

Neoclassical economics is far from reality and often follows the theory of “rational man,” underestimating human character and evolution. The assumption is that human beings are self-interested, rational maximisers of their own satisfaction. They will respond to incentives, and if they can increase their satisfaction by altering their behaviour to adjust to changes in their surroundings, they will do so. People are assumed to be rational utility maximisers in all areas of life.
However, rational maximisation of expected utility is not regarded as the same notion as conscious calculation; nor is economics a theory about consciousness. Richard Posner remarks that perfectly normal persons are not always rational, and, in some situations, non-calculable risk may preclude a rational choice (Posner, 2014: 3–5). In Posner’s opinion, however, even though people do make deviations from rational behaviour, this does not invalidate the rational choice theory as it stands because these occasional deviations, according to him, will cancel out. Cognitive psychologists and economists have shown, however, that human behaviour reveals systematic departures from rationality (Posner, 2014: 18–19). For instance, the essential insight of behavioural economics and neuroeconomics is that human beings make predictable errors in cognition, decision-making and in judgement. People are “predictably irrational” (Ariely, 2009; Cooter and Ulen, 2012: 51). What comes to our mind before we make choices and decisions is shaped by memory and highly selective perception, which influence our choices and decisions, frequently diverting them from the predictions of rational choice theory. Explanation for some of the cognitive deficiencies that the rational choice theorists tend to ignore can be found in human evolution. For instance, majority of people have hardship dealing rationally with events that have low-probability, and this may well be traced back to the period of human prehistory when survival required full-time attention to high-probability threats and opportunities (Posner, 2014: 19).

“When economists find that they are unable to analyze what is happening in the real world, they invent an imaginary world which they are capable of handling.”
— Ronald Coase 1988 (Samuels, 2011: iv)

Human behaviour demonstrates systematic departures from rationality and not all economists have been satisfied with the conception of economics as the science of rational choice. Two of the greatest economists of the twentieth century, John Maynard Keynes (a liberal macroeconomist) and Ronald Coase (a conservative microeconomist), are both well-known skeptics of rational choice theory. Coase has written caustically that the rational model of human behaviour is:

“unnecessary and misleading” since “[t]here is no reason to suppose that most human beings are engaged in maximizing anything unless it be unhappiness, and even this with incomplete success.”

Keynes, like Coase, wanted to be realistic as regards decision-making. Methodologically, Coase and Keynes were alike; both of them utilised the essential tools of economics while being disdainful of mathematics and the rational model of human behaviour. Furthermore, they were both disposed to take people as they are instead of constructing a “rational man”. Neither of them considered the realism of their assumptions as irrelevant nor sought to test a theory by the precision of its predictions, as Milton Friedman had famously suggested in Positive Economics (Friedman, 1966: 3–16, 30–43; Posner, 2014: 23–26).

Modern microeconomic theory, which assumes that decision makers are rationally self-interested, has been under attack for several decades. The attack against the rational choice theory has been principally empirical and it has been based on experimental findings that people do not behave as rational choice theory predicts. Daniel Kahneman and Amos Tversky are two leaders in the experimental literature critical of rational choice theory. Cass Sustein and Richard Thaler are often regarded as the founders of behavioural law and economics (Cooter and Ulen, 2012: 50).1
These attacks on the rational choice theory demonstrate that economic analysis of law has more to offer for today’s science within empirical and experimental studies than with the outdated neoclassical theory. Behavioural law and economics, behavioural economics and neuroeconomics could lead us in the right direction through empirical studies and experimental findings.

**Homo economicus**\(^2\) (Mills, 1836) and *The ultimatum bargaining game*

Behavioural economics describes and studies economic decision-making. According to the field’s theories, actual human behaviour is less stable, selfish, and rational than traditional normative theory suggests, due to limited self-control, social preferences, and bounded rationality. The *ultimatum bargaining game* is one of the empirical examples of behavioural economics that has particular relevance to law and that revealed a violation of the standard assumption of rationality (Camerer, 2020: 146, 178). In this game, there are two participants who do not know each other, and they interact anonymously. Their goal is to divide a small sum of money, say 20 dollars.

The rational choice theory assumes that the player 1 will take advantage of his position and propose a disproportionate division of the sum, say 15 dollars. It is possible, in fact, that the Player 2 might regard the Player 1 as selfish, but still settle for 5 dollars as regarding it to be better than nothing. The ultimatum bargaining game has been played in experiments in over 140 countries, some poor and some wealthy, and among groups with greatly diverse ages, education levels, incomes, religions, and the like. The most common outcome of the game is that the stakes are split equally 50–50, both participants receiving 10 dollars. In many countries it has been noticed that if the Player 1 tries to acquire more than 70% of the stakes, then the Player 2 will reject the proposal and both of the players receive nothing. Cooter & Ulen point out that in *the ultimatum bargaining game* strangers rarely take advantage of one another. Instead, it seems that the norm is to treat the other party fairly, the way one treats oneself (Cooter and Ulen, 2012: 50–51). The observed behaviour in the ultimatum bargaining game cannot be explained or supported with the standard assumption of the rational choice theory. The observed behaviour is neither uncooperative nor is it selfish, as the most common outcome of the game is that the stakes are divided in an equal manner. The experience from the ultimatum bargaining game demonstrates that people do cooperate and even behave fairly with strangers. I expect from the empirical understanding that the aligned result would occur where parties divide a mutual gain from a contractual arrangement.

The neoclassical approach of standard rational choice theory is not enough to explain observed behaviour in real life. The ultimatum bargaining game demonstrates that teachings also from other fields of science and conventional wisdom are needed to better understand human behaviour. More empirical approach can reflect what should be empirically investigated in legal design (Table 1).

| Player 1 | Makes a proposition of how the money should be divided between the parties |
|---------|---------------------------------------------------------------|
| Player 2 | Can accept the proposal, in which case the sum is divided as proposed |
|         | OR                                                             |
|         | Can reject the proposal, in which case none of the parties receives any money |

Table 1. The ultimatum bargaining game—a violation of the standard assumption of rationality.
Transaction and opportunity costs of negotiation and contracting

Economic analysis of law as a tool and approach reflects on what should be empirically investigated in the practice of legal design when measuring the impact of it in transaction and opportunity costs of negotiation and contracting. Law and economics is the application of economic theory, especially microeconomic theory, to the practice and the analysis of law. Behavioural law and economics is needed to better understand and complement the teachings from standard neoclassical theory of commercial contracting. Behavioural law and economics explores the implications of actual human behaviour for the law (Sunstein et al., 1998: 1476). Emphasis on how people respond to information and how it bears on the role of law has relevance for the application of legal design approach. Legal design clarifies complex legalese, improves and empowers ethics and efficiency of legal products, services and processes. All too often, whether a contract is boilerplate or uniquely drafted, they have one thing in common; namely, contracting parties too frequently have no clear understanding what rights or obligations they have under these contracts. The lack of knowledge and understanding puts businesses at risk. The legal design approach enables parties to save in transaction and opportunity costs and maintain reciprocal trust.

Transaction cost is any cost involved in making an economic transaction. They may include, among others, administrative costs, legal fees and costs of judicial proceedings, communication charges or even labour costs. Transaction costs are always sunk costs whereas opportunity cost refers to the loss of alternatives, when one alternative is chosen; it is the value one needs to give up in order to get something else. Moreover, legal design approach can reduce or even eliminate the knowledge and information asymmetry between contracting parties and by that, enable “better” contracting decisions:

“Everything should be made as simple as possible, but not simpler”
— Albert Einstein (Calaprice, 2000: 314)

Clarity in contracts should be the new standard and not just the privilege of only a few end-users of legal products and services—legal design approach should be applied more widely among operators. Legal design can empower people, with no judicial training, with their own legal matters in a way that even lawyers are not always needed in contract negotiating and drafting processes. Furthermore, understandability and clarity in legal language are widely recognised rights in judicial systems (European Union, 2016 and Finlex, 2003).

When contracts are comprehensive and complex, then transaction costs are already excessive when drafting and reading those contracts. Prolonged contract negotiations cause remarkable transaction costs. Often parties strive to negotiate complex—and often ambiguous—contract clauses that, they hope, will work to their benefit in case of a disagreement (Cohen, 2011: 148). We encounter the same strategy with boilerplate contracts; however, with one little difference, boilerplate contracts are not often negotiated. When contract clauses and terms are written with clarity and plain language, then a prolonged pursuit of self-interest in contract drafting—that can burden the whole contracting relationship and bring excessive costs—can be avoided altogether.

From the law and economics theory on contracts we expect the following benefits from the use of legal design in commercial contracts:

- The first expectation is to lower transaction and opportunity costs due to clear (transparent) communication, and particularly in the form of shorter time for negotiation.
The second expectation is to find a deep-rooted contractual commitment. Transparent and clear language contract negotiations often deepen collaboration, increase mutual trust and understanding of the basis for negotiations, and about the objectives, obligations and rights of the negotiable agreement at hand.

The third expectation is to find less re-negotiation and breaches. When parties to a contract understand their rights and obligations, unintended contractual breaches are less likely to occur. Furthermore, negligent behaviour or negligent contractual breaches will decrease as the parties to a contract have accomplished transparent, a more deep-rooted level of understanding of the objects and the meaning of the contract for both of the parties. When from the beginning of contractual negotiations, the objectives, aims and means of the contract are clearly and transparently discussed, it creates more deep-rooted commitment than with a comprehensive and complex traditional legal or boilerplate contract;

The fourth expectation is to find less strategic “non-compliance” as the relationship has now more human dimension. Plain language and less legalese contracts diminished the ground for ambiguity, which earlier could have allowed for the pursuit of self-interest through complex legalese.

The fifth expectation is to find savings in reclamation, judicial and other administrative costs. Remarkable transaction costs can emerge from reclamation and dispute proceedings as a part of a contractual relationship. Reclamation and dispute proceedings can be time consuming and require a lot of communication between the contracting parties and their representatives. Moreover, having and educating personnel for customer service can be costly. With clear and plain language contracts, the number of reclamations and disputes can be decreased; because when contractual clauses and terms are unambiguous, leaving no room for legalese, there will be fewer unnecessary claims as parties to a contract better understand their rights and obligations under the contract regime. In case a contractual relationship is damaged, and the parties have their dispute before a court, the transaction costs are significant. Judicial proceeding transaction costs can be avoided with a clear, user- and human-centred design approach to law, negotiation and contractual proceedings. Furthermore, a proactive and transparent contracting increases mutual understanding of the objectives and means of the contract and thereby, decreases the emergence of possible future transaction costs of negotiation. In addition, it is the more human dimension of the contractual relationship, created through legal design approach, that decreases the unnecessary claims as mutual trust and the maintaining of the relationship is regarded as valuable. Legal design approach is expected to bring significant savings in transaction and opportunity costs when applied with negotiation and contractual operations.

The sixth expectation is to find signalling of an implemented legal design approach to a company’s negotiation and contractual practice to create profits and enable sustainable business development. Negotiation and commerce are based on trust. Trust is especially important when no efficient contractual judicial enforcement tools are available. Mutual trust and its signalling are the grounds for long-term collaboration and business. Partners who are unreliable are suitable for only one-off agreement, if any. Clear, plain language and transparent negotiation and contracting practice, demonstrated in the market, signal potential customers and partners of the company’s trustworthiness as well as of the willingness to be bound by its contractual obligations. Furthermore, this legal practice is expected to increase trust and create a good reputation in the market. Well-working contractual relationships enable long-term contracting or the renewal of short-term contracts. It is a win-win situation for the
company and its partners. Signalling a company’s implemented legal design approach to negotiation and contracting will foster sustainable business development and create profits.

– The seventh expectation is to find signalling of trust as a business advantage that creates profits. Before legal design approach becomes the new standard, it will be a competitive advantage for those actors who apply it. A company that executes a legal design approach in its negotiations and contracting signals that it is not a “bad apple”. When trust has been created through transparency in contractual operations, it is natural for customers to recommend the company for others as well. A recommendation in a commercial framework is a strong signal and it helps a company to strengthen its position on a market.

These are the hypotheses of effects that we have tried testing through empirical studies. We are currently analysing gathered data and we are expecting preliminary empirical research findings in the near future. There are, however, also costs associated with the use of legal design. These costs can include, among others:

– the entering costs to legal design approach,
– the use of interdisciplinary expertise for renewing and/or drafting (sometimes from a scratch) new contracts,
– the time spent on implementing the new procedures as part of a company’s practice,
– the education of relevant personnel,
– the integration of the change to a company’s strategic level.

It is our intention to investigate through empirical testing that the benefits largely outweigh those costs.

**Schumpeter’s innovation theory and legal design approach**

Schumpeter has argued that anyone seeking profits must innovate. Schumpeter’s Innovation Theory is grounded within the idea that an entrepreneur can earn profits by introducing successful innovations (Sledzik, 2013: 89–94). Within the economic theory framework, the legal design approach can be regarded as innovative since it combines design methods as well as the latest innovations in the field of law and technology, and since it intends to improve the quality and efficiency of legal products and services. According to Schumpeter, innovation refers to any new policy that reduces the total cost of production or that increases the demand for sold products. The legal design approach is expected to do both, and it can fit into these two categories; namely, the first category incorporates all operations which decrease the total cost of production, for instance, the introduction of a new technique or a method of production, or an innovative method of organising an industry. The second category of innovation incorporates all operations which increase the demand for a product, for instance, the introduction of new quality goods, opening or emerging of a new market or a design of a product (Sledzik, 2013: 89–94). Legal design’s innovative approach to commercial contracting is aligned with profitable commerce and revenue, and therefore also with Schumpeter’s Innovation Theory.

**The application of game theory to legal design**

Economists have always insisted that co-operation is in the interest of everyone. In most cases, self-interest is not seen as being opposite to co-operation and trust (Axelrod, 1980). According to the
theoretical understanding from the law and economics of contract, within the legal design approach, firms should contract more clearly even if they are pursuing only their rational self-interest. This is in accordance with the application of non-cooperative game theoretical approach. It is in the firm’s best interest to apply legal design approach in its operations:

“Doux Commerce (Sweet Commerce)!”
— Montesquieu 1748 (Montesquieu, 1748)

Making law more approachable and understandable through legal design is not in a conflict with profitable commerce. Quite the opposite. Transparent, ethical and empowering contractual operations go hand-in-hand with profitability and revenue. The legal design approach gives preference to more ethical and judicially sustainable negotiation and contractual operations development as part of a company’s growth. When a company leads the way with transparency and clarity in judicial services, products and processes, other companies in the market must follow the path, otherwise they will be left behind or end up being regarded as “bad apples”; eventually “bad apples” are pushed out of the market. People “voting with their feet” and influential millennials in social media bring imperativeness for having more ethics, humanity and human-centred design in negotiation and contracting operations.

Conclusion

This essay has laid the pioneering groundwork for further research on theory of legal design in law and economics framework of commercial contracting. The essay began by presenting concepts drawn from the standard economic theory on contracts, and then used behavioural economics and behavioural law and economics to predict reality better, and to complement the teachings from standard economic theory. This essay applied law and economics theory on contracts to legal design for the first time, arguing that using legal design approach to commercial contracting would, in the light of law and economics theory on contracts, bring great advantages for the parties to a contract and the society at large, and that law and economics is the valid tool for assessing the total impact of legal design in commercial contracting. These expected advantages of using legal design approach included, among others, the decrease of transaction costs, the increase of understanding and trust between contracting parties, and better reputation as well as competitive advantage when signalling the application of the legal design approach within contractual operations. The essay ended by discussing the application of innovation theory and game theory to legal design by concluding that making law more approachable and understandable through legal design is not in conflict with profitable commerce, but quite the opposite—as transparent, ethical and empowering contractual operations go hand-in-hand with profitability and revenue. Applying legal design approach should even game theoretically be every operators’ choice as it supports business profitability and revenue.

I am of the opinion that legal design approach to negotiation and contracting will be the new mainstream—if it is not that already!

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Supplemental material
Supplemental material for this article is available online.

Notes
1. A legal analysis that takes account of these empirical findings is called behaviour law and economics, whereas the economic body of literature is called behavioural economics. For a summary of the fields, see Sunstein, Cass R., Jolls, Christine and Thaler, Richard H. 1998, “A Behavioral Approach to Law and Economics.” Stanford Law Review, vol. 50, no. 5 (May): 1471-1550. https://doi.org/10.2307/1229304; Korobkin, Russell B. and Ulen, Thomas S. 2000.” Law and Behavioural Science: Removing the Rationality Assumption from Law and Economics.”. Cal. L. Rev. 88, no.4 (July 2000): 1051–1144. https://doi.org/10.2307/3481255.
2. Homo Economicus is a term and model for human behaviour to describe a rational human being that has unlimited capability to make rational decisions.
3. Exceptions for co-operation exists. See, for instance, tit-for-tat strategy.

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