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## FROM REACTION TO PREVENTION: PRODUCT APPROVAL AS A MODEL OF DERIVATIVES REGULATION

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#### **Introduction: Dilemmas of Regulatory Reform**

The global financial crisis of 2008 underscored the importance of reducing and managing systemic risk in derivatives markets. Even though the crisis originated in the U.S. subprime mortgage market, over-the-counter (OTC) derivatives significantly contributed to pre-crisis accumulation of excessive risk and hidden leverage in the global financial system.<sup>1</sup> Derivatives offer private counterparties an unprecedented degree of flexibility and freedom to achieve desired outcomes by unbundling, reassembling, and trading financial risk. They may, and often do, function as a socially beneficial mechanism of prudent risk management and liquidity provision.<sup>2</sup> At the same time, by removing some of the traditional constraints on speculative trading—such as the need to purchase, hold, or physically move underlying assets—derivatives have fundamentally altered the nature and dynamics of financial investment and intermediation. By the mid-2000s, increasingly complex and opaque derivatives had become the key tool of financial speculation and regulatory arbitrage, ultimately leading the financial system to the brink of collapse.<sup>3</sup>

Not surprisingly, the need to update and strengthen regulatory oversight of derivatives markets has emerged as one of the key themes in post-crisis financial regulation reform. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act) contains a wide range of measures designed to increase transparency in derivatives trading and to encourage better risk management on the part

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<sup>&</sup>lt;sup>1</sup> See, e.g., Lynn A. Stout, Derivatives and the Legal Origin of the 2008 Credit Crisis, 1 HARV. BUS. L. REV. 1 (2011); Mark J. Roe, The Derivatives Market's Payment Priorities as Financial Crisis Accelerator, 63 STAN. L. REV. 539 (2011).

<sup>&</sup>lt;sup>2</sup> See Kimberly D. Krawiec, More than Just "New Financial Bingo": A Risk-Based Approach to Understanding Derivatives, 23 J. CORP. L. 1, 7–8, 10 (1997); Roberta Romano, A Thumbnail Sketch of Derivative Securities and Their Regulation, 55 MD. L. REV. 1, 5 (1996).

<sup>&</sup>lt;sup>3</sup> See Stout, supra note 1, at 22-31.

of private market participants.<sup>4</sup> The key element of the new statutory scheme is the mandatory central clearing of standardized derivatives and trading through regulated exchanges and swap execution facilities.<sup>5</sup> The statute also mandates public reporting of swap transactions<sup>6</sup> and introduces new regulatory categories of financial actors—swap dealers and major swap participants—that must comply with special business conduct, capital, and margin rules.<sup>7</sup>

The extent to which these reforms are likely to reduce systemic risk in practice remains to be seen.<sup>8</sup> Fundamentally, however, the Dodd-Frank Act falls short of radically reshaping the structure or operation of derivatives markets. It does not impose direct, targeted regulatory restraints on the levels of risk, complexity, or leverage in the OTC derivatives market.<sup>9</sup> Instead, the new law seeks to restrain potential risks posed by derivatives only indirectly, mainly through enhancing informational flow and rationalizing the clearing and settlement process for sufficiently standardized instruments. It leaves intact the monopoly of private actors on deciding which products—and, accordingly, risks—are traded in derivatives markets. In that sense, the Act's focus is inherently reactive and retrospective rather than proactive and prospective. Ultimately, the new law fails to address the key policy question: how much risk in derivatives markets is too much for the public to bear, and how can we prevent such socially harmful risk from entering the financial system in the first place?

#### A Paradigm of Prevention: Approval Regulation

This Article explores one possible way to answer this fundamental question. It outlines the rough contours of a regulatory scheme based on mandatory pre-market government licensing of complex financial instruments, including derivatives. An envisioned model of product approval regulation explicitly aims to control the amount and types of risk being introduced into the financial system. In that sense, it is a true gatekeeping mechanism, a form of ex ante regulation of systemic risk in financial

<sup>&</sup>lt;sup>4</sup> Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

<sup>&</sup>lt;sup>5</sup> *Id.* § 723.

<sup>&</sup>lt;sup>6</sup> *Id.* §§ 727–30.

<sup>&</sup>lt;sup>7</sup> Id. § 731.

<sup>&</sup>lt;sup>8</sup> Much of the academic debate in this area focuses on the ability of derivatives clearinghouses to fulfill their risk-reducing role. *See, e.g.*, Yesha Yadav, *The Problematic Case of Clearinghouses in Complex Markets*, 101 GEO L. J. 387, 412–20 (2013); Adam J. Levitin, *Response: The Tenuous Case for Derivatives Clearinghouses*, 101 GEO L. J. 445, 463–66 (2013).

<sup>&</sup>lt;sup>9</sup> Two key provisions in the Dodd-Frank Act attempt to impose limits on derivatives activities of banking organizations: the Volcker Rule that bans banking organizations from proprietary trading, and the "swap push-out" rules that prohibit insured depository institutions from conducting equity and commodity derivatives business. *See* Dodd-Frank Act §§ 619, 716. Yet, for reasons too complex to be elaborated in this brief Article, there is little hope that, as implemented, these provisions will significantly reshape derivatives markets.

markets.10

Generally, approval regulation can be defined as a regime in which "government entities exercise discretion over whether the firm or product can enter the market, such that firms must provide an empirical case for admission that the regulator must accept if legal market entry is to be granted."<sup>11</sup> Product approval has long been the model of pharmaceutical drug regulation in the United States and has recently been introduced in the European Union for chemicals regulation.<sup>12</sup> A similar system of pre-trading "contract designation" also existed in the area of the U.S. commodity futures regulation prior to 2000.<sup>13</sup> Potential extension of approval regulation to a broad range of financial products became a subject of academic discussion in 2008-09, in the context of the debate on the creation of a new consumer financial protection agency with the power to pre-approve financial products to ensure they are "safe" for consumers.<sup>14</sup>

Approval regulation, however, may also serve as a potentially effective mechanism for controlling systemic financial risk, not just the risk to individual consumers.<sup>15</sup> Of course, shifting the focus of the proposed scheme toward systemic concerns—socially unproductive levels of complexity, leverage, speculation, regulatory

<sup>&</sup>lt;sup>10</sup> For a more extensive and detailed elaboration of the proposal outlined in this Article, see Saule T. Omarova, *License to Deal: Mandatory Approval of Complex Financial Products*, 90 WASH. U. L. REV. 63 (2012).

<sup>&</sup>lt;sup>11</sup> Daniel Carpenter & Michael M. Ting, A Theory of Approval Regulation 2 (Feb. 10, 2004) (unpublished manuscript), http://people.hmdc.harvard.edu/~dcarpent/endosub-20040214.pdf. Approval regulation differs from the classic "regulation of entry" model that typically sets forth purely procedural conditions on market entry, such as licensing fees.

<sup>&</sup>lt;sup>12</sup> Noah M. Sachs, *Rescuing the Strong Precautionary Principle from its Critics*, 2011 U. ILL. L. REV. 1285, 1298–99 (2011).

<sup>&</sup>lt;sup>13</sup> For a discussion of these three examples of approval regulation, see Omarova, *supra* note 10, at 89–113.

<sup>113.</sup> <sup>14</sup> See Oren Bar-Gill & Elizabeth Warren, *Making Credit Safer*, 157 U. PA. L. REV. 1 (2008); J. E. Macrosconomic Consequences 29–30 (2008) Stiglitz, The Financial Crisis of 2007/2008 and its Macroeconomic Consequences 29-30 (2008) (unpublished paper presented at meeting on Financial Markets Reform of the Initiative for Policy Force), Dialogue Task available at http://www2.gsb.columbia.edu/faculty/jstiglitz/download/papers/2008 Financial Crisis.pdf; Daniel Carpenter, Particulars of a Financial Product Safety Commission, in THE TOBIN PROJECT: CONSIDERING FINANCIAL PRODUCT SAFETY COMMISSION (May 2009) available А 8 at http://people.hmdc.harvard.edu/~dcarpent/finreg/FPSC-Tobin.pdf. Although born of this debate, the Bureau of Consumer Financial Protection established under the Dodd-Frank Act does not have direct product-licensing authority.

<sup>&</sup>lt;sup>15</sup> This idea is beginning to gain some recognition among academics. Professors Eric Posner and Glen Weyl recently proposed to set up a regulatory agency with the power to approve new financial products if they pass the "social utility" test that focuses on whether, based on a straightforward quantitative market analysis, the product would likely be used more often for insurance than for gambling. *See* Eric A. Posner & E. Glen Weyl, *An FDA for Financial Innovation: Applying the Insurable Interest Doctrine to 21<sup>st</sup>-Century Financial Markets*, 107 NW. U. L. REV. (forthcoming 2013), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2010606&rec=1&srcabs=1995077&alg=1&pos=1.

arbitrage, and interconnectedness in financial markets—complicates the task of designing it. A rigorous product approval regime can inadvertently limit the ability of financial firms to develop and market potentially beneficial financial instruments and impede socially useful financial innovation, which may have serious consequences for long-term economic growth.<sup>16</sup> In this context, it becomes critical to articulate, in clear and unambiguous terms, the normative basis on which the new scheme would operate. Not only does this task involve making potentially difficult policy choices and trade-offs, but it also elevates the importance of drawing clear definitional and procedural lines, neither of which is an easy undertaking in the world of derivatives.

#### **Regulatory Objective: Reducing Strategic Complexity**

As the recent crisis demonstrated, numerous factors contribute to a systemic market failure. In designing a product approval regime, however, it is important to define the scheme's normative focus as clearly as possible. Which of the well-documented "evils" in modern financial markets should be designated as the primary target of ex ante regulatory intervention? The laundry list of plausible candidates includes, at a minimum, excessive speculation, leverage, regulatory arbitrage, and complexity.<sup>17</sup> Of course, truly effective regulation should target all of these phenomena in order to prevent an unsustainable level of risk accumulation in the financial system. However, for the purposes of providing clear policy guidance to regulators administering a product approval scheme, sharpening its policy focus may be a more effective strategy.

One potential approach would be to structure the new regulatory regime to target primarily and explicitly what I call strategic complexity in financial markets: constant introduction of new complex financial instruments into the market, regardless of actual demand or true economic need for such instruments.<sup>18</sup> In general, increasing complexity of financial instruments and institutional structures through which they are traded is one of the key sources of systemic financial risk.<sup>19</sup> What is particularly insidious in this respect is that much of that risk-generating complexity results from purely strategic

<sup>&</sup>lt;sup>16</sup> The latest crisis, however, demonstrated the many dangers of unrestrained financial innovation. *See, e.g.*, Margaret M. Blair, *Financial Innovation, Leverage, Bubbles, and the Distribution of Income*, 30 REV. BANKING & FIN. L. 225 (2010).

<sup>&</sup>lt;sup>17</sup> I deliberately leave aside a host of other potentially important factors—including greed, incompetence, and regulatory capture—because a product approval scheme cannot directly remedy these problems. If successful, however, a new regime may significantly alter, or counteract negative effects of, behavior causing these and other problems.

<sup>&</sup>lt;sup>18</sup> See Omarova, supra note 10, at 73.

<sup>&</sup>lt;sup>19</sup> For scholarly analyses of complexity in financial markets and its implications for systemic stability and efficiency, see Steven L. Schwarcz, *Regulating Complexity in Financial Markets*, 87 WASH. U. L. REV. 211 (2010); Dan Awrey, *Complexity, Innovation, and the Regulation of Modern Financial Markets*, 2 HARV. BUS. L. REV. 235 (2012); Henry T. C. Hu, *Too Complex to Depict? Innovation, "Pure Information," and the SEC Disclosure Paradigm*, 90 TEX. L. REV. 1601 (2012). *See also* Omarova, *supra* note 10, at 68–71.

efforts of dealers and market-makers—financial intermediaries that structure, sell, and deal in complex financial instruments—seeking short-term, monopoly-like rents.<sup>20</sup> Dealers derive the highest profits from being the first to design and sell to clients a new financial instrument that is perceived as offering some unique benefits to investors, mostly by enhancing their ability to engage in speculation and arbitrage, and commands a high premium. Once a new product becomes commoditized, the original dealer loses its ability to extract monopolistic rents and seeks to introduce the next innovation to recapture lost rents, without regard to any natural demand for such a product in the marketplace.<sup>21</sup> In the course of this socially inefficient over-innovation, dealer institutions originate, distribute, and amplify financial risk. That, in turn, enables other market participants to make increasingly risky and levered speculative bets, expands intra-market linkages and interconnectedness, and preemptively defeats regulators' efforts to exercise effective oversight of the financial system.

It makes intuitive sense, therefore, that limiting financial institutions' ability to over-supply unnecessarily complex financial products should substantially decrease levels of speculative trading, leverage, interconnectedness, and systemic fragility. The most effective method of achieving this goal is to insert regulatory controls at the point of product development, before financial intermediaries introduce the risk into the system. Under this regime, the regulatory agency would act as a gatekeeper and its primary task would be to vet all new financial products for indicia of strategic complexity and other socially undesirable risk attributes.<sup>22</sup>

#### **Regulatory Mechanism: The Three-Part Product Approval Standard**

The core element of a product approval scheme is the substantive standard for determining whether a particular product should be allowed to enter the market. Fashioning a comprehensive and precise set of standards for licensing derivatives and other financial products is a difficult task. Nevertheless, it is possible to envision key substantive and procedural principles of a viable product approval mechanism. Inevitably, this is more of a thought experiment than a legislative blueprint.

The key aim of the product licensing review should be to evaluate each relevant financial instrument from functional, institutional, and policy perspectives. Regulatory approval should be granted only if the application meets a three-part statutory standard: (1) an "economic purpose" test, which would place the burden of proving commercial

<sup>&</sup>lt;sup>20</sup> See Awrey, supra note 19, at 258–67; Omarova, supra note 10, at 72–73.

<sup>&</sup>lt;sup>21</sup> See Awrey, supra note 19, at 263–65. In effect, dealers manufacture demand by offering clients new ways to increase their returns.

<sup>&</sup>lt;sup>22</sup> This is in not to say that complexity is the only cause of systemic risk. Strategic complexity is a proxy for a cluster of risk-generating phenomena: it functions as a corollary for excessive speculation, over-leveraging, and regulatory arbitrage. It may also be easier (although by no means easy) to operationalize a regulatory scheme specifically focused on complexity of financial products, as opposed to their speculative potential or effect on the leverage in the financial system.

and social utility of each proposed financial instrument on the financial institutions seeking approval; (2) an "institutional capacity" test, which would require a review of the applicant-firm's ability to monitor and manage the risks of the proposed product effectively; and (3) a "systemic effects" test, which would require a finding that approval of the proposed product does not pose an unacceptable risk of increasing systemic vulnerability and does not raise significant public policy concerns.

#### The "Economic Purpose" Test

First, the financial institution would have to make an affirmative showing that the proposed financial instrument has a bona fide economic purpose that promotes productive enterprise and does not merely provide another means of financial speculation, leverage, or regulatory arbitrage. The goal of the product approval regime is to discourage financial institutions from creating and marketing complex financial instruments, where the benefits of such complexity for the economy and broader society do not outweigh potential increase in systemic risk.

To meet this test, an applicant-firm will have to (1) identify the intended market for the proposed financial product and describe (with sufficient specificity) potential users; (2) show that the product will fulfill a specific business need of potential product users, which existing financial products fail to fulfill; and (3) demonstrate that this legitimate business need significantly outweighs any potential uses of the product for speculative investment or regulatory arbitrage as the core motivation for the product user (or the applicant firm) to enter into the proposed transaction.<sup>23</sup>

The economic purpose test is essentially a "facts-and-circumstances" inquiry.<sup>24</sup> The applications would have to describe the target market for the product and the intended economic purpose of the product in reasonably specific terms, in order to show a relatively direct and meaningful link between the proposed financial instrument and some productive economic activity outside the confines of financial markets.<sup>25</sup> Applicant-firms would be required to monitor on an ongoing basis the markets for their approved products and report any significant changes in the market composition and uses of the

<sup>&</sup>lt;sup>23</sup> In effect, the proposed test would reverse the currently dysfunctional concept of cost-benefit analysis of financial services regulation as a more risk-based and socially conscious cost-benefit analysis of financial services. In contrast to the current system, the proposed approach would allocate the duty to produce information necessary to conduct such analysis on the party that has full access to such information. For a critical examination of the current system of regulatory cost-benefit analysis, see Nicholas Bagley & Richard L. Revesz, *Centralized Oversight of the Regulatory State*, 106 COLUM. L. REV. 1260 (2006); Daniel A. Farber, *Rethinking the Role of Cost-Benefit Analysis*, 76 U. CHI. L. REV. 1355 (2009).

<sup>&</sup>lt;sup>24</sup> This is one of the key differences between the approval standard envisioned here and the quantitative market analysis of "social welfare" proposed by Posner & Weyl, *supra* note 15, at 16–19.

<sup>&</sup>lt;sup>25</sup> This requirement raises many difficult questions about drawing the line between legitimate hedging and socially useless speculation. For a fuller discussion of some of these difficulties, and potential ways to solve them, see Omarova, *supra* note 10, at 116–20.

relevant products, as these changes may alter considerations on which the original approval grant was based.  $^{26}$ 

In effect, financial institutions will have to provide complete ongoing disclosure and analysis of their dealing and market-making activities. This burden-shifting mechanism would begin correcting the informational asymmetries between regulators and industry and the current incentive structure that encourages socially sub-optimal risktaking by financial market actors.

#### The "Institutional Capacity" Test

The second part of the statutory standard would require the applicant to demonstrate its internal organizational, operational, and financial capacity to monitor and manage potential risks the proposed product poses to the institution's own financial health, as well as to the financial well-being of the product's users and overall market stability.

To meet this test, the applicant would have to satisfy certain capital adequacy or similar requirements limiting its ability to incur leverage.<sup>27</sup> Additional factors to be considered may include the firm's overall business and risk profile; the relationship between the proposed activity and the rest of the firm's business and resources (including human and technological resources); internal systems of risk management and regulatory compliance; previous regulatory and compliance record; and the history of enforcement against the firm or its affiliated entities. It is also important to review and evaluate whether the firm has established effective risk management policies and procedures designed specifically for the proposed activity.

The inquiry at this point should not be limited to the firm's ability to handle the economic demands of dealing in the specific product. It is just as critical to assess how the proposed activity may alter the firm's economic incentives and overall business strategy, and whether or not such a change creates potential conflicts of interest, poses reputational risks to the firm, or raises significant concerns about broader market integrity.<sup>28</sup> To put it simply, the key question has to be, "Do we want this particular

<sup>&</sup>lt;sup>26</sup> This would enable the regulators to react in a timely manner when familiar financial instruments begin morphing into something different in terms of their functions and risk profile. The pre-crisis transformation of traditional residential mortgages and relatively straightforward mortgage-backed securitizations into a complex form of financial speculation provides an example of such dynamics. *See* Adam J. Levitin & Susan M. Wachter, *Explaining the Housing Bubble*, 100 GEO L. J. 1177 (2012).

<sup>&</sup>lt;sup>27</sup> Importantly, regulators may require a (significantly) higher additional capital buffer to support the specific proposed financial transaction and related market activities.

<sup>&</sup>lt;sup>28</sup> One example highlighting the importance of assessing this type of risk both to the firm's reputation and to the broader market integrity is Goldman Sachs' infamous "Big Short" strategy in early 2007. One of the major CDO originators, Goldman Sachs accumulated a large short position in mortgage-backed assets it was aggressively securitizing and marketing at the same time. *See* U.S. SENATE PERMANENT SUBCOMM. ON INVESTIGATIONS, WALL STREET AND THE FINANCIAL CRISIS: ANATOMY OF FINANCIAL

institution to trade and deal in this particular product?"

#### The "Systemic Effects" Test

Finally, the applicant-firm will also have to demonstrate that the proposed product does not pose potentially unacceptable systemic risk or is otherwise likely to increase the vulnerability of the financial system. This intentionally broad requirement gives the regulator statutory authority to consider a wide variety of potentially relevant factors and public policy considerations that may not be directly included in the description of the product or the immediate market needs. Many existing statutes mandate that financial regulators exercise their discretion only if doing so is "in the public interest."<sup>29</sup> This aspect of the product approval process is designed to allow for this type of deliberation, where the applicant-firm bears the burden of proving that the financial instrument it seeks to market is not likely to have a negative impact on broader socio-economic policies and political goals.<sup>30</sup>

#### **Implementing the Mechanism: Operational Design Challenges**

This cursory outline of a product approval mechanism raises many legitimate questions about the proper scope, feasibility, and potential negative consequences of instituting such an intrusive regulatory scheme. While it is impossible to answer all of these questions in this short Article, it is useful to sketch out some of the key challenges posed by this proposal.

To function effectively, a product approval mechanism must be embedded in a properly designed regulatory structure. Many operational details of such a structure would require serious thought. Perhaps the most critical—and most difficult—task in this respect is delineating the overall scope of the scheme and defining which classes of financial products and transactions should be subject to regulatory pre-approval. While an over-inclusive definition may have an unnecessary chilling effect on socially beneficial

<sup>30</sup> A quintessential example of a financial product banned on public policy grounds are terrorism futures, conceived in 2003 by the Pentagon as a market-based predictor of the level of risk posed by terrorist attacks. Justin Wolfers & Eric Zitzewitz, *The Furor Over 'Terrorism Futures,'* WASH. POST, July 31, 2003, at A19. Congress discarded this idea on public policy grounds. In 2011, the CFTC adopted a rule prohibiting the listing and trading of contracts referencing "terrorism, assassination, war, gaming, or an activity that is unlawful under any State or Federal law." 17 C.F.R. § 40.11(a)(1) (2012).

COLLAPSE 376–636 (2011), available at http://www.hsgac.senate.gov/subcommittees/investigations/reports.

<sup>&</sup>lt;sup>29</sup> See, e.g., 12 U.S.C. § 371c(f)(2) (2012) (authorizing federal bank regulators to grant exemptions from the statutory limitations on banks' transactions with affiliates if, among other things, the regulators find such exemptions to be "in the public interest"); *Id.* § 1843(a) (authorizing the Board of Governors of the Federal Reserve System to extend the two-year grace period for new bank holding companies to comply with the statutory prohibitions on non-banking investments if, in the Board's judgment, "such an extension would not be detrimental to the public interest"). There are numerous examples of similar provisions in federal banking statutes.

innovation, an under-inclusive definition may allow for the excessive build-up of systemic risk in financial markets and thus undermine the efficacy of the entire regime.

Complex trading strategies and sophisticated structuring techniques raise an even more difficult question: What constitutes a "product" that would require a separate regulatory approval under the new regime?<sup>31</sup> Thus, one of the critical tasks in designing the new regulatory regime is to develop a set of criteria for determining when a particular instrument has features unique enough to make it a separate "product." As a first approximation, that list of factors should include key terms related to payment and other significant rights and obligations of the counterparties, the intended uses and target markets of the instrument, and the nature of assets underlying the instrument. A significant change in any of these terms would require the financial institution to apply for a separate regulatory approval.

Finding a workable solution to these definitional problems—where and how exactly to draw the lines between separate "products" and which of those "products" should be subject to mandatory licensing—may be the key to the feasibility of the proposed scheme.<sup>32</sup> Among other things, these choices would determine the volume of deals to be reviewed and approved by the regulator under the new regime. After all, the viability of any regulatory model depends on the agency's resources and ability to manage the process in practice.

Beyond these definitional problems, numerous questions arise with respect to structuring the process of approval, assigning regulatory jurisdiction, and enforcing compliance. Developing these operational details requires careful balancing of competing considerations of procedural fairness and efficiency, regulatory flexibility and regime integrity, technical expertise and public accountability.<sup>33</sup> These difficulties are hardly insurmountable, nor are they unique to this proposal. In any event, envisioning an operational product approval scheme is a valuable intellectual exercise for purposes of shaping the future of regulatory reform.

#### **Conclusion: Redefining What Is Possible**

This Article explored the prospect of a fundamental shift in derivatives regulation and advocated an explicitly anticipatory approach to reducing systemic risk in the financial sector. The proposed model of ex ante derivatives regulation does not prohibit any financial activities. It merely imposes the duty to provide information necessary for evaluating potential risks and benefits of a specific financial product on the financial

<sup>&</sup>lt;sup>31</sup> For example, under a well-functioning regime, a financial institution should not be able to apply for blanket pre-approval of all "swaps" or "equity swaps" and then proceed to structure and market a wide variety of such instruments with different risk profiles.

<sup>&</sup>lt;sup>32</sup> For a more detailed discussion of potential solutions to these definitional problems, as well as other design issues, see Omarova, *supra* note 10, at 123–31.

<sup>&</sup>lt;sup>33</sup> See id. at 131–35.

institution seeking to market it. If properly designed and implemented, this regulatory approval process would provide a mechanism for ensuring that financial innovation, in fact, advances productive enterprise in the real economy and offers real public benefits.

As discussed above, executing this idea will likely involve resolving various technical and operational challenges. Because it calls for a radical change in the existing regulatory philosophy, this proposal is also bound to generate criticisms on other grounds. To some, product approval may appear too blunt a tool, liable to cause more harm than good by stifling financial innovation and driving financial activities abroad. Others may see it as unacceptably paternalistic "command-and-control" regulation. Finally, many may doubt the presence of political will to take on such bold and controversial reforms.

This Article does not purport to provide answers to every question and dispel every doubt. It may very well prove too difficult to design and implement a comprehensive and effective mandatory product approval scheme for derivatives (or any other financial products) in practice. Nevertheless, it is critical to give this seemingly radical proposal a full, open-minded consideration as a potentially superior alternative to the current, *ex post* regulatory approach. At the very least, expanding the range of plausible reform options should lead to more meaningful academic discussions and better informed policy decisions. By making a preliminary case for product approval as a potentially plausible model of derivatives regulation, this Article seeks to enhance our chances of getting it right next time.