The Corporate Restructuring Machine: Introducing an Open Platform Approach to Workouts

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Out-of-court corporate reorganizations, or "corporate workouts," allow dispersed investors with differing interests to coalesce and strike deals to successfully reorganize distressed companies. Corporate workouts, however, suffer from a host of well-known problems, creating "process fragility." Current bargaining dynamics limit the instances in which corporate workouts can be used, narrow the kinds of deals that can be made, and invite opportunistic and other socially costly behavior. Yet the Artificial Intelligence (AI) revolution is here; how can it help parties navigate corporate workouts?

In this Article, we argue that AI is well situated to help increase the efficiency of corporate workouts. Based on previous work on the use of AI in negotiations, we envision a "Corporate Restructuring Machine" (CRM). This is a private, online, AI-enhanced platform companies and their stakeholders would be able to join at different times, for different services, and at different prices. The CRM would come armed with restructuring-specific problem-solving and process-management tools. These would be designed to improve decision-making in workouts, mitigate workouts' fragile process, and incentivize more inclusive (and less socially costly) corporate restructurings. We further predict that, when combined with other innovations like "self-driving contracts," corporate workouts will not occur at discrete moments in time but rather be a process of constant coordinated renegotiations between a company and its contractual counterparties. We discuss the profound implications of the CRM's evolution on bankruptcy practice, corporate finance, and corporate governance.

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* Assistant Professor of Law, Benjamin N. Cardozo School of Law. For comments on earlier versions of this Article, we are grateful to participants at a conference on "Tomorrow's Corporate Insolvency Law" in Frankfurt/Main on October 10–11, 2024, an ECCL Symposium on "Trends in EU Insolvency Law" in Thessaloniki on November 8, 2024, a conference on "Markt als Paradigma" in Vienna on November 29, 2024, a business law workshop at the University of Innsbruck on March 17, 2025, a work in progress workshop at the University of Chicago Law School on April 17, 2025, a business law workshop at the University of Oxford on May 28, 2025, and a global restructuring conference at Singapore Management University on August 5–6, 2025.

INTRODUCTION

Artificial Intelligence (AI) tools have passed the inflection point of their exponential growth, and the law is scrambling to deal with their impact. Much of current scholarship and policymaking focuses on the regulation of AI.[1] Just as important is how AI will change legal rules and practice.[2]

Out-of-court corporate restructurings or "corporate workouts", as they have come to be known,[3] stand at the center of this technological upheaval. Corporate workouts involve high-stakes multi-party negotiations without a clear procedural framework as provided, for example, in Chapter 11.[4] This gives the parties the freedom to design workouts without the constraints imposed by a rigid legal process.[5] They can also save a significant portion of the direct and indirect bankruptcy costs that accompany in-court bankruptcy proceedings. In jurisdictions with poorly developed restructuring laws, corporate workouts may be the only viable route to restructure a financially distressed business.[6] And for small and medium-sized enterprises (SMEs) it may be the most cost-effective route even if a court-supervised process is available in principle.[7]

At the same time, corporate workouts suffer from a host of well-known problems.[8] These make them inherently fragile undertakings ("process fragility"). High transaction

1. *See, e.g.*, JACOB TURNER, ROBOT RULES: REGULATING ARTIFICIAL INTELLIGENCE (2018); ITECHLAW, RESPONSIBLE AI: A GLOBAL POLICY FRAMEWORK (Charles Morgan ed., 2019).

2. This question was the focus of a symposium at The University of Chicago Law School on "How AI Will Change the Law" that took place on April 12–13, 2024. *See* Omri Ben-Shahar & Anthony J. Casey, *How AI Will Change the Law Symposium, Cohosted by the Coase-Sandor Institute, the University of Chicago Law Review Online and Oxford Business Law Blog*, U. CHICAGO L. SCH. (Apr. 12, 2024), https://www.law.uchicago.edu/events/how-ai-will-change-law-symposium [https://perma.cc/2CDD-K4KG]. It prompted us to start thinking about how AI will change corporate restructuring.

3. WORLD BANK GROUP, A TOOLKIT FOR CORPORATE WORKOUTS 4, 23 (2022), https://documents1.worldbank.org/curated/en/982181642007438817/pdf/A-Toolkit-for-Corporate-Workouts.pdf [https://perma.cc/U68F-LBKX].

4. *Id.* at 62.

5. *See id.* at 2 ("The key benefits of implementing a workout framework include the flexibility to choose from a range of possible approaches and to tailor a procedure to the specific needs of an economy.").

6. *Id.*

7. *See id.* at 5 ("For financially distressed MSME debtors, these potential advantages may be especially important. An MSME may have extremely limited funds available, so an inexpensive restructuring process may in practice be the only alternative to liquidation.").

8. *See infra* Part I.B (discussing the sources of process fragility).

costs of complex multi-party negotiations reduce the cooperative surplus. Parties often lack relevant information, leading to suboptimal decision-making. Successful workouts require consensus building between key stakeholders. Yet individual claimants find themselves caught in a multi-party prisoners' dilemma in which defection is a dominant strategy.[9] Solving this problem is probably the most important challenge for successfully engineering a corporate workout.[10] Solving it in a way that is inclusive to relevant stakeholders—a way that does not generate the deadweight losses associated with sharp dealing—is another significant challenge.[11]

Corporate restructuring practice has long developed legal and practical tools to address these challenges. Starting in the 1980s and 1990s, informal rules and business practices such as the London Approach to corporate workouts or the INSOL Principles for a global approach to multi-creditor workouts aspired to solve or at least reduce the problems described above.[12] Those rules and practices, though, ran out. They were sensible tools to the extent that a company's capital structure was concentrated, homogeneous, and stable—such as when a firm's key financing is provided by a handful of commercial banks in a syndicated loan. Once firms were financed by dispersed and frequently changing debtholders with heterogeneous interests, neither the London Approach nor the INSOL Principles could flourish. Recent experiences with so-called "liability management exercises" and "cooperation agreements" illustrate both the breakdown of the London Approach and the INSOL Principles on the one hand, and the persistence of process fragility in corporate workouts on the other.[13]

Based on previous work on the use of AI applications in negotiations, we argue that AI applications have the potential to mitigate these shortcomings, increase the efficiency of corporate workout negotiations, and improve decision-making by stakeholders.

We introduce a private, online, open, and AI-enhanced platform designed to support or even automate corporate workouts called the "Corporate Restructuring Machine" (CRM). The CRM would offer restructuring-specific problem-solving tools (for example, bankruptcy prediction, financial distress detection, bankruptcy court decision prediction, predicting post-bankruptcy performance), and also process-management tools (for example, communication assistance, transcription, mediation and arbitration services).

Companies and their stakeholders (particularly creditors and shareholders) could join the platform and opt into AI applications at different times, for different services, and at different prices. In so doing, parties could pre-commit to using CRM applications to address financial distress (whether by stipulating as much in a contract or company charter). And by being an open platform and making it more cost efficient to negotiate with a larger set of counterparties, the CRM opens the possibility of consummating corporate workouts that include stakeholders that might not otherwise be reachable. The CRM can thus revitalize the London Approach and the INSOL Principles for today's financial market landscape.

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9. *See* HORST EIDENMÜLLER, UNTERNEHMENSSANIERUNG ZWISCHEN MARKT UND GESETZ: MECHANISMEN DER UNTERNEHMENSREORGANISATION UND KOOPERATIONSPFLICHTEN IM REORGANISATIONSRECHT 19–22 (1999).

10. Mark J. Roe, *The Voting Prohibition in Bond Workouts*, 97 YALE L.J. 232, 235–39 (1987).

11. *Id.*

12. *See infra* Part I.C (discussing the responses of process fragility).

13. *Id.*

To be sure, the CRM would not render court-supervised restructurings obsolete. Corporate workouts can still fail for various reasons. Corporate debtors or other stakeholders may trust a court-supervised process more than a machine-run restructuring. Not enough stakeholders might sign up for a comprehensive CRM restructuring, at least initially. Corporate financial distress may stem from mass tort episodes, which inherently involve parties who never agreed to use the CRM.

We nevertheless think the CRM could streamline cases that are likely bound to be resolved via corporate workout. This is particularly true in countries without a well-developed judicial system and sophisticated insolvency procedures, as well as for SMEs for whom such procedures are not cost-effective. And by making corporate workouts more efficient, parties will be incentivized to use the CRM more frequently.

We think that the CRM may revolutionize corporate workouts in more radical ways, too. That is especially the case if the CRM is coupled with "self-driving contracts," which rewrite and adjust their own terms along a set of normative parameters. These two technologies will allow companies and their counterparties to constantly renegotiate those contracts in a concerted fashion, and thus constantly reorganize companies' capital and operational structures. The workout will thus change from an event that takes place at a discrete moment in time to an ongoing and endless process.

The remainder of the Article is structured as follows. In Part I, we survey the benefits and process fragility of corporate workouts, as well as responses to that fragility. In Part II, we review various AI applications for negotiations at large and corporate workouts specifically. Part III introduces the CRM, its capabilities, and how parties would operationalize it. We then discuss how the CRM could evolve in practice, and key implications for bankruptcy practice, corporate finance, and corporate governance. Concluding remarks follow.

I. PROCESS FRAGILITY OF CORPORATE WORKOUTS

This Part provides an account of workouts' underlying dynamics. We posit that, despite the cost savings and flexibility they provide, corporate workouts are fundamentally "process fragile": the instability across the people that facilitate them, the processes by which they are negotiated, and the very problems they are designed to solve all threaten to make corporate workouts unworkable. While "process fragility" does not necessarily prevent all corporate workouts from taking place, it constantly threatens corporate workouts and limits the instances in which they are feasible. While actors and institutions have attempted to bolster corporate workouts in the face of this fragility, we show that those efforts have either fallen short or generated (social) costs of their own. These costs can be prohibitively high, especially for SMEs.[14] There is consequently more work to be done in tackling process fragility in corporate workouts. This is where AI applications in general and the CRM in particular could come in.

A. Motives for Corporate Workouts

Corporate workouts allow parties to rework a company's capital structure while avoiding (parts of) the direct and indirect costs that in-court bankruptcy proceedings

14. *See* WORLD BANK GROUP, *supra* note 3, at 30–31 (discussing the disadvantages of traditional corporate workouts).

generate.[15] Such access to (low-cost) restructuring proceedings may be particularly important for SMEs or in jurisdictions with poorly developed restructuring laws.[16] Corporate workouts further enable parties to craft deals that mandatory rules in bankruptcy proceedings otherwise prohibit. For example, many jurisdictions' bankruptcy schemes frequently subordinate shareholder loans,[17] but in a corporate workout, parties can treat those loans differently. The financial benefit for an affected shareholder can be significant.[18] What the workout offers, then, is a flexible and efficient contractual solution to corporate financial distress.[19]

B. The Sources of Process Fragility

That promise can also be workouts' peril. In-court bankruptcy proceedings force investors to come to the table to figure out what they should do with a company's assets.[20] Not so with workouts. Investors and the company organize and negotiate with each other to reach a bargain. Bankruptcy's mandatory rules and coercive tools are nowhere to be found in corporate workouts.[21]

Corporate workouts fundamentally depend on negotiations to work. To be sure, so do all kinds of corporate reorganizations, whether they take place in-court or out-of-court.[22] But corporate workouts place unique pressure on negotiations, since corporate workouts entail parties striking out on their own to make a deal.[23] The "PPP Negotiation Model," which conceptualizes a negotiation as a *process* in which *people* attempt to solve a *problem*, allows us to model the three levels at which negotiations can reach an impasse.[24]

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15. On different types of bankruptcy costs, see Stephen J. Lubben, *The Costs of Corporate Bankruptcy: How Little We Know*, *in* RESEARCH HANDBOOK ON CORPORATE BANKRUPTCY LAW 275, 276 (Barry E. Adler ed., 2020); *see also* Lemma W. Senbet & Tracy Yue Wang, *Corporate Financial Distress and Bankruptcy: A Survey*, 5 FOUND. & TRENDS FIN. 243 (2012) (surveying various empirical studies of indirect bankruptcy costs).

16. WORLD BANK GROUP, *supra* note 3, at 1.

17. *See* Horst Eidenmüller, *Comparative Corporate Insolvency Law, Second Edition* 41 (Eur. Corp. Governance Inst., Working Paper No. 738, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4625897 [https://perma.cc/XM4U-JXBF] (discussing rules on the subordination of shareholder loans and rationales for such rules); *see also* Martin Gelter, *The Subordination of Shareholder Loans in Bankruptcy*, 26 INT'L REV. L. & ECON. 478, 479 (2006).

18. Eidenmüller, *supra* note 17, at 17–19.

19. *Id.* at 14.

20. *See* THOMAS H. JACKSON, THE LOGIC AND LIMITS OF BANKRUPTCY LAW 7–19 (1986) (examining how bankruptcy solves collective action problems among creditors by bringing them into a single, collective proceeding).

21. *See* WORLD BANK GROUP, *supra* note 3, at 30 ("Restructuring negotiations are not subject to specific requirements, and restructuring terms — embodied in a contract or contracts — are subject only to requirements under applicable governing law for a contract of this nature to be binding.").

22. *See* Douglas G. Baird & Robert K. Rasmussen, *Antibankruptcy*, 119 YALE L.J. 648, 699 (2010) ("The lifeblood of corporate reorganizations is and always has been negotiation.").

23. WORLD BANK GROUP, *supra* note 3, at 31.

24. Horst Eidenmüller & Andreas Hacke, *The PPP Negotiation Model: Problem, People, and Process*, OXFORD BUS. L. BLOG (Mar. 17, 2017), https://blogs.law.ox.ac.uk/business-law-blog/blog/2017/03/ppp-negotiation-model-problem-people-and-process [https://perma.cc/X2KA-H5YH].

Start with the problem. Corporate workouts present the fundamental challenge of reworking the company's capital structure in ways that maximize the company's value.[25] Solving that problem requires getting a sense of whether there's a deal to be made in the first place. Each party in the negotiation will have its own "Best Alternative to a Negotiated Agreement" or "BATNA."[26] If, and only if, the parties' BATNAs overlap can they identify a "Zone of Possible Agreement" ("ZOPA") or "Bargaining Range."[27] Because of information deficits, the existence and size of a ZOPA may be unclear, especially in the unregulated environment of a workout.

The people running these workouts, and their human limitations, are also essential to understanding how those workouts work. Creating value in these negotiations requires a nuanced understanding of the parties' interests and preferences.[28] For example, do they have similar interests in building a business relationship, or in resolving disputes in a certain process? Do they differ in their interests, risk attitudes, time preferences, views of future events (forecasts), or capabilities?[29] What's more, in discerning their BATNAs and those of their counterparties, parties may engage in strategic behavior or costly maneuvering designed to suss out or to manipulate those parameters.[30] Human emotions, especially when paired with misalignments in expectations, can generate additional frictions in the bargaining process.[31] The result is that those involved in a workout may not make good decisions due to a lack of reliable and relevant information or due to emotional blindness.

Finally, any workout negotiation takes place in light of fractionalized claims to the firm's assets.[32] All of the investors may stand to gain if the company successfully revamps its capital structure. Without more, though, two collective action problems complicate the workout process and can stymie a successful corporate reorganization.

The first is free riding.[33] If fewer than all the investors are needed for the company to successfully restructure, then each investor might rely on the other investors to bear the

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25. *See* Douglas G. Baird & Thomas H. Jackson, *Corporate Reorganizations and the Treatment of Diverse Ownership Interests: A Comment on Adequate Protection of Secured Creditors in Bankruptcy*, 51 U. CHI. L. REV. 97, 104–09 (1984) (demonstrating the fundamental challenges of a corporate reorganization).

26. The concept of "BATNA" was developed by Roger Fisher and William Ury see ROGER FISHER & WILLIAM URY, GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN 101–02 (3d ed. 2011).

27. *See, e.g.*, ROBERT H. MNOOKIN, SCOTT R. PEPPET & ANDREW S. TULUMELLO, BEYOND WINNING: NEGOTIATING TO CREATE VALUE IN DEALS AND DISPUTES 18–21 (2000) (discussing legal negotiations in the context of creating value and effective strategies in negotiating deals).

28. On creating value in negotiations, see DAVID A. LAX & JAMES K. SEBENIUS, THE MANAGER AS NEGOTIATOR: BARGAINING FOR COOPERATION AND COMPETITIVE GAIN 88–116 (1986).

29. On the relevance of such differences for value creation, see STEVEN J. BRAMS & ALAN D. TAYLOR, FAIR DIVISION: FROM CAKE-CUTTING TO DISPUTE RESOLUTION 6–8 (1996) (discussing the origins and development of fair division within the context of disputes).

30. *See* FISHER & URY, *supra* note 26, at 100 (discussing the importance of setting a flexible floor for your BATNA).

31. *See* MNOOKIN, PEPPET, & TULUMELLO, *supra* note 27, at 50–51 (discussing how rarely negotiators strike the right emotional balance in the bargaining process).

32. Christopher W. Kirkham & Jennifer M. Taylor, *Working Through a Workout: A Practitioner's Guide from the Perspective of Private Equity Sponsors, Venture Capital Funds and Other Significant Equity Investors*, 5 HASTINGS BUS. L.J., 355, 357 (2009).

33. Rick Antonoff, *Out-Of-Court Debt Restructuring and the Problem of Holdouts and Free Riders*, CORP. COUNS. BUS. J. (Sept. 19, 2013), https://ccbjournal.com/articles/out-court-debt-restructuring-and-problem-holdouts-and-free-riders [https://perma.cc/HDT5-V2RK] ("Free riders are creditors that do not contribute to a

cost of negotiating the workout with the company.[34] Yet since every investor can adopt this attitude, each one may wait for the other investors to negotiate the workout with the company, leaving the company's capital structure unreformed.[35] Free-riding further raises the possibility that the investors who participate in the restructuring will be worse off than those who do not participate in it.[36] If the deal requires the participating lenders to subordinate their debt or exchange their debt for equity, for instance, the non-participating lenders would arguably be in a better position because their claims would have priority over the participating lenders' subordinated debt or exchanged equity, as the case may be.[37]

One response to the threat of free riding is for parties to force as many of the relevant investors as possible to participate in the restructuring.[38] Thus, lenders may agree ex ante to modify some, or all, of the debt instrument's terms only by unanimous consent.[39] Doing so contractually pre-commits the lenders who hold portions of that debt instrument to participate in restructuring that instrument and, consequently, avoid free-rider problems.[40]

Such an arrangement, though, can create the second kind of collective action problem, which is the holdout problem.[41] If consummating the deal requires unanimous or near-unanimous consent from affected lenders, then the non-negotiating lenders could extract a premium from the negotiating lenders or the company in order to buy their participation.[42] This rent-seeking behavior can discourage parties from trying to make such a deal or even investing in the debt instrument in the first place.[43]

Aggregating all of the relevant investors together in a single workout is also a costly undertaking in its own right. Finding and collecting all of the distressed firm's dispersed investors would generate high information and search costs.[44] Even if those investors could be found and aggregated, communicating effectively across those dispersed investors—which can consist of constituencies as diverse as lenders, employees, customers, vendors, landlords, and governmental entities—would be a tall task, significantly reducing the cooperative surplus of a successful workout.

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restructuring but obtain the benefit of a financially healthier debtor at the expense of those creditors that made concessions.").

34. *Id.*

35. *See* Marcel Kahan, *Rethinking Corporate Bonds: The Trade-Off Between Individual and Collective Rights*, 77 N.Y.U. L. REV. 1040, 1057 n.89 (2002) (identifying and analyzing the free rider problem).

36. *Id.* at 1057.

37. *See* Roe, *supra* note 10, at 233.

38. *See id.* at 259 n.86.

39. In contemporary debt finance parlance, these are known as "sacred rights." *See* Jackson Skeen, Note, *Uptier Exchange Transactions: Lawful Innovation or Lender-on-Lender Violence?*, 40 YALE J. REG. 408, 413–14 (2023) (discussing the recent emergence in "uptier exchange transactions").

40. *See* Saul Levmore, *Monitors and Freeriders in Commercial and Corporate Settings*, 92 YALE L.J. 49, 55 (1982) (discussing how changing the terms of security instruments could alleviate the freeriding problem on the debtor side in secured transactions).

41. Antonoff, *supra* note 33.

42. *Id.*

43. *See* Anthony J. Casey, *Chapter 11's Renegotiation Framework and the Purpose of Corporate Bankruptcy*, 120 COLUM. L. REV. 1709, 1736–38 (2020) (explaining that unanimity or near-unanimity requirements in debt restructurings empower holdout lenders to engage in rent-seeking, raising transaction costs and deterring efficient renegotiation and investment).

44. *See* Kahan, *supra* note 35, at 1057.

These costs have consequently limited when companies could perform workouts. They are largely reserved for companies that remain on fairly good terms with many of its stakeholders (such as trade creditors and customers) and yet face distinct problems with its capital structure, such as a liquidity shortage or an upcoming maturity on a debt instrument.[45] Under those circumstances, the companies would have to aggregate and consult only those narrow classes of investors who are affected by those issues.[46]

Even if it is possible to corral all of the relevant investors to the bargaining table, doing so and crafting a deal that accommodates all of them means that there are many mouths to feed. Such a deal can be expensive and unsustainable for the company, while a more exclusive deal might be more sustainable and inure to all of the stakeholders' benefit. Having companies juggle negotiations with several different constituencies in an effort to comprehensively work through their financial and operational challenges would be nothing short of a Herculean task.

Aggregating investors can also strain inter-creditor dynamics. The point of bringing creditors together is to allow them to engage in collective action that they could not achieve on their own. But which action should they take? Creditors may have different views on how they should react to a company's distress. Vesting the authority to act on the group's behalf in a subset of creditors who uniformly stand on one side of that debate risks overriding the legitimate concerns of creditors who are on the other side of that debate. Alternatively, vesting the decision to act in all sides of the debate threatens to leave the creditors unable to act at all. The pressure towards aggregating investors, then, either flattens the disagreements among them or leaves them deadlocked. Neither option makes a workout workable.

C. Responses to Process Fragility

The PPP model of negotiations highlights three central levels at which negotiations can operate or, by contrast, break down.[47] The history of corporate workouts has not ignored these challenges. To the contrary, it is replete with efforts to tackle them, and below we note several recent ones.[48] But as we show, those strategies have fallen short either because of ever-fractionalizing investor bases or sharp dealing tactics that parties deployed to collect a sufficient number of investors to reorganize (a part of) the company's capital structure. Therefore, despite parties' best efforts to bolster them, corporate workouts remain process fragile.

Start with the so-called "London Approach," which began in the 1980s and 1990s as a way to mitigate process fragility in the London credit market. British firms primarily financed their operations through syndicated bank loans that could not be refinanced through a debtor-in-possession insolvency regime (which the United Kingdom lacked).[49] Because the loans required unanimous lender consent to be altered or amended, the banks

45. *See* WORLD BANK GROUP, *supra* note 3, at 30 (outlining several limitations of out of court workouts that practically limit the number of constituencies that can participate).

46. Kahan, *supra* note 35, at 1062–64.

47. Eidenmüller & Hacke, *supra* note 24.

48. *See infra* Part II (discussing AI applications and corporate workouts).

49. WORLD BANK GROUP, *supra* note 3, at 31.

that held fractions of those loans needed to coordinate with each other and distressed firms in order to facilitate successful workouts.[50]

The London Approach was a "constitutional contract" for corporate workouts that the Bank of England promulgated and policed.[51] It first mandated that the banks agree to a standstill period so they could negotiate a deal.[52] A "lead bank" or a committee of banks (depending on the number of banks in the syndicate and the complexity of the company's financial distress) would then negotiate a workout with the company in exchange for a fee.[53] Dissenting banks were permitted to submit their own plans subject to a "norm of equity," which provided that no bank may propose a plan that would give it an unreasonable share of the surplus that the deal was expected to generate.[54] Banks that attempted to defect were invited to an (ominous) cup of tea with Bank of England officials, with the implication that the Bank of England, through its myriad channels of influence, would impose dire sanctions on the defector.[55] The London Approach, then, mediated between the risks that free-rider and holdout problems posed for workouts. The London Approach was so successful that the International Association of Restructuring, Insolvency, and Bankruptcy Professionals (INSOL) ratified it in the "Principles for a Global Approach to Multi-Creditor Workouts" in 2000.[56]

Nevertheless, the London Approach and the INSOL Principles gradually fell into obscurity in the new millennium.[57] Corporate debt became much more fragmented and heterogeneous.[58] Claims were increasingly traded, and so chasing after claim holders became ever more difficult.[59] Against this backdrop, inviting a handful of commercial bankers to a cup of tea with the Governor of the Bank of England was no longer a sensible way of supporting a corporate workout. The "workout game" had changed fundamentally.

Things are no different in the American context today. Companies frequently finance themselves with loans that are fractionalized and traded in secondary markets.[60] This in

50. *See* John Armour & Simon Deakin, *Norms in Private Insolvency: The 'London Approach' to the Resolution of Financial Distress*, 1 J. CORP. L. STUD. 21, 37–39 (2001) (discussing informal creditor norms governing financial restructurings among large United Kingdom firms).

51. *See, e.g.*, EIDENMÜLLER, *supra* note 9, at 236–44; *see* Armour & Deakin, *supra* note 50, at 39.

52. *See* Armour & Deakin, *supra* note 50, at 34–35 (describing how lead banks enforce cooperation by requiring dissenters to propose counter-offers that are "demonstrably fair" to all parties rather than merely self-serving).

53. *See id.* at 35–36.

54. *See id.* at 44.

55. *See id.* at 40–41

56. *See* INSOL INT'L, STATEMENT OF PRINCIPLES FOR A GLOBAL APPROACH TO MULTI-CREDITOR WORKOUTS II (2d ed. 2017).

57. *See* WORLD BANK GROUP, *supra* note 3, at 31 ("Since the 1990s, the use of the London Approach in practice in the United Kingdom has been more limited.").

58. *See id.*

59. *See generally* Jared A. Ellias, *Bankruptcy Claims Trading*, 15 J. EMP. LEG. STUD. 772 (2018) (discussing the controversy and impact of bankruptcy claims trading on the Chapter 11 process); Baird & Rasmussen, *supra* note 22, at 666–75.

60. Jan-Peter Siedlarek & Vladimir Yankov, *The Secondary Market for Syndicated Loans* 2 (Fed. Rsrv. Bank Clev., Working Paper No. 25-10, 2025), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5191165 [https://perma.cc/7PEH-FW7E].

turn means that the creditors who possess these loan fragments face coordination and information challenges when a company seeks to restructure.[61]

Solving the free-rider and holdout problems in this landscape has led to more aggressive transactions. So-called "liability management exercises" or "LMEs" are a prime example.[62] In essence, these are transactions which seek to leverage "flexibility" within existing debt structures to "create refinancings" and "unlock fresh capital."[63] In their most violent forms, these transactions authorize lenders to "change the rules of the road to take the lion's share of any debt recovery for themselves, leaving the minority out in the cold."[64] They allow companies to solve the free-rider and holdout problems by privileging selected lenders and economically disadvantaging excluded ones.[65] Though some LMEs may create social wealth,[66] the most aggressive LMEs can be socially costly in that they undermine lenders' certainty in understanding the rights that they have with respect to a particular debt instrument, generate deadweight litigation costs, and thereby increase the cost of capital.[67]

Market participants have crafted mechanisms that combat the most aggressive forms of LME while still attempting to solve the free-rider and holdout problems that might otherwise plague workouts.[68] One such solution is the "cooperation agreement," which allows lenders that hold (in the aggregate) a supermajority of a syndicated loan to create a unified front when negotiating with a distressed company.[69] In exchange for joining the cooperation agreement, participating lenders are prohibited from engaging in their own negotiations with the company and cannot trade their loan fragments to other parties who are not (or who are not willing to become) parties to the agreement.[70] To prevent the problem of

61. *See* Jared A. Ellias & Elisabeth de Fontenay, *Law and Courts in an Age of Debt*, 171 U. PA. L. REV. 2025, 2051 (2023) ("In this new world, it is creditors who are the passive investors and who face severe collective action and information problems, often far more so than shareholders.").

62. For an overview, see Ben Browne, Randall Eisenberg & Clare Kennedy, *Liability Management: Securing Stability with a Turnaround Mindset*, ALIXPARTNERS (Oct. 2024), https://www.alixpartners.com/media/cjdmtezt/alixpartners-liability-management-october-2024.pdf [https://perma.cc/28SS-ST6E].

63. *Id.* at 2; *see also* Samir D. Parikh, *Financial Disequilibrium*, 171 U. PA. L. REV. 1925, 1944–48 (2023).

64. ANANT KUMAR, PUBLIC INSIGHTS ON PRIVATE CREDIT: BARBARIANS INSIDE THE SYNDICATED LOAN GATES, FRANKLIN TEMPLETON 1 (July 15, 2024), https://www.franklintempleton.com/articles/2024/bsp-alcentra/public-insights-on-private-credit-barbarians-inside-the-syndicated-loan-gates [https://perma.cc/E9C2-MDFD].

65. *See* UNDERSTANDING AND NAVIGATING LIABILITY MANAGEMENT EXERCISES (LMES), OCTUS 4 (2025), https://go.octus.com/l/279152/2025-02-12/2gbb2y/279152/17393985082qzfZGKZ/Octus_LME_Whitepaper_0225.pdf [https://perma.cc/96BF-GATF] ("LMEs often have a competitive, zero-sum reality. For one party to recover strongly, another takes the hit.").

66. *See* Douglas G. Baird, *Three Faces of Creditor-On-Creditor Aggression*, 97 AM. BANKR. L.J. 213, 231 (2023) (illustrating hypotheticals that do not harm minority investors); Vincent S.J. Buccola, *Efficacious Answers to the Non-Pro Rata Workout*, 171 U. PA. L. REV. 1859, 1877–78 (2023) ("The best way to address non-pro rata workouts, assuming it is feasible, is for the holders of distressed debt to decide on a case-by-case basis whether the advantages of dispensing with a presumption of equal-treatment outweigh the costs.").

67. *See* Diane Lourdes Dick, *Hostile Restructurings*, 96 WASH. L. REV. 1333, 1371–74 (2021) (explaining that the rise of hostile restructurings reflects a normative failure in U.S. capital markets because they undermine legal certainty, violate core justifications for nonconsensual loan adjustments, and disrupt market functioning).

68. *See* Diane Lourdes Dick, *Alliance Politics in Corporate Debt Restructurings*, 39 EMORY BANKR. DEV. J. 285, 325–26 (2023) (explaining that internal procedures can improve fairness and lender coordination, but their limits and rigidity suggest a need for broader legal or market solutions).

69. Samir D. Parikh, *Creditors Strike Back: The Return of the Cooperation Agreement*, 73 DUKE L.J. ONLINE 1, 23–25 (2023).

70. *Id.* at 27–28.

free-riding by allowing non-co-op lenders to benefit from the work and participation of the co-op lenders, cooperation agreements also frequently feature financial incentives to induce lenders to join the cooperation agreement earlier on.[71] And by aggregating a supermajority of the syndicated loan, cooperation agreements solve the holdout problem by ensuring that there is enough of the syndicated loan locked into the agreement to make a workout with the company possible.[72]

Yet there's reason to think that these collaborative responses to free-rider and holdout problems may not last. Some of the more recent cooperation agreements mimic the exclusivity and aggression of the old LMEs.[73] Solving the free-rider and holdout problems in an inclusive way came at too high a cost for some companies, but this in turn may increase the deadweight losses fuelled by posturing to be in, or combatting, the newest generation of cooperation agreements. The workout has returned to its earlier state of process fragility.[74]

When multiple parties have claims to a company's assets, those parties must inevitably and collectively figure out if and how to reorganize the firm's capital structure. Doing so creates free-rider and holdout problems that make corporate workouts inherently fragile. Can innovations with AI mitigate some of the worst aspects of this fragility? Can such innovations improve decision-making in corporate workouts? We explore these questions in the next Part.

II. AI APPLICATIONS AND CORPORATE WORKOUTS

In this Part, we survey several AI tools that can help mitigate the negotiation frictions and failures across problem, people, and process levels in corporate workout negotiations. The goal is to achieve better financing and restructuring decisions in a smoother process. While the tools presented underscore AI's promise to make negotiations more efficient than they currently are, they are nevertheless limited both in their own capabilities as well as in how they can be used in tandem. This lays the foundation for the introduction of the CRM in Part III.

A. Problem Level

Start with the problem level of negotiations. A workout entails a series of open issues about the distressed company. How likely is it that the company is financially distressed in

71. *See id.* at 31 (explaining that coordination designers rely on incentive-based "carrots," such as early-consenter fee sweeteners, to deter creditor free riding, though concerns about reluctance may eventually prompt stricter exclusionary provisions).

72. *Id.* at 27–28.

73. *See* Soma Biswas & Alicia McElhaney, *Struggling Businesses Sharpen Debt Tactics, Just in Time for a Downturn*, WALL ST. J. (Mar. 19, 2025), https://www.wsj.com/articles/struggling-businesses-sharpen-debt-tactics-just-in-time-for-a-downturn-0c2da023 [https://perma.cc/QA4S-7WDJ] (identifying cooperation agreement that seek to exclude lenders, since the requisite majority of lenders have already joined the cooperation agreement).

74. Some scholars have consequently suggested that legislatures should develop "creditor cooperation duties" to stabilize corporate workouts. *See* Horst Eidenmüller & Kristin van Zwieten, *The Case for Creditor Cooperation Duties in Corporate Workouts*, CLS BLUE SKY BLOG (May 13, 2020), https://clsbluesky.law.columbia.edu/2020/05/13/the-case-for-creditor-cooperation-duties-in-corporate-workouts/ [https://perma.cc/LX86-4HMY].

the sense that the company's assets are worth less than its liabilities (balance sheet insolvency), or that it is not able to pay its debts as they fall due (cash flow insolvency)? Is the firm worth more as a going concern than if it were liquidated? And if it is, what (new) capital structure would maximize the economic value of the firm?

One way that AI can help with corporate workouts is by identifying whether a company is financially distressed in the first instance. CovenantAI is an AI model that does this by tracking SEC-reported covenant violations from 1996 to 2022 with greater accuracy over existing text-search methods.[75] Models like CovenantAI can flag that financial distress is imminent, thereby triggering restructurings at more optimal times.[76] This reduces the agency costs of debt that are associated with equity holders taking riskier actions that may benefit them but jeopardize creditor recoveries and squander corporate value.[77]

AI applications can also support better (re)financing, valuation, and restructuring decisions in a corporate workout context. This can help correct information asymmetries and reduce opportunistic (and therefore costly) behavior. The financial distress and bankruptcy prediction models mentioned above also allow parties to predict how the company will fare post-workout across a range of different scenarios.[78] The wealth of information that they are able to access and analyse enables them to consistently achieve higher predictive accuracies,[79] price loans more accurately, and reduce adverse selection problems given information asymmetries between borrowers and lenders.[80] Such loan terms could more precisely reflect the specific companies' risk profiles, increasing loan markets' efficiency and fairness.

Parties can also use AI tools to determine how their claims would be treated in a hypothetical bankruptcy proceeding. Assessing those hypothetical outcomes is essential because workouts take place in the shadow of bankruptcy proceedings' mandatory rules.[81]

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75. *See* Anthony Saunders, Sascha Steffen & Paulina M. Verhoff, CovenantAI – New Insights into Covenant Violations 2 (Oct. 9, 2025) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4640653 [https://perma.cc/49RF-WLA7] (discussing CovenantAI's higher accuracy and consistency against existing methods).

76. Meanwhile, several financial distress or bankruptcy prediction models have hit the markets. *See, e.g.*, Apostolos Dasilas & Anna Rigani, *Machine Learning Techniques in Bankruptcy Prediction: A Systematic Literature Review*, 255 EXPERT SYS. WITH APPLICATIONS 1 (2024) (reviewing 207 empirical studies on bankruptcy prediction); Kaoutar El Madou et al., *Evolutions in Machine Learning Technology for Financial Distress Prediction: A Comprehensive Review and Comparative Analysis*, 41 EXPERT SYS. 1 (2023). These models leverage open-source software libraries such as XGBoost (eXtreme Gradient Boosting), or machine learning algorithms such as Random Forest or SVM (support vector machines) to assess companies along a series of predictive variables including liquidity ratios, profitability (such as return on assets), cash flow, leverage, and company size.

77. On agency costs of debt, see, for example, REINIER KRAAKMAN ET AL., THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH 110–19 (3d ed. 2017).

78. *See, e.g.*, Wolfgang Breuer, Andreas Knetsch & Katharina Mersmann, What Do Reogranization Plans Reveal About Post-Bankruptcy Outcomes? (Mar. 28, 2026) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4723098 [https://perma.cc/5FHN-YW28].

79. *See generally* Manel Hamdi, Sami Mestiri & Adnène Arbi, *Artificial Intelligence Techniques for Bankruptcy Prediction of Tunisian Companies: An Application of Machine Learning and Deep Learning-Based Models*, 17 J. RISK FIN. MANAG. 132 (2024) (comparing performance of five models to forecast the bankruptcy of Tunisian companies).

80. *See* George A. Akerlof, *The Market for 'Lemons': Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970) (discussing quality and uncertainty in various markets).

81. *See* DOUGLAS G. BAIRD, ROBERT H. GERTNER & RANDAL C. PICKER, GAME THEORY AND THE LAW 232–37 (1994).

Yet to accurately evaluate what one's entitlements would look like in a hypothetical bankruptcy proceeding, one must account not only for the financial prospects of the firm and the priority of one's claim, but also the error costs associated with judicial valuation of those (and perhaps other) factors. Much as AI models currently predict court decisions and litigation risk more broadly,[82] they can also help predict how bankruptcy courts will value claims and companies.[83] Other models similarly help with more formal aspects of claims verification.[84] While the benefit of these latter models lies primarily within bankruptcy proceedings, they can also be useful in corporate workout negotiations because they facilitate assessments of the economic value of creditors' claims.

B. People Level

AI tools can also have meaningful impacts on the "people" level of negotiation dynamics. Recall how on a "people" level, parties' strategic behavior and good faith misalignments in negotiation expectations can derail negotiations. Here, again, AI applications can help by levelling information asymmetries. Several current AI applications use decision theory concepts and data-based probability assessments to quantify alternatives to an agreement.[85] AI tools can also apply indirect inference rules and Bayesian reasoning to various activities to discern parties' interests in negotiations.[86] And AI tools can be used to discern negotiators' personalities more broadly through a tool known as "AI Profiling."[87] Giving parties insight into their counterparties' interests, concerns, and preferences better allows them to structure value-enhancing deals.

The AI-induced transparency in negotiations has another positive effect on bargaining efficiency. Manipulating your opponent's perceptions of your interests and alternatives is a key negotiation tactic.[88] For example, if your negotiation partner believes that your BATNA is better than it actually is, that false belief will induce them to inflate their offer.

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82. *See, e.g.*, *Lex Machina*, LEXISNEXIS, https://www.lexisnexis.com/en-us/products/lex-machina.page [https://perma.cc/BXJ8-CBGR]; SOLOMONIC, https://www.solomonic.co.uk [https://perma.cc/G57S-NTTF].

83. *See* Felix Steffek, *A Story of Two Holy Grails: How Artificial Intelligence Will Change the Design and Use of Corporate Insolvency Law*, U. CHI. L. REV. ONLINE 1, 5 (2024) (noting that AI applications can predict court decisions in insolvency proceedings).

84. *See, e.g.*, David A. Castleman & Robert Klamser, *The Evolution of Claims Administration Technology in Bankruptcy & Receiverships*, J. CORP. RENEWAL 18 (2024) (describing AI tools that help claimants search and summarize bankruptcy case documents).

85. *See, e.g.*, Kathrin Eidenmüller, Conor McLaughlin & Horst Eidenmüller, *Expanding the Shadow of the Law: Designing Efficient Judicial Dispute Resolution Systems in a Digital World — An Empirical Investigation*, 30 HARV. NEG. L. REV. 53, 53–54 (2024) (reporting the results of an empirical study on AI applications which are used in practice to assess non-agreement alternatives in dispute resolution settings).

86. *See* Tanveer Ahmed & Abhishek Srivastava, *Predicting Human Interest: An Application of Artificial Intelligence and Uncertainty Quantification*, 4 J. UNCERTAINTY ANALYSIS & APPLICATIONS 1 (2016) (proposing a Bayesian inference framework that uses indirect inference rules to estimate human interest from observable activity).

87. *See* Laura Berrill, *Artificial Intelligence and People Profiling*, AI MAG. (June 2, 2021), https://aimagazine.com/ai-applications/artificial-intelligence-and-people-profiling (on file with the *Journal of Corporation Law*) (describing AI profiling systems that analyze involuntary micro-movements to identify personality types and emotional states of individuals).

88. Luis Reyes, *10 Hard-Bargaining Tactics to Watch Out for in a Negotiation*, HARV. L. SCH. PROGRAM ON NEGOT. (June 2, 2026), https://www.pon.harvard.edu/daily/batna/10-hardball-tactics-in-negotiation/ [https://perma.cc/58JA-TKMC].

The advent of smart negotiation algorithms makes it much more difficult for a party to conceal their true interests, concerns, preferences, and alternatives. Developers have already created an AI system that can decode silent thoughts and turn them into text.[89] Another AI tool can detect if a person is lying or telling the truth, based on facial movements.[90] By reducing parties' ability to engage in deceptive tactics, AI tools can decrease the deadweight loss associated with crafting and responding to those tactics.[91]

So far, we have assumed that human negotiators will be assisted by AI tools, but the "AI Revolution" may upend that assumption, too. AI-led negotiations may replace human-led ones. This is not science fiction. In November 2023, the British company Luminance[92] demonstrated how its LLM "Autopilot" completely automated the negotiation of a Non-Disclosure Agreement (NDA), without human intervention, between two opposing parties.[93] In 2022, Walmart started to use a chatbot developed by California-based firm Pactum[94] to automate (re-)negotiations of 89 of Walmart's more than 100,000 contracts with suppliers.[95] The chatbot reached an agreement with 64% of the participating suppliers.

89. *See Portable, Non-Invasive, Mind-Reading AI Turns Thoughts into Text*, U. TECH. SYD. (Dec. 12, 2023), https://www.uts.edu.au/news/2023/12/portable-non-invasive-mind-reading-ai-turns-thoughts-text [https://perma.cc/T3VV-3YUS] (describing a portable, non-invasive AI system that decodes silent thoughts into text by translating EEG brain signals into words and sentences).

90. *See* Zizhao Dong et al., *Intentional-Deception Detection Based on Facial Muscle Movements in an Interactive Social Context*, 164 PATTERN RECOGNITION LETTERS 30, 36 (2022) (finding that AI can detect deception by analyzing involuntary facial muscle movements).

91. Those social costs will persist if access to smart negotiation algorithms is asymmetric since asymmetric information allows the (better) informed player to capture almost all of the cooperative surplus. This result holds for a large class of games across different models. *See* Drew Fudenberg & David K. Levine, *Reputation and Equilibrium Selection in Games with a Patient Player*, 57 ECONOMETRICA 759, 765–66 (1989) (explaining in a simple Stackelberg model, a player who participates in the game longer, will be able to capture more utility than a new player); Klaus M. Schmidt, *Commitment Through Incomplete Information in a Simple Repeated Bargaining Game*, 60 J. ECON. THEORY 114, 114–16 (1993); Klaus M. Schmidt, *Reputation and Equilibrium Characterization in Repeated Games with Conflicting Interests*, 61 ECONOMETRICA 325, 325–28 (1993). For an overview of the literature, see GEORGE J. MAILATH & LARRY SAMUELSON, REPEATED GAMES AND REPUTATIONS: LONG-RUN RELATIONSHIPS 264–67 (2006).

92. LUMINANCE, www.luminance.com [https://perma.cc/9XG7-DCRA].

93. *See Luminance Showcases World's First Completely AI-Powered Contract Negotiation*, LUMINANCE, https://www.luminance.com/press/luminance-showcases-worldpowered-contract-negotiation/ [https://perma.cc/S5JX-43PU]; *see also* Ryan Browne, *An AI Just Negotiated a Contract for the First Time Ever — and No Human was Involved*, CNBC (Nov. 7, 2023), https://www.cnbc.com/2023/11/07/ai-negotiates-legal-contract-without-humans-involved-for-first-time.html [https://perma.cc/8WMT-EERL].

94. PACTUM, www.pactum.com [https://perma.cc/M72K-JP7X]; Horst Eidenmüller, *Game Over: Facing the AI Negotiator*, U. CHI. L. REV. ONLINE 1, 6 (2024).

95. *See* Remko Van Hoek et al., *How Walmart Automated Supplier Negotiations*, HARV. BUS. REV. (Nov. 8, 2022), https://hbr.org/2022/11/how-walmart-automated-supplier-negotiations [https://perma.cc/U62C-ASGR]; *see also* Daniela Sirtori & Brendan Case, *Walmart is Using AI to Negotiate the Best Price with Some Vendors*, BLOOMBERG (Apr. 26, 2023), https://www.bloomberg.com/news/articles/2023-04-26/walmart-uses-pactum-ai-tools-to-handle-vendor-negotiations [https://perma.cc/CHA3-YU2F]. The algorithm was programmed to target payment schedules, seeking to negotiate early payment discounts or extended payment terms without discounts. In exchange, suppliers were offered the option of changing Walmart's right to terminate contracts immediately without cause to providing a 30-, 60-, or 90-day written termination notice. Walmart also selectively offered suppliers opportunities for growth in assortment and sales volume in exchange for price discounts. Crucially, the different agreement options were used to build "structured scripts" to guide suppliers through the negotiation process.

Walmart reported limited cost savings (on average 1.5% on the expenses negotiated) and an extension of payment terms to an average of 35 days.[96]

To be sure, even Walmart's extraordinary AI tool has its limits. It is currently deployed to achieve clearly defined distributive goals in simple negotiation settings (two parties, one issue). All of that is a far cry from AI creating value by crafting solutions in complex multi-party, multi-issue negotiations. Market dynamics are doing much of the work here, too. Walmart's size and access to data make it uniquely capable of developing this kind of tool relative to smaller businesses.[97] Because of Walmart's deep pool of capital and ability to deploy AI tools at scale, it could afford to make upfront investments in the development and/or purchase of specialized algorithms, unlike the counterparties it faces.[98]

At the same time, the Walmart example may evidence a positive development in how AI negotiators can create value and save costs. Right now, AI-assisted negotiations augment human negotiation with AI capabilities. But technological development is currently progressing rapidly. It may not be long before AI applications can automate even complex negotiations, such that "Humans Need Not Apply."[99] AI-assisted and automated negotiations yield great potential for creating value and reducing transaction costs in a wide array of deals, including in corporate workouts.

C. Process Level

Parties can further use AI to streamline negotiation processes. Even today, sophisticated negotiators are using a wealth of different AI applications to assist them in planning negotiation processes and conducting negotiations more efficiently.[100] Dynamic topic modelling techniques and so-called topic rivers, for instance, can identify relevant negotiation topics.[101] Technology-Assisted Review (TAR) applications can assist with due diligence/documents review, document classification/management, and document generation.

AI tools help not only in preparing negotiations, but also in conducting them. An important technology here is "Natural Language Processing" (NLP).[102] NLP is the key technology for speech recognition and translation. Sentiment analysis, a subfield of NLP, can be used to extract opinions and sentiments from text.[103] NLP-powered translation algorithms allow negotiators from different jurisdictions to communicate with each other in

96. Sirtori & Case, *supra* note 95.

97. *Id.*

98. On the advantages of large corporations regarding the development and deployment of AI applications based on machine learning. *See generally* John Armour & Horst Eidenmüller, *Self-Driving Corporations?*, 10 HARV. BUS. L. REV. 87, 98–99 (2020); John Armour, Richard Parnham & Mari Sako, *Augmented Lawyering*, 2022 U. ILL. L. REV. 71, 108–09, 112–13.

99. JERRY KAPLAN, HUMANS NEED NOT APPLY: A GUIDE TO WEALTH AND WORK IN THE AGE OF ARTIFICIAL INTELLIGENCE (2015).

100. *See* Eidenmüller, *supra* note 94, at 6–8 (discussing the use of Walmart's use of an AI chatbot to renegotiate contracts with suppliers).

101. *See* Johannes C. Scholtes & Hendrik Jacob van den Herik, *Big Data Analytics for E-Discovery*, *in* RESEARCH HANDBOOK ON BIG DATA LAW 253, 268–72 (Roland Vogl ed. 2021) (discussing big data analytics in the law).

102. *See, e.g.*, RAYMOND S.T. LEE, NATURAL LANGUAGE PROCESSING: A TEXTBOOK WITH PYTHON IMPLEMENTATION (2023).

103. *See* James Yoon, *Artificial Intelligence and the Zealous Litigator*, *in* RESEARCH HANDBOOK ON BIG DATA LAW 389, 398 (2021); Scholtes & van den Herik, *supra* note 101 (describing methods of analysis).

real time, despite language barriers. Other algorithms improve wording and communication style more generally.[104] And NLP-powered AI tools can instantly provide transcripts of the negotiations.[105]

Other AI tools go even further and facilitate consensus-building in negotiation processes in more tangible ways. Consider Google DeepMind, which has developed an AI-driven mediation tool called the "Habermas Machine." It is designed to foster consensus in group discussions by integrating diverse viewpoints.[106] The Habermas Machine is functionally akin to the "One-Text Procedure." This well-known mediation tool aims to build consensus between conflicting parties on the basis of a single text.[107] The mediator proposes a draft compromise text and asks the negotiating parties for feedback. The text is refined in iterative feedback rounds until the mediator concludes that he can no longer improve it.[108] Similarly, the Habermas Machine engages in "shuttle diplomacy" (caucus mediation) between groups to help them identify common ground while discussing divisive (political) issues.[109]

Other providers offer AI-powered mediation services that go beyond creating a single text to serve as a focal point for negotiations. "TheMediator.AI," for example, poses a round of confidential questions to the disputing parties before a mediator proposal is developed.[110] Those questions, in turn, provide the AI mediator with information on parties' BATNAs and, correspondingly, the potential existence and size of a ZOPA (bargaining range). From there, the AI mediator will offer potential resolutions to the parties, which, much like in any other evaluative mediation, they are free to accept or reject.

To the extent that corporate workouts can benefit from mediation, they can benefit from these kinds of AI mediation tools. Scholars and practitioners have observed how mediation can help reduce frictions in corporate reorganizations.[111] Mediation has steadily become more important in U.S. Chapter 11 cases,[112] as well as a consensus-building tool

104. *See, e.g.*, SWAYBETA, www.swaybeta.ai [https://perma.cc/CTW8-TQAH].

105. *See, e.g.*, OTTER, www.otter.ai [https://perma.cc/FY8W-FD2K].

106. *See* Michael Henry Tessler et al., *AI Can Help Humans Find Common Ground in Democratic Deliberation*, SCI. (Oct. 18, 2024), https://www.science.org/doi/epdf/10.1126/science.adq2852 (on file with the *Journal of Corporation Law*) (investigating whether artificial intelligence can help groups reach a consensus); *DeepMind's Habermas Machine*, PERPLEXITY (Oct. 25, 2024), https://www.perplexity.ai/page/deepminds-habermas-machine-B2rpSbXeTTmofdFV1qglsA (on file with the *Journal of Corporation Law*) (integrating diverse viewpoints to foster inclusive dialogue).

107. The "One-Text Procedure" was developed by Roger Fisher and William Ury. *See* ROGER FISHER & WILLIAM URY, GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN 118–22 (1981) (describing the development of the "One-Text Procedure"); *see also* CHRISTIAN DUVE ET AL., MEDIATION IN DER WIRTSCHAFT: WEGE ZUM PROFESSIONELLEN KONFLIKTMANAGEMENT 244–46 (4th ed. 2025) (discussing application of the procedure in business mediations).

108. FISHER & URY, *supra* note 107, 118–22.

109. *Id.*

110. *See* THEMEDIATOR.AI, https://themediator.ai/ [https://perma.cc/QU87-DX66] (providing mediation proposals based on user input).

111. *See* Eidenmüller, *supra* note 17, at 6, 61–64 (discussing the harmonization of corporate insolvency laws); Julia Winters, *Mediation in Bankruptcy — An Important, Albeit Unwieldy Tool*, 38 REV. BANKING & FIN. SERVS. 121, 122–23 (2022) (discussing the benefits of mediation in bankruptcy disputes).

112. *See, e.g.*, M. Natasha Labovitz & Erica S. Weisgerber, *The Rise of Mediation in US Chapter 11 Restructurings*, GLOB. RESTRUCTURING REV. (Nov. 15, 2024), https://globalrestructuringreview.com/review/restructuring-review-of-the-americas/2025/article/the-rise-of-mediation-in-us-chapter-11-restructurings [https://perma.cc/PMV7-76V5].

in corporate workouts.[113] The technical tools now available promise to make mediators' consensus-building efforts much more effective in these situations.

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The AI applications described above promise to radically streamline and improve negotiation processes, as well as improve decision-making in negotiations in general and corporate workouts in particular. However, AI tools are not perfect. Like other tools, they can misfire.

Furthermore, there are precise and significant limitations with these tools: they are all separate and operate independently. The fact that they were developed to solve specific problems (and at times for specific parties, like Walmart), means that they provide limited solutions. Corporate workouts may benefit from all of them, but aggregating them one by one can be difficult and costly, especially since not every tool will be specifically geared toward the corporate workout context.

In contrast, software tools have long been available for automating business functions outside of the insolvency context (financial accounting, controlling, materials management, sales, etc.). Leading providers, such as the German software group SAP, have developed software modules for all of these functions that are compatible with each other and operate in an integrated manner.[114] There is no comparable solution in the context of corporate workouts.

What corporate workouts can benefit from, then, is a platform that harbors a suite of AI tools specifically designed to facilitate negotiations and decision-making in the corporate workout context. To the best of our knowledge, though, no such platform exists.[115] Imagining what that platform might look like is the next Part's task.

III. THE CORPORATE RESTRUCTURING MACHINE AS OPEN PLATFORM

In this Part, we sketch the contours of the CRM. This is the creation of a private, online, and open platform designed to support or even automate corporate workouts with AI tools. Stakeholders, particularly creditors and shareholders, could join the platform and opt into AI applications at different times, for different services, and at different prices. We discuss the operating principles of the CRM, participation, pricing, and the platform's functionality in detail. We demonstrate that by providing a menu of AI tools that are already being deployed in various negotiation settings in a single platform, the CRM can mitigate several of the limitations that currently affect corporate workouts.

113. *See* EIDENMÜLLER, *supra* note 9, at 529–36; *see also* Horst Eidenmüller & David Griffiths, *Mediation in Cross Border Insolvency Procedures*, https://insolventiemediation.nl/media/uploads/file/11-Cross-Border-Mediation.pdf [https://perma.cc/7AQJ-K6FY]; Akshaya Kamalnath, *The Future of Corporate Insolvency Law: A Review of Technology and AI-Powered Changes*, 33 INT. INSOLV. REV. 40, 48–50 (2024).

114. *See* SAP, https://sap.com [https://perma.cc/MGA6-TQSR].

115. *But see Stretto Introduces First Gen AI Platform Designed for Corporate Bankruptcy Cases*, LEGALTECHTALK (Jan. 10, 2025), https://www.legaltech-talk.com/stretto-introduces-first-gen-ai-platform-designed-for-corporate-bankruptcy-cases/ [https://perma.cc/73NK-PZMS] (discussing "Stretto Conductor," a new AI-powered platform designed specifically for bankruptcy case management and communications).

A. Contours of the Corporate Restructuring Machine

We envisage the CRM as a private,[116] online,[117] and open platform, designed to support or even automate corporate workouts, using AI tools and services. The goal function and key operating principles of the CRM and subsystems would be specified at the outset in its General Terms and Conditions for doing business. These could reflect an updated version of the London Approach and the INSOL Principles and would be designed to increase the transparency and efficiency of workouts.

The tools and services on the CRM could range from relatively simple to fairly complex. The simplest offering would be to provide a place for meetings, discussions, and networking. When stakeholders can come together informally and discuss topics relevant to restructuring, they can establish norms and shared understandings that promote collaboration and facilitate bargaining.[118] To support such informal exchanges, the CRM could organize conferences, workshops, and networking events.[119]

More complex offerings would operate to facilitate corporate workouts directly. They would include the several communication, moderation, and process-management tools we described above.[120] More bespoke tools designed for the corporate workout context would also be available. This category would include tools for valuing assets and claims, assessing the feasibility of restructuring plans, and predicting companies' post-restructuring performance.[121] Real-time assessments of proposed deal terms could also be helpful. Parties to commercial negotiations often debate as to whether terms are or are not "market"; that is, they debate whether those terms do or do not conform to market standards. The CRM can include AI tools that provide real-time information on the prevalence of certain deal terms, as well as the extent to which a draft term might deviate from "market" standards.[122]

The most complex or "muscular" offerings the CRM could provide are mediation, arbitration, and other ADR procedures.[123] Online mediations and arbitrations, which parties have increasingly used since the COVID-19 pandemic, have become an established

116. While we envisage the CRM as a private enterprise, we are open to the possibility that governmental entities may wish to participate in or sponsor the CRM on certain occasions. In our view, that governmental intervention would not fundamentally change the CRM's nature as a private enterprise.

117. By "online platform," we mean a digital service that is a two-sided platform that enables interactions between two or more sets of users who use the service to communicate via the internet. This definition is broadly in line with the definition in Article 3 (i) of the EU Digital Services Act. In this provision, "online platform" is defined to be a "hosting service that, at the request of a recipient of the service, stores and disseminates information to the public." *See* Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and Amending Directive 2000/31/EC, 2022 O.J. (L 277) 1 (Digital Services Act).

118. One can argue that these "unwritten" norms are doing the real work in corporate reorganizations. *See* DOUGLAS G. BAIRD, THE UNWRITTEN LAW OF CORPORATE REORGANIZATIONS (2022).

119. This is not novel. Octus, a corporate reorganization and distressed debt analysis platform, hosts several educational and networking events online and in-person. *See About Us*, OCTUS, https://octus.com/company/about-us/ [https://perma.cc/BX9A-5CCV].

120. *See supra* Part II.C.

121. *See supra* Part II.A (discussing potential AI tools for restructuring).

122. For an overview of the use of AI applications to improve financial decision-making, see Vinayak Pillai, *Integrating AI-Driven Techniques in Big Data Analytics: Enhancing Decision-Making in Financial Markets*, 12 INT'L J. ENG'G & COMPUT. SCI. 25774, 25774–75 (2023).

123. For an overview, see CHRISTIAN DUVE ET AL., MEDIATION IN DER WIRTSCHAFT: WEGE ZUM PROFESSIONELLEN KONFLIKTMANAGEMENT (4th ed. 2024).

feature of the dispute resolution landscape.[124] Technological innovation may make these dispute resolution mechanisms even more effective. Parties to a mediation may opt for an AI mediator. They could also initiate "swarm arbitrations," which use blockchain and crowdsourcing to create ad-hoc "juries" to resolve disputes.[125] Traditional arbitration proceedings benefit from AI support as well. "Self-driving" arbitrations are on the horizon.[126]

Think of the CRM as a "restructuring gym": various applications would be on offer to assist corporate workouts: on the process level, and on the problem level. An ecosystem of offerings could be built around an attractive "anchor product." On the problem level, decision-support with financial distress detection, BATNA assessment, and re-design of the firm's financial structure are core functionalities. On the process level, it could be some form of consensual dispute resolution based on the "Habermas machine" or similar tool.

B. Functionality of the Corporate Restructuring Machine

By integrating all these technologies in a single platform, the CRM can reduce the process fragility of workouts and increase their efficiency in various ways.

First, the CRM would create an online market for restructuring support applications. As with any other market, there is value for the consumer in the transparency the market creates with respect to which products and services are on offer, and at what prices. Platform users would be able to assess different offerings and select those that compare favourably on a price/quality ratio.

Second, the platform's various individual tools and services would reduce the costs and increase the benefits of workouts. Process management tools reduce transactions (dispute resolution) costs, and they facilitate value-increasing deals. Decision support tools increase negotiators' information levels and lead to improved decision-making. Increased transparency and participation, as we show below,[127] reduce the scope for strategic behaviour. Overall, we believe it is likely that significant marginal improvements would result compared to the status quo of corporate workout practices.

Third, hosting all of the technologies on the platform would allow parties to not only reap the benefits that each one provides but also capture the synergies that come from using those tools in tandem with each other. For example, parties who use the CRM might sign up for an AI-led mediation of a dispute within the broader context of a workout, and the AI mediator would incorporate the communication and market-checking technologies that facilitate a speedy resolution to that issue. Alternatively, parties using the CRM for a

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124. *See* Bryan Clark & Tania Sourdin, *Necessity the Mother of Invention? International Commercial Mediators' Views on Online Mediation*, MEDIATION THEORY & PRAC., May 2024, at 1,1; Eidenmüller, McLaughlin & Eidenmüller, *supra* note 85, 69–79 (reporting the results of an empirical study on the popularity of various forms of online dispute resolution mechanisms).

125. *See, e.g.*, Andreas Hacke, *Law and Autonomous Systems Series: Micro-Justice and New Law? 'Swarm Arbitration' as a Means of Dispute Resolution in Blockchain-Based Smart Contracts*, OXFORD BUS. L. BLOG (Mar. 29, 2018), https://blogs.law.ox.ac.uk/business-law-blog/blog/2018/03/micro-justice-and-new-law-swarm-arbitration-means-dispute-resolution [https://perma.cc/9AGM-W7AR]. A popular provider of this sort of service is Kleros. *See* KLEROS, https://kleros.io/ [https://perma.cc/RBM4-UHG4].

126. *See* Horst Eidenmüller & Faidon Varesis, *What is an Arbitration? Artificial Intelligence and the Vanishing Human Arbitrator*, 17 N.Y.U. J.L. & BUS. 49, 68 (2020) (arguing that fully autonomous AI arbitrations are feasible in the near future).

127. *See infra* Part III.D (discussing price and participation).

corporate workout could quickly assess the firm's financial prospects, evaluate the value of each party's claim in the shadow of what they would receive in bankruptcy proceedings, determine each party's BATNA and the ZOPA between them, and craft a corporate workout plan with fewer frictions in the bargaining process.

The CRM's benefits go beyond merely offering a "one stop shop" for corporate workouts. They also include providing a forum that companies can commit to using if they face financial distress, and that stakeholders can more easily engage with once a company decides to commence corporate workout negotiations. It is this aspect of the CRM that we turn to next.

C. Contracting into the Corporate Restructuring Machine

We envision that the CRM would largely operate on a subscription basis. Subscriptions could be transaction-based or personal. When parties subscribe to the CRM for a certain transaction, the transaction would stipulate that certain issues—for example, the pricing of a financial instrument—would be governed by designated AI applications on the platform. Several parties might take out "personal" subscriptions to the CRM. Certain institutional investors that are repeat players in the distressed debt space, such as syndicated loan holders or hedge funds, might purchase personal subscriptions. Alternatively, companies might subscribe to the CRM by establishing in their respective charters that the CRM or specific applications on the platform will govern how they will resolve particular (if not all) disputes. The CRM will thus be contractual in the sense that voluntary stakeholders will be able to understand ex ante the forum in which their disputes will be handled.

In this way, the CRM will revitalize old calls for allowing firms to choose the applicable bankruptcy regime in their charter. In the 1990s, Alan Schwartz proposed a contract theory approach to business bankruptcy.[128] Under this approach, states would permit parties to contract with lenders for the bankruptcy system they prefer. Similarly, Robert Rasmussen suggested a "menu approach to corporate bankruptcy,"[129] where lawmakers would create a menu bankruptcy system that would provide choices for how companies would handle their insolvency, and firms upon formation would be required to select one of the alternatives from the menu. More recently, Anthony Casey, Aurelio Gurrea-Martínez, and Robert Rasmussen have called for a "Commitment Rule" under which corporations would pre-commit to handle their financial distress in a particular insolvency forum.[130]

The CRM could provide the next logical extension of these approaches. Firms could contract with their lenders or other counterparties to use specified applications on the platform to resolve their disputes. They could also select such applications or mechanisms as governing restructuring systems in their charter.

These commitments to use the CRM, though, would only bind voluntary creditors. Tort creditors, for example, would classically not fall into this category. That limitation, though, is the same under the contractual approaches described above. The parties to those

128. *See* Alan Schwartz, *A Contract Theory Approach to Business Bankruptcy*, 107 YALE L.J. 1807 (1998).

129. *See* Robert K. Rasmussen, *Debtor's Choice: A Menu Approach to Corporate Bankruptcy*, 71 TEX. L. REV. 51 (1992); *see also* Horst Eidenmüller, *Contracting for a European Insolvency Regime*, 18 EUR. BUS. ORG. L. REV. 273 (2017).

130. *See* Anthony J. Casey, Aurelio Gurrea-Martínez & Robert K. Rasmussen, *A Commitment Rule for Insolvency Forum*, 4 U. CHI. BUS. L. REV. 51 (2025).

disputes would use traditional dispute resolution mechanisms unless they agree ex post to use the CRM.

Voluntariness would therefore be the CRM's foundational principle. No one would be forced to participate unless they agreed to do so. Users could even be allowed to make their participation contingent on a certain threshold of total participation—measured, for example, by the volume of creditors' claims—being reached or exceeded. By the same token, some CRM users might exclude certain investors from a corporate workout. A corporation, for instance, might want to use the CRM to conduct a workout with respect to a particular tranche of its capital structure.

This all may mean that the CRM will always be exclusive, to some extent. That is not a significant problem per se. Corporate workouts have always been selective. While the CRM similarly does not guarantee inclusivity, its technological innovations, ability to reduce transaction costs, and improve decision-making should encourage users to expand the set of investors who could participate in corporate workouts.

The CRM's voluntariness and potential exclusivity raise important limits. If the CRM is both voluntary and not inherently inclusive, how would the CRM obtain sufficient buy-in from companies and investors to make it work? The next section addresses these questions.

D. Pricing and Participation

The CRM would collect fees from subscribers, but without more, the CRM's voluntariness could create a collective action problem. Each investor of a distressed company might be better off if all of them were to join a company's workout on the CRM once the company initiated it, but each one might be hesitant to join (and therefore spend the time and money to do so) if an insufficient number of other investors are willing to participate.

Fees and deal economics could incentivize early and widespread participation in the CRM and therefore reduce or even solve the collective action problem. Parties who join a deal earlier could benefit from lower fees and better economics in the restructuring. The idea is to reward those who increase the likelihood of a workout success by making the first (risky) moves/contributions towards a cooperative outcome.[131] For example, parties who pre-commit to using the CRM when they first issue the bond could get lower fees than if they seek to use it only once financial distress sets in. The CRM could also offer discounts commensurate with the degree of upfront participation and inclusivity. If all lenders in a syndicated loan are included when they first use the CRM, for instance, the CRM could reduce its fees.

The London Approach and the INSOL Principles motivate this pricing scheme. By incentivizing parties to join earlier, the CRM addresses the free-rider problem that dispersed investors might otherwise face. And by folding in a wide array of tools designed to mitigate strategic behavior, the CRM encourages parties to create and divide any cooperative surplus in a more efficient manner. While the CRM does not include any coercive tactics, market dynamics might provide the discipline needed to shellack holdouts. Among sophisticated investors, "jamming" one's counterparties in one deal risks being "jammed," or simply excluded from, future deals. Though long gone are the days of being called to

131. *See* BARRY NALEBUFF, SPLIT THE PIE: A RADICAL NEW WAY TO NEGOTIATE 56–57 (2022) (arguing that a negotiator who increases the pie should be compensated for his efforts by the other parties).

the Bank of London for a cup of tea, the CRM could replicate several of the London Approach's virtues in facilitating more efficient corporate workouts. An updated version of the London Approach could be reflected in the CRM's operating principles.[132]

The level of buy-in the CRM achieves will largely depend on the quality of its services. The more effectively its tools and applications perform, the greater the engagement from stakeholders and, all else being equal, the smoother their integration into the restructuring effort will be. A decisive element in this process is the presence of an appealing "anchor product"—a high-value tool that strongly attracts and retains investors.[133]

Hence, the CRM's quality and inclusivity work in tandem. A higher quality set of tools will enable a company to conduct a workout with more classes of investors. A well-functioning CRM, then, can expand the set of corporate workouts from those cases in which companies need to rework one or two tranches of their capital structures to companies that fundamentally need to rethink their financial and operational setup.

The CRM's ability to facilitate corporate workouts in a wider set of cases that will affect a broader set of investors suggests a hydraulic effect between the CRM and ex ante contracting. All else equal, we predict that the CRM, if effective, would induce parties to create contracts that are more amenable to using the CRM, since the cost of ex post renegotiation via the CRM will be lower relative to such costs today. Perhaps some kind of consumer contracts could be drafted to anticipate using the CRM. This, in turn, will place pressure on different jurisdictions' substantive contract law and choice of law doctrines (especially when it comes to vulnerable populations, like ordinary consumers).

Given this, we do not think it makes sense to prescribe a certain degree of inclusivity as part of the CRM's operating principles. There is likely no optimal level of inclusivity. As mentioned earlier, price incentives and the quality of the CRM offerings can go a long way toward encouraging broader stakeholder participation than is currently the case with many corporate workouts. However, there may be competing CRM models on the market experimenting with different operating principles. This leads us to the next Section of this Article.

E. Competing Models

As with AI applications in general, we expect a market for corporate restructuring applications to develop. Various providers will develop and market CRMs featuring different products, services, and terms under which parties can use them. Despite this anticipated proliferation of platforms, we doubt that there will be "creditor-friendly" and "debtor-friendly" platforms. Ex ante, creditors and debtors are jointly interested in minimising the cost of capital, i.e., in systems that increase efficiency. Any attempt to make a CRM debtor- or creditor-friendly will get priced in ex ante. These distortions will consequently push users away from those CRMs. Since creditors and debtors are jointly interested in minimizing the cost of capital ex ante, we anticipate that CRMs will converge on policies that do just that.

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132. *See supra* Part III.A (discussing how an updated version of the London Approach could be reflected in CRM operating principles).

133. *See supra* Part III.A (discussing the contours of the corporate restructuring machine, including "anchor products").

CRMs can vary significantly in terms of quality, features, and cost. An AI-powered solution with distinctive capabilities can create a strong competitive edge, potentially serving as an "anchor product" that attracts investor interest. At the same time, a major institutional investor might decide to develop its own CRM and require that all transactions be conducted through it. Whether other investors and companies comply would depend on the investor's influence. If the institution is large enough and wields considerable market power, others may adopt its CRM simply as a prerequisite for gaining access to its capital.

CRMs may nevertheless differ along quality, quantity, and price dimensions. An AI application with distinctive capabilities can create a strong competitive edge, potentially serving as an "anchor product" that attracts investor interest. At the same time, a major institutional investor might decide to develop its own CRM and require that all transactions be conducted through it. Whether other investors and companies comply would depend on the investor's influence. If the institution is large enough and wields considerable market power, others may adopt its CRM simply as a prerequisite for gaining access to its capital.

By and large, we expect that companies and investors will converge on a narrow set of CRMs. Market power, distinctive capabilities, but also bandwagon, learning, and network effects are likely to play a crucial role here.[134] The more a CRM is used across various workouts, the better it may become for users. The CRM's technology will develop, and/or users will become more familiar with how it works. One can imagine that the CRM or CRMs on which parties converge will be the one or ones that successfully facilitate workouts in a cost-effective way while keeping reputational and other business risks associated with using the platform fairly low.

IV. THE END OF THE CORPORATE WORKOUT AS WE KNOW IT

Privately adjudicating disputes after they arise is only a second-best solution. Ideally, firms would not have to face financial distress because claims would be automatically adjusted to changing macroeconomic and microeconomic conditions. This can be achieved, for example, with applications which execute automatic write-downs of debt instruments or debt-to-equity conversions under certain conditions.[135] Such conversions also form the heart of various models proposed decades ago to eliminate the need for valuing distressed companies while preserving the priority of creditors' claims.[136] But automatic write-downs or debt-to-equity conversions are relatively blunt tools that do not take into account optimal

134. *See* Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 772–73 (1995) (explaining network externalities in product markets); Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")*, 83 VA. L. REV. 713, 719–27 (1997); AVINASH K. DIXIT & BARRY J. NALEBUFF, THE ART OF STRATEGY: A GAME THEORIST'S GUIDE TO SUCCESS IN BUSINESS AND LIFE 277–81 (2008).

135. Such financial instruments have played an important role in the recent Credit Suisse bailout. *See, e.g.*, Javier Paz Valbuena & Horst Eidenmüller, *Bailout Blues: The Write-Down of the AT1 Bonds in the Credit Suisse Bailout*, 24 EUR. BUS. ORG. L. REV. 409 (2023).

136. *See* Lucian Arye Bebchuk, *A New Approach to Corporate Reorganizations*, 101 HARV. L. REV. 775 (1988); Barry E. Adler, *Financial and Political Theories of American Corporate Bankruptcy*, 45 STAN. L. REV. 311 (1993). On these proposals, see EIDENMÜLLER, *supra* note 9, at 102–12. Schillig, Kletzer, and Balcau aim to revive these approaches for tokenized securities. *See* Michael Anderson Schillig, Christoph Kletzer & Andrei Balcau, *Smart Restructuring Tokens*, J. BUS. L. (2023). This limits their proposal to a specific asset class. It also shares the shortcomings of the original conversion models, namely the automatic conversion of debt positions into equity positions. *See infra* note 140 and accompanying text.

responses to financial distress both ex ante and ex post. Furthermore, investors might be reluctant to buy debt positions which would be automatically converted into an equity stake if the debtor is financially distressed. One reason for this is the risk of equitable subordination of non-converted loans (if not all loans are converted).[137] Those loans would have in effect become shareholder loans, and it may be difficult to price the subordination risk ex ante.

More sophisticated and flexible "self-driving contracts" may be on the horizon.[138] These contracts use AI and Big Data to "fill their own gaps and interpret their own standards without adjudication."[139] Thus, various conditions, such as interest rates, would be continually adjusted as relevant parameters—such as macroeconomic conditions, asset values, or business prospects—change.

A CRM could serve as a platform for negotiating, drafting, and managing a wide array of autonomous, or "self-driving," contracts. As the prevalence of such contracts grows, an increasing share of a firm's financial and operational activities could themselves become autonomously governed. At its most advanced stage, the CRM would function as the central coordinator of these contracts. Because autonomous contracts are capable of modifying their own terms in response to changing conditions, the CRM would be engaged in continuous coordination, facilitating perpetual renegotiation among interdependent agreements. Consequently, the firm party to these contracts would experience an ongoing dynamic that resembles both "business as usual" and continual corporate reorganization.

That would fundamentally change the nature of corporate restructuring. Currently, a corporate restructuring, whether in- or out-of-court, is a discrete economic event that occurs when a firm experiences or is threatened with financial distress.[140] The task for the corporation's managers is to find the point where the company is distressed enough to warrant calling for a workout, yet not so distressed as to squander the company's going concern value and make any reorganization futile.[141] That means that the first task for any corporate restructuring is to decide when it should occur.

Self-driving contracts and the CRM could jointly upend this temporal assumption. Both could make the corporate workout a continuous process that prevents an acute crisis situation from even arising. A company's contracts would simply be in a constant state of renegotiation. And because renegotiation would be the norm, not the exception, the company's operations would match that constant state of flux, too. The company's financial and operational profiles would be both stable and subject to ongoing, perhaps endless, renegotiation.

Two implications stand out. First, human roles in corporate workouts, particularly those of lawyers and other restructuring professionals, will change. Fewer negotiations

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137. *See* Horst Eidenmüller, *Comparative Corporate Insolvency Law, Second Edition* (Eur. Corp. Governance Inst., Working Paper No. 738, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4625897 [https://perma.cc/75EU-65RY].

138. *See* Anthony J. Casey & Anthony Niblett, *Self-Driving Contracts*, 43 J. CORP. L. 1 (2017) (introducing the concept of AI-powered contracts that automatically fill gaps and adapt to real-time contingencies without adjudication).

139. *Id.* at 1.

140. WORLD BANK GROUP, *supra* note 3, at 1.

141. *See* Sarah Paterson & Adrian Walters, *Chapter 11's Inclusivity Problem*, 55 ARIZ. ST. L.J. 1227, 1230–31 (2023) (explaining that early intervention in financial distress preserves going concern value while delay renders reorganization increasingly futile).

mean fewer human negotiators. Many processes and decisions will be completely automated. And the better the algorithms work, the less need for ad hoc crisis management. Where humans continue to be involved, they will be assisted by intelligent machines, which they have to use skillfully. Lawyers and financial advisors will work together with computer and data scientists in multi-disciplinary teams. Traditional human negotiation skills and experience will be far less important than they are today.

Second, *ceteris paribus*, firms will be more efficiently financed and managed, and corporate bankruptcies will occur less frequently. CRMs will reduce corporate workouts' process fragility, and CRMs along with self-driving contracts will help firms avoid acute financial distress in the first place. As a result, firms' financing costs could decline substantially. Moreover, as AI applications assume a growing role in corporate financing, management, and restructuring, the conventional boundary between corporate governance and corporate bankruptcy becomes increasingly blurred. The "Self-Driving Corporation"[142] is thus positioned to avert severe financial distress; and in instances where such distress does arise, the CRM would restructure the firm's financial architecture accordingly.

Chapter 11 or similar processes will still be required as a backup. And state-supplied corporate restructurings would benefit from adopting technological innovations that have proven successful in the private sector. In turn, private platform providers could emulate best legal restructuring practices in the operating conditions of their business. Yet the ability to renegotiate automated contracts on an ongoing basis means that there will be less need to identify discrete moments in time in which to corral investors and decide what to do with the company going forward. So, while in-court proceedings may still be useful to some extent, the rise of CRMs and self-driving contracts would be the end of the corporate workout as we know it.

CONCLUSION

AI applications are fundamentally changing general business practices and commercial negotiations at breakneck speed. Corporate workouts often involve complicated negotiations between many different stakeholders with diverse interests and preferences. If successful, they promise significant savings in direct, and especially indirect, bankruptcy costs. However, corporate workouts suffer from significant "process fragility" due to collective action problems and strategic behavior.

AI tools have the potential to reduce this process's fragility and stabilize corporate workouts. The core idea of this Article is to introduce a private, online, and open platform—the Corporate Restructuring Machine—designed to support or even automate corporate workouts, using AI tools and services. Companies and their stakeholders (particularly creditors and shareholders) could join the platform and opt into AI applications at different times, for different services, and at different prices. Based on previous work on the use of AI applications in negotiations, we have shown that the CRM would enable parties to negotiate more efficiently and inclusively. The endpoint of the development could be a fully automated (AI-driven), comprehensive, and private reorganization process/system that changes the very notion of a "corporate workout."

142. *See* Armour & Eidenmüller, *supra* note 98, at 98–99.

We end with a word of caution. Engineers develop applications based on what is technically feasible. This includes the data required to train supervised learning algorithms. The result could be a new process that is more efficient than the old one. However, there is also the risk of making compromises on key elements of existing systems and processes in order to automate what can be automated. System designers need to be aware of this trade-off. Technical feasibility should not dictate how corporate restructuring practice evolves.