

November 16, 2020

Submitted electronically to: pubcom@finra.org

Jennifer Piorko Mitchell Office of the Corporate Secretary FINRA 1735 K Street, NW Washington, DC 20006-1506

### Re: Regulatory Notice 20-36 – FINRA Requests Comment on a Concept Proposal Regarding the Application of FINRA Rules to Security-Based Swaps

Dear Ms. Mitchell:

The Securities Industry and Financial Markets Association ("SIFMA")<sup>1</sup> appreciates the opportunity to comment on Financial Industry Regulatory Authority ("FINRA") Regulatory Notice 20-36 ("Notice 20-36") regarding the application of FINRA rules to security-based swaps ("SBS"). Overall, SIFMA supports many aspects of FINRA's proposal. However, we suggest further tailoring, as described below. Our comments are driven in large part by a desire to seek greater clarity from FINRA regarding the application of its rules to SBS, to ensure that standalone broker-dealers are not placed at a disadvantage relative to broker-dealers that are dually registered as SBS dealers, and to better harmonize certain of FINRA's rules applicable to SBS with the SBS regime implemented by the Securities and Exchange Commission ("SEC").

### 1. Extension of Expiration Date

FINRA proposes to extend its existing exemptions contained in Rule 0180 from September 1, 2021 to October 6, 2021, which is the earliest date by which an SBS dealer or major SBS participant (collectively, "SBS Entities") may register as such with the SEC. However, as the SEC staff has explained, the earliest date by which an SBS Entity will be *required* to register will be November 1, 2021; specifically, a person is not required to begin counting SBS transactions towards the SBS dealer *de minimis* threshold

<sup>&</sup>lt;sup>1</sup> SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets. On behalf of our industry's nearly 1 million employees, we advocate on legislation, regulation and business policy, affecting retail and institutional investors, equity and fixed income markets and related products and services. We serve as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit <u>http://www.sifma.org</u>.

until August 6, 2021, *i.e.*, the counting date, and then is not deemed to be an SBS dealer (and hence will not be required to register) until two months after the end of the month in which the person crosses the *de minimis* threshold, which makes November 1, 2021 the date when a person that crosses the *de minimis* threshold on August 6, 2021 must register as an SBS dealer.<sup>2</sup> Because registration will trigger an obligation to comply with the requirements applicable to an SBS dealer, we expect that most if not all SBS dealers will wait to register until November 1, 2021.

In light of these considerations, and given FINRA's desire to "align the expiration of Rule 0180 with the compliance date for the SEC's SBS rules," we request that FINRA extend the expiration date of current Rule 0180 to November 1, 2021, not October 6, 2021.

# 2. Exceptions from Presumption of Applicability

We support FINRA's proposal to except certain rules from the general presumption of applicability of FINRA rules to SBS, including Rule 6000 Series (Quotation, Order, and Transaction Reporting Facilities), Rule 7000 Series (Clearing, Transaction and Order Data Requirements, and Facility Charges), and Rule 11000 Series (Uniform Practice Code). We agree that providing exceptions for these rules will promote clarity, considering that these rules are not designed to apply to SBS, and arguably overlap with some of the SEC's SBS rules (such as reporting and public dissemination under Regulation SBSR).

### 3. Exception for SBS Entities and Associated Persons

We generally support FINRA's proposal to provide exceptions from certain rules for a broker-dealer that is registered as an SBS Entity as well as an associated person of a broker-dealer acting in his or her capacity as an associated person of an SBS Entity, including an associated person "dual-hatted" as an associated person of an affiliated SBS Entity. Such rules include Rule 2030 (Engaging in Distribution and Solicitation Activities with Government Entities), Rule 2090 (Know Your Customer), Rule 2111 (Suitability), Rule 2210 (Communications with the Public),<sup>3</sup> Rule 2232 (Customer Confirmations), Rule 3110 (Supervision), Rule 3120 (Supervisory Control System), and Rule 3130 (Annual Certification of Compliance and Supervisory Processes). As FINRA observes, these rules would unnecessarily duplicate certain of the SEC's SBS rules if they applied to SBS Entities or their associated persons. However, we believe it would be beneficial if FINRA made certain clarifications and expanded the exceptions, as discussed below.

<sup>&</sup>lt;sup>2</sup> See SEC Staff, Key Dates for Registration of [SBS] Dealers and Major [SBS] Participants (Feb. 13, 2020), <u>https://www.sec.gov/page/key-dates-registration-security-based-swap-dealers-and-major-security-based-swap-participants</u>.

<sup>&</sup>lt;sup>3</sup> As proposed, only SBS Entities and their associated persons would be excepted from the content standards in Rule 2210(d), whereas FINRA members generally would be excepted from the remainder of Rule 2210's requirements with respect to SBS activities and positions.

#### A. FINRA Should Clarify the Treatment of Dual-Hatted Personnel

Notice 20-36 states that its proposed exceptions for SBS Entities and their associated persons would "only [apply] to the extent that the associated person of the member involved in the SBS activity is acting in his or her capacity as an associated person of an SBS Entity" and that the exceptions would apply "where the associated person of the member is 'dual-hatted' as an associated person of an affiliated SBS Entity." We request that FINRA clarify this guidance in two respects:

First, we request that FINRA confirm that, by adopting this exception for an associated person of a broker-dealer who is dual-hatted as an associated person of an affiliated SBS Entity, FINRA is not addressing whether or to what extent the rules not covered by the exceptions might apply to a dual-hatted associated person when he or she is acting in his or her capacity as an associated person of an affiliated entity. We understand that FINRA's proposal was intended to promote legal certainty in connection with SBS rules and not otherwise change the way FINRA regulates dual-hatted personnel.

Second, we request that FINRA confirm that, regardless of how the dual-hatting arrangement is documented, if in substance the relevant individual is designated as an associated person of an SBS Entity and is in fact acting in that capacity, then such individual would benefit from FINRA's proposed exceptions. Firms employ a variety of documentation methods based on unique employment, tax, and other considerations unrelated to the federal securities laws, but, regardless of the method employed, designation of the relevant individuals as associated persons of an SBS Entity will subject them to appropriate SEC oversight of their SBS activities.

### B. FINRA Should Adopt Exceptions for Broker-Dealers Subject to SBS Dealer Rules When Arranging, Negotiating, or Executing Transactions for Foreign Affiliates That Are De Minimis Dealers

The exceptions proposed in Notice 20-36 would not generally apply to a FINRA member when acting on behalf of an affiliate that is not registered as an SBS Entity. However, we expect that this situation will arise in certain cross-border scenarios. Specifically, the SEC has adopted an exemption, SEC Rule 3a71-3(d), under which a non-U.S. person is not required to count certain SBS transactions arranged, negotiated, or executed by U.S. personnel toward its SBS dealer *de minimis* threshold if all arranging, negotiating, or executing activity for such transactions conducted by U.S. personnel is conducted by such personnel in their capacity as associated persons of an affiliated registered broker or SBS dealer. As FINRA notes in Notice 20-36, in order to qualify for this exemption, the registered entity must comply with specified SBS dealer requirements as if the counterparties to the non-U.S. person were counterparties to the registered entity and as if the registered entity were registered as an SBS dealer. Therefore, if the registered entity is a FINRA member, such entity would be required to comply with the SEC SBS dealer rules specified in SEC Rule 3a71-3(d)(ii), which include SEC rules relating to communications, trade acknowledgment and verification, and suitability. These rules are

similarly the basis for several of the exceptions that FINRA proposes to provide for a FINRA member that is dually registered as an SBS Entity.

In light of these considerations, we request that FINRA expand its exceptions for Rules 2111 (Suitability), 2210 (Communications with the Public), and 2232 (Customer Confirmations) to cover a FINRA member when it is acting as the registered entity for a foreign affiliate pursuant SEC Rule 3a71-3(d). These FINRA Rules overlap with SEC Rules 15Fh-3(f)(1), 15Fh-3(g), and 15Fi-2, which the FINRA member would be required to satisfy when acting as the registered entity pursuant to SEC Rule 3a71-3(d)(ii). Applying these FINRA Rules in connection with SBS arranged, negotiated, or executed by a FINRA member acting in this capacity would otherwise undermine the SEC's efforts to adopt uniform requirements for firms engaged in SBS dealing activity.

### C. FINRA Should Provide Exceptions From Associated Person Registration and Continuing Education Requirements

We believe that certain additional exceptions from the general presumption of applicability are warranted. In particular, we request that FINRA adopt exceptions from associated person registration and continuing education requirements contained in Rules 1210, 1220, and 1240 for a person associated with a broker-dealer dually registered as an SBS Entity whose securities-related activities relate solely and exclusively to transactions in SBS conducted in his or her capacity as an associated person of an SBS Entity.

We note in this regard that FINRA's existing registration (including proficiency testing) and continuing education requirements are not tailored to SBS. As a result, it would seem to provide little if any benefit to apply those requirements to a person associated with a member solely in connection with the member's status as an SBS Entity. Similar considerations led the National Futures Association ("NFA") initially to exclude swaps associated persons from its proficiency testing requirements, until tests tailored to swaps could be developed.

Further, associated persons of standalone SBS dealers are not subject to registration or continuing education requirements. Instead, Section 15F(b)(6) of the Securities Exchange Act of 1934 solely prohibits an SBS dealer from permitting a statutorily disqualified associated person from effecting or being involved in effecting SBS for the SBS dealer. As SBS dealers generally are not required to register as broker-dealers or become members of FINRA or any other self-regulatory organization, it would be inappropriate to subject associated persons of SBS dealers to differing requirements solely depending on whether the SBS dealer happened, for other reasons, to be a FINRA member.

### D. FINRA Should Provide Exceptions from Customer Account Statements and Information Rules

We also request exceptions for a FINRA member dually registered as an SBS Entity from Rule 2231 (Customer Account Statements) and Rule 4512 (Customer Account Information), in each case, for an account solely holding SBS and related collateral.

FINRA's rationale for not proposing an exception from Rule 2231 for members that are SBS Entities is that Rule 2231 and the SEC's portfolio reconciliation requirement contained in SEC Rule 15Fi-3 serve different purposes and cover different information. While this rationale may hold true for accounts in which a customer conducts a broader range of business, if an account only holds SBS and related collateral, the SEC's portfolio reconciliation requirement should be sufficient because it will provide the counterparty with information on a periodic basis regarding the parties' SBS portfolio and address the resolution of disputes, including collateral-related disputes.<sup>4</sup> We note further that the SEC did not adopt an account statement requirement for standalone SBS Entities, even though, like broker-dealers dually registered as SBS Entities, they too will maintain accounts for customers containing SBS and related collateral.

In addition, the SEC's amended recordkeeping rules, specifically SEC Rule 17a-3(a)(9)(iv), cover much of the information required by FINRA Rule 4512. Moreover, such recordkeeping rules are specifically tailored for SBS, for example by requiring a counterparty's unique identification code, as opposed to requiring information such as whether the counterparty is of legal age, which is unlikely to be relevant to SBS. Accordingly, we believe that it is more appropriate and would provide greater legal certainty for Rule 4512 not to apply to accounts that hold only SBS and related collateral.

# 4. Margin Requirements

Notice 20-36 raises for comment, on a preliminary basis, what concepts should be applied in constructing a new SBS-related margin rule for certain broker-dealers. The new margin rule would not apply to (a) any member registered as an SBS dealer or (b) any SBS in a portfolio margin account if the SBS is of a type whose risk is appropriately addressed by TIMS or another approved theoretical pricing model and covered by portfolio risk procedures filed by the broker-dealer with FINRA.

The new SBS margin rule would require daily posting and collection of variation margin ("VM") for uncleared SBS, except vis-à-vis certain multilateral organizations, with respect to which members would be able to take a capital charge in lieu of collecting VM. Further, the new SBS margin rule would require collection of initial margin ("IM") for uncleared SBS as follows: (a) for any "Basic CDS," IM would be computed using the

<sup>&</sup>lt;sup>4</sup> Although SEC Rule 15Fi-3 does not expressly address collateral-related disputes, the NFA has interpreted the parallel Commodity Futures Trading Commission ("CFTC") rule to cover such disputes, and the SEC indicated that an SBS Entity that is following NFA's processes in relation to disputes would also be compliant with SEC Rule 15Fi-3. *See Risk Mitigation Techniques for Uncleared [SBS]*, 85 Fed. Reg. 6359, 6368 (Feb. 4, 2020).

spread and maturity grid set forth in amended SEC Rule 15c3-1(c)(2)(vi)(P); (b) for an uncleared SBS (other than a CDS) that is the economic equivalent of a margin account containing a portfolio of long or short positions in securities or options (a "Basic SBS"), IM would be computed by applying Rule 4210 to that equivalent margin account; (c) for any other types of SBS, members would need prior FINRA approval of an appropriate IM methodology, subject in each case to exceptions for SBS with certain multilateral organizations, sovereign entities, and financial market intermediaries, with respect to which members would be permitted to take to a capital charge in lieu of collecting IM.

### A. FINRA Should Clarify the Treatment of SBS Held in Portfolio Margin Accounts

SIFMA supports the proposed exceptions from FINRA's new margin rule for SBS dealers and portfolio margin accounts. However, in order to promote harmonization between the SEC's margin rules and FINRA's margin rules, SIFMA believes that FINRA should align the treatment of SBS under FINRA Rule 4210(g) with the SEC's SBS margin rule, Rule 18a-3.

In particular, we request that FINRA conform Rule 4210's definitions of "related instrument" and "underlying instrument" to the recent changes made by the SEC to the definitions in Appendix A to SEC Rule 15c3-1, which now include swaps and SBS. We also request that FINRA clarify Rule 4210 to permit house margin and stress test requirements for portfolio margin accounts to recognize risk offsets across all types of swaps, SBS, and other positions permitted in the account.

We further request that FINRA clarify that an SBS may be held in a portfolio margin account even if the underlier for the SBS would not be eligible for portfolio margining, given that SEC Rule 18a-3 imposes no limitation on the types of SBS that can be margined using the methodology set forth in Appendix A to SEC Rule 15c3-1. For example, exchange-traded notes are not eligible for portfolio margining under FINRA Rule 4210(g),<sup>5</sup> but are eligible for this Appendix A methodology under SEC Rule 18a-3.

# B. FINRA Should Harmonize its New SBS Margin Rule with SEC Rule 18a-3

We support the steps that FINRA has taken thus far to harmonize its new SBS margin rule with the SEC's margin rule for SBS dealers, Rule 18a-3, including with respect to the IM exceptions for sovereign entities and financial market intermediaries and the VM and IM exceptions for multilateral organizations. However, the proposed new FINRA SBS margin rule would still diverge from SEC Rule 18a-3 in several significant respects, which we describe in greater detail below. We are concerned that these differences would impose significant limitations on the ability for FINRA members that are not SBS dealers to transact in SBS, including for risk management purposes, which would ultimately make such FINRA members less safe and sound.

<sup>&</sup>lt;sup>5</sup> Exchange-Traded Notes, FINRA, Regulatory Notice 19-21 (July 1, 2019), https://www.finra.org/sites/default/files/2019-07/Notice\_Regulatory\_19-21.pdf.

Although a broker-dealer subject to FINRA's new SBS margin rule will not be engaged in material SBS dealing as it will by definition not be registered as an SBS dealer, we understand that one of FINRA's policy objectives is to ensure that the exposures and risks of a broker-dealer engaged in even a *de minimis* amount of SBS activity are adequately addressed. FINRA can address this policy objective and simultaneously harmonize its new SBS margin rule with SEC Rule 18a-3 by allowing a broker-dealer subject to the new rule to opt into compliance with SEC Rule 18a-3 if the broker-dealer (a) is affiliated with a registered SBS dealer subject to Rule 18a-3 and (b) uses IM models, if any, that the SEC has approved for use by that affiliate. This approach would promote efficiency and consistency across affiliated entities.

If FINRA does not adopt this approach, then we request that it harmonize its new SBS margin rule with SEC Rule 18a-3 in the respects described below.

#### i. <u>FINRA Should Adopt Certain Affiliate and Legacy Account</u> Exceptions That Have Been Adopted by the SEC

FINRA's new SBS margin rule would not include the same exceptions as SEC Rule 18a-3:

- *Inter-Affiliate SBS.* The new rule would not include an IM exception for SBS with affiliates that are not financial market intermediaries. However, it is not entirely uncommon for broker-dealers to transact SBS with such affiliates, such as transactions with a parent company designed to centralize equity or credit risk faced by such parent company in the broker-dealer, which in turn hedges that risk in the cash securities markets.
- *Legacy SBS.* The new rule would not include an exception for legacy accounts, which would pose significant issues for member firms with open SBS positions, as they would not be able to force their counterparties to post margin.

For these reasons, we request that FINRA adopt an IM collection exception for affiliates and an exception from both IM and VM requirements for legacy accounts.

### ii. <u>FINRA Should Allow Broker-Dealers to Use IM Models</u> <u>Approved by the SEC for an Affiliate</u>

The new FINRA SBS margin rule would not permit a member to use a model to compute IM requirements, and those IM requirements would also determine the amount of a capital charge that a member would need to take in lieu of collecting margin when an exception applies. Under the SEC Rule 18a-3, an SBS dealer may use an approved model to calculate IM requirements (except a broker-dealer dually registered as an SBS dealer would only be able to use a theoretical options pricing model under SEC Rule 15c3-1a to calculate IM requirements for an equity SBS).

If standalone broker-dealers are not able to use models to compute IM requirements, this may result in competitive disparities between standalone broker-dealers and broker-dealers dually registered as SBS dealers. To the extent the use of a model results in more risk-based and tailored IM requirements, customers may prefer to trade with a broker-dealer dually registered as an SBS dealer rather than a standalone broker-dealer even if both are equally attractive liquidity providers in all other respects. Thus, not permitting a member to use a model to compute IM requirements could render it challenging for members to engage in *de minimis* SBS dealing activity. Moreover, even for SBS excluded from IM requirements, such as SBS with financial market intermediaries, not allowing a standalone broker-dealer to use a model would translate into significantly higher capital charges, which in turn would significantly undermine the cost effectiveness of using SBS for hedging purposes.

We therefore request that FINRA modify its new SBS margin rule to provide that if the SEC has approved an affiliate of a standalone broker-dealer to use an IM model, such as the ISDA "Standard Initial Margin Model", then such broker-dealer should be able to use that same model to the same extent as a broker-dealer dually registered as an SBS dealer would be able to under the SEC's margin rules. We do not see any reason why FINRA would not be able to defer to an SEC-approved model. This approach would also ensure that FINRA would not have to expend duplicative resources in approving IM models.<sup>6</sup>

iii. <u>Broker-Dealers That Operate Pursuant to Alternative Net Capital</u> <u>Requirements ("ANC firms") Should be Permitted to Use Credit</u> <u>Risk Charges Set Forth in SEC Rule 15c3-1e in Lieu of Collecting</u> <u>Margin</u>

We request that, when they transact pursuant to an exception from FINRA's new SBS margin rule, ANC firms be permitted to use credit risk charges set forth in SEC Rule 15c3-1e in lieu of capital charges computed using the IM methodology required under the new margin rule, so that they are not placed at a disadvantage relative to ANC firms that are dually registered as SBS dealers. Given that ANC firms are subject to significantly higher minimum net capital and tentative net capital requirements, this approach should not pose undue risks to ANC firms. Further, allowing ANC firms to use credit risk charges in lieu of capital charges is consistent with the SEC's intent. In response to comments, the SEC was persuaded that the ability to calculate capital charges using approved credit risk models should not be narrowed as was proposed in 2012 to exposures arising from uncollected VM and IM from commercial end users. Instead, the

<sup>&</sup>lt;sup>6</sup> In addition, to the extent FINRA adopts our proposal to allow broker-dealers to use IM models approved by the SEC for an affiliate, the use of any such IM model should not be limited to products that fall within the scope of FINRA's proposed definition of Basic CDS or Basic SBS. Rather, such broker-dealers should be able to use such IM model to calculate the requisite IM for any SBS that the SEC allows the IM of which to be calculated based on such approved IM model.

SEC decided the better approach was to allow ANC firms to apply Rule 15c3-1e's credit risk charges to all derivatives transactions not subject to margin collection requirements.<sup>7</sup>

### iv. FINRA Should Adopt an IM Threshold

FINRA's new SBS margin rule would not include an IM threshold. As a result, FINRA members engaged in a *de minimis* amount of SBS dealing activity would face a significant competitive disadvantage relative to SBS Entities, increasing concentration in the SBS markets. On the other hand, if FINRA permitted a member to take a capital charge in lieu of collecting IM up to the threshold, similar to what the SEC permits for SBS dealers, then FINRA could ensure that its members maintained sufficient financial resources to address the credit risks posed by their SBS counterparties without creating an un-level playing field or increasing market concentration. Thus, we request that FINRA include an IM threshold consistent with Rule 18a-3's \$50 million threshold in its new SBS margin rule.

### v. FINRA Should Adopt a Minimum Transfer Amount

FINRA's new SBS margin rule would not include a minimum transfer amount. The SEC's margin rules, on the other hand, provide that an SBS dealer is not required to collect or post margin with a counterparty if the total margin amount (including VM and IM) would be \$500,000 or less. As the SEC noted in support of including a minimum transfer amount in its margin rules, a minimum transfer amount would "reduce operational burdens for [SBS dealers] and their counterparties by not requiring them to transfer small amounts of collateral on a daily basis."<sup>8</sup> The SEC further noted that the minimum transfer amount would align the SEC's rules with the minimum transfer amount adopted by the CFTC and the prudential regulators and, thereby, "reduce potential operational burdens and competitive impacts that could result from inconsistent requirements."9 Consistent with the SEC's rationale for including a minimum transfer amount in its uncleared SBS margin rules, we request that FINRA similarly adopt a minimum transfer amount to minimize operational burdens and competitive disadvantages that would otherwise be imposed on broker-dealers, including when facing SBS dealers, in which case broker-dealers would be required to collect or post VM when its SBS dealer counterparty would not.

# C. FINRA Should Clarify the New SBS Margin Rule's CDS Definitions

FINRA defines "Basic CDS" to mean a Basic Single-Name CDS or a Basic Narrow-Based Index CDS, with "Basic Narrow-Based Index CDS" defined to mean an SBS transaction consisting of a component Basic Single-Name CDS. "Basic Single Name CDS" is in turn defined to mean an SBS in which one party pays either a single fixed amount or periodic fixed amounts or floating amounts determined by reference to a

<sup>&</sup>lt;sup>7</sup> Capital, Margin, and Segregation Requirements for [SBS] Dealers and Major [SBS] Participants and Capital and Segregation Requirements for Broker-Dealers, 84 Fed. Reg. 43872, 43903 (Aug. 22, 2019). <sup>8</sup> Id at 43925.

<sup>&</sup>lt;sup>9</sup> Id.

specified notional amount, and the other party pays either a fixed amount or an amount determined by reference to the value of one or more loans, debts, securities, or other financial instruments issued, guaranteed, or otherwise entered into by a third party upon the occurrence of one or more specified credit events with respect to such third party.

On its face, this definition does not seem to cover an option on a CDS (*i.e.*, CDS swaptions). However, FINRA members from time to time use CDS swaptions for hedging purposes, as they can be an efficient manner for hedging downside credit risk. We are concerned that omitting CDS swaptions from treatment as Basic CDS would make it difficult for FINRA members to employ these hedging techniques. To address this issue, we request that FINRA change the definition of Basic CDS to include swaptions, so that swaptions are treated the same as the underlying CDS. Such a change would also eliminate the added costs market participants would otherwise incur in requesting approval from FINRA of the appropriate IM requirement for swaptions.

In addition, we are concerned that the Basic CDS definition could be read to require physical settlement of CDS. Specifically, Notice 20-36 provides that a "Basic Single-Name CDS may be physically settled by payment of a specified fixed amount by one party against delivery of specified obligations by the other party." Given the prevalence of auction settlement in the CDS market,<sup>10</sup> we believe that the definition of Basic Single-Name CDS should specifically contemplate auction settlement as well.

\* \* \*

SIFMA appreciates the opportunity to comment on Notice 20-36 and FINRA's consideration of our views. SIFMA looks forward to continuing dialogue with FINRA on the treatment of SBS under FINRA's rules. If you have questions or would like additional information, please contact the undersigned at [Redacted] or [Redacted]

Very truly yours,

KhilBrenden

Kyle L Brandon Managing Director, Head of Derivatives Policy SIFMA

<sup>10</sup> See Lisa Pollack, *Mechanics*, FINANCIAL TIMES, Jan. 11, 2012,

https://ftalphaville.ft.com/2012/01/11/823791/mechanics/; Erica Paulos, Bruno Sultanum, and Elliot Tobin, *CDS Auctions: An Overview*, 105 ECON. Q. 105 (2019), https://www.richmondfed.org/-/media/richmondfedorg/publications/research/economic\_quarterly/2019/q2/sultanum.pdf.