

Final Report on the Work of the Task Force on Securities Holding Infrastructure: Part Two*

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* The views expressed herein have not been reviewed or approved by the House of Delegates or Board of Governors of the American Bar Association (the ABA) and should not be construed as representing the position of the ABA. In addition, this Report does not necessarily reflect the views of all members of the Business Law Section, the Task Force, or their respective firms or clients.

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I. INTRODUCTION AND EXECUTIVE SUMMARY

This is Part Two of a two-part Final Report on the Work of the Task Force on Securities Holding Infrastructure. The Task Force was organized in 2020 within the ABA Section of Business Law (Section) and is sponsored by seven of the Section’s committees: Banking, Bankruptcy Study and Policy, Business Bankruptcy, Commercial Finance, Federal Regulation of Securities, Trust Indentures and Indenture Trustees, and Uniform Commercial Code. The Task Force undertook an examination of the prevailing financial infrastructure for the post-settlement holding of securities in the United States. The Mission Statement of the Task Force² charged it to:

- (i) examine the infrastructure for the intermediated holding of securities in the United States, (ii) identify, analyze, and assess the significance of any problems associated with the infrastructure, and (iii) identify and assess plausible means of addressing any problems.

Part One of this Report examined the current infrastructure and identified, analyzed, and assessed problems associated with the infrastructure.³ This Part Two considers plausible means of addressing the problems.

Interested persons across a broad spectrum of legal and financial market professionals have participated in the meetings of the Task Force. Participation was not limited to members of the ABA or the Section. During 2020 through 2023 the Task Force held sixteen virtual, online, and hybrid (online and in-person) meetings, including meetings in connection with the Section’s Spring and Fall meetings.⁴ Seven of the meetings involved formal panel discussions by experts on the relevant topics followed by open discussions. The Task Force chairs worked with various Task Force participants in organizing the meetings, preparing notes of the meetings, and analyzing the findings and discussions held during the meetings.

2. ABA Section of Bus. Law, Task Force on Securities Holding Infrastructure, *Mission Statement* (on file with authors).

3. See Charles W. Mooney, Jr. & Sandra M. Rocks, *Final Report on the Work of the Task Force on Securities Holding Infrastructure: Part One*, 79 BUS. LAW. 343 (2024).

4. The Agendas and Notes of the meetings are on file with the authors.

We submitted an Interim Report on the Work of the Task Force to the Council of the Section⁵ and the Council voted in September 2023 to support the recommendations of the Interim Report. The principal recommendation was for an independent study of the securities holding infrastructure. This recommendation is reiterated and discussed in this Part Two of the Report.

As contemplated by this Report, the securities holding “infrastructure” includes the formal mechanisms for intermediated holding on the books of intermediaries as well as direct holding on the books of issuers, including the relevant legal and regulatory environment. The infrastructure also includes the various mechanisms for communications and recordkeeping, the nature of relationships among market participants, and the accessibility of information and records (or lack thereof). This Report necessarily takes account of prevailing systems for trading and settlement, but the principal focus is on the post-settlement holding infrastructure—the so-called “intermediated” or “indirect” holding system.

Given the breadth and depth of the Mission Statement’s goals and the Task Force’s constraints of time and resources, both Parts of the Report rely substantially on earlier work, as supplemented and updated by various insights contributed during meetings of the Task Force and various other contributions by Task Force participants. This Report also draws on other resources, including published materials, conversations of the authors with securities market professionals, regulators, and attorneys, and in general our experience, judgment, and knowledge. We have made every effort to present in this Report descriptions, analyses, and conclusions that are fair and objective. This goal benefited from the circulation of drafts for comment and the inclusion of perspectives that reflect the views offered by others. We present a neutral approach that takes no position on whether modifications, material or otherwise, in the post-settlement securities holding infrastructure are needed or, if needed, the nature of such modifications. Indeed, consistent with this approach and as noted above, the principal recommendation made in this Report calls not for modifications but for an independent benefit-cost study of the securities holding infrastructure.

We note an important caveat. Throughout this Report, references to “transparency” or “transparent” models of a securities holding infrastructure encompass the reliable identifiability, and the nature and extent of holdings, of investors (“beneficial owners” or “BOs”) who hold interests in securities as account holders resulting from credits to their securities accounts with securities intermediaries.⁶ Although transparency and a transparent system contemplate that the identity and holdings of BOs would be reliably (and definitively) recorded and maintained and be readily

5. CHARLES W. MOONEY, JR. & SANDRA M. ROCKS, INTERIM REPORT ON THE WORK OF THE AMERICAN BAR ASSOCIATION SECTION OF BUSINESS LAW TASK FORCE ON SECURITIES HOLDING INFRASTRUCTURE (Aug. 17, 2023) [hereinafter INTERIM REPORT] (on file with authors).

6. As used here, references to BOs are to the “ultimate beneficial owners” of securities in the intermediated system. The BOs, who may be any type of person, such as natural persons or institutional investors, hold securities in securities accounts at the “lowest tier”—i.e., securities account holders that do not hold securities as intermediaries for other securities account holders. A BO might, however, hold as a nominee, agent, trustee, or otherwise (but not as a securities intermediary) on behalf of another person.

accessible, we do not intend any implication as to who would (or would not) be entitled to have access to or use that information. We assume that the information would be available only to those who are legally entitled to access it. We assume that any desirable infrastructure modification would not necessarily require any change as to *whom* the information would be made available or for what purposes. Modification would not necessarily involve any change from the status quo as to issues of confidentiality and privacy. As an example, the current system for treatment of BOs in the intermediated system, under which Non-Objecting Beneficial Owners (NOBOs) or Objecting Beneficial Owners (OBOs) can choose whether their identity would be revealed to issuers, could be maintained.⁷ In that context, the “identification” of a BO need not be by *name* and OBO shareholders could be visible to an issuer only as holding an identified portion of a fungible bulk. Note that the identity of BOs is *already* maintained in the intermediated holding system. But currently there is no reliable and efficient mechanism for making that information available continuously and on a timely and current basis to those who need it and who are entitled to it.

The Task Force chairs are the authors of this Report. However, participants in the work of the Task Force and several other interested persons have been afforded the opportunity to review and comment on drafts of the Report. Comments received during this process have been seriously considered and most taken on board. The chairs are grateful for the many comments on drafts and suggestions for improvements.

This Part Two of the Report proceeds as follows. Following this Introduction and Executive Summary, Part II provides a very brief overview of the intermediated securities holding infrastructure and the problems associated with the infrastructure—matters addressed in detail in Part One. Part III then offers a major contribution contemplated by the Mission Statement. It explores various plausible means of addressing the identified problems associated with the infrastructure. The plausibility of the means considered here and whether they would be superior to the status quo would, of course, be a central inquiry of the independent study recommended here. On the other hand, claims that the existing intermediated infrastructure need not be materially modified merely because it adequately addresses its original goals (clearance and settlement) are at best incomplete.⁸ These claims are especially open to question and further investigation because, to our knowledge, no thorough examination of the comparative benefits of different approaches has been undertaken by any major market participant, relevant regulatory authority, or independent investigators.

Part IV summarizes the important areas on which there is a consensus, or at least strong support, among those who participated in the Task Force. Part V then outlines the various challenges and obstacles facing any implementation of various means for addressing the problems. Given practical constraints, reaching a consensus on specific modifications or material changes of the infrastructure was not feasible—and not sought. Part VI discusses the principal recommendation of

7. See Mooney & Rocks, *supra* note 3, pt. III.K (discussing OBO-NOBO system).

8. These claims sometimes are encapsulated in the assertion that “if it ain’t broke don’t fix it.”

this Report for an independent benefit-cost analysis and study of the securities holding infrastructure. Part VII concludes this Part Two of the Report.

II. INTERMEDIATED SECURITIES HOLDING INFRASTRUCTURE AND PROBLEMS ASSOCIATED WITH THE INFRASTRUCTURE: A BRIEF OVERVIEW

This Part provides a very brief overview of the intermediated securities holding infrastructure and some of the various problems associated with the infrastructure. Parts III and IV of Part One of this Report provide a detailed overview of the infrastructure and identification of problems. For convenience this Part contains the bare minimum of detail needed to provide some context for the discussion below in Part III of plausible means of addressing the problems. However, this Part Two of the Report assumes that readers have first read Part One.

The intermediated (“indirect”) securities holding infrastructure in the United States was developed as a solution to the problems of the direct-holding system. In a direct-holding system, entities and individuals hold securities in the form of certificates (or, sometimes, as book entries for uncertificated securities) that represent a property interest in or an obligation owed by the issuer, with security holders being registered owners on the books of issuers. Motivated by the so-called “paperwork crisis” of the 1960s, over the following two decades a complex intermediated securities holding infrastructure developed. Today, most publicly traded equity and (non-United States Treasury and Agency) debt securities are held by The Depository Trust Company (DTC), a central securities depository for safekeeping of securities and a subsidiary of The Depository Trust & Clearing Corporation (DTCC).⁹ DTC’s nominee, Cede & Co., is the registered owner of these securities on the books of the various issuers. DTC records beneficial ownership of securities by its securities intermediary participants—generally banks and broker-dealers—as electronic book-entries, thereby allowing beneficial ownership interests to be transferred through an electronic book-entry delivery system. Uniform Commercial Code (U.C.C.) Articles 8 and 9 provide the modern rules of private, commercial law governing transfers of and security interests in securities held in the intermediated securities holding system.

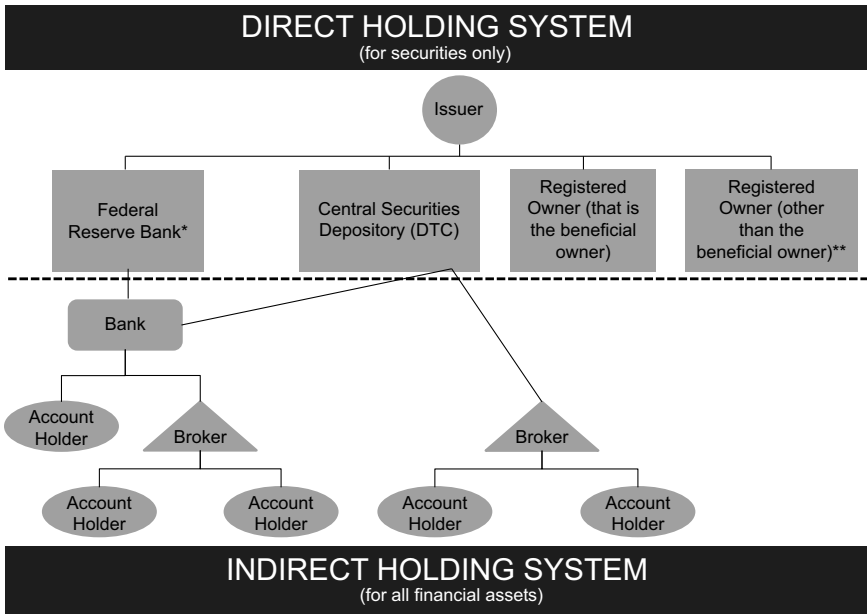
The simplified diagram below reflects and compares the direct and the indirect (intermediated) holding systems.¹⁰

The intermediated holding infrastructure has served well its primary function of facilitating trading, clearance, and settlement for securities transactions in the public securities markets.¹¹ It also affords considerable flexibility and

9. The common shareholders of DTCC are the banks and broker-dealers that are the participants and users of its clearing corporation subsidiaries, including DTC.

10. This simplified diagram illustrates only the basic distinction between the direct and indirect (intermediated) holding systems.

11. This Report addresses primarily equity securities and corporate and municipal debt securities and not U.S. Treasury and U.S. Agency securities.



* This would only be the case for U.S. Treasury and Agency securities and certain other issuances that a Federal Reserve Bank accepts.

** These registered owners could be acting as securities intermediaries – such as when a broker-dealer carries mutual fund shares for a customer, or could be acting for a beneficial owner in another capacity, such as agent or trustee.

convenience for investors who hold interests in securities as account holders resulting from credits to their securities accounts with securities intermediaries.

Securities that are publicly traded in the United States are typically held on deposit at DTC and benefit from book-entry clearance (verification of trade data) and settlement (book-entry deliveries of securities and payment for securities) processes available at DTC and National Securities Clearing Corporation (NSCC, which, like DTC, is a subsidiary of DTCC). NSCC's Continuous Net Settlement (CNS) system handles most broker-to-broker trades in the United States for equity securities, corporate and municipal bonds, and various other securities. In the CNS system, NSCC takes on the role of making payments and deliveries to each participant counterparty and receiving payments and deliveries from each counterparty. On each settlement date each participant has an obligation to deliver to or the right to receive from NSCC a netted number or amount for each relevant security issue and an obligation to pay to or right to receive payment from NSCC a netted sum. This multilateral netting reduces costs, mitigates counterparty risk, and reduces the number of settlement obligations.

In general, a securities intermediary has a duty to maintain sufficient securities to cover credits that the intermediary has made to securities accounts of its account holders.¹² But an intermediary's compliance with another applicable law is

12. U.C.C. § 8-504(a) (2023).

compliance with that U.C.C. duty.¹³ For the duty under section 8-504(a), the relevant other law for a registered broker-dealer is the SEC's customer protection rule, SEC Rule 15c3-3.¹⁴ Subject to that rule's complex requirements, a broker-dealer may rehypothecate—(i.e., create a security interest securing a loan of funds (a repledge), transfer in a repurchase transaction (repo), or transfer in a securities loan)—a portion of the customer securities in which the broker-dealer has a security interest (margin securities).¹⁵ Rehypothecation is a typical means for a broker dealer to fund loans by the broker-dealer to its customers (margin loans).

Pursuant to a rehypothecation the broker-dealer (and therefore its customers) may have lost all connection with the rehypothecated securities. However, the broker-dealer normally does not debit its customers' accounts with respect to rehypothecated securities (or even allocate rehypothecated securities to any particular customer). Thus, an imbalance may be created—the securities of a particular issue credited to the broker-dealer's customer accounts may exceed, in number or amount, the securities of that issue held by the broker-dealer (at its depository or another intermediary or otherwise).

Risks associated with such imbalances are substantially mitigated by the SEC's customer protection rule and other SEC rules. For example, a broker-dealer must maintain a special reserve bank account for the exclusive benefit of its customers. It must deposit (i.e., credit) to the reserve account cash or U.S. government issued or guaranteed securities in amounts based on a reserve formula.¹⁶ Assuming a broker-dealer's compliance, the customer protection rule, including the reserve account and other restrictions, serve to set aside for customers sufficient value to satisfy customers' claims in case of a broker-dealer's insolvency proceeding.

Shareholder voting (“proxy plumbing”) and related problems have received much attention in the commentary and from the SEC.¹⁷ An issuer may treat the holder of a security on its books as being exclusively entitled to vote and exercise all other rights of an owner of the security.¹⁸ Because BOs in the intermediated holding system necessarily do not hold shares of record, they may vote shares beneficially owned only if they receive a proxy from the record holder, which typically is Cede & Co., DTC's nominee. Issuers typically employ proxy solicitors to obtain proxy cards from BOs and meet quorum requirements for meetings. Issuers typically rely on third-party inspectors or tabulators for determining voting credentials and counting votes.

The complexity of the “proxy plumbing” results primarily from the intermediated holding infrastructure. DTC facilitates voting by BOs by distributing an “omnibus proxy” to each of its participants holding shares eligible to be voted. The participants (typically through service providers), in turn, provide their account holders with proxy materials provided by the issuer and voting instruction forms (VIFs) for shares held for the customers. For a given intermediary, there may be multiple

13. *Id.* § 8-509(a).

14. 17 C.F.R. § 240.15c3-3 (2024).

15. See Mooney & Rocks, *supra* note 3, pt. III.E.

16. *Id.* pt. III.F.

17. See *id.* pt. III.K.

18. U.C.C. § 8-207(a) (2023).

channels of communication and ownership that must be tracked for a given vote. Issuers wishing to communicate with their shareholders also must grapple with the intermediated holding system. Because BOs do not show up on the stock ledgers of public companies, many BOs are not in direct communication with the issuers in which they are invested.

BOs seeking to exercise rights other than shareholder voting also must confront their lack of privity with issuers.¹⁹ Because Cede & Co. typically is the registered security holder in the intermediated holding system for publicly traded equity securities and corporate and municipal debt securities, the power to exercise security holder rights must begin with DTC (as with proxies for shareholder voting). DTC accommodates some aspects of this situation. A DTC participant may request DTC, on behalf of Cede & Co., to issue a letter confirming that a participant, or if applicable another BO (e.g., the participant's customer), holds a position (e.g., a number of shares or a principal amount of debt securities) in a particular securities issue. Upon a participant's request, DTC also issues such letters in connection with the exercise of other security holder rights.

Part III of Part One of this Report describes various additional transactional patterns, roles of market participants, types of securities, regulatory aspects, and DTCC programs related to the intermediated holding structure.²⁰

Notwithstanding its benefits, several problem areas have been identified which arise from or are exacerbated by the intermediated holding infrastructure. Part IV of Part One of this Report addresses these problems.

The fundamental risks associated with intermediated holding of securities are the failure of a securities intermediary accompanied by a shortfall in the securities and other assets available to satisfy the claims of customers.²¹ These risks have been managed well in the United States and in many other countries, in general thanks to substantial regulatory intervention, both prudential and supervisory. That intermediary risk has been managed well and actual losses have been minimal does not diminish the reality and seriousness of these risks. However, these risks of actual failure, shortfall, and delay are not the only costs of intermediary risk. Other costs relate to protecting the rights and interests of BOs from intermediary risks, including costs of the regulatory supervision and intermediary compliance.

Major causes of the prevailing problems relating to the exercise of security holder rights by BOs are the lack of transparency as to the identity of BOs and their holdings and the absence of privity, actual or functional, between BOs and issuers.²² The current infrastructure may be contrasted with infrastructures that provide for some variation of either an intermediated system that is "transparent"²³

19. See Mooney & Rocks, *supra* note 3, pt. III.L.

20. See, e.g., *id.* pt. III.C (clearing brokers and self-clearing firms), pt. G (prime brokerage), pt. H (security entitlements as collateral), pt. J (bank custody), pt. M (Book-Entry-Only debt securities), pt. N (DTC's Fast Automated Securities Transfer system and Direct Registration System), and pt. O (DTC's Fund/SERV system).

21. See *id.* pt. IV.A.

22. See *id.* pt. IV.B.

23. See *id.* Part I (discussing meaning and context of the terms "transparent" and "transparency" as used in this Report).

or one that is based on the direct holding of securities on the books of issuers. A related source of problems is the existence of imbalances—the number or amount of an issue of securities credited to a securities account does not necessarily reflect the extent of the account holder’s property interest.²⁴ It is the amount or number credited to securities accounts of BOs that is the basis for preparing and obtaining proxies in the process of shareholder voting, for the exercise of rights in connection with corporate actions, and for the issuance by DTC of letters identifying the positions in securities held by BOs in the intermediated holding system.

Although shareholder voting plays a central role in corporate governance, the system for voting by BOs is problematic due to its imprecision and high costs.²⁵ The principal problems burdening the U.S. shareholder voting system result primarily from the complexity of the intermediated holding structure, which results from the need to overcome nontransparency and lack of privity. Problems in shareholder voting within the intermediated securities system are well-documented in ongoing critiques. Issuer-BO communications face the same structural intermediation-based impediments that prevail for proxy plumbing in the voting context, complicated by the OBO/NOBO system.²⁶

Problems associated with shareholder voting have received considerably more attention from the SEC, the academic literature, and practitioners than the exercise and enforcement of rights and remedies by security holders in other contexts. However, as with shareholder voting, in these other contexts the lack of privity with issuers (and, where applicable, with indenture trustees or other agents) resulting from intermediated holding imposes considerable transaction costs on both shareholders and bondholders.²⁷

Part IV of Part One of this Report describes various additional problematic issues.²⁸

III. PLAUSIBLE MEANS OF ADDRESSING PROBLEMS ASSOCIATED WITH INTERMEDIATED SECURITIES HOLDING INFRASTRUCTURE

A. APPROACH IN GENERAL

The Mission Statement calls upon the Task Force to “identify and assess plausible means of addressing any problems” that it identifies. The Task Force has not sought to reach conclusions on the ultimate issues as to whether material changes should be made to the intermediated holding infrastructure or the details and shape of any such modifications. This approach appropriately takes account of the essentially voluntary and self-selected makeup of those who have

24. See *id.* pt. IV.B.1.

25. *Id.* pt. IV.B.2.

26. *Id.*

27. *Id.* pt. IV.B.3.

28. See *id.* pt. IV.C (execution and attachment against intermediated securities), pt. D (compliance issues: anti-money laundering, sanctions compliance, and anti-terrorist financing), pt. E (costs and errors).

participated in the Task Force and the unlikely prospect that any consensus could be reached on these ultimate issues. Instead, the recommendation in Part VI calls for an independent study and benefit-cost analyses and the encouragement of concrete proposals for addressing the prevailing problems.

One approach to the prevailing problems would be to leave the infrastructure essentially as it is and to continue with current approaches but with improvements that would address at least some of the problems. Essentially, this approach would be to keep on doing the same things in general but to do them better. That approach might well yield some benefits at the margins. But, if the experience with efforts to implement even incremental and modest changes in the context of shareholder voting provides any lessons, one such lesson is that such a modest plan would be unlikely to yield significant improvements. However, with a major commitment, encouragement, and incentives from, for example, the SEC and constituencies such as the issuer and investor communities, perhaps material improvements could be achieved. The remainder of this Part III considers potential plausible infrastructure modifications that to date have received relatively little attention.

B. THREE APPROACHES FOR INFRASTRUCTURE MODIFICATION

The following discussion outlines three general approaches to modifications of the infrastructure that would address problems arising from the two distinct, but closely related, principal identified problems—non-transparency²⁹ of the intermediated holding system and its impairment and frustration of the exercise by BOs of legal entitlements.³⁰ As discussed in Part III.A, each set of problems is caused or exacerbated by the prevailing intermediated holding system.

These approaches focus on modification of prevailing methods of communications and recordkeeping, including modifications of the holding infrastructure. There are more direct approaches to certain problems, such as shareholder voting and the exercise of other security holder rights. One such approach might be to modify the underlying legal entitlements. For example, corporate laws might be modified to permit BOs in the intermediated holding system (in addition to registered owners) to vote and to exercise other rights directly against issuers.³¹ Similar

29. See *supra* Part I (discussing meaning and context of the terms “transparent” and “transparency” as used in this Report).

30. These approaches are not, of course, the only possible ones. But they do respond to the responsibility of the Task Force to identify and assess plausible means of addressing the identified problems and provide a useful point of departure for further discussions and analyses. Note, however, that infrastructure modification (other than a direct-holding model) would not resolve potentially problematic aspects of the prohibition of upper-tier attachment under U.C.C. section 8-112(c) or other potential problems presented by provisions of U.C.C. Article 8 that were discussed in meetings of the Task Force. See Mooney & Rocks, *supra* note 3, pt. IV.C (discussing execution and attachment against intermediated securities). The Task Force chairs communicated these problems to the leadership of the U.C.C. Committee of the ABA Business Law Section. That Committee’s Subcommittee on Investment Securities has established a Task Force on Article 8, which will consider the possible need for revisions to U.C.C. Article 8 and its official comments.

31. The Model Business Corporation Act provides that a corporation’s board may establish procedures for a beneficial owner holding through an intermediary to be treated as a shareholder of record. MODEL BUS. CORP. ACT ANN. § 7.23 (2023). However, most corporation laws limit the right to vote to

changes in the structure of debt securities might entitle BOs to exercise rights directly against issuers and indenture trustees. But these approaches generally would require that the relevant BOs could be definitively determined and identified, a result that would either assume away existing challenges or require infrastructure modifications. Moreover, even if a BO is identified, given the operation of the customer protection rule, the amount or number of securities credited to the BO's securities account would not necessarily reflect the actual interests held by the BO.³² Consequently, permitting the direct exercise rights by BOs would require material infrastructure modification to overcome that problem. In the case of shareholder rights, for example, such an approach also would require changes in most corporate laws of relevant jurisdictions and possibly U.C.C. Article 8.

Another approach, at least for equity interests, might be adoption of a system for "traceable shares" that would replace the current approach of treating shares as part of a fungible bulk for purposes of trading, clearance and settlement, and post settlement holding in the intermediated holding system.³³ Presumably, each traceable share would have the functional equivalent of a serial number (compare paper currency in the United States). Introducing and establishing as the norm such nonfungible, traceable shares likely would require an enormous *sui generis* restructuring of securities markets.³⁴ Traceable shares could be helpful for addressing some issues under current law in which shares are not treated as fungible but where tracing of shares forming part of a fungible bulk is problematic in an intermediated environment.³⁵ It is questionable whether there is a sufficiently significant subset of non-fungible treatment to warrant creating such a new system from scratch (not to mention that during a possibly very long transition period, many non-traceable shares would remain in the market). For example, if there generally is no need for traceable shares in trading, clearing and settlement, and post-settlement holding, it might make sense to (i) create tracing mechanisms only for when it is necessary (e.g., Section 11 claims) or (ii) consider applying (or modifying) underlying law to provide tracing mechanisms or to eliminate the necessity of tracing under the applicable legal doctrine.³⁶

actual shareholders of record or holders of proxies attributable to a shareholder of record. See, e.g., DEL. CODE ANN. tit. 8, § 219(c) (2024). Moreover, the virtually uniform practice of public corporations is to rely exclusively on the shareholder register for the determination of shareholders' voting rights. This practice protects issuers in the determination of voting rights and, no doubt, reflects the fact that there is no definitive and reliable means for issuers to determine beneficial ownership in the intermediated holding system.

32. See Mooney & Rocks, *supra* note 3, pts. III.F & III.I, IV.B.1.

33. George Geis has considered this approach in some detail. See George S. Geis, *Traceable Shares and Corporate Law*, 113 NW. U. L. REV. 227 (2018).

34. Perhaps blockchain-based platforms for issuance, registration, trading, and settlement of securities transactions could be a catalyst for such changes. See *id.* at 254–66.

35. See *id.* at 238–48 (discussing claims under section 11 of the Securities Act of 1933, 15 U.S.C. § 77k (2024), and exercise of appraisal rights under corporate laws); Mooney & Rocks, *supra* note 3, pt. IV.B.3 (same).

36. For a fascinating defense of tracing principles, when applied to further normative and policy objectives, see Kenneth C. Kettering, *Repledge and Pre-Default Sale of Securities Collateral Under Revised Article 9*, 74 CHI.-KENT L. REV. 1109, 1111–39 (1999).

For these reasons, this Report focuses on the plausible approaches suggested below—two flavors of transparency models and a direct-holding model. These approaches rely primarily (but with adjustments and adaptations) on the familiar current approaches of direct holding on the books of issuers and intermediated holding of fungible bulks of securities. That said, this Report should not be understood to discourage the independent study recommended in Part VI from considering different or additional approaches to the means of addressing prevailing problems.

1. Two Transparency Models

The data necessary to identify each BO and the details of its holdings for purposes of any transparency model for securities holding already reside in the current system. However, the data are scattered among many intermediaries and are not continuously and currently reconciled to account for imbalances. A transparent model would seek to overcome these problems.

The first general approach to transparency may be described as “synthetic” transparency (the synthetic transparency model). This would leave the intermediated securities holding infrastructure largely as it is, although it necessarily would involve cooperation and coordination among market participants, including DTCC, securities intermediaries, issuers, transfer agents, and (probably) third-party contractors. Synthetic transparency would address problems with an extensive overlay of “shadow” communications, recordkeeping, and agreements that would identify, track, and reconcile BOs and their interests. This would be a variation on (and improvement of) the current approach to shareholder voting, which relies on the dissemination and gathering of proxies with the administrative involvement of DTC and third-party contractors to allow BOs to vote shares through proxies. However, the synthetic transparency model would involve a standing, ongoing informational network for maintaining information on BOs rather than an ad hoc, case-by-case, episodic information flow. Presumably, the synthetic transparency model would incorporate improvements to the current system inspired by modifications such as those proposed in the IAC Recommendations.³⁷ The successful end-to-end confirmation of voting pilot project undertaken by the End-to-End Confirmation Working Group in 2022 offers some encouragement for increased transparency in the shareholder voting context.³⁸ But the 2022 project was a one-off operation, leaving unresolved how and by whom the process might be institutionalized on an ongoing basis.

The second general approach to transparency would involve more structural and fundamental modifications built upon the basic intermediated holding infrastructure. It would implement a transparent structure (the structural transparency model) as an integral part of the DTC-NSCC settlement and post-settlement intermediated holding system. Information as to the identity of BOs would be systematically and continuously organized, recorded, and reconciled

37. SEC INVESTOR ADVISORY COMM. (IAC), RECOMMENDATIONS OF THE SEC ADVISORY COMMITTEE, PROXY PLUMBING (Sept. 5, 2019), <https://www.sec.gov/spotlight/investor-advisory-committee-2012/iac-recommendation-proxy-plumbing.pdf> [hereinafter IAC RECOMMENDATIONS]; see Mooney & Rocks, *supra* note 3, pt. IV.B.2.

38. See Mooney & Rocks, *supra* note 3, pt. IV.B.2.

on a current (ideally, real-time, but at least daily) basis. However, as with the synthetic transparency model, the tiered, intermediated, omnibus account-based holding infrastructure would be maintained with the addition of these features. These two polar transparency models represent stylized paradigms for identifying the BOs (and their interests, discussed below). In practice, however, a transparency model could adopt an approach for identification of BOs and their interests along a spectrum between the two models. Although the two transparency models are functionally the same, they likely would involve differences in costs of implementation and maintenance. Once established, the structural transparency model might be less costly to maintain. On the other hand, the synthetic transparency model could afford more flexibility and might be more easily adjusted from time to time.

A transparent system could ameliorate several problems associated with the intermediated holding infrastructure. For example, in the shareholder voting context, proxies could be delivered to BOs directly, thereby avoiding multilayered chains of communication to and through non-BO intermediaries. One might also expect that the many errors that occur under the current proxy regime could be avoided and that expenses incurred for third-party services could be reduced. The expected increased accuracy and speed in the identification of BOs also could facilitate the delegations of powers by Cede & Co. (DTC's nominee) in connection with the exercise by BOs of security holder rights.

Although a more transparent system could result in enhanced efficiency and accurate identification of the BOs within the intermediated holding system, identification of BOs alone would not address another problem under the current system. As noted above, the number or amount of units of a security reflected on the books of a BO's intermediary is not necessarily an accurate reflection of a BO's *actual* beneficial interest (as opposed to the units to which the BO is ultimately *entitled* according to the intermediary's books). This is due to the types of imbalances that occur when broker-dealers maintain credits of units of a security to its account holders that exceed the number or amount of units that the intermediary itself actually holds.³⁹ Notwithstanding this fact, both the operation of the proxy system for shareholder voting and DTC's designation of powers presume that the number of units credited to a BO's securities account is an accurate reflection of the BO's holdings. To resolve this problem, in addition to identifying the BOs, it would be necessary for a transparent model to implement a methodology for allocating the units actually held by an intermediary to the intermediary's account holders (including BOs). No such mechanism currently exists.

2. Direct-holding Model

A third approach would implement as the norm a system of direct holding (direct-holding model). The direct-holding model would allow BOs—post-settlement—routinely to hold directly on the books of the issuers of securities.

39. See *id.* pts. III.I, IV.B.1.

The direct-holding model would address both core problems not only by identifying the registered owners (ROs) of securities but also by empowering the holders to exercise directly all rights of security holders. As discussed below, the foregoing observations concerning issues of confidentiality and privacy under the transparency models could be applied as well to the direct-holding model.

As already noted, the current system already includes the data necessary to identify each BO and the details of its holdings. If the data were consolidated and reconciled to identify each BO and its holdings as to each issue of securities, the same data that would be the basis for transparency would be sufficient to add each BO as the RO on the books of each relevant issuer. In this way, any transparent system would provide the basis for direct holding.

Adoption of the direct-holding model could ameliorate the problems associated with non-transparency and the impairment of the exercise of legal entitlements by BOs without many of the limitations of the transparency models. Not only would each directly holding investor be an RO on an issuer's books, but the quantity of units reflected there would be definitive. Moreover, implementing the direct-holding model could be less complicated and more straightforward than putting in place either of the transparency models. For example, at the end of the settlement cycle instead of crediting or debiting an investor's securities account, each investor dealing with the security issue would receive an increase or decrease in its units on the issuer's (or transfer agent's) books. In like fashion, when under the current system balances held by Cede & Co. on an issuer's (or transfer agent's) books would be adjusted with net increases or decreases of units of a security issue, adjustments would instead also result in each investor dealing with the security issue receiving an increase or decrease in its units on the issuer's (or transfer agent's) books. It would not be necessary to adjust holdings at every level of intermediation as under the current regime. Moreover, the time and costs of communicating and reconciling holdings at every level would be avoided thereafter (for example in the operation of the proxy plumbing system). Obviously, adoption of a direct-holding model would involve modification of the existing direct-holding infrastructure and might also involve regulatory changes and adjustments in settlement systems, financing practices, and other areas.

C. MEETING THE CHALLENGES FOR STRUCTURING A DIRECT-HOLDING MODEL WHILE PRESERVING CURRENT BENEFITS

Notwithstanding the potential benefits of the direct-holding model, the design, construction, and implementation of that model would face several challenges. One major challenge would be the preservation and adaptation of (or substitution for) several important attributes (viewed by many as beneficial) of the current intermediated holding system. These potentially beneficial attributes would include (i) confidentiality and privacy for BOs, including NOBO/OBO rules, (ii) treatment of fails to deliver and fails to receive, (iii) the customer protection rule, (iv) rehypothecation—securities lending, repos, and repledge, (v) margin lending and,

more generally, substitutes for security interests in security entitlements currently perfected by control agreements with securities intermediaries, (vi) global certificates and DTC's BEO structure for debt securities,⁴⁰ (vii) holding through bank custodians by investment companies, and (viii) providing ROs with consolidated reports of holdings with multiple issuers that would be substantially equivalent to statements for securities accounts.⁴¹ There are plausible approaches for preserving under a direct-holding model the functional attributes and benefits of intermediated holding.⁴² For example, preservation of many benefits could be facilitated by a centralized system involving issuers or transfer agents for all DTC-eligible securities. Such a system could allow an RO to receive statements reflecting all direct holdings with all relevant issuers instead of separate documentation and communications on an issuer-by-issuer basis.⁴³ Moreover, DTC already has systems in place that efficiently connect issuers with ROs⁴⁴ and issuers with Cede & Co..⁴⁵

The principal and overarching challenge for a direct-holding model would be how the model could achieve the perceived benefits of the prevailing intermediated holding infrastructure while addressing prevailing problems. Its deficiencies aside, the current system's use of omnibus accounts and custody chains is widely

40. For bonds issued under the BEO structure, the process of migration to a direct-holding infrastructure would depend on the terms of the bond documentation (typically the indenture). In some cases, the issuer or the depository has an option to unwind the global security certificates and cause the issuance of definitive securities registered in the names of the BOs. If that option is not available, many (probably most) indentures provide that the issuer and the indenture trustee can agree to amend the indenture if the bondholders would not be adversely affected. An amendment permitting direct holding would appear easily to meet that standard.

41. For institutional investors that are investment companies, facilitating direct holding would require amendments of relevant SEC Rules. See Mooney & Rocks, *supra* note 3, pt. III.J (discussing use of bank custodians by investment companies).

42. See Charles W. Mooney, Jr., *Beyond Intermediation: A New (FinTech) Model for Securities Holding Infrastructures*, 22 U. Pa. J. Bus. L. 386, 427–42, 449–51 (2020) (describing how many of these attributes could be preserved or adapted in a direct-holding environment). An important consideration would be the potential disruptiveness of preserving current flexibility in a direct-holding model. For example, this might depend in part on the proportion of securities accounts that currently involve margin loans or other security interests perfected by control agreements. The discussion at the September 15, 2020, meeting of the Task Force, which focused on broker-dealer operations, indicated that a relatively small percentage of margin accounts involved actual margin loans. See Task Force Meeting Notes of September 15, 2020, at 6–7 (on file with authors). Responses of the SEC, FINRA, and DTCC to subsequent inquiries seeking data on this question indicated that the data was not readily available. This data would be important for a study such as that recommended in Part VI.

43. Recall that the purpose of this discussion is to identify “plausible means of addressing” problems, not to lay out the details of a future direct-holding system or the details of how it might meet the needs of investors for convenience and flexibility. Note as well that it has been a longstanding practice for some securities intermediaries to maintain for account holders (and to reflect on account statements) an itemization of “below the line” or “serviced” assets that the intermediary monitors but that are not actually held by the intermediary and credited to a securities account.

44. See *Direct Registration System*, DTCC, <https://www.dtcc.com/settlement-and-asset-services/securities-processing/direct-registration-system> (last visited June 2, 2024); *FundSERV*, DTCC, <https://www.dtcc.com/wealth-management-services/mutual-fund-services/fund-serv> (last visited May 4, 2024); Mooney & Rocks, *supra* note 3, pts. III.N, III.O.

45. *The FAST Program*, DTCC, <https://www.dtcc.com/settlement-and-asset-services/agent-services/fast/support> (last visited May 4, 2024); Mooney & Rocks, *supra* note 3, pt. III.N.

perceived as efficiently addressing the “many to many” problem of connecting (albeit indirectly) multiple issuers to multiple investors. However, potential infrastructure modification cannot be understood or assessed by merely imagining the elimination or bypassing of the current intermediated holding systems (relying only on the direct-holding infrastructure as it has existed for many years and continues to exist today). Instead, the exercise must involve comparing the present infrastructure with concrete examples of plausible direct-holding models. Any defense of the status quo against direct-holding models based on conclusory assertions is inherently inadequate. But the same is equally true of conclusory claims of superiority of direct-holding models. Useful comparisons will require the development of direct-holding models that would preserve (or even enhance) current benefits without imposing the difficulties that gave rise to indirect holding as the norm, or at least the identification of concrete attributes of such hypothetical models. Emerging technologies, such as distributed ledger technology (including blockchain technology), may provide potential sources of optimism for the development of such models. But we do not assume that a direct-holding model *necessarily* could preserve current benefits in a substantially intact form. We leave any ultimate conclusions for the study recommended in Part VI.

Given the centrality of the OBO/NOBO regime for many investors, and because it is applicable only to intermediated holding by BOs, it is useful to consider how the regime might have continued relevance in a direct-holding environment. (This discussion assumes that the substance of the OBO/NOBO dichotomy would persist (and not be rejected on policy grounds) notwithstanding any modifications in the holding infrastructure). Although the regime currently applies only to BOs in the intermediated system, the attributes of an OBO election need not turn on whether an investor is a direct or indirect holder. Under the policies on which OBO/NOBO is based, a balance must exist between an issuer's wishes and needs to communicate and an investor's preference for OBO status. While direct holding could facilitate and lower costs of issuer communications with investors, there is no *a priori* reason why an investor's holding directly would preclude it from electing OBO-like status. For example, OBOs could be represented by a “nominee” on the books of each issuer. That would permit a transfer agent to protect the anonymity (*vis-à-vis* the issuer) of “OBO” shareholders while the holders would be direct holders—shareholders of record. Their *identity* simply would not be disclosed to the issuers. But communications and voting could be streamlined. This is not to say that service providers would not have useful roles to play, but their work could be narrowed and simplified. In any case, an investor's desire for OBO status need not be an infrastructure issue; it should be a policy debate on its own terms.

Another challenge for the direct-holding model would be to ensure that the actual use (as opposed to mere availability) of that infrastructure feature would indeed be the norm. Intermediated holding might be available on an optional basis, and (depending on the nature of infrastructure modifications) it might even be necessary at times for some purposes, such as margin lending.

But to obtain the desired benefits of the direct-holding model it would be necessary to provide a framework that provides very strong incentives for use.⁴⁶ Otherwise, it is a safe assumption that the intermediaries, or structural incentives, would steer investors away from direct holding and toward intermediated holding. For example, DTC's DRS system is structured in a way that does not accommodate many benefits that are available to indirect holders.⁴⁷

The most significant challenge for implementing a direct-holding model would be the accommodation of prevailing securities market transactional patterns inherent in securities accounts (for both cash (fully paid securities) and margin accounts), the customer protection rule, and, more generally, inherent in the perfection of security interests through control agreements. Following is a somewhat more detailed outline of the approach sketched above as to how such accommodations might be implemented.⁴⁸ This description is strictly functional—it identifies the elements and results that a direct-holding infrastructure would need to include for that accommodation. Our goal is to hypothesize the plausibility of a direct-holding infrastructure that would substantially preserve the flexibility and benefits that are currently available and to provide guidance and background for further development.⁴⁹ Perhaps those with expertise in financial infrastructure design would be unable to design modifications that would achieve the requisite functions and results with current technology. The independent study recommended here would address that question as well as whether, on balance, such modifications would be warranted even if possible.

An essential element of the infrastructure would be a platform or system that connects issuers of DTC-eligible securities,⁵⁰ ROs of securities, each RO's "broker-transactor" (a B-T, normally a DTC-NSCC participant that is a registered broker-dealer), DTC (Cede & Co.), NSCC, and certain transferees of interests in securities, including secured parties. The final steps in each securities settlement cycle would be the registration of ownership in the names of the ROs on the books of issuers instead of credits to the securities accounts of DTC participants and, where applicable, further credits down the chain to BOs.

An RO's B-T would have power to initiate transfers of registration of the securities as an agent of the RO and to bind the RO to a standard form control agreement

46. One possibility would be a default rule requiring investors to hold in the direct-holding system. If necessary, exceptions might be made, for example, for very high-value and volume investors (e.g., the largest hedge funds and investment companies).

47. See Mooney & Rocks, *supra* note 3, pt. III.N (discussing DTC's DRS); see also *infra* Part V.A (discussing potential opposition to infrastructure modifications that might alter business models).

48. The following discussion draws in part on Mooney, *supra* note 42, at 427–42.

49. We are not experts in information technology or financial infrastructure design. We leave ultimate conclusions and details to be reached in the study recommended here and subsequent development and implementation efforts.

50. Issuers that use transfer agents for purposes of registrations of transfers would be connected through the transfer agents' participation in the system. References to issuers in the following discussion include transfer agents of issuers, where applicable.

(without material limitations⁵¹) with the issuer that would confer control of securities on the RO's B-T or another person.⁵² For example, should an RO wish to sell securities in the market, it could request its B-T to transfer the securities to Cede & Co. for credit to the B-T's DTC account (or to its account with another broker-dealer) and to execute the trade. This step would be the functional equivalent of a BO's instruction to its broker-dealer securities intermediary to sell securities credited to its securities account. In similar fashion, an investor could submit a buy order to its B-T. The data reflecting the execution of these sell and buy orders would be the basis for reductions and additions to the holdings of ROs on the books of issuers.

For purposes of perfection of security interests, ROs also could authorize their B-Ts to negotiate one-off control agreements with issuers. This contemplates that securities in the modified direct-holding system would be uncertificated securities, thereby permitting acquisition of control by a control agreement with an issuer.⁵³ However, a standard form control agreement would be required for ROs and B-Ts acting in the context of synthetic securities accounts, discussed next.⁵⁴

The system would facilitate the creation and operation of "synthetic" securities accounts. This approach contemplates that an RO's B-T would have a role analogous to that of a broker-dealer securities intermediary for a securities account. The RO and the B-T would agree as to the RO's interests in specified issues of securities that would compose the assets subject to the synthetic account ("synthetic fully paid securities" or "synthetic margin securities").⁵⁵ The RO would

51. This authority would generally mimic the power held by Cede & Co. as registered owner in the current intermediated holding system, on which most intermediated holding currently is based. Unlike the context of typical control agreements with securities intermediaries, issuers entering into control agreements normally would not be actual or potential competing creditors with a superpriority. See U.C.C. § 9-328(3) (2023) (security interest held by securities intermediary in security entitlement or securities account maintained by the intermediary has priority over security interest held by another secured party).

52. Under the system's protocols, a B-T's presentation of an instruction to an issuer to register a transfer of securities could be made effective upon the issuer's acknowledgment of receipt or a (short) specified time thereafter.

53. U.C.C. § 8-106(c)(2) (2023) (control of uncertificated security by issuer's agreement to comply with purchaser's instructions without further consent by RO); *id.* § 9-106(a) (control of uncertificated security); *id.* § 9-314(a) (perfection of security interest in investment property by control). Any issuer also could permit an RO to hold as the RO of a certificated security, but the features of a modified direct-holding infrastructure would not be available to such an RO.

54. An important feature would be the effectiveness of registrations of transfers to be effected on the books of issuers (transfer agents, where applicable) without the need for deliveries of security certificates. See Mooney & Rocks, *supra* note 3, pt. III.N (discussing DTC's DRS). Issuers might be required to permit the issuance of uncertificated securities to be dealt with in the modified system or the eligibility of securities to be dealt with in the system could be conditioned on the issuer's permission of such issuance.

55. Because addressing the complexities of synthetic margin accounts are more challenging, most of the following discussion addresses those accounts. But the discussion should be read to apply as well to relevant aspects of synthetic cash accounts. The idea of synthetic securities accounts bears some similarity to aspects of the "open banking" proposal recently announced by the Consumer Financial Protection Bureau (CFPB). See *CFPB Proposes Rule to Jumpstart Competition and Accelerate Shift to Open Banking*, CFPB (Oct. 19, 2023), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-proposes-rule-to-jumpstart-competition-and-accelerate-shift-to-open-banking/>.

grant to the B-T a security interest in synthetic margin securities to secure all indebtedness of the RO to the B-T (or obligations as otherwise agreed), perfected by the standard form issuer control agreements with the issuers of the synthetic margin securities.⁵⁶

A key component of preserving current convenience and benefits for investors in a direct-holding environment would be the availability of consolidated statements and reports reflecting all of an RO's holdings of securities with all issuers included in synthetic securities accounts with a B-T.⁵⁷ The statements and reports could reflect information equivalent to the information included in statements provided to customers in connection with current securities accounts.

The system also would simulate the application of the customer protection rule⁵⁸ to a synthetic securities account as if it were a securities account maintained with the B-T. Calculations with respect to fully paid securities, excess margin securities, and non-excess margin securities would be made as if the customer protection rule applied.⁵⁹ The issuer control agreements and agent status of an RO's B-T would enable the B-T to engage in rehypothecation (repledge, securities lending, and repo) transactions to the extent permitted under the customer protection rule. The reserve account calculations and compliance also would be applied to synthetic margin accounts as if the customer protection rule applied. As with actual margin accounts maintained by broker-dealer intermediaries, application of the customer protection rule, including the reserve account compliance, would implicate all of the synthetic margin accounts maintained by a B-T as if the B-T were acting as a securities intermediary for actual margin accounts.

In one respect synthetic margin accounts would involve some differences in market practice from prevailing practice for actual margin accounts. In the case of transfers of securities in repo transactions and securities lending transactions for synthetic margin accounts, the securities necessarily would be transferred out of RO holdings with issuers and corresponding registrations of transfers would be made to new ROs (which might be ROs holding for their own accounts, as repo buyers, securities borrowers, or otherwise, or might be Cede & Co. (DTC) or other intermediaries for BO transferees). Currently, reductions from a broker-dealer's holdings at DTC or another intermediary would be made to reflect such transfers but no adjustments in the account balances of the broker-dealer's

56. One approach would be to deem (perhaps by SEC rule) an RO to enter into an industry standard issuer control agreement by instructing its B-T to acquire a security on its behalf or to act for the RO in connection with a synthetic securities account.

57. For convenience, this discussion focuses on synthetic securities accounts maintained by B-Ts. However, investment companies and clients of investment advisors could hold directly as ROs instead of investment companies holding through custodian banks and investment advisor clients holding through securities intermediaries. Banks could provide all the services to investment company ROs that custodian banks currently provide in domestic (U.S.) settings and investment advisors also could provide their customary services.

58. See Mooney & Rocks, *supra* note 3, pt. III.F (discussing customer protection rule).

59. It is also plausible that the SEC would at some point revise the customer protection rule to apply directly to synthetic margin accounts, either as a mandatory or optional rule.

customers would be made, leading to the imbalances discussed above. This continuation of customer balances without debits represents the broker-dealer's markers for its ongoing obligation to its customers in respect of the securities reposed out or loaned, which are owed back to the broker-dealer (for the collective benefit of customers) under the terms of the relevant rehypothecation transactions. Similar imbalances currently occur when there are fails to receive securities in settlement and broker-dealers nevertheless credit securities not yet received to the accounts of acquiring customers. Currently, neither allocations nor debits are made to particular customers' accounts to reflect any securities transferred by the broker-dealer in rehypothecation transactions and there are no indications to reflect a broker-dealer's obligations to return rehypothecated securities (other than the continuing credits to securities accounts). In the synthetic margin account context, in contrast, it would be necessary for the B-T to allocate to its client ROs the securities that have been rehypothecated by making reductions in the direct holdings of specific client ROs. The B-T also would need to maintain a corresponding ledger of securities "deliverable" by it (its RO clients' securities "receivable") to ensure that this obligation would be included in the clients' net equity balances.⁶⁰

The overarching theme for a system of synthetic securities accounts would be that the state of "repose" for investors would be as ROs of securities instead of having securities credited to securities accounts, with relatively minor exceptions for imbalances permitted by the customer protection rule and other applicable SEC rules applied synthetically. But this discussion illustrates that even in the context of a new system for post-settlement direct holding of securities, the roles of broker-dealers and banks would continue to be essential. Intermediation of services would persist even as intermediated *holding* would be reduced.⁶¹

Finally, some general observations are in order concerning meeting the challenges to implementing a direct-holding system. First, depending on the shape of a direct-holding environment that might emerge, it is possible, perhaps likely, that some changes in laws and regulations would be needed for optimizing effectiveness and efficiency of implementation. Second, a direct-holding approach, and in particular a regime for synthetic securities accounts, would require an "operator," at least in some form. We are quite receptive to the idea that DTCC could play a significant role in the development and operation of such a system. Perhaps the independent study recommended here will demonstrate that moving toward a direct-holding norm would be an opportunity, and not a risk, for DTCC and its broker-dealer and bank owners and participants. Finally, further study may demonstrate that there are better and more straightforward approaches to reforms

60. There are several plausible means of allocating reductions in RO holdings and maintaining a ledger allocating imbalances (deliverables/receivables) to synthetic securities account clients. The desirability of various approaches might depend on the proportions of the aggregate synthetic margin securities that, at any point in time, would be rehypothecated and the proportion of fails to deliver. Further detailed elaboration is not necessary for purposes of this discussion.

61. Some services might be provided by third-party servicers, however, which would be consistent with the idea of "open banking."

than attempts to replicate functionally (such as through synthetic securities accounts and simulated application of the customer protection rule) the current infrastructure.

D. COMPATIBILITY WITH CONSENSUS VIEWS

Another challenge would be to ensure that approaches to infrastructure modification would address the core problems in a manner consistent with the areas of consensus summarized in Part IV and with the result that benefits would outweigh the costs of implementing and sustaining the reforms. This Report does not undertake a resolution of these ultimate issues. A robust benefit-cost analysis is beyond the scope of the mission of the Task Force and its resources (both human and financial). However, this Report is an important step toward identifying many of the costs and benefits and it provides a preliminary roadmap for further analysis. In particular, Part V considers some strategies for implementing plausible means of addressing the identified problems.

E. PLAUSIBILITY OF FUNDAMENTAL INFRASTRUCTURE MODIFICATIONS

There is reason to believe that material modifications of the securities holding infrastructure that would address the prevailing problems are plausible. In addition to academic literature,⁶² there is strong evidence that support for such infrastructure reforms exists within the securities industry.

Discussions at the SEC's 2018 Roundtable on the proxy process are replete with references to the potential for reforms based on new technologies, including blockchain technology. For example, Kenneth Bertsch, then executive director of the Council of Institutional Investors (CII), observed that according to many experts it is "possible, or will be possible soon, to develop a technology-based proxy system that enables proxy materials to be distributed instantaneously to all eligible shareholders, and for votes to be counted quickly, accurately, reliably, fairly, and confidentially."⁶³ Bertsch noted that in 2010 the view of the CII was that only incremental change in the proxy plumbing would be realistically possible, but in 2018 it took a different view of the technological possibilities, in particular blockchain.⁶⁴ In Bertsch's view "a permissioned blockchain system with a gatekeeper is the most likely solution" that could "safeguard privacy interests but put beneficial

62. For academic literature that is supportive of this conclusion, see, for example, David C. Donald & Mahdi H. Miraz, *Multilateral Transparency for Securities Markets Through DLT*, 25 *FORDHAM J. CORP. & FIN. L.* 97 (2020); David C. Donald, *Heart of Darkness: The Problem at the Core of the US Proxy System and its Solution*, 6 *VA. L. & BUS. REV.* 41 (2011); Geis, *supra* note 33; Mooney, *supra* note 42; Delphine Nougayrède, *Towards a Global Financial Register? The Case for End Investor Transparency in Central Securities Depositories*, 4 *J. FIN. REG.* 276 (2018); Federico Panisi, Ross P. Buckley & Douglas Arner, *Blockchain and Public Companies: A Revolution in Share Ownership Transparency, Proxy-voting and Corporate Governance?*, 2 *STAN. J. BLOCKCHAIN L. & POL'Y* 1 (2019).

63. *Roundtable on the Proxy Process*, U.S. SEC. & EXCHANGE COMMISSION 97 (Nov. 15, 2018), <https://www.sec.gov/files/proxy-round-table-transcript-111518.pdf> [hereinafter 2018 SEC Roundtable].

64. *Id.*

owners in charge of their votes.”⁶⁵ Bertsch also observed that “[t]he current web of intermediaries creates too many opacities, and . . . blockchain . . . should enable routine and a reliable end-to-end vote confirmation . . . and enhance company ability to communicate with shareholders while protecting privacy.”⁶⁶ He concluded that “[t]here are very substantial cost savings in the long-term in going to a new system, probably based on blockchain.”⁶⁷

Bertsch was not alone in his views. For example, Brian L. Schorr, chief legal officer and partner, Trian Fund Management, L.P., observed:

I agree with Ken Bertsch and CAI^[68] [sic] I think there need to be longer-term recommendations too. I think we’re almost at a point where the immobilized and fungible share system should be reconsidered and moved toward a system of traceable shares, specific share ownership, and identification, and at the same time safeguarding identities, holdings, and voting decisions. And the way to get there may well be—and I think alternatives should be studied and considered, whether it’s digital voting platforms, a digital central ledger book entry system, or blockchain private permissioned technology with a central gatekeeper. I think those are all the sorts of things that should be looked at very carefully. And I think the Commission should consider implementing a series of pilot programs to test those various alternatives.⁶⁹

Consider also the observations of David Katz, partner, Wachtell, Lipton, Rosen, & Katz:

The voting system stinks, for lack of a better word. It doesn’t work well. There are more problems than we’ve even talked about here [W]hen you’ve got a client that needs to get a majority of the outstanding shares on a particular proposal to amend its charter to do something else that’s ministerial, and votes don’t get counted or votes don’t get made, and nobody has any ability to track who voted and didn’t vote, we have a system that doesn’t work. . . . And I think that we really do need to take a step back and figure out what the right system is. There are so many costs built into this current system that I think that if you revamp the system, you’d probably have a payback of two or three years, when you think about it, and take out some of the different levels.⁷⁰

As these observations suggest, developments in technology may make feasible modifications of infrastructure, such as those discussed above, which may not have been so even a few years ago. The SEC expressed similar sentiments more than four decades ago:

Until comparatively recently there were serious technological limitations on creating a system where all interests of investors could be represented in a central market. This is no longer the case. Recent advances in communications and electronic

65. *Id.* at 98–99.

66. *Id.* at 99–100.

67. *Id.* at 100.

68. Reference should be to “CII.”

69. 2018 SEC Roundtable, *supra* note 63, at 62.

70. *Id.* at 74–75.

data processing make such representation technically feasible if the necessary systems are developed and used.⁷¹

The modifications discussed above and our focus primarily on post-settlement holding issues reflect our generally cautious approach. Our emphasis is on plausibility and the potential for general acceptance in the near term—an approach that we hope will offer credibility to the independent study that this Report recommends. However, it is not our intention to influence the independence or open-mindedness of that study. For example, others have taken a more ambitious approach and would call on blockchain technology to revamp more thoroughly the securities markets.⁷² Moreover, in her forthcoming article, Professor Carla Reyes has offered a trenchant critique of the prevailing regulatory environment in the context of blockchain, an environment that she argues has a detrimental obsession with intermediaries and intermediation.⁷³

IV. AREAS OF CONSENSUS OR STRONG SUPPORT

There are significant areas on which we believe there is a consensus, or at least strong support, among the participants in the work of the Task Force.⁷⁴

A. SOURCES OF PREVAILING PROBLEMS

Many of the problems identified in Part One of this Report arise primarily from two factors. These factors are common denominators across the various contexts and settings that are examined in more granular fashion in Part IV of Part One.

First is the difficulty (in some cases, impossibility) of reliably identifying the BOs of intermediated securities and the number or amount of their holdings—i.e., non-transparency.⁷⁵ Second is the absence of privity between BOs and issuers, which results in the impairment, difficulties, or complexity of the exercise by BOs of legal entitlements attendant to the ownership of intermediated securities. These factors are inextricably related. Without reliable and accessible identification of BOs and their holdings, workarounds for proxy voting, proxy services including DTC authorizations, and corporate actions cannot be successfully implemented.

Each of these factors arise from (or are exacerbated by) the prevailing deeply intermediated, multi-tiered, omnibus account-based post-settlement securities

71. U.S. SEC. & EXCH. COMM'N, INSTITUTIONAL INVESTOR STUDY REPORT OF THE SECURITIES AND EXCHANGE COMMISSION, H.R. Doc. No. 64, 92d Cong., 1st Sess. (1971) (Part 8, Letter of Transmittal XXIV).

72. See, e.g., Donald & Miraz, *supra* note 62.

73. Carla L. Reyes, *Law's Detrimental Reliance on Intermediaries*, 92 GEO. WASH. L. REV. (forthcoming 2025), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=46927551.

74. The following summary of these areas draws in particular on the Interim Report, MOONEY & ROCKS, *supra* note 5, pt. V. It also takes account of discussions during meetings of the Task Force, many informal communications, and feedback on drafts of the Interim Report.

75. See *supra* Part I (discussing meaning and context of the terms “transparent” and “transparency” as used in this Report).

holding infrastructure. That said, it is possible, for example, that the benefits of the intermediated holding infrastructure nonetheless outweigh its costs. It is also possible that the prevailing problems could be ameliorated without abandoning the basic elements of the current infrastructure. These possibilities (among others) would be explored and assessed in the independent study recommended here.

Aside from problems (in many cases, less than optimal solutions) related to non-transparency and lack of BO-issuer privity, substantial costs are involved in the workarounds to overcome lack of privity. And substantial costs also are involved in the protection of account holder assets against intermediary risk. This protection generally has been successful. However, whether that protection might be achieved more efficiently and at a lower cost, such as by more reliance on direct holding, warrants further study.

B. PRESERVATION OF CURRENT BENEFITS

Whether fundamental and material or more modest in nature, any infrastructure modifications should in general preserve (and, perhaps, enhance) the flexibility and convenience of the existing infrastructure without materially increasing (and, perhaps, while decreasing) costs for issuers, investors, intermediaries, DTCC and its affiliates, other market participants, and relevant regulators. Any modifications should preserve the various benefits of the current infrastructure mentioned in the examples of characteristics listed as requirements for a request for proposals (RFP), as described in Part V.C.

C. CONTINUING ROLES FOR DTCC AND AFFILIATES, BROKER-DEALERS, BANKS, TRANSFER AGENTS, OTHER MARKET PARTICIPANTS, REGULATORS, AND ASSET-PROTECTION MECHANISMS

Preservation of the current benefits of the intermediated holding infrastructure, even with modifications along the lines mentioned in Part III, necessarily would involve continuation of crucial roles for those organizations involved in the operation of the current infrastructure. The roles of those participating in trading, clearing, and settlement should continue without material interference. Investors of all types would continue to need the services and conveniences currently provided by broker-dealers and banks—even in an environment in which post-settlement direct holding is predominant (or even the norm) and in circumstances in which those institutions are not providing traditional “custody” of securities. Those services would include, for example, consolidated reporting concerning all holdings monitored by the investor’s service provider of choice and the many benefits of continuing institutional and individual relationships. Moreover, intermediated holding might well have a role in many circumstances, including during the trading-settlement cycle and in connection with margin lending, securities lending, and repos.

It also is clear enough that an independent study as recommended here could not be undertaken and successfully completed without the expertise, knowledge,

and experience of existing organizations in connection with the current infrastructure. Likewise, the development and implementation of any modifications would require input and participation of all types of organizations currently involved. Any such modifications would no doubt be relying and building on the experience and innovations developed over the years by the DTCC group, in particular the pathbreaking interfaces developed and operated among DTC, NSCC, transfer agents, and issuers.

D. EMPIRICAL ASSESSMENT OF COSTS AND BENEFITS

Whether material infrastructure modifications should be made, and the nature of any modifications, should be based on an independent empirical assessment of costs and benefits of the status quo and those of potential plausible modifications. It does not appear that DTCC (or its owners, broker-dealers, and banks) or existing organizations representing broker-dealers, banks, issuers investors, transfer agents, service providers, or other market participants are inclined or positioned to undertake such an empirical assessment. Moreover, although all interested constituencies should be encouraged to participate actively in such a study, ideally the principal investigators and sponsor or sponsors should be independent of vested and incumbent interests.

V. CHALLENGES AND OBSTACLES TO IMPLEMENTING THE MEANS OF ADDRESSING PROBLEMS

Identifying the problems caused or exacerbated by the intermediated securities holding system and in general the plausible means of addressing the problems is a far cry from sorting out just how such plausible means actually might be implemented. This Part considers some of the principal challenges and obstacles to implementation.

A. POTENTIAL OPPOSITION TO INFRASTRUCTURE MODIFICATION

The misaligned incentives that exist in connection with the proxy plumbing⁷⁶ are writ large with respect to any potential infrastructure modifications. During the meetings and discussions over the course of the work of the Task Force, there were no indications that securities intermediaries (including clearing organizations such as the DTCC group, banks, and broker-dealers) saw a business case for material modifications of the infrastructure or for an investment of the time and expense necessary to pursue a study such as that recommended here. This is not surprising. These market participants in general appear to view the current infrastructure as satisfactory, enjoy benefits from the existing infrastructure, and lack incentives to support material modifications. On the other hand, investors and issuers that bear many of the direct and indirect costs of the current

76. See Mooney & Rocks, *supra* note 3, 381 n.167.

system lack the ability to impose changes. Even if investors and issuers might wish changes in results, the costs for any individual investor or issuer to pursue infrastructure changes would hardly be a wise investment. Moreover, those market participants clearly lack the ability to impose such changes.

Wholly aside from the question of incentives to propose and abilities to implement reforms, even if a credible and concrete reform proposal were tabled, one might expect the beneficiaries of the current infrastructure to muster a strong opposition. That said, it difficult to imagine that any of the plausible modifications contemplated here would eliminate the need for the crucial roles of broker-dealers and banks in the securities markets.⁷⁷

Finally, there currently is no existing or likely single competitor to the DTCC organization which realistically could present a competitive driver of change.⁷⁸ This situation derives from the roles of DTC and NSCC in the clearing and settlement process and the resulting dominant position of DTC in post-settlement holding.⁷⁹

B. “SILOED” NATURE OF PROBLEMS AND INTERESTS

The various problems identified in Part II.B. involve different constituencies, regulators, and legal frameworks. For example, the SEC might have the greatest influence and power over the infrastructure given its relationship to and regulation of the national market system, clearing and settlement, shareholder voting and communications, and investment management. Even as to shareholder voting, however, the SEC has not demonstrated sustained interest and has not been successful in resolving the prevailing problems. Moreover, the SEC does not necessarily focus on or have concerns about prevailing problems such as with the exercise of bondholder rights, claims based on corporate laws, security holder claims in insolvency proceedings of issuers, or the execution and attachment of intermediated securities. Other relevant regulators or constituencies might not have sufficient stand-alone concerns, influence, or motivation to take on major infrastructure modification battles. Even if they did, they might not appreciate the impact of changes on other constituencies and transactions, such as securities lending, margin lending, and repos. This “siloeed” aspect of affected interests and regulatory frameworks may serve to mute any calls for change and mask the aggregate impact of the securities holding infrastructure.

77. See *supra* Part IV.C.

78. There are likely several Fintech companies or other new entrants that would have the incentive to pursue such a study, but they are unlikely to have the resources or market involvement to permit them to complete such a study successfully or based on adequate information.

79. On the development of DTCC's dominant position, see Dan Awrey & Joshua C. Macey, *Open Access, Interoperability, and DTCC's Unexpected Path to Monopoly*, 132 *YALE L.J.* 96 (2022) (explaining how SEC's open access and interoperability requirement led to DTCC's monopoly position and the demise of the regional exchanges and depositories).

C. NECESSITY OF INTERVENTION

From the foregoing discussion it seems likely that no major initiative to study (or implement) substantial modifications of the securities holding system will occur in the absence of a powerful intervention. Given the current landscape, such an intervention would most likely have to come from a regulator, probably the SEC (or another financial regulator). But if past is prologue, one might expect an initiative by the SEC, if any were to transpire, to be both incremental and intermittent. Indeed, the 2018 Roundtable offers a convenient natural experiment. Notwithstanding expressions of the need for reforms, some even for major reforms, very little has transpired. Even the subsequent relatively modest IAC Recommendations (from an advisory committee of the SEC itself) have not been acted upon by the SEC except for the Universal Proxy Rule, which had already been proposed by the SEC even before those recommendations. Although three informal working groups established following the Roundtable have issued reports, those reports have not yet generated any further activity by the SEC.⁸⁰

One hopes that this Report, followed by an independent study as recommended here, may provide a catalyst for further action and spark some coordinated activity by organizations representing issuers and investors that would, finally, lead to regulatory intervention. The SEC, for example, might accept the apparently inevitable conclusion that “the industry” is not going to solve the problems on its own. Realistically, however, it is unlikely that the SEC itself would mandate specific changes in the infrastructure that would address holistically the fundamental problems of nontransparency and the disconnect between BOs and issuers. This is especially so given the likely role of emerging technologies in any infrastructure reforms. For these reasons, it would be important for the independent study recommended here to address implementation and, in particular, the encouragement of specific proposals for infrastructure reforms.⁸¹

One approach would be to develop an RFP that would invite the private sector (not limited to but not excluding the DTCC organization) to proposed detailed reforms. Perhaps the RFP could be issued by (or at the request of) the SEC, another regulator, or even a consortium of regulators or of constituency representatives and interest groups. The RFP could call for proposals for infrastructure reforms that would preserve and achieve, for example, the following:

- (i) Eliminate or substantially reduce intermediary risk in post-settlement holding (e.g., intermediary failure, shortfall, and attendant losses/costs) and the costs of reducing intermediary risk;

80. See Mooney & Rocks, *supra* note 3, pt. IV.B.2.

81. The discussions in Part III and this Part, which describe approaches for addressing problems and challenges for designing modifications to the infrastructure and for implementation of means of addressing problems, may provide a helpful point of departure for the study recommended in Part VI.

- (ii) Remove obstacles to (a) exercise of BO rights and legal entitlements (e.g., voting, corporate actions, enforcement) and (b) issuer-investor communications;
- (iii) Ameliorate negative externalities imposed by non-transparency on external constituencies (e.g., AML, sanctions, taxation compliance, and enforcement); and
- (iv) Preserve (or enhance):
 - (A) the flexibility, convenience, and efficiency of the current infrastructure (e.g., trading, margin lending, securities lending, record keeping, services provided by prime brokerage and global custodians, efficiencies of clearing and settlement systems);
 - (B) the provision of services by broker-dealers and bank custodians (e.g., trading, record keeping, investment management, communications); and
 - (C) the functional effects of the status quo as to privacy and confidentiality—e.g., NOBO-OBO treatment (except to the extent that policy decisions are made to modify current policies).

This RFP approach might provide an incentive for the financial services community (including Fintech firms) to submit proposals for meeting these objectives—or concede their inability to do so on a cost-effective basis.

VI. RECOMMENDATION: INDEPENDENT BENEFIT-COST ANALYSIS AND STUDY

This Report recommends the organization, completion, and widespread dissemination of an independent and thorough study, including a benefit-cost analysis, of the current securities holding infrastructure. The study should assess the problems identified in this Report and the means of addressing those problems discussed here. The study also should identify and assess any additional problems and issues identified in the study. The study should make recommendations, if any, concerning the plausible means of addressing the problems discussed here and identified in the study, including possible modifications of the current infrastructure. It also should address and recommend necessary steps concerning implementation of any recommendations, including the encouragement of specific proposals for infrastructure reforms.

The study should be undertaken by an independent entity that does not represent the interests of any stakeholder or group of stakeholders, such as an established and impartial research organization. The study should be adequately funded, so that it could acquire and access data that has, for example, been unavailable to the Task Force. Ideally, the study would be commissioned or sponsored by a governmental entity, such as the SEC or another federal regulator of financial institutions and markets, or by a group of such entities.

VII. CONCLUSION

The U.S. intermediated securities holding infrastructure is mature and sophisticated. DTCC lies at the core of the infrastructure. Today's DTCC has emerged from incremental changes in organization of several entities and many enhancements in services and technology over more than five decades. This evolutionary process successfully solved the paperwork crises of the 1960s and has met the many challenges in the clearance and settlement of transactions in the public securities markets in the United States. As part of this development, DTC's nominee, Cede & Co., has become the holder of record of the vast majority of publicly traded equity and corporate and municipal debt securities in the U.S. markets. The result is that the predominant means of post-settlement holding of securities by investors of all types is now through securities accounts with broker-dealers and banks. The infrastructure, supported by statutory and regulatory frameworks, both state and federal, also has been successful in protecting the rights and interests of investors against losses arising out of the default, defalcation, and insolvency of securities intermediaries.

Notwithstanding the successes of the current infrastructure for its intended purposes, and given the infrastructure's size and complexity, it is not surprising that several problems and areas in need of improvement exist. Moreover, the costs of maintaining this infrastructure are significant. This Report meets the charges of the Task Force Mission Statement to examine the infrastructure, identify, analyze, and assess its problems, and identify and assess plausible means of addressing the problems. Its credibility is evidenced by consensus views on important points and for its recommendation. No doubt this results from the involvement in the work of the Task Force by participants reflecting a broad spectrum of the securities and banking industries, regulators, legal practitioners, and academics.

This Report aspires to be the beginning of a process, not an end. It recommends an independent study and benefit-cost analysis of the infrastructure and potential means of addressing problems, including any needed infrastructure modifications. Although the proposed study and subsequent processes likely will require regulatory intervention (or at least support), support by the ABA Business Law Section's Council for this Report's recommendation provides important recognition of the need for a thorough assessment of the infrastructure. This support also lends important recognition and support for necessary interventions and acknowledges the need to seriously consider infrastructure improvements.

