

UNCONSCIONABILITY, SMART CONTRACTS, AND BLOCKCHAIN TECHNOLOGY: ARE CONSUMERS REALLY PROTECTED AGAINST POWER ABUSES IN THE DIGITAL ECONOMY?

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Abstract: *This work discusses the doctrine of unconscionability in smart contracts involving consumers, as implied by the Supreme Court of Canada in its *Uber v Heller* decision of 2020. Finding an arbitration clause, whereby Uber required a Toronto driver to bring his labour complaint to an arbitration tribunal in the Netherlands, unenforceable, the Supreme Court required the presence of inequality of bargaining power and improvident bargain for a contract to be unconscionable. This approach to unconscionability also applies to standard form contracts or contracts of adhesion involving consumers. This work focuses on the implications of such an approach for protecting consumers in standard form contracts that take the form of smart contracts.*

The doctrine of unconscionability may curb abusive practices by companies (particularly global platforms), mitigate the problems associated with the immutability of smart contracts, and incentivize companies to encode fair terms and conditions in smart contracts. This paper, however, raises concerns about the effectiveness of the enforcement of the doctrine of unconscionability in smart contracts implemented within blockchain technologies. Companies' apparent unwillingness to encode fair terms and conditions in smart contracts and consumers' inability to detect unfair terms and bring

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an action in response along with the limitations of regulators and courts to enforce fairness standards in the digital economy may render the doctrine of unconscionability ineffective.

Consideration should be given to supplementing regulators and courts with mandatory auditing of smart contracts under public scrutiny, in order to encourage companies to remove unfair terms and conditions together with bias, discrimination, and technical failures. This corporate auditing of smart contracts may greatly mitigate the enforcement problems associated with the doctrine of unconscionability and ensure that consumers are effectively and conveniently protected in the digital economy. Although lessons may be drawn for other nations, attention should also be paid to local contexts and the institutional strengths and weaknesses of a particular country.

Keywords: Smart Contracts, Standard Form, Uber, Unconscionability.

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I. INTRODUCTION

The protection of consumers against unfair terms in contracts is widely established in the common law world. Legislatures and courts have frequently granted protection to consumers who are victims of abusive terms imposed by companies, in situations of inequality of bargaining power. It is expected that such protection will be extended to consumers that are parties to smart contracts, which are self-executing agreements that encode immutable terms and conditions onto blockchain technologies. The doctrine of unconscionability has been central to the protection of consumers against unfair terms and conditions in classic standard form contracts, and is likely to be of equal importance to the protection of consumers against such terms in smart contracts.

A smart contract can be unconscionable and voided if it is formed or executed under conditions of inequality of bargaining power and improvident bargains. The unconscionability doctrine has bolstered existing consumer protection legislations that currently provide protection to consumers in most

jurisdictions. Canada is not an exception to that trend. In 2020, the Supreme Court of Canada issued its decision in *Uber v Heller*¹ (*Uber*) that dealt with an arbitration clause requiring a Toronto driver to bring his labour complaint to an arbitration tribunal in the Netherlands. The Supreme Court found that clause unconscionable and, thus, unenforceable. While that case involved a worker, the Court articulated the doctrine of unconscionability as applied to standard form contracts or contract of adhesion. As such, the unconscionability doctrine should apply to standard form contracts generally, including smart contracts involving consumers.

While the Supreme Court of Canada has set out a protective standard of unconscionability and has shown its regulatory power over global platforms and the immutability of smart contracts, the enforcement of such contractual fairness standards can be ineffective. The Supreme Court has lowered the standard for finding unconscionability and, thus, more instances of contractual unfairness may be found. However, consumers, regulators, and courts may still face difficulties enforcing such standards in the digital economy, as companies, particularly those using cross-jurisdictional platforms, appear to be reluctant to encode fair terms and conditions in smart contracts. This enforcement problem may deprive decisions such as *Uber v Heller* of its real impact on deterring unfair practices, thereby delivering little practical protection to consumers. This work discusses the doctrine of unconscionability in standard form contracts that take the form of smart contracts, as articulated by the Supreme Court of Canada in *Uber v Heller*. It argues that the enforcement of the doctrine of unconscionability may be ineffective in the case of consumer smart contracts implemented within blockchain technologies. In practice, most consumers appear to remain vulnerable to unfair terms and conditions encoded in smart contracts. Consideration should be given to supplementing regulators and courts with mandatory corporate auditing of smart contracts. Placing companies under more public and regulatory scrutiny may, in turn, encourage them to remove unfair terms and conditions along with bias, discrimination, and technical failures in their smart contracts.

This paper is organized as follows. The first section briefly reviews the *Uber v Heller* decision. The second section focuses on analysing the doctrine of unconscionability as applied to standard form contracts or contracts of adhesion involving consumers. The next part discusses the application of the unconscionability doctrine to smart contracts involving consumers. It highlights the exacerbation of the problems of inequality of bargaining power and improvident bargains in the digital economy and the challenges of protecting

¹ *Uber Technologies Inc v Heller* 2020 SCC 16.

consumers against unconscionable smart contracts. This section briefly elaborates on the concerns about the enforcement of the unconscionability doctrine and puts forward the idea of supplementing the existing consumer redress mechanisms with a mandatory corporate auditing of smart contracts in order to prevent the encoding of unfair terms and conditions more effectively and efficiently. The last section concludes with a summary of the argument and a suggestion of a future research agenda.

II. UBER V HELLER

In the 2020 Supreme Court of Canada decision in *Uber Technologies Inc v Heller*,² the court dealt with the issue of the validity of an arbitration clause included in an agreement between Uber and Mr. Heller (“H”). The latter provided food delivery services in Toronto using Uber’s software applications. To become a driver for Uber, Mr. Heller had to accept the terms of Uber’s standard form services agreement. Under this agreement, Mr. Heller was required to resolve any dispute with Uber through mediation and arbitration in the Netherlands. This required up-front administrative and filing fees of U.S.\$14,500, plus legal fees and other costs of participation, which altogether represented most of Mr. Heller’s annual income. This case before the Supreme Court started in 2017, when Mr. Heller began a class proceeding against Uber in Ontario for violations of employment standards legislation. Uber brought a motion to stop the class proceeding in favour of arbitration in the Netherlands as stipulated in the arbitration clause of the agreement with Mr. Heller. The latter argued that the arbitration clause was unconscionable and therefore invalid. Siding with the Ontario Court of Appeal, the Supreme Court of Canada held that the arbitration clause was unconscionable as Uber, a global platform corporation, had significant power over Mr. Heller and there was a clear inequality of bargaining power between the company and a driver:

“There was inequality of bargaining power between Uber and H because the arbitration clause was part of an unnegotiated standard form contract, there was a significant gulf in sophistication between the parties, and a person in H’s position could not be expected to appreciate the financial and legal implications of the arbitration clause. The arbitration clause is improvident because the arbitration process requires US\$14,500 in up-front administrative fees. As a result, the arbitration clause is unconscionable and therefore invalid.”³

² *ibid.*

³ *Uber* (n 1).

The Supreme Court's decision was based on the doctrine of unconscionability that requires the presence of inequality of bargaining power and improvident bargain for a contract to be unconscionable. Such doctrine intends to protect vulnerable parties in contracts. Applying the doctrine of unconscionability, the Supreme Court concluded that Mr. Heller was unable to protect his own interest in dealing with a global platform corporation:

“Unconscionability requires both an inequality of bargaining power and a resulting improvident bargain. An inequality of bargaining power exists when one party cannot adequately protect its own interests in the contracting process. A bargain is improvident if it unduly advantages the stronger party or unduly disadvantages the more vulnerable. Improvidence is measured at the time the contract is formed and must be assessed contextually. The question is whether the potential for undue advantage or disadvantage created by the inequality of bargaining power has been realized. Although one party knowingly taking advantage of another's vulnerability may provide strong evidence of inequality of bargaining power, it is not essential for a finding of unconscionability. Unconscionability does not require that the transaction was grossly unfair, that the imbalance of bargaining power was overwhelming, or that the stronger party intended to take advantage of a vulnerable party. ... Based on both the financial and logistic disadvantages faced by H in his ability to protect his bargaining interests and on the unfair terms that resulted, the arbitration clause is unconscionable and therefore invalid.”⁴

The Supreme Court of Canada, thus, lowered the standard for finding a contract unconscionable. The Court indicated that there must be an inequality of bargaining power that results in an improvident bargain but finding unconscionability does not require that an improvident transaction be “grossly unfair” and the imbalance in bargaining power need not be “overwhelming”. After rejecting a four-part test of unconscionability as it lessens the focus on equity, the Court stated that “[u]nconscionability has always targeted unfair bargains resulting from unfair bargaining”.⁵ The Court recognized that independent advice may be of assistance, but it “is relevant only to the extent that it ameliorates the inequality of bargaining power experienced by the weaker party”.⁶

⁴ *Uber* (n 1).

⁵ *Uber* (n 1) [82].

⁶ *Uber* (n 1) [83].

Furthermore, for a contract to be unconscionable, it is not required that the stronger party knowingly took advantage of the vulnerability of the weaker party. The Court stated that unconscionability can be established without proving the stronger party's intent to engage in, or knowledge of, the abuse:

“[84] Unconscionability, moreover, can be established without proof that the stronger party knowingly took advantage of the weaker. Such a requirement is closely associated with theories of unconscionability that focus on wrongdoing by the defendant (see Boustany, at p. 6). But unconscionability can be triggered without wrongdoing...⁷

[85] We agree. One party knowingly or deliberately taking advantage of another's vulnerability may provide strong evidence of inequality of bargaining power, but it is not essential for a finding of unconscionability. Such a requirement improperly emphasizes the state of mind of the stronger party, rather than the protection of the more vulnerable. This Court's decisions leave no doubt that unconscionability focuses on the latter purpose. Parties cannot expect courts to enforce improvident bargains formed in situations of inequality of bargaining power; a weaker party, after all, is as disadvantaged by inadvertent exploitation as by deliberate exploitation. A rigid requirement based on the stronger party's state of mind would also erode the modern relevance of the unconscionability doctrine, effectively shielding from its reach improvident contracts of adhesion where the parties did not interact or negotiate.”⁸

The Supreme Court elaborated on the doctrine of unconscionability, placing emphasis on the protection of the weaker party rather than the stronger party's mental state. To that end, an inequality of bargaining power and an improvident bargain should be established. The Court stated that “the requirements of inequality and improvidence, properly applied, strike the proper balance between fairness and commercial certainty”.⁹

The Supreme Court's decision ultimately remedied a corporate abuse and invalidated an unconscionable arbitration clause imposed by a global platform corporation. Uber was held accountable to local courts, tribunals, and governments, and was required to abide by Canadian labour laws to the benefit of drivers seeking labour justice locally. Ultimately, the Court intervention made

⁷ *Uber* (n 1) [84].

⁸ *Uber* (n 1) [85].

⁹ *Uber* (n 1) [86].

Uber more socially responsible in the Canadian context and mitigated the negative impact of the use of new technology without eliminating its advantages. The Court indirectly democratized the governance of the new technology and data whose creation and implementation have been in the hands of a few computer programmers, directors, and officers, prior to court and government interventions. This democratization of data and platform governance may also incentivize companies and all stakeholders to build participatory mechanisms within business organizations to allow for multi-stakeholder involvement in the creation, monitoring and assessment of the new technology so as to prevent future conflicts, abuses, inefficiencies and thus avoid the cost and inconveniences of court litigation.

III. UNCONSCIONABILITY, STANDARD FORM CONTRACTS, AND CONSUMER PROTECTION

The Supreme Court of Canada stated that the doctrine of unconscionability applies to standard form contracts, contracts of adhesion or ‘boiler-plates’, including those involving consumers.¹⁰ The Court indicated that standard form contracts do not necessarily establish an inequality of bargaining power and can be necessary, useful and effective in communicating the meaning of clauses.¹¹ However, the Court asserted that the doctrine of unconscionability is helpful in analysing the validity of consent to standard form contracts and the extent to which a party’s ability can be impaired by such contracts so that it is unable to protect its interest. A standard form contract can create an inequality of bargaining power and an improvident bargain:

“[89] Our point is simply that unconscionability has a meaningful role to play in examining the conditions behind consent to contracts

¹⁰ The Court noted that the development of the law of unconscionability in connection with standard form contracts has been widely established in Canada and elsewhere. See *Uber* (n 1) [90] (“...The link between standard form contracts and unconscionability has been suggested in judicial decisions, textbooks, and academic articles for years (see eg, *Douez*, at para 114; *Davidson v Three Spruces Realty Ltd* (1977) 79 DLR (3d) 481 (BCSC); *Hunter*, at p 513; *Swan, Adamski and Na*, at pp 992-93; *McCamus*, at p 444; *Jean Braucher*, “Unconscionability in the Age of Sophisticated Mass-Market Framing Strategies and the Modern Administrative State” (2007), 45 *Can Bus LJ* 382, at p 396). It has also been present in the American jurisprudence for more than half a century (see *Williams v Walker-Thomas Furniture Co*, 350 F 2d 445 (1965), at pp 449-50”).

¹¹ See *Uber* (n 1) [88] (“We do not mean to suggest that a standard form contract, by itself, establishes an inequality of bargaining power (Waddams (2017), at p 240). Standard form contracts are in many instances both necessary and useful. Sophisticated commercial parties, for example, may be familiar with contracts of adhesion commonly used within an industry. Sufficient explanations or advice may offset uncertainty about the terms of a standard form agreement. Some standard form contracts may clearly and effectively communicate the meaning of clauses with unusual or onerous effects (Benson, at p 234).”).

of adhesion, as it does with any contract. The many ways in which standard form contracts can impair a party's ability to protect their interests in the contracting process and make them more vulnerable, are well-documented. For example, they are drafted by one party without input from the other and they may contain provisions that are difficult to read or understand ... The potential for such contracts to create an inequality of bargaining power is clear. So too is their potential to enhance the advantage of the stronger party at the expense of the more vulnerable one, particularly through choice of law, forum selection, and arbitration clauses that violate the adhering party's reasonable expectations by depriving them of remedies. This is precisely the kind of situation in which the unconscionability doctrine is meant to apply."¹²

More specifically, the Supreme Court endorsed the view that the doctrine of unconscionability and its two-step test, namely, proof of inequality of bargaining power and an improvident bargain, apply to standard form consumer contracts. The Court approvingly cited the concurrent judgment of Justice Abella in *Douez v Facebook, Inc.*,¹³ who applied the unconscionability doctrine to standard form contracts involving consumers,¹⁴ and stated that there is no need to depart from such an approach:

¹² *Uber* (n 1) [89].

¹³ *Douez v Facebook Inc* 2017 SCC 33, 2017 CSC 33, 2017 CarswellBC 1664.

¹⁴ *ibid* [112-117]. Justice Abella, concurring in the results with the majority regarding the finding that a forum selection clause imposed by Facebook on a consumer is unenforceable, stated:

"112. The doctrine of unconscionability, a close jurisprudential cousin to both public policy and gross bargaining disparity, also applies to render the forum selection clause unenforceable in this case. ...

114. As Prof. McCamus notes, the doctrine of unconscionability is a useful tool for addressing the enforceability of some clauses in consumer contracts of adhesion:

... the doctrine of the unconscionable term may provide a common law device, long awaited by some, that can ameliorate the harsh impact of unfair terms in boilerplate or "adhesion" contracts, offered particularly in the context of consumer transactions on a take-it-or-leave-it basis. [Footnote omitted; p 444.]

(See also Jean Braucher, "Unconscionability in the Age of Sophisticated Mass-Market Framing Strategies and the Modern Administrative State" (2007), 45 *Can Bus LJ* 382.)

115. Two elements are required for the doctrine of unconscionability to apply: inequality of bargaining powers and unfairness. Prof McCamus describes them as follows:

... one must establish both inequality of bargaining power in the sense that one party is incapable of adequately protecting his or her interests and undue advantage or benefit secured as a result of that inequality by the stronger party. [Emphasis added; pp 426-27.]

116. In my view, both elements are met here. The inequality of bargaining power between Facebook and Ms Douez in an online contract of adhesion gave Facebook the unilateral ability to require that any legal grievances Ms Douez had, could not be vindicated in British Columbia where the contract was made, but only in California where Facebook has its head office. This gave Facebook an unfair and overwhelming procedural — and potentially substantive — benefit. This, to me, is a classic case of unconscionability.

“[64] In *Norberg*, La Forest J. described proving the elements of unconscionability as “a two-step process”, involving “(1) proof of inequality in the positions of the parties, and (2) proof of an improvident bargain” (p 256). The concurring judgment in *Douez v Facebook Inc*, 2017 SCC 33 (CanLII), [2017] 1 SCR 751, followed a similar approach in a case involving a standard form consumer contract:

Two elements are required for the doctrine of unconscionability to apply: inequality of bargaining powers and unfairness. Prof. McCamus describes them as follows:

. . . one must establish both inequality of bargaining power in the sense that one party is incapable of adequately protecting his or her interests and undue advantage or benefit secured as a result of that inequality by the stronger party. [Emphasis deleted; para. 115.] ...

[65] We see no reason to depart from the approach to unconscionability endorsed in *Hunter*, *Norberg* and in *Douez*. That approach requires both an inequality of bargaining power and a resulting improvident bargain.¹⁵

IV. UNCONSCIONABILITY IN SMART CONTRACTS AND CONSUMER PROTECTION

The facts of the *Uber* case exemplify the extent of the power held by global platform corporations and their massive deployment of algorithms, artificial intelligence, smart contracts, and blockchain technology in order to restructure corporate governance and contracting in particular. This may result in more efficient business organizations and lower transaction costs that may benefit companies, employees and consumers. On the other hand, the *Uber* decision reveals the extent to which platform corporations are also utilizing new and emerging technologies to circumvent local employment laws and policies to the detriment of local workers, local economies, and local governments. Uber has revolutionized the ride-hailing/taxi industry by outsourcing its labour using a digital platform that allows them to hire drivers as ‘independent contractors’, thereby avoiding local labour laws and reducing labour costs. An important tool for such a business model is the use of standard form contracts with terms

117. For all these reasons, the forum selection clause is unenforceable under the first step of the *Pompey* test.”

¹⁵ *Uber* (n 1) [64-65].

and conditions that are imposed on drivers. As the digitalisation of the economy progresses, standard form contracts increasingly take the form of smart contracts that are designed and implemented using blockchain technologies. As shown in the *Uber* case, smart contracts may encode unfair terms and conditions, such as unreasonable arbitration clauses, that can prevent drivers from bringing an action or complaint before local courts and local regulators. Similarly, consumers can also be exposed to unfair smart contracts.

The doctrine of unconscionability has become even more relevant with the digitalisation of the economy and the massive utilisation of standard form consumer contracts in the form of smart contracts, as power imbalances between companies and consumers have exacerbated. On the one hand, companies are massively deploying new technologies and, as a result, are increasing their market power. Companies are now in a better position to engage in rapid, massive and global transactions and monitor consumers' behaviour as companies gain more access to private data associated with consumers' preferences, purchase habits, financial status, emotional vulnerabilities, health conditions and location, among other things. Companies' use of multiple and complex algorithms has enhanced such commercial surveillance, monitoring, and control. Furthermore, the rise of big tech global corporations, concentrated corporate ownership, powerful institutional shareholders, and global common owners has further empowered fewer companies and shareholders. On the other hand, consumers are forced to deal with overwhelming amounts of digital information, are constantly exposed to digital and traditional marketing strategies, and are under increasing pressure to make rapid market decisions under income, time, and resource constraints. Needless to say, these problems are more severe in the case of vulnerable consumers that have limited income and education, are less tech savvy, and have limited access to the technology. In that context, the ubiquity of standard form contracts in the form of smart contracts, albeit convenient, have added new advantages for companies and contract drafters and disadvantages for consumers.¹⁶ Companies may be in an advantageous position to encode unfair terms and conditions and change them over time, which can go unnoticed by consumers. Consumers may be under pressure to enter

¹⁶ See eg, Marina Pavlović, 'Consumers First, Digital Citizenry Second: Through the Gateway of Standard-Form Contracts' in Elizabeth Dubois and Florian Martin-Bariteau (eds), *Citizenship in a Connected Canada. A Policy and Research Agenda* (University of Ottawa Press 2020) 161 (claiming that "[s]tandard-form contracts became an integral and unavoidable gate through which we pass ... into the realm of digital services and our collective digital lives. In the digital environment, as Ian Kerr put it, these contracts have become "the rule[,] and [the businesses,] the rulers." (Kerr, 2005, p 191). Rakoff's observation from the last quarter of the Twentieth century captures the significance of the rule-making power of these contracts: "The use of form documents, if legally enforceable, imparts to firms ... a freedom from legal restraint and an ability to control relationships across a market" (1983, p 1229)").

into smart contracts that unilaterally impose unfair terms and conditions that they may neither understand nor refuse and negotiate. This can be particularly pressing for consumers as they are in need of receiving services or goods and such decisions should be made rapidly as required by smart contracts that are presented as irreversible.¹⁷

The exacerbation of power imbalances in the digital economy, and in smart contracts in particular, was evident in the *Uber* case. Although it was not a business-to-consumer transaction, the facts of the *Uber* case resemble it. Heller provided “food delivery services in Toronto using Uber’s software applications. To become a driver for Uber, Mr. Heller had to accept, without negotiation, the terms of Uber’s standard form services agreement. Under the terms of the agreement, Mr. Heller was required to resolve any dispute with Uber through mediation and arbitration in the Netherlands”, which required him to spend more than his annual income on filing his complaint.¹⁸ This practically denied Mr. Heller access to justice and insulated the smart contract from significant challenges. Similarly, in *Douez v Facebook Inc.*,¹⁹ Justice Abella, concurring in the results with the majority that found a forum selection clause unenforceable, described the disadvantageous position of a Canadian consumer *vis-à-vis* a global and powerful platform corporation, such as Facebook, which were parties to an electronic standard form contract that imposed unfair terms and conditions:

“111. Tied to these public policy concerns is the “grossly uneven bargaining power” of the parties. Facebook is a multi-national corporation which operates in dozens of countries. Ms. Douez, a videographer, is a private citizen. She had no input into the terms of the contract and, in reality, no meaningful choice as to whether to accept them given Facebook’s undisputed indispensability to online conversations. As Prof. Cheryl Preston noted: “... if one’s family, friends, and business associates are on Facebook ... using a competitor’s service is not a reasonable choice” (Cheryl B. Preston, ‘Please

¹⁷ It is realistic to assume that a large number of consumers may not be able to understand and assess the risks and costs of terms and conditions in standard form smart contracts in the same way they were not when entering into non-digital standard form contracts. For a general analysis of such problems, see eg, Yannis Bakos, Florencia Marotta-Wurgler and David R. Trossen, ‘Does Anyone Read the Fine Print? Consumer Attention to Standard-Form Contracts’ (2014) 43(1) *The Journal of Legal Studies* 19; Omri Ben-Shahar and Carl E. Schneider, *More Than You Wanted to Know: The Failure of Mandated Disclosures* (Princeton University Press 2014).

¹⁸ *Uber* (n 1) [2].

¹⁹ *Douez* (n 13).

Note: You Have Waived Everything’: Can Notice Redeem Online Contracts?” (2015), 64 Am. U. L. Rev. 535, at p. 554).²⁰

Thus, smart contracts, along with blockchain technologies, have added an additional layer of inequality of bargaining power and new opportunities for improvident bargains largely due to the corporate control of the new technology and its immutability. The doctrine of unconscionability ought to capture such new challenges that the digital economy and the new technology pose and effectively rectify significant unfairness in smart contracts.²¹

While the Supreme Court of Canada’s decision in *Uber v Heller* was responsive to that challenge and provided protection to weaker parties against power abuses in contracts including smart contracts, it is unclear whether such a ruling will have a real massive impact on protecting consumers. Ideally, companies and global platforms should commit to encoding fair terms and conditions into smart contracts as a result of the *Uber* decision, as the Court stated generally:

“[91] Applying the unconscionability doctrine to standard form contracts also encourages those drafting such contracts to make them more accessible to the other party or to ensure that they are not so lop-sided as to be improvident, or both. The virtues of fair dealing were explained by Jean Braucher as follows:

Businesses are driven to behave competitively in their framing of market situations or otherwise they lose to those who do. Only if there are meaningful checks on what might be considered immoral behavior will persons in business have the freedom to act on their moral impulses. An implication of this point is that, absent regulation, business culture will become ever more ruthless, so that the distinctions between “reputable businesses” and fringe marketers gradually wither away. . . . [p. 390]”

However, the likelihood of doing so is low. Companies may not be interested in incorporating fair terms and conditions widely in standard form contracts or encoding them in smart contracts in particular. For instance, the Supreme Court of Canada in 2017 in *Douez v Facebook, Inc*²² concluded that

²⁰ *Douez* (n 13) [111].

²¹ Andrew Luesley, ‘Unravelling Smart Contracts: Smart Contracts and the Law of Rescission in Canada’ (2019) 19 *Asper Review of International Business and Trade Law* 155; Max Raskin, ‘The Law and Legality of Smart Contracts’ (2017) 1 *Georgetown Law Technology Review* 304, 305 (claiming that “certain unconscionable examples of strong smart contracts may need to be policed”).

²² *Douez* (n 13).

a forum selection clause imposed on a Facebook user was unenforceable. Deborah Douez was a resident of British Columbia, Canada and a member of the social network Facebook.com since 2007. She claimed that Facebook infringed her privacy rights and those of more than 1.8 million British Columbians in 2011, when Facebook's advertising product called 'Sponsored Stories' used her name and profile picture without her consent.²³ Facebook sought to "have the action stayed on the basis of the forum selection clause contained in its terms of use, which every user must click to accept in order to use its social network".²⁴ Such a clause required that disputes be resolved in California according to California law. In finding the forum selection clause unenforceable, the majority reasoned that the "grossly uneven bargaining power between the parties and the importance of adjudicating quasi-constitutional privacy rights in the province are reasons of public policy that are compelling" and decisive in the case while recognizing that "the interests of justice, and the comparative convenience and expense of litigating in California" also support the same finding.²⁵ Three years after the *Douez* decision, the Supreme Court of Canada in the 2020 *Uber* case again dealt with a similar unfair clause and had to issue a similar decision setting aside an arbitration clause imposed by Uber that required a Toronto driver to bring his labor complaint to an arbitration tribunal in the Netherlands. The similarities in the matter dealt with by the Supreme Court in *Douez* and *Uber* and its considerations of inequality of bargaining power, access to local justice, and unconscionability in contracts could have prompted Uber to ideally drop its arbitration clause, encode fair terms and conditions in its smart contracts, and avoid a costly and lengthy litigation. Yet, Uber chose to apply its unfair arbitration clause and fight in court for several years to defend it.

The limited ability of consumers to detect unfair terms and conditions in smart contracts and seek enforcement of fairness standards set by the courts aggravates the problems arising from the apparent corporate reluctance to encode fair terms and conditions. Even if consumers find unfair terms or conditions, they may be unwilling to pursue renegotiation with companies or a legal action due to the cost of conflict resolution inside and outside regulators and courts. Needless to say, consumers' inability to seek the removal of unfair terms and conditions are more severe in the case of vulnerable and low-income consumers who face serious access to justice problems. The combination of companies' unwillingness to encode fair terms and conditions and consumers' inability to monitor them may ultimately render decisions such as *Uber v*

²³ *Douez* (n 13) [2], [6], and [7].

²⁴ *Douez* (n 13) [2].

²⁵ *Douez* (n 13) [4].

Heller ineffective in practice. Additional oversight of unfair terms and conditions in smart contracts is needed.

It is expected that existing consumer protection mechanisms will help enforce fairness standards in smart contracts such as the one set in the *Uber* decision. Regulators and courts have traditionally overseen unfair practices in consumer contracts and are expected to continue with that role when it comes to smart contracts and should handle consumer complaints and ensure that fair terms and conditions are effectively encoded.²⁶ Canada is not an exception to such an approach. Consumers are encouraged to settle their concerns with companies by writing to them and, if unsuccessful, have the right to bring complaints before provincial regulatory agencies. For instance, in the province of Ontario, the Ministry of Government and Consumer Services enforces the Consumer Protection Act and has been granted the power to disseminate information to educate and advise consumers, receive complaints, investigate, issue some compliance orders, and apply penalties.²⁷ In the province of Quebec, the Office de la Protection du Consommateur is responsible

²⁶ See generally Oscar Borgogno, ‘Smart Contracts as the (New) Power of the Powerless? The Stakes for Consumers’ (2018) 6 *European Review of Private Law* 885 (arguing that “policy makers and regulators shall take the lead by testing, with a sector-specific approach, smart contracts ability to improve the consumer protection toolbox”).

²⁷ Canada, Ontario’s Ministry of Government and Consumer Services, ‘Filing a Consumer Complaint. Find Out How to File a Complaint Against a Business in Ontario’ <<https://www.ontario.ca/page/filing-consumer-complaint>> accessed 17 May 2021. In enforcing consumer protection laws, the Ministry asks consumers to contact companies first and then file a complaint if unsuccessful:

How to file a complaint

Here are the steps you should take to file a complaint with the ministry:

Step 1: inform the business of your complaint

You should advise the business of your complaint by letter, email, or by phone before filing a complaint with us. We recommend writing to the business before you file a complaint with us. ...

Step 3: after you submit your complaint

We will contact you by email, mail or phone within 15 business days.

Complaints will be examined on a case-by-case basis in order to determine what action, if any, should be taken. The ministry’s involvement may take the form of:

- referring you to an organization or government office that is better suited to deal with the complaint
- attempting to mediate a resolution between you and the business
- educating the business about consumer protection laws and the consumer about their rights
- administrative action against a business, if the business is licensed, registered, or appointed by the Ministry of Government and Consumer Services
- issuing a compliance or other type of order
- conducting an investigation into the conduct/activities of the business where appropriate
- ongoing monitoring of the business through the consumer marketplace
- placing the business on the Consumer Beware List if certain regulatory conditions are met.

for enforcing consumer protection legislation and has similar powers including compelling companies or individuals to provide relevant information. If unsatisfied or unsuccessful, consumers can bring an action before the courts. Consumers may bring their complaints before a small claim court or launch a class action. This consumer redress system that combines the interventions of regulators and courts is supposed to enforce contractual fairness standards set out by Canada's consumer protection legislations and the courts, including fair terms and conditions in smart contracts.

However, the ability of regulatory agencies to enforce fair terms and conditions and have them encoded in smart contracts can be very limited in the digital economy. Regulators' intervention is largely reactive, as it relies on the willingness and ability of consumers to detect unfair terms and bring complaints. Yet, consumers may be passive or unable both to monitor unfair terms and conditions in complex technology-based smart contracts and to lodge a complaint due to rationality failures or litigation cost.²⁸ This problem may be

²⁸ Consumers in Canada struggle with the cost of litigating their claims and regulators and courts are not necessarily sensitive to such concerns. See eg, *Milan and Aviva Canada Inc Re 2018 CarswellOnt 7576* (FSCO Arb). In that case, a Financial Services Commission of Ontario Arbitrator dealt with a consumer's complaint against a motor vehicle insurance company regarding benefits and litigation expenses and was somewhat responsive to the consumer's concerns about access to justice and litigation cost:

"13. The Applicant alluded to consumer protection and access to justice issues in submitting that the Applicant should be found entitled to her expenses. ...

16. In all of the circumstances, and noting the Insurer's degree of success, I find that the Insurer is entitled to its expenses but in an amount reduced to also reflect the degree of success of the Applicant and to reflect principles of reasonableness, consumer protection and access to justice. ...

19. It is trite law that a line-by-line assessment of expenses is not necessary but rather the establishment of an amount that is reasonable. In my view of the circumstances of this case including degree of success, consumer protection and access to justice, I fix expenses payable by the Applicant to the Insurer at \$5,000.00. ..."

The consumer, Ms. Milan, was unsatisfied with the way the Arbitrator responded to her access to justice concerns, among other things. She appealed the Arbitrator's decision. The Financial Services Commission of Ontario Appeal body reversed the Arbitrator's decision in that regard and favoured a re-assessment of the expense award in light of Ms. Milan's success and circumstances. See *Milan and Aviva Canada Inc, Re 2019 CarswellOnt 3306* (FSCO App, 7 February 2019) [58] ("To be clear, I am not ordering a full re-hearing of the arbitration expenses: I am only ordering a re-assessment based on the degree of success, so the only issue is whether the \$5,000 awarded against Ms. Milan should be amended in light of her success regarding the orthotics issue").

Consumers' current litigation cost and access justice problems appear to have a long history. See eg, *I (N) v Allstate Insurance Co of Canada 2009 CarswellOnt 4221* (FSCO Arb). In that case, counsel Mr. Voudouris speaking for Mr. I raised concerns about consumer's access to justice in the context of a motor vehicle accident issue:

"7. To begin with, Mr. Voudouris urged me to interpret the Expense Regulation in a way which will promote the objectives of consumer protection and access to justice. He argued that any interpretation which places too much weight on the first criterion, "Each party's degree of success in the outcome of the proceeding", would discourage applicants from

compounded by the limited assistance of consumer associations. Furthermore, regulators may not be as effective when dealing with companies in the new economy, especially global platform corporations. Local regulators may be impaired by regulatory inefficiencies, regulatory capture, excessive regulatory cost, and the political orientation of the governing party. In particular, regulators may not have sufficient power and sophisticated knowledge to inspect and monitor companies' blockchain technologies and algorithms so as to effectively enforce fairness standards in smart contracts.

Given the limited powers and efficacy of regulatory agencies, Canadian courts will continue to play a critical role in enforcing the doctrine of unconscionability in smart contracts involving consumers. Yet, the social and individual cost of consumer litigation and the limited social impact of court decisions should not be underestimated. These problems were apparent in the *Douez* and *Uber* cases. At the time the Supreme Court of Canada was issuing its decision in *Douez* in 2017, voiding a forum selection clause that was imposed on a consumer, a Toronto driver was initiating a class action against Uber seeking to invalidate a similar clause, namely, an arbitration clause,²⁹ that culminated in a 2020 favourable decision by the same Supreme Court. Consumers and workers had to litigate for several years up to the Supreme Court in order to void a similar clause that was encoded in smart contracts by global platforms. Consumers, workers, and ultimately taxpayers bore the large financial and non-financial cost of enforcing contractual fairness standards through courts. These costs may be prohibitive for consumers and disincentivize future consumer litigation particularly when the cost of litigation exceeds the value of consumers' claim as it is usually the case. It is, thus, plausible to assume that for those reasons many unfair terms and conditions in smart

exercising their right to challenge insurers' denials of benefits. Applicants with legitimate and arguable claims should not, he maintained, be intimidated or penalized by an overly rigid "results-based" approach to expenses. ..."

The Arbitrator was not sensitive to Mr Voudouris' concerns:

"15. It follows, in my view, that if I am to draw a link between consumer protection and access to justice, on the one hand, and expense awards, on the other, I must find some language in the provisions governing expenses which can be interpreted as establishing this link.

16. I regretfully conclude that no such language can be found. ...

18. .. For this reason, I think Arbitrator Feldman stated the law more accurately a few pages later in his decision when he wrote:

I do not agree with the proposition that the consumer protection nature of the Insurance Act permits me to ignore the clear and unambiguous wording of the only criteria that I am permitted by regulation to consider. For this same reason, I do not accept the submission that "imbalance of power" is a factor to be considered. The Expense Regulation specifically states that the listed criteria are the only ones to be considered. It specifically requires consideration of "[E]ach party's degree of success", not just that of the Applicant. ..."

²⁹ *Uber* (n 2) [3] ("Mr Heller started a class proceeding against Uber in 2017 for violations of the *ESA*. ...").

contracts may not reach the court. Class actions are supposed to mitigate consumers' litigation costs and facilitate access to justice. However, the laws governing consumer class actions in Canada appear to be inconsistent and do not provide a clear roadmap to consumer recovery or criteria for viable claims.³⁰ Companies are aware of consumers' prohibitive litigation costs and may exploit their financial power to sustain lengthy and costly litigation seeking a court victory.

Even if consumers are successful in court, it is unclear whether most consumers will benefit from favourable court decisions, as companies may be reluctant to encode fair terms and conditions following a ruling or may simply persist in engaging in unfair practices in the future.³¹ For instance, as noted earlier, one would expect that Uber had withdrawn its arbitration clause that required a Toronto driver to litigate in the Netherlands after hearing the *Douez* decision which voided a forum selection clause that required a consumer to litigate in California. This could have been particularly possible in light of the fact that Facebook and Uber have had the same common owners, notably BlackRock, Vanguard and State Street. Furthermore, both cases, albeit involving a consumer and a worker respectively, dealt with similar forum selection clause issues in standard form contracts with significant inequality of bargaining power³² around the same years. This apparent corporate reluctance to withdraw or encode fair terms and conditions in smart contracts may reveal not only the limited ability of local regulators to enforce fairness standards, but also the limited impact of court decisions on deterring companies from constantly engaging in unfair practices in the digital economy.

³⁰ Ron Podolny, 'A Shoddy Doctrine: Canadian Consumer Class Actions at a Crossroads' (2020) 51 *The Advocates' Quarterly* September 61. For an analysis of the problem of consumer access to justice in Canada, see eg, Anthony Duggan and Iain Ramsay, 'Front-End Strategies for Improving Consumer Access to Justice' in Michael Trebilcock, Anthony Duggan and Lorne Sossin (eds), *Middle Income Access to Justice* (University of Toronto Press 2012) 95.

³¹ See eg, Mariella Montplaisir, 'The Missing Hyperlink - An Empirical Study: Can Canadian Laws Effectively Protect Consumers Purchasing Online?' (2018) 16 *Canadian Journal of Law and Technology* 1 (claiming that "[g]iven that there is little to no hard data on whether current consumer protection is actually effective in protecting consumers, an empirical study was designed to assess the limits of current legislation and offer recommendations to improve e-businesses and online consumers' experience. The study's main finding is that not a single business complied fully with its legal obligations. This suggests that in order for Canadian consumer protection law to have a significant impact on e-businesses' practices, substantive obligations imposed by the legislation must be combined with a more effective coercive mechanism. State intervention is required to reshape legislation and ensure the protection of consumers' basic rights").

³² Commentators have noted the similarities and mutual relevance of both rulings. See Pavlović (n 17) 167 (noting that "[w]hile, like TELUS, *Uber v Heller* is not a consumer case, the underlying issue of the regulatory power of standard-form contracts is equally applicable to consumer relationships").

The weak enforcement of the doctrine of unconscionability in smart contracts creates a paradoxical situation. While the Supreme Court has lowered the standard for finding unconscionability and thus more instances of contractual unfairness may be found, consumers, regulators, and courts may be less able to enforce such fairness standards in the digital economy. The doctrine of unconscionability as stated in the *Uber* decision has strengthened the protection of consumers and has enhanced the existing consumer protection remedies introduced by Canada's consumer legislation. Ideally, regulators and courts would be expected to develop jurisprudence and best practices over time that would set out a standard of contractual fairness in smart contracts, which can ultimately be followed by companies and consumers and avoid costly interventions. Yet, in practice most consumers may not be benefiting from such protective contractual fairness standards as the enforcement seems to be inadequate in the digital economy.³³ Ironically, the *Uber* and *Douez* cases demonstrate that companies, particularly global platforms, are aggravating the already poor enforcement of contractual fairness by imposing arbitration and forum selection clauses that require consumers (and workers) to litigate their claims outside Canada. This also undermines the ability of consumers to use a powerful recourse locally, namely, a class action whose purpose is precisely to facilitate their access to justice.³⁴ Ultimately, such clauses practically deny access to justice to most consumers and further erodes the enforcement of contractual fairness standards in smart contracts.³⁵

³³ This contradiction has been noted in the literature of consumer access to justice. See eg, Kate Tokeley, 'Access to Justice' in Geraint Howells, Iain Ramsay and Thomas Wilhelmsson, *Handbook of Research on International Consumer Law* (2nd edn, Edward Elgar Publishing 2018) (highlighting the importance of addressing consumers' access to justice barriers, notes that "[t]here is little point in having a set of substantive consumer laws if those laws are inaccessible in practice").

³⁴ *Bisaillon v Concordia University* 2006 SCC 19 (stating that the purpose of class actions is "to facilitate access to justice for citizens who share common problems and would otherwise have little incentive to apply to the courts on an individual basis to assert their rights").

³⁵ See generally Pavlović (n 17) 163 (claiming that "if there is a serious problem with the goods, services, or the provider's practices, due to restrictive contractual terms (such as arbitration clauses, forum selection clauses, or class action waivers) that limit consumer's access to domestic courts, it is virtually impossible for an individual to obtain a recourse, which renders any rights that one may have under the contract (or even under a legislative or regulatory mechanism) effectively meaningless"); John Enman-Beech, 'Unconscionable Inaccess to Justice' (2020) 96 *Supreme Court Law Review* 2d 77 (noting that "clauses that affect the ability of parties to access adjudicative procedures when disputes arise. Examples include arbitration clauses, choice of forum clauses and class action exclusions. These clauses deserve special scrutiny because they risk denying a party the very rights that a contract purports to grant. When they are effectively one-sided, they risk turning a contractual relationship between legal equals into an exercise of bare power by one over the other."); Jonnette Watson Hamilton, 'Pre-Dispute Consumer Arbitration Clauses: Denying Access to Justice?' (2005) 51 *McGill Law Journal* 693.

It is, thus, important to consider alternative enforcement mechanisms. In particular, companies may be required to audit their smart contracts for unfair or abusive terms and conditions³⁶ and disclose the auditing so that regulators and the general public can monitor the fairness of smart contracts. This requires the development of contractual fairness standards that can set some criteria for conducting the auditing of smart contracts. This corporate auditing of the fairness of smart contracts can be part of a broader control of contracting over bias, discrimination, data privacy breaches and technical failures³⁷ and

³⁶ See generally Kevin Werbach, ‘Trust, but Verify: Why the Blockchain Needs the Law’ (2018) 33 Berkeley Technology Law Journal 487, 542 (claiming that “[l]egal code audits could also be implemented to ensure the contracts match the parties’ intent, analogous to the security audits widely used by firms engaged in software development”). The need for testing consumer smart contracts, albeit without significant fairness concerns, has also been suggested from the perspective of regulators. See Oscar Borgogno, ‘Usefulness and Dangers of Smart Contracts in Consumer and Commercial Transactions’ in Larry A. DiMatteo, Michel Cannarsa and Cristina Poncibò (eds), *The Cambridge Handbook of Smart Contracts, Blockchain Technology and Digital Platforms* (Cambridge University Press 2019) (highlighting the benefits of smart contracts for consumers, claims that “while businesses already have commercial incentives to implement smart contracts on their own, when it comes to consumer protection, regulators shall take the lead by testing, through regulatory sand-boxes, smart contracts potential”); Oscar Borgogno, ‘Usefulness and Dangers of Smart Contracts in Consumer Transactions’ in Larry A. DiMatteo, Michel Cannarsa and Cristina Poncibò (eds), *The Cambridge Handbook of Smart Contracts, Blockchain Technology and Digital Platforms* (Cambridge University Press 2019) 288-310 (arguing that smart contracts may be beneficial in consumer transactions, describes the adoption of regulatory sandboxes in the rail and air sectors as a first testing ground to assess the potential of smart contracts); Oscar Borgogno, ‘Smart Contracts as the (New) Power of the Powerless? The Stakes for Consumers’ (n 27) (arguing that “[b]y virtue of their self-executing and tamper-proof character, smart contracts are suited to substantially reduce transaction costs in B2C relationships. So far, several legal scholars have raised concerns regarding both smart contracts inability to reflect relational aspects of contract governance and the augmented complexity generated by the translation of an agreement into computer code. ... the article explains why these problems can be overcome when it comes to consumer rights that are standardized and easily verifiable. ... The article concludes that policy makers and regulators shall take the lead by testing, with a sector-specific approach, smart contracts ability to improve the consumer protection toolbox”). Auditing firms are increasingly providing services to audit smart contracts largely for bugs and security vulnerabilities. See Alyssa Hertig, ‘Blockchain Veterans Unveil Secure Smart Contracts Framework’ (*CoinDesk*, 18 September 2016) <<https://www.coindesk.com/blockchain-veterans-unveil-secure-smart-contracts-framework/>> accessed 11 July 2021; ‘Certificate of Smart Contract Audit for Edge-Lockdrop’ (*Quantstamp*, 8 April 2019) <<https://arena-attachments.s3.amazonaws.com/4282493/al55dc84aaldfba4cfd3dc66belelebd.pdf?1557965252>> accessed 11 July 2021; Grainne McNamara, ‘Blockchain Strategist, PricewaterhouseCoopers’ (Address at the American Banker Blockchains + Digital Currencies Conference 13 June 2017) (stating that “we’re looking at how to audit the technology using the technology”); Ekotysh, ‘How Much Does a Smart Contract Audit Cost?’ (*REDDIT*, 2017) <https://www.reddit.com/r/ethdev/com-ments/6pdgvd/how_much_does_a_smart_contract_audit_cost> accessed 11 July 2021.

³⁷ Shaanan Cohny and David A Hoffman, ‘Transactional Scripts in Contract Stacks’ (2020) 105 Minnesota Law Review 319, 320-21 (noting that “... as the coder who discovered the vulnerability put it, “smart contracts are software. Even carefully audited, well tested software will (almost always) contain bugs. Therefore, and despite our best efforts ... Smart contracts will (almost always) contain bugs!...”).

should supplement the existing oversight by regulators and courts.³⁸ Corporate auditing may mitigate the problems with regulatory inefficiencies, regulatory capture, regulatory cost, consumers' inability to bring a complaint before a regulator or a court and litigation cost. Such a proposal deserves a thorough assessment of its feasibility taking into account the institutional environment and the broader social, cultural, economic and political context in which smart contracts are embedded.

Adopting an appropriate enforcement mechanism will more effectively implement decisions such as *Uber v Heller* and ensure an effective protection of consumers in smart contracts. Needless to say, an effective enforcement of contractual fairness in smart contracts will prevent power abuses, preserve freedom of contract and healthy market competition, curtail unfair wealth transfers, ensure a proper provision of goods and services and enhance consumers' financial and non-financial well-being in the new digital economy.

V. CONCLUSION

This work has discussed the doctrine of unconscionability in smart contracts involving consumers as implied by the Supreme Court of Canada in its 2020 *Uber v Heller* decision. Finding an arbitration clause whereby Uber required a Toronto driver to bring his labour complaint to an arbitration tribunal in the Netherlands unenforceable, the Supreme Court required the presence of inequality of bargaining power and improvident bargain for a contract to be unconscionable. This approach to unconscionability also applies to

³⁸ This proposed smart contract auditing and broader control of digital contracting to be required from companies share some similarities with some proposed policy interventions that aim to require companies to assess their use of the new technology more generally. See eg, Algorithmic Accountability Act of 2019, a Bill introduced in the House of Representatives, US Congress on 10 April 2019:

“A BILL

To direct the Federal Trade Commission to require entities that use, store, or share personal information to conduct automated decision system impact assessments and data protection impact assessments.

...

SEC. 2. DEFINITIONS.

In this Act:

- (1) AUTOMATED DECISION SYSTEM.— The term “automated decision system” means a computational process, including one derived from machine learning, statistics, or other data processing or artificial intelligence techniques, that makes a decision or facilitates human decision making, that impacts consumers.
- (2) AUTOMATED DECISION SYSTEM IMPACT ASSESSMENT.— The term “automated decision system impact assessment” means a study evaluating an automated decision system and the automated decision system’s development process, including the design and training data of the automated decision system, for impacts on accuracy, fairness, bias, discrimination, privacy, and security that includes, at a minimum”.

standard form contracts or contracts of adhesion involving consumers. This work focused on the implications of such an approach for protecting consumers in standard form contracts that take the form of smart contracts. While the doctrine of unconscionability may curb abusive practices by companies particularly global platforms, mitigate the problems with the immutability of smart contracts and incentivize companies to encode fair terms and conditions in smart contracts, this paper raises concerns about the effectiveness of the enforcement of the doctrine of unconscionability in smart contracts implemented within blockchain technologies. Companies' apparent unwillingness to encode fair terms and conditions in smart contracts and consumers' inability to detect unfair terms and bring an action in response in conjunction with the limitations of regulators and courts to enforce fairness standards in the digital economy may render the doctrine of unconscionability ineffective. Consideration should be given to supplementing regulators and courts with a mandatory auditing of smart contracts under public supervision in order to encourage companies to remove unfair terms and conditions along with bias, discrimination and potential technical failures. This corporate auditing of smart contracts may greatly mitigate the enforcement problems of the doctrine of unconscionability and ensure that consumers are effectively and conveniently protected in the digital economy. Although lessons may be drawn for other countries, attention should also be paid to local contexts and the institutional strengths and weaknesses of a particular country.

Future research is needed in several respects. The concerns about the effectiveness of the enforcement of the doctrine of unconscionability in smart contracts involving consumers in Canada need stronger empirical evidence and a thorough empirical study should be conducted to further substantiate those concerns. While this paper briefly focused on discussing the doctrine of unconscionability in smart contracts as articulated by the Supreme Court of Canada in *Uber v Heller*, a comprehensive analysis of other relevant legal authorities will enrich the examination of such doctrine and its enforcement. The analysis of the merits and feasibility of the proposed corporate auditing of smart contracts is beyond the scope of this work and requires an in-depth discussion theoretically and empirically.