# CHAPTER 7 Reconsidering the Dodd-Frank Swaps Trading Regulatory Framework

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hough there were a number of factors said to have contributed to the financial crisis of 2008,<sup>1</sup> many contend that bilaterally executed overthe-counter (OTC) swaps amplified and spread the crisis.<sup>2</sup> In response, the US Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank),<sup>3</sup> which imposed a new regulatory framework for the OTC swaps market. One of Dodd-Frank's major reforms is a requirement that counterparties execute most clearing-mandate swaps on regulated trading platforms—that is, swap execution facilities (SEFs)<sup>4</sup> or designated contract markets (DCMs).<sup>5</sup> In enacting this reform, Congress put forth a fairly simple and flexible swaps trading framework suited to the episodic nature of swaps liquidity.

This chapter analyzes the flaws in the implementation by the US Commodity Futures Trading Commission (CFTC) of the swaps trading regulatory frame-

<sup>\*</sup>The views expressed in this chapter reflect the views of the author and do not necessarily reflect the views of the US Commodity Futures Trading Commission (CFTC), other CFTC commissioners, or CFTC staff. This chapter is drawn from the author's White Paper, dated January 29, 2015, entitled: "Pro-Reform Reconsideration of the CFTC Swaps Trading Rules: *Return to Dodd-Frank.*"

work under Title VII of Dodd-Frank and proposes a more effective alternative.<sup>6</sup> It asserts that there is a fundamental mismatch between the CFTC's swaps trading regulatory framework and the distinct liquidity and trading dynamics of the global swaps market. It explains that the CFTC's framework is highly overengineered, disproportionately modeled on the US futures market, and biased against both human discretion and technological innovation. As such, the CFTC's framework does not accord with the letter or spirit of Title VII of Dodd-Frank.

The CFTC's flawed swaps trading rules are triggering numerous adverse consequences, foremost of which is driving global market participants away from transacting with entities subject to CFTC swaps regulation, resulting in fragmented global swaps markets. The rules have also carved swaps trading into numerous artificial market segments, fragmenting markets domestically. This fragmentation has exacerbated the already inherent challenge in swaps trading—adequate liquidity—and thus is increasing market fragility and the systemic risk that Dodd-Frank reforms were predicated on reducing.

The alternative regulatory framework outlined in this chapter is pro-reform. It is comprehensive in scope and more flexible in application. This alternative focuses on raising standards of professional conduct for swaps market personnel rather than dictating prescriptive and ill-suited trading rules. It provides flexibility so that market participants can choose the manner of trade execution best suited to their swaps trading and liquidity needs. It better aligns regulatory oversight with inherent swaps market dynamics. Crucially, the alternative framework fully aligns with Title VII of Dodd-Frank to promote swaps trading under CFTC regulation and attract, rather than repel, global capital to US trading markets. The alternative approach seeks to lessen the market fragility and fragmentation that have arisen as a consequence of the CFTC's flawed swaps trading regime.

#### THE DODD-FRANK SWAPS TRADING REGULATORY FRAMEWORK

Title VII of Dodd-Frank requires execution of most clearing-mandate swaps on DCMs or SEFs via a straightforward trade execution requirement.<sup>7</sup>

Congress expressly permitted SEFs to offer various flexible execution methods for swaps transactions using "any means of interstate commerce." The law defines a SEF as a "trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the facility or system, through any means of interstate commerce, including any trading facility, that—(A) facilitates the execution of swaps between persons; and (B) is not a designated contract market.<sup>\*\*</sup> Despite continuing assertions to the contrary from some observers, Congress did not require SEFs to provide electronic execution.

Additionally, Congress articulated goals, not requirements, for this SEF framework in order to maintain its flexibility. Congress set two goals for SEFs in Title VII of Dodd-Frank: to promote (1) the trading of swaps on SEFs and (2) pre-trade price transparency in the swaps market.<sup>9</sup> Congress did not prescribe that the global swaps market be carved into an isolated US domestic market and then further sliced and diced into smaller and smaller domestic markets for swaps trading.<sup>10</sup>

Congress mandated "impartial" access to swaps markets rather than "open" access. It did not require SEFs to merge dealer-to-client and dealer-to-dealer market segments.<sup>11</sup> Indeed, in providing that a SEF must establish rules to provide market participants with impartial access to the market, Dodd-Frank requires a SEF to set out any limitation on this access.<sup>12</sup> This requirement confirms that Dodd-Frank does not demand that all market participants receive access to every market. There is no mandate or impetus for an all-to-all swaps market structure in Dodd-Frank.

Congress further laid out a core principles-based framework for SEFs and provided them with reasonable discretion to comply with these principles.<sup>13</sup> In short, Congress left it up to individual SEFs, not regulators, to choose their own business model based on their customer needs.

In crafting Title VII of Dodd-Frank, Congress got much of it right.<sup>14</sup> Unfortunately, the CFTC's implementation of the swaps trading rules widely misses the congressional mark.

## THE CFTC'S FLAWED SWAPS TRADING REGULATORY FRAMEWORK

In response to political pressure to hurry the implementation of Dodd-Frank and likely influenced by the naïve view that centralized order-driven markets are the best way to execute all derivatives transactions, the CFTC acted expediently and modeled its swaps trading rules on the well-known and readily available regulatory template of the US futures market. Unfortunately, that framework is mismatched to the natural commercial workings of the global swaps market. It is a square peg being forced into a round hole. In adopting this framework, the CFTC failed to properly respond to congressional intent and Dodd-Frank's express goal of promoting swaps trading on SEFs.<sup>15</sup>

## Limits on Methods of Execution

The SEF rules create two categories of swaps transactions, Required Transactions (i.e., any transaction involving a swap that is subject to the trade execution requirement)<sup>16</sup> and Permitted Transactions (i.e., any transaction not involving a swap that is subject to the trade execution requirement),<sup>17</sup> and prescribe execution methods for each category.<sup>18</sup> Required Transactions must be executed in an order book (Order Book)<sup>19</sup> or a Request for Quote (RFQ) System in which a request for a quote is sent to three participants operating in conjunction with an Order Book (RFQ System).<sup>20</sup> Any method of execution is allowed for Permitted Transactions,<sup>21</sup> but SEFs must also offer an Order Book for such transactions.<sup>22</sup>

There is no firm statutory support for segmenting swaps into two categories or for limiting one of those categories to two methods of execution. A footnote to the preamble of the final SEF rules justifies this segmentation by stating that Commodity Exchange Act (CEA) section 2(h)(8) "sets out specific trading requirements for swaps that are subject to the trade execution mandate . . . [and] [t]o meet these statutory requirements, [the SEF rule] defines these swaps as Required Transactions and provides specific methods of execution for such swaps."<sup>23</sup> The only thing that CEA section 2(h)(8) expressly requires, however, is that swaps subject to the trade execution requirement must be executed on a SEF or DCM.<sup>24</sup> The statute nowhere references the concept of Required Transactions with limited execution methods and Permitted Transactions via any method of execution. These artificial categories unnecessarily complicate Congress's simple and flexible swaps trading framework.

Rather, Dodd-Frank's SEF definition contemplates a platform where multiple participants have the ability to execute swaps with multiple participants through any means of interstate commerce, including a trading facility.<sup>25</sup> Congress clearly drafted this broad and flexible definition to allow execution methods beyond an Order Book or RFQ System for all swaps, not just some swaps. Dodd-Frank also permits SEFs to offer swaps trading "through any means of interstate commerce." The phrase "interstate commerce" has a rich constitutional history, which US federal courts have interpreted to cover almost an unlimited range of commercial and technological enterprise.<sup>26</sup> The CFTC rule construct is not supported by the plain language of the statute and expresses a bias for two specific execution methods over all others: one drawn from the all-to-all US futures markets and one that is generally one-to-many, not multiple-to-multiple.

The CFTC's limited execution method approach also does not comport with the way swaps actually trade in global markets. Trillions of dollars of swaps trade globally each day through a variety of execution methods designed to better account for their episodic liquidity. A swap product's particular liquidity characteristics determine the execution technology and methodology, which can change over time. This liquidity continuum necessitates flexible execution methods as rightly authorized by Dodd-Frank.

CFTC swaps trading rules, however, thwart trade execution flexibility and limit needed human discretion.<sup>27</sup> By requiring SEFs to offer Order Books for all swaps, even very illiquid or bespoke swaps,<sup>28</sup> the rules embody the uninformed and parochial view that centralized order-driven markets, like those in the US futures markets, are the best way to execute transactions for swaps. That flawed view is not reflective of global swaps market reality. The unique nature of swaps trading liquidity should drive execution methods, not the other way around.

## Block Transactions: "Occurs Away" from SEF

The CFTC block trade definition—specifically, the "occurs away" requirement is another example of artificial segmentation like the contrived distinction between Required Transactions and Permitted Transactions. A "block trade" is generally a transaction between two institutional traders for a large amount of the same product. Most organized trading markets delay public reporting of block trades so that the counterparties can complete the transaction and any associated hedging without the market moving against them. A block trade is defined by the CFTC as "a publicly reportable swap transaction that: (1) Involves a swap that is listed on a registered [SEF] or [DCM]; (2) 'Occurs away' from the registered [SEF's] or [DCM's] trading system or platform and is executed pursuant to the registered [SEF's] or [DCM's] rules and procedures; (3) Has a notional or principal amount at or above the appropriate minimum block size applicable to such swap; and (4) Is reported subject to the rules.  $\dots$ <sup>29</sup>

It is unclear what is being achieved by the CFTC in requiring block trades to be executed away from the SEF's trading platform. The "occurs away" requirement creates an arbitrary and confusing segmentation between nonblock trades "on-SEF" and block trades "off-SEF," especially given that a SEF may offer any method of execution for Permitted Transactions. The off-SEF requirement also undermines the legislative goal of encouraging swaps trading on SEFs.

The block trade definition is a holdover from the futures model.<sup>30</sup> In futures markets, block trades occur away from the DCM's trading facility as an exception to the centralized market requirement.<sup>31</sup> In today's global swaps market, however, there are no on-platform and off-platform execution distinctions for certain-sized swaps trades. OTC swaps generally trade in very large sizes. These swaps are not constrained to Central Limit Order Books (CLOBs), but trade through one of a variety of execution methods appropriate to the product's trading liquidity.

Congress recognized these differences by not imposing on SEFs an open and competitive centralized market requirement with corresponding exceptions for certain noncompetitive trades as contained in DCM Core Principle 9.<sup>32</sup> Congress knew that counterparties executed swaps on flexible trading platforms in very large sizes. Rather, Congress expressly authorized delayed reporting for block transactions.<sup>33</sup> Congress got it right. The CFTC got it wrong. Its swaps block trade definition is inappropriate and unwarranted.

#### Unsupported "Made Available to Trade" Process

Congress included a trade execution requirement in CEA section 2(h)(8) that requires SEF<sup>34</sup> execution for swaps subject to the clearing mandate.<sup>35</sup> In a simple exception to this requirement, Congress stated that this trade execution requirement does not apply if no SEF "makes the swap available to trade."<sup>36</sup>

Rather than follow Congress's simple direction, the CFTC created an unnecessary regulatory mandate, referred to as the "made available to trade" (MAT) process, in order to identify those swaps subject to SEF execution.<sup>37</sup> Under this platform-controlled MAT process, a SEF submits a MAT determination for swaps products to the Commission pursuant to part 40 of the

CFTC's regulations after considering, as appropriate, certain liquidity factors for such swaps.<sup>38</sup> The CFTC reviews the SEF's determination, but may only deny the submission if it is inconsistent with the CEA or CFTC regulations.<sup>39</sup> Once made available to trade, these swaps are Required Transactions and counterparties must execute them on a SEF pursuant to the limited execution methods permitted by CFTC rules.<sup>40</sup>

A plain reading of the trade execution requirement demonstrates that Congress did not intend to create an entire regulatory mandate around the phrase "made available to trade." Unlike the clearing mandate in CEA section 2(h)(1), Congress provided no process in CEA section 2(h)(8) for determining which swaps must be traded on-SEF.<sup>41</sup> Congress could have instituted a regulatory mandate for the trade execution requirement as it did for the clearing mandate, but chose not to.<sup>42</sup> Congressional drafters of Title VII were aware that, unlike futures, newly developed swaps products are initially traded bilaterally and only move to a platform once trading reaches a critical stage. The trade execution requirement expresses this logic by requiring that a clearing-mandated swap must be executed on a SEF unless no SEF makes that swap available to trade (i.e., offers the swap for trading). Unfortunately, however, congressional intent was not followed and an entire regulatory mandate was created based on nothing more than the phrase "makes the swap available to trade."

#### **Beyond Impartial Access**

Congress required SEFs to have rules to provide market participants with impartial access to the market and to establish rules regarding any limitation on access.<sup>43</sup> The Commission, through the preamble to the final SEF rules, and staff appear to view these provisions as requiring SEFs to serve every type of market participant in an all-to-all market structure.<sup>44</sup> Given Dodd-Frank's reference to *limitations* on access, however, efforts to require SEFs to serve every type of market participant or to operate all-to-all marketplaces are unsupported by law.

There is no mandate for an all-to-all swaps market structure in Dodd-Frank. Congress knew that there were dealer-to-customer and dealer-to-dealer swaps markets before Dodd-Frank, just as there are in many other mature financial markets.<sup>45</sup> This structure is driven by the unique liquidity characteristics of the underlying swaps products.<sup>46</sup> This dynamic has not changed post–DoddFrank, and the law's impartial access provisions do not require or support the alteration of the present swaps market structure.<sup>47</sup>

Dodd-Frank does not prohibit SEFs from serving separate dealer-to-dealer and dealer-to-customer markets. Its impartial access requirement must not be confused with open access.<sup>48</sup> Impartial access, as the Commission noted in the preamble to the final SEF rules, means "fair, unbiased, and unprejudiced" access.<sup>49</sup> This means that SEFs should apply this important standard to their participants; it does not mean that SEFs are forced to serve every type of market participant in an all-to-all futures-style marketplace. Congress could have imposed this mandate, but it chose not to do so. Even the Commission acknowledged in the preamble to the final SEF rules that a SEF may operate different markets and may establish different access criteria for each of its markets.<sup>50</sup> This preamble language and the statutory language regarding "any limitation on access" are meaningless if CFTC staff act under the supposition that SEFs are required to operate business models with the capacity to serve every type of market participant.

## Unwarranted Void Ab Initio

The staffs of the Division of Clearing and Risk and the Division of Market Oversight (the Divisions) issued guidance that states that "any [swap] trade that is executed on a SEF . . . and that is not accepted for clearing should be void *ab initio*" (i.e., invalid from the beginning).<sup>51</sup> The guidance also states that this result is consistent with CEA section 22(a)(4)(B), which prohibits participants in a swap from voiding a trade, but does not prohibit the Commission or a SEF from declaring a trade to be void.<sup>52</sup>

The statute does not support the Divisions' justification for this policy. Although CEA section 22(a)(4)(B) does not prohibit the Commission or a SEF from voiding a trade, it does not require this outcome if a trade is rejected from clearing.<sup>53</sup> This section also does not prevent a SEF from implementing rules that allow a participant to correct errors and resubmit a trade for clearing.<sup>54</sup>

The CFTC staff's void *ab initio* policy creates a competitive disadvantage for the US swaps market relative to the US futures market. There are legitimate reasons, such as operational or clerical errors, that cause swaps trades to be rejected from clearing. In the futures market, DCMs have implemented rules to address the situation where an executed futures transaction is rejected from clearing.<sup>55</sup> Furthermore, the void ab initio policy introduces additional risk into the system. For example, after a participant executes a swap, the participant enters into a series of other swaps to hedge its risk. If the first swap is declared void ab initio and there is no opportunity to resubmit the trade, then the participant will not be correctly hedged, which creates additional market and execution risk.

## Expansive Scope for Uncleared Swaps Confirmations

Under CFTC rules, a SEF is required to provide "each counterparty to a transaction . . . with a written record of all of the terms of the transaction which shall legally supersede any previous agreement and serve as a confirmation of the transaction."<sup>56</sup> Additionally, responding to public comments about a SEF's confirmation for uncleared swaps, footnote 195 to the preamble of the final SEF rules states, in part, that "[t]here is no reason why a SEF's written confirmation terms cannot incorporate by reference the privately negotiated terms of a freestanding master agreement . . . provided that the master agreement is submitted to the SEF ahead of execution . . ."<sup>57</sup>

The CFTC's approach to SEF confirmations is taken from the futures model. DCMs own their futures contracts and control the products' standardized terms. SEFs, however, do not own swaps products. The products' terms are akin to an open-source design that sell-side dealers created with their buy-side customers. Additionally, swaps market participants have long relied on master agreements that govern the overall trading relationship between counterparties. These master agreements set out the nontransaction-specific credit and operational terms that apply to all transactions entered into under them. As a result, SEFs do not know or have access to all of a swap's terms and corresponding documentation. This paradigm has not changed post–Dodd-Frank for uncleared swaps transactions.

Importantly, a master agreement and a confirmation serve different purposes and should be thought of as different documents. The CFTC swap documentation rules recognize the importance and distinct purposes of these documents.<sup>58</sup> The rules define a master agreement as including "all terms governing the trading relationship between the [parties]"<sup>59</sup> and a swap confirmation as documentation that "memorializes the agreement of the counterparties to all of the terms of the *swap transaction*."<sup>60</sup> The two are as alike as apples and oranges. The burden of requiring a SEF to confirm and report "all of the terms" of a trading relationship to which it is not a party is significant. Absent reconsideration, the SEF confirmation requirements will continue to be an obstacle for the trading of uncleared swaps on SEFs.

#### Embargo Rule and Name Give-Up

Under the embargo rule, a SEF may not disclose swap transaction and pricing data to its market participants until it transmits such data to a swap data repository (SDR) for public dissemination.<sup>61</sup> To effect such SDR transmission, a SEF must first enrich and convert such transaction data as required by the SDR. Alternatively, the SEF may choose to use a third-party provider to transmit data to an SDR. Only then can the SEF disclose swap transaction data to market participants on its trading platform.

The embargo rule causes delays in transaction and data disclosure that inhibit the long-established "workup" process, whereby counterparties buy or sell additional quantities of a swap immediately after its execution on the SEF at a price matching that of the original trade.<sup>62</sup> The workup process may increase wholesale trading liquidity in certain OTC swaps by as much as 50 percent.<sup>63</sup> This rule has hindered US markets from continuing a well-established and crucial global trading mechanism. The effect of the embargo rule appears to prioritize public transparency—in a market that is closed to the general public<sup>64</sup>—at the expense of transparency for actual participants in the marketplace. It is difficult to justify this unbalanced restraint on swaps liquidity.<sup>65</sup>

Similarly, name give-up is a long-standing market practice in many swaps markets. With name give-up, the identities of the counterparties are disclosed to each other after they have been anonymously matched by a platform.<sup>66</sup> The origins of the practice lie in wholesale markets for self-cleared swaps and other products. There, counterparties to large transactions use name give-up to confirm the creditworthiness of their counterparties.

In markets with central counterparty (CCP) clearing of swaps, however, the rationale for name give-up is less clear cut. That is because the CCP and not the trading counterparty bears the credit obligations. Counterparties to CCP-cleared swaps primarily need assurance of each other's relation to the CCP and not the opposing counterparty's individual credit standing.

As the swaps market increasingly becomes a cleared market, it is reasonable to ask whether name give-up continues to serve a valid purpose. There are a variety of different views on both sides of this issue depending on one's position in the market. Some parties have urged the CFTC to flat-out ban the practice of name give-up. Yet, the impact of such a step must be carefully considered before taking any action.<sup>67</sup> What impact would a blanket ban have on swaps market liquidity? Would such a ban cause sell-side dealers to remove liquidity from the market or charge higher prices? Would new liquidity makers fully and consistently act in the market to make up any shortfall in liquidity? Because market illiquidity is increasingly recognized as a potential systemic risk to the US financial system,<sup>68</sup> any regulatory action to curtail the use of name give-up must be thoroughly analyzed for its impact on market liquidity and systemic risk.<sup>69</sup>

## Prescriptive Rules Disguised as Core Principles

Congress provided a core-principles-based framework for SEFs based on the CFTC's historical principles-based regulatory regime for DCMs.<sup>70</sup> Unfortunately, Dodd-Frank missed the mark with respect to the SEF core principles, most of which are based on the DCM core principles. The successful futures regulatory model is an inappropriate template for core principles in swaps execution.

This problem has been magnified by unwarranted amendments to CFTC rules making SEFs self-regulatory organizations (SROs)<sup>71</sup> and requiring them to comply with very prescriptive rules modeled after futures exchange practices that are unsuitable for the way swaps trade. Although the SEF core principles place certain regulatory obligations on SEFs, Dodd-Frank does not require the CFTC to make SEFs SROs.<sup>72</sup> Additionally, it does not instruct the Commission to take a prescriptive rules-based approach to SEFs.<sup>73</sup> In fact, the statute provides SEFs with reasonable discretion to comply with the core principles.<sup>74</sup>

## ADVERSE CONSEQUENCES OF THE CFTC'S SWAPS TRADING REGULATORY FRAMEWORK

Given the mismatch between the CFTC's flawed swaps trading regulatory framework and the manner in which swaps trade in global markets, the CFTC's swaps trading rules are threatening to cause and, in several cases, have already caused numerous adverse consequences for US market participants.

# Global Market Fragmentation and Systemic Risk

Foremost among the adverse consequences is the reluctance of global market participants to transact with entities subject to CFTC swaps regulation. Non-US persons are avoiding financial firms bearing the scarlet letters of "US person" in certain swaps products to steer clear of the CFTC's problematic regulations.<sup>75</sup> As a result, global swaps markets are fragmenting into US person and non-US person liquidity pools.<sup>76</sup> The fragmentation of the global swaps market has fractured trading liquidity, exacerbating the inherent challenge of swaps trading—adequate liquidity.<sup>77</sup> Fragmentation has led to smaller, disconnected liquidity pools and less efficient and more volatile pricing. Divided markets are more brittle, with shallower liquidity, posing a risk of failure in times of economic stress or crisis.

## **Domestic Market Fragmentation**

The CFTC's unwarranted slicing and dicing of swaps trading into a series of novel regulatory categories, such as Required Transactions and Permitted Transactions and block transactions "off-SEF" and non-blocks "on-SEF," has fragmented the US swaps market into artificial market segments. Like global fragmentation, domestic fragmentation has led to an artificial series of smaller and smaller pools of trading liquidity and increased market inefficiency.

# Market Liquidity Risk

Several government studies and industry observations have focused on the liquidity shortfall in corporate and US government debt markets.<sup>78</sup> CFTC regulations and staff actions may be hazarding a similar structural imbalance between liquidity provided and liquidity demanded in the US swaps markets.<sup>79</sup>

## Threatens SEF Survival

The CFTC's swaps regime threatens the survival of many SEFs and has erected enormous barriers to entry for future registrants. The CFTC's prescriptive and burdensome rules have ensured that operating a SEF is an expensive, legally intensive activity.<sup>80</sup> And the mismatch between the CFTC's swaps trading framework and the natural commercial workings of the swaps market has caused participants to avoid the CFTC's SEF regime, sharply depressing revenues.<sup>81</sup> As a result, big platforms get bigger, small platforms get squeezed out, and operating a SEF is unprofitable.<sup>82</sup>

## Hinders Technological Innovation

In 1899, US Patent Commissioner Charles H. Duell is said to have pronounced that "everything that can be invented has been invented."<sup>83</sup> Not to be outdone, the CFTC's swaps trading rules presuppose that order book and RFQ methodologies are today and will always remain the only suitable technological means for US swaps execution. These restrictive SEF rules would close US swaps markets to promising technological advances while the rest of the world proceeds ahead in financial market innovation.<sup>84</sup>

# Wastes Taxpayer Dollars

Fitting the square peg of the CFTC's swaps trading rules into the round hole of the established global swaps markets requires the CFTC to devote enormous resources to continuously explain, clarify, adjust, exempt, and manipulate rules sufficient for rough swaps market operability. The CFTC's current swaps trading regulatory framework requires enormous bureaucratic "make work" to ensure industry compliance. Yet, it is mostly unnecessary and unsupported by Title VII of Dodd-Frank. It wastes taxpayer dollars at a time when the Commission is seeking additional resources from Congress.

# Harms Relations with Foreign Regulators

Instead of working with its counterparts abroad as agreed to by the Group of Twenty (G20),<sup>85</sup> the CFTC forged ahead with overreaching swaps rules, which are partially responsible for harming relations with foreign regulators. It is clear that Organized Trading Facilities (OTFs) under European swaps trading rules will not be similarly hidebound by CFTC-like restrictions in methods of trade execution, nor will swaps platforms in Singapore or Hong Kong.<sup>86</sup> This mismatch between CFTC and European rules may well be the basis down the

road for another "equivalency" standoff similar to the prolonged dispute over central counterparty recognition.<sup>87</sup>

## Threatens Job Creation and Human Discretion

The application of certain CFTC rules threatens jobs in the US financial services industry. Many overseas trading firms are considering cutting off all activity with US-based trade support personnel to avoid subjecting themselves to the CFTC's flawed swaps trading rules.<sup>88</sup> Also, underlying many CFTC rules is an unstated bias against human discretion in swaps execution.<sup>89</sup> Yet there is no legal support in Title VII of Dodd-Frank for restricting human discretion in swaps execution.

## **Increases Market Fragility**

Nassim Nicholas Taleb, the well-known options trader who coined the phrase "black swan," has written about the increased fragility of today's top-downdesigned, overly complicated economic systems.<sup>90</sup> He warns that naïve overintervention in complex systems such as financial markets makes them more vulnerable, not less, to cascading runaway chains of reactions and ultimately fragile in the face of outsized crisis events.<sup>91</sup> The CFTC swaps trading rules, with their prescriptive complexity, limits on human discretion, and transaction methodology bias, seem to support this type of systemic fragility. That fragility increases rather than decreases the systemic risk—the risk of failure of the swaps markets and the broader US financial system—that Dodd-Frank was ostensibly designed to reduce.

# ALTERNATIVE SWAPS TRADING REGULATORY FRAMEWORK

This section proposes a pro-reform reconsideration of many of the CFTC's swaps trading rules to align with natural swaps market dynamics and the express statutory framework of Title VII of Dodd-Frank. This reconsideration is drawn from five key tenets: comprehensiveness, cohesiveness, flexibility, professionalism, and transparency.

### Comprehensiveness

The first tenet of this alternative framework is to subject a comprehensive range of US swaps trading to CFTC oversight. In this respect, the CFTC implemented a broad SEF registration requirement that applies "to facilities that meet the SEF definition in CEA section 1a(50)."<sup>92</sup> This alternative framework supports that comprehensive approach. Congress generally intended to bring all facilities for swaps trading into a comprehensive regulatory structure through its broad SEF registration provision.<sup>93</sup> Leaving platforms that solely facilitate the execution of swaps not subject to the trade execution mandate outside of CFTC oversight, and those that facilitate swaps subject to the mandate within creates bifurcated regulated and unregulated markets and invites abuses and evasion.<sup>94</sup>

The alternative approach proposed hereby adopts the CFTC's registration approach, but in a clear and noncircuitous manner. The scope of SEF registration would be defined through rules and not buried footnotes in the preamble text.<sup>95</sup> Similarly, all key components of the CFTC's swaps rules would reside in clear and definitive rule text and not in footnotes, staff advisories, and ad hoc no-action letters.

#### Cohesiveness

The second tenet of this alternative framework is regulatory cohesiveness. All CFTC-regulated swaps trading should fall within the same, cohesive, and undivided regulatory framework. This approach would remove the artificial segmentation between Required Transactions and their limited execution methods and Permitted Transactions and their broad execution methods, and between block transactions "off-SEF" and non-blocks "on-SEF." There is no statutory support for these divisions. They carry no ostensible policy justification. They are at odds with accepted global practices of swaps trading and hinder liquidity formation. They add large and unjustifiable regulatory costs and burdens and absorb limited agency resources.

## Flexibility

This straightforward, comprehensive, and cohesive approach will only work if the CFTC returns to Dodd-Frank's express prescription for flexibility in swaps trading. This alternative framework proposes congressionally authorized flexibility in five key areas:

- 1. *Permitting trade execution through "any means of interstate commerce.*" Markets, not regulators, must determine the various means of interstate commerce utilized in the swaps market, as Congress intended.
- 2. Allowing swaps products to evolve naturally. Follow Dodd-Frank's trade execution requirement and do away with the CFTC-created MAT process.
- 3. *Letting market structure be determined by the market*. Let market participants determine the optimal market structure (i.e., all-to-all markets or separate dealer-to-dealer and dealer-to-client marketplaces) based on their swaps trading needs and objectives.
- 4. Accommodating beneficial swaps market practices. Allow SEFs to implement workable error trade policies; narrow the scope of confirmations for uncleared swaps; better accommodate the activities of third-party commercial service providers, such as swaps data vendors, trade term affirmation providers, and trade confirmation vendors and allow compression, risk reduction, risk recycling, dynamic hedging, and other similar services.
- 5. *Treating core principles as general principles*. Implement a flexible core principles–based approach for SEFs that aligns with the way swaps actually trade.

# Professionalism

The fourth tenet of this alternative framework is to raise standards of professionalism in the swaps market by setting standards of conduct for swaps market personnel. Rather than implementing highly prescriptive swaps trading rules that seek to limit the discretion of intermediaries (e.g., interdealer brokers, futures commission merchants [FCMs], introducing brokers [IBs]) through ill-suited execution methods, this alternative framework proposes to establish standards that would enhance the knowledge, professionalism, and ethics of personnel in the US swaps markets who exercise discretion in facilitating swaps execution. It is noteworthy that US individuals who wish to broker or sell equities or debt securities must register with the US Securities and Exchange Commission (SEC) and join an SRO.<sup>96</sup> They must also pass the Series 7 exam, which seeks to measure the knowledge, skills, and abilities needed to perform the functions of a registered securities representative.<sup>97</sup> Similarly, in US futures markets certain persons must register with the CFTC and National Futures Association (NFA), a futures industry self-regulatory organization. Generally, all applicants for NFA membership must pass the Series 3 exam that seeks to measure futures markets proficiency.<sup>98</sup> Yet there is currently no examination that one must pass in the United States to broker swaps. There is no standardized measurement of one's knowledge and qualification to act with discretion in the world's largest and, arguably, most systemically important financial market—swaps.<sup>99</sup>

#### Transparency

The last tenet of this alternative framework focuses on promoting swaps trading and market liquidity as a prerequisite to increased transparency. The right measure of pre- and post-trade transparency can benefit market liquidity, but absolute and immediate transparency can harm liquidity and trading.<sup>100</sup> The regulatory objective must be to strike the right balance. Markets as complex as the swaps markets, where adequate liquidity is already a challenge, require care in the imposition of transparency mandates to ensure that this liquidity is not harmed.

Congress understood the liquidity challenge in the swaps market and thus set two goals for SEFs to be balanced against each other: (a) promoting the trading of swaps on SEFs and (b) promoting pre-trade price transparency in the swaps market. To date, CFTC rules have put greater weight on the side of the scale of pre-trade price transparency to the detriment of healthy trading liquidity.

A better way to promote price transparency is through a balanced focus on promoting swaps trading and market liquidity as Congress intended. Instead of taking a prescriptive approach to swaps execution that drives away participants, this framework would allow the market to innovate and provide execution through "any means of interstate commerce." That way, participants could choose the execution method that meets their needs based on a swap's liquidity characteristics, which in turn, responds to Congress's direction to promote trading on SEFs and liquidity.

## CONCLUSION

The pro-reform proposals that I have set forth are a package. They stand together as a comprehensive whole. It would serve little purpose to reassert the broad reach of SEF registration without easing the rigid inflexibility of the CFTC's swap transaction rules. It would make little sense to seek to improve standards of participant conduct without removing the unwarranted restraints on their professional discretion. It would be pointless to seek greater market transparency while continuing to thwart market liquidity. These proposals work together to achieve the aims of Title VII of Dodd-Frank to improve the safety and soundness of the US swaps market. They should not be adopted on a piecemeal basis.

A smarter and more flexible swaps regulatory framework would enable the United States to take the global lead in smart regulation of swaps trading. It would allow American businesses to more efficiently hedge commercial risks, promoting economic growth. Such a framework would also stimulate the American jobs market. A smarter swaps regulatory regime would return to the express letter and language of Title VII of Dodd-Frank. It would eschew the artificial slicing and dicing of US trading liquidity and unwarranted restrictions on means of execution that are unsupported by the law. For decades the CFTC has been a competent and effective regulator of US exchange-traded derivatives. The opportunity is at hand to continue that excellence in regulating swaps markets. It is time to seize that opportunity.

#### NOTES

- 1. Financial Crisis Inquiry Commission, The Financial Crisis Inquiry Report.
- 2. Ibid., 45–51, 308, 343, 352, and 386. For dissenting views, ibid., 414, 426–27, and 447; and Tuckman, "In Defense of Derivatives."
- Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).
- 4. A SEF is defined as a trading platform where multiple participants have the ability to execute or trade swaps by accepting the bids and offers of multiple participants on the platform, "through any means of interstate commerce." CEA § 1a(50); 7 U.S.C. § 1a(50).
- 5. 17 C.F.R. § 1.3(a) and (h); CEA § 2(h)(8); 7 U.S.C. § 2(h)(8).

- 6. In this chapter I argue, among other points, that the CFTC failed to follow its legislative mandate under Dodd-Frank in promulgating its swaps trading rules. I do not, however, seek to express a view as to whether the CFTC exceeded its general regulatory authority or acted in an arbitrary and capricious manner contrary to law.
- 7. CEA § 2(h)(8); 7 U.S.C. § 2(h)(8).
- 8. CEA § 1a(50); 7 U.S.C. § 1a(50).
- 9. CEA § 5h(e); 7 U.S.C. § 7b-3(e).
- 10. See the subsequent section in this chapter on the CFTC's Flawed Swaps Trading Regulatory Framework.
- 11. Given the episodic liquidity in many of the swaps markets, they have generally evolved over the past several decades into two-tiered marketplaces for institutional market participants; that is, "dealer to customer" marketplaces and "dealer to dealer" marketplaces. Traditionally, liquidity "taking" counterparties turn to sell-side dealers with large balance sheets that are willing to take on the liquidity risk in the swaps markets for a fee. Sell-side dealers then turn to the dealer-to-dealer marketplaces to instantly hedge the market risk of their large swaps inventory by trading with other primary dealers and sophisticated market-making participants. Dealers price their customer trades based on the cost of hedging those trades in the dealer-to-dealer markets. Without access to dealer to charge their buy-side customers much higher prices for taking on their liquidity risk, assuming they remained willing to do so.
- 12. CEA § 5h(f)(2); 7 U.S.C. § 7b-3(f)(2).
- 13. CEA § 5h(f)(1)(B); 7 U.S.C. § 7b-3(f)(1)(B).
- 14. Dodd-Frank missed the mark with respect to the SEF core principles. Most of the SEF core principles are based on the DCM core principles. Compare 7 U.S.C. § 7(d) (enumerating DCM core principles, including enforcement of exchange rules, monitoring of trading, recordkeeping and reporting, establishing position limits, adopting rules for emergency authority, requirements for financial resources, etc.), with 7 U.S.C. § 7b-3(f) (setting forth extremely similar core principles applicable to SEFs). However, the futures regulatory model is inappropriate for swaps trading, given the different liquidity and market structure characteristics of swaps.
- 15. CEA § 5h(e); 7 U.S.C. § 7b-3(e).
- 16. 17 C.F.R. § 37.9(a)(1).
- 17. 17 C.F.R. § 37.9(c)(1).
- 18. 17 C.F.R. §§ 37.9(a)(2) and 37.9(c)(2).
- 19. 17 C.F.R. §§ 37.3(a)(2), 37.3(a)(3), and 37.9(a)(2).
- 20. 17. C.F.R. §§ 37.9(a)(2) and 37.9(a)(3).
- 21. 17 C.F.R. § 37.9(c)(2).
- 17 C.F.R. § 37.3(a)(2); "Core Principles and Other Requirements for Swap Execution Facilities," 78 Fed. Reg. (June 4, 2013): 33476, 33504.
- 23. SEF Rule at 33493n216 (emphasis added). The Commission further stated that to "distinguish these swaps from other swaps that are not subject to the trade execution mandate, [the SEF rule] defines such swaps . . . as Permitted Transactions and allows these swaps to be voluntarily traded on a SEF by using any method of execution." Ibid.

- 24. CEA § 2(h)(8); 7 U.S.C. § 2(h)(8).
- 25. CEA § 1a(50); 7 U.S.C. § 1a(50). I assert the context in which it is used makes clear that the reference to "interstate commerce" is substantive rather than a statement of Constitutional jurisdiction. See also SEF Rule at 33501.
- See, for example, Gonzales v. Raich, 545 U.S. 1, 17 (2005); Katzenbach v. McClung, 379 U.S. 294, 302 (1964); Wickard v. Filburn, 317 U.S. 111, 125 (1942).
- 27. 17 C.F.R. § 37.9(a)(2).
- 28. See SEF Rule at 33504 (clarifying that a SEF must offer an Order Book for Permitted Transactions).
- 29. 17 C.F.R. § 43.2.
- See "Alternative Executive, or Block Trading, Procedures for the Futures Industry," 64 Fed. Reg. (June 10, 1999): 31195; "Chicago Board of Trade's Proposal to Adopt Block Trading Procedures," 65 Fed. Reg. (September 27, 2000): 58051.
- 31. 17 C.F.R. § 38.500.
- 32. Ibid.
- 33. CEA § 2(a)(13)(E); 7 U.S.C. § 2(a)(13)(E). Established marketplaces worldwide have long recognized that for less liquid products where a smaller number of primary dealers and market makers cross larger size transactions, the disclosure of the intention of a major institution to buy or sell could disrupt the market and lead to poor pricing. If a provider of liquidity to the market perceives greater danger in supplying liquidity, it will step away from providing tight spreads and leave those reliant on that liquidity with poorer hedging opportunities. Hence, large size or "block" trades are generally afforded a time delay before their details are reported to the marketplace.
- 34. The trade execution requirement and the Commission's made available to trade process pertain to DCMs as well. Given this chapter's focus on SEFs, the references to DCMs in this section have been omitted.
- 35. CEA § 2(h)(8); 7 U.S.C. § 2(h)(8).
- 36. Ibid.
- 37. Ibid.; 17 C.E.R. §§ 37.10, 37.12, 38.11 and 38.12; "Process for a Designated Contract Market or Swap Execution Facility to Make a Swap Available to Trade, Swap Transaction Compliance and Implementation Schedule, and Trade Execution Requirement under the Commodity Exchange Act," 78 Fed. Reg. (June 4, 2013): 33606.
- 38. 17 C.F.R. §§ 37.10(a), (b), 38.12(a) and (b).
- 39. MAT Rule at 33607 and 33610. It is doubtful that the Commission could find that a MAT submission is inconsistent with the CEA or Commission regulations because neither the CEA nor the regulations contain any objective requirements that a swap must meet for a MAT determination to be valid.
- 40. 17 C.F.R. §§ 37.9(a)(1), 37.9(a)(2), 37.10, 37.12, 38.11, and 38.12.
- 41. Compare CEA §§ 2(h)(1), 2(h)(2) and 2(h)(3); 7 U.S.C. §§ 2(h)(1), 2(h)(2) and 2(h)(3), *with* CEA § 2(h)(8); § 7 U.S.C. § 2(h)(8).
- 42. Ibid.
- 43. CEA § 5h(f)(2); 7 U.S.C. § 7b-3(f)(2).
- 44. SEF Rule at 33507-8.

- 45. See supra note 14. Many swaps markets have evolved into two-tiered marketplaces for institutional market participants given the episodic liquidity in these markets.
- 46. Ibid.
- 47. In a McKinsey report, an overwhelming majority of buy-side participants interviewed acknowledged the important role that dealers play in providing liquidity and were "not interested in disintermediating dealers..." See "Brave New World of SEFs," 5–6.
- 48. Open access is generally understood to mean universal, unrestricted access to all market participants.
- 49. SEF Rule at 33508.
- 50. Ibid.
- 51. US Commodity Futures Trading Commission, "Staff Guidance on Swaps."
- 52. Ibid.
- 53. CEA § 22(a)(4)(B); 7 U.S.C. § 25(a)(4)(B).
- 54. Ibid.
- See, for example, Chicago Mercantile Exchange (CME) Rule 527.C. Outtrades Resolution, http://www.cmegroup.com/rulebook/CME/I/5/5.pdf; CME Rule 809.D. Reconciliation of Outtrades, http://www.cmegroup.com/rulebook/CME/I/8/8.pdf.
- 56. 17 C.F.R. § 37.6(b).
- 57. SEF Rule at 33491n195.
- Compare 17 C.F.R. § 23.501 Swap Confirmation, with 17 C.F.R. § 23.504 Swap Trading Relationship Documentation.
- 59. 17 C.F.R. § 23.504(b)(1).
- 60. 17 C.F.R. § 23.500(c) (emphasis added).
- 61. 17 C.F.R. § 43.3(b)(3).
- 62. See SEF Rule at 33500 (explaining the workup process).
- 63. Author's professional observation based on marketplace experience.
- 64. The swaps market is closed to participants that are not eligible contract participants. CEA \$ 1a(18); 7 U.S.C. \$ 1a(18).
- 65. The preamble to the final real-time reporting rule did not respond to a public comment about the embargo rule's impact on the workup process. "Real-Time Public Reporting of Swap Transaction Data," 77 Fed. Reg. (January 9, 2012): 1182, 1200–2.
- 66. For example, after counterparties execute a swap through an anonymous order book, the identities of the counterparties are disclosed to each other. See Madigan, "CFTC to Test Role of Anonymity," discussing the name give-up issue; Burne, "CFTC to Look into Disclosure."
- 67. A question remains whether the CFTC has such authority under Dodd-Frank.
- 68. US Treasury Department, Office of Financial Research, 2014 Annual Report.
- 69. See the subsequent section on Adverse Consequences of the CFTC's Swaps Trading Regulatory Framework.
- 70. CEA § 5h(f); 7 U.S.C. § 7b-3(f).

- 17 C.F.R. § 1.3(ee). "Adaptation of Regulations to Incorporate Swaps," 77 Fed. Reg. (November 2, 2012): 66288, 66290.
- 72. Ibid.
- 73. CEA § 5h(f)(1)(B); 7 U.S.C. § 7b-3(f)(1)(B).
- 74. Ibid.
- 75. Blater, "Cross-Border Fragmentation," says "the fracturing of the global interest rate swaps market that emerged in the aftermath of US swap execution facility rules coming into force in October 2013 shows no signs of reversing"; Stafford, "CFTC Calls for International Help," indicates that because of recent CFTC regulations, "Sefs have become US-centric venues [which] has led to concern that the market is fragmenting, damaging both economic growth and contributing to potential systemic market risk"; Stafford, "US Swaps Trading Rules," notes that "European dealers [have become] unwilling to trade with US counterparts" due to CFTC regulations; Burne, "Big U.S. Banks Make Swaps," notes that some banks are "changing the terms of some swap agreements made by their offshore units so they don't get caught by U.S. regulations."
- 76. Ibid.
- 77. Referring to the manifest liquidity split between London and New York, Dexter Senft, Morgan Stanley's co-head of fixed income electronic markets, said, "I liken [SEF liquidity] to a canary in a coal mine. It's not dead yet, but it's lying on its side." Hunter, "Growing Pains," 31. See also Burne, "Companies Warn of Swaps," on fragmentation and liquidity concerns.
- 78. The IMF ("Global Financial Stability Report," 49–53) explains that "unconventional monetary policies involving protracted, large-scale asset purchases" have depleted market liquidity by "drastically reduc[ing] the net supply of certain securities available to investors." The Bank for International Settlements ("85th Annual Report," 36–40) cites the increasing "liquidity illusion" in which credit markets appear liquid and well-functioning in normal times, only to become highly illiquid upon market shock. See also Krouse, "Wall Street Bemoans Bond Market"; Jersey and Marshall, "Interest Rate Strategy Focus," 3–5.
- 79. Madigan, "US End-Users Are Losers."
- 80. Contiguglia, "Sef Boss Spends His Days."
- 81. Ibid.
- See Market Concentration section of Guest Lecture of Commissioner J. Christopher Giancarlo, Harvard Law School, Fidelity Guest Lecture Series on International Finance, December 1, 2015.
- 83. *Wikipedia*'s "Charles Holland Duell" entry also states that this statement has been debunked as apocryphal.
- 84. Because of the technological transformation of markets, it is no surprise that a global contest is afoot among world financial centers to attract a new generation of financial technology ("FinTech") and the jobs it will create. In fact, investment in the British FinTech sector already exceeds that of New York. One key reason is the relative simplicity, transparency and innovation-friendly approach of British regulators. In contrast, US regulatory frameworks are seen as complex, conservative and, in some respects, opaque with limited regulatory initiatives directed toward financial technology. See generally Ernst and Young, UK FinTech, "On the Cutting Edge." I proposed five practical steps for the CFTC to encourage financial technology innovation: employ FinTech savy regulatory staff, give FinTech firms "breathing room" to develop, collaborate in commercial FinTech experiments, listen and learn where

rules need to be adapted for technical advances and collaborate with other regulators here and abroad. See Giancarlo, "Blockchain."

- 85. At the 2009 Pittsburgh G20 Summit, one year after the financial crisis, global leaders agreed to work together to support economic recovery through a "Framework for Strong, Sustainable and Balanced Growth." The Pittsburgh participants pledged to work together to "implement global standards" in financial markets while rejecting "protectionism." See "G20 Leaders' Statement," 7, 20, 22.
- 86. See Statement of Edwin Schooling Latter, Head of Markets Policy, UK Financial Conduct Authority: "We're not prescriptive in the EU about the execution methods that the venues have to employ. So, for example, taking MTFs [multilateral trading facilities] and OTFs, they can use central limit order books, they can have quote-driven systems, they can do RFQ, they can use undeveloped hybrids of all of those." Division of Market Oversight (DMO) Public Roundtable regarding the Made Available to Trade Process, archived webcast, July 15, 2015, http://www.cftc.gov/PressRoom/Events/opaevent\_cftcstaff071515. See also Regulation 600/2014, 2014 O.J. (L173) 85-86 (EU).
- 87. Brunsden and Stafford, "EU and US Strike Derivatives Regulation Deal."
- CFTC Staff Advisory No. 13-69, "Applicability of Transaction-Level Requirements to Activity in the United States," November 14, 2013; CFTC Letter No. 16-64, "Extension of No-Action Relief: Transaction-Level Requirements for Non-US Swap Dealers," August 4, 2016.
- 89. The bias is seen in a range of CFTC positions, including allowing only two specific types of execution methods for Required Transactions, requiring an RFQ System to operate in conjunction with an Order Book, requiring an RFQ to be sent to three market participants, and placing various conditions around basis risk mitigation services.
- 90. See generally Taleb, Antifragile.
- 91. Ibid.
- 92. 17 C.F.R. § 37.3(a)(I); SEF Rule at 33481, 33483.
- 93. The SEF registration requirement states that "no person may operate a facility for the trading or processing of swaps unless the facility is registered as a [SEF] or as a [DCM] under this section." CEA § 5h(a)(1); 7 U.S.C. § 7b-3(a)(1).
- 94. For example, a platform meeting the SEF definition could shift its offerings to eliminate swaps imminently subject to a trade execution mandate in order to stay outside of CFTC oversight.
- 95. See SEF Rule at 33481n88.
- 96. See SEC, "Guide to Broker-Dealer Registration," April 2008.
- See Financial Industry Regulatory Authority, General Securities Representative Qualification Examination (Series 7) Content Outline (2015), retrieved August 12, 2016, http://www.finra.org/web/groups/industry/@ip/@comp/@regis/documents/industry /p124292.pdf.
- 98. See NFA, "Registration: Who Has to Register," retrieved August 12, 2016, http://www.nfa .futures.org/NFA-registration/index.HTML; NFA, "Proficiency Requirements," http://www .nfa.futures.org/NFA-registration/proficiency-requirements.HTML; NFA, "Examination Subject Areas National Commodity Futures Exam," http://www.nfa.futures.org/NFA -registration/study-outlines/SO-Series3.pdf.
- 99. Dodd-Frank requires registration of swap dealers (SDs) and major swap participants (MSPs) and directed the CFTC to promulgate specific business conduct requirements and "such

other standards and requirements as the Commission may determine are appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of this Act." CEA §§ 4s(a), 4s(h) and 4s(h)(3)(D); 7 U.S.C. §§ 6s(a), 6s(h) and 6s(h)(3)(D). Pursuant to this direction the Commission issued business conduct standards for SDs and MSPs in Part 23 of its regulations. Those regulations do not require any sort of proficiency testing, however. Moreover, associated persons of SDs and MSPs are not required to register under Dodd-Frank or the Commission's regulations. See "Registration of Swap Dealers and Major Swap Participants," 77 Fed. Reg. (January 19, 2012): 2613.

100. There are historical examples of markets that have sought to achieve full market transparency without adequate exemptions. In 1986, the London Stock Exchange (LSE) enacted post-trade reporting rules designed for total transparency with no exceptions for block sizes. What ensued was a sharp drop in trading liquidity as market makers withdrew from the market due to increased trading risk. To bring back trading, the LSE thereafter engaged in a series of amendments to make its block trade rules more flexible and detailed over time. See, for example, ISDA and SIFMA, "Block Trade Reporting," 8–9.

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