

**Transcending Regulatory Fragmentation and the  
Construction of an Economy-Society Discourse:  
Implications for Regulatory Policy Derived from a  
Functional Approach to Understanding Shadow Banking**

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I. INTRODUCTION .....	328
II. WHY A FUNCTIONAL APPROACH TO UNDERSTANDING SHADOW BANKING? .....	329
<i>A. A Functional Approach to Understanding Repo Markets.....</i>	<i>331</i>
<i>B. A Functional Approach to Understanding Money Market Funds.....</i>	<i>334</i>
<i>C. A Functional Approach to Understanding Securitization.....</i>	<i>337</i>
III. THE FUNCTIONAL APPROACH AND ITS ORIGINS.....	342
IV. LIMITATIONS OF THE FUNCTIONAL APPROACH.....	347
V. THE OPTIMALITIES OF THE FUNCTIONAL APPROACH AND CONCLUSION.....	354

## I. INTRODUCTION

The interpretation of “shadow banking” and the mapping of the shadow banking universe is the subject of significant academic commentary<sup>1</sup> and policy discussions.<sup>2</sup> This is because shadow banking is often used as a catch-all term to refer to financial activities and transactions that may not be subject to traditional realms of regulation, but the amorphous nature of the term is unsatisfactory for informing debates on regulatory boundaries and policy. Often, a “functional” approach is suggested in order to understand the nature of financial activities and transactions that are lumped into the shadow banking category. The “functional” approach focuses on the economic function of the financial activity in question, regardless of the type of institution carrying it out.<sup>3</sup> By looking at the economic function performed by the financial activity in question, one may better ascertain the underlying demand and supply for such function<sup>4</sup> and the risks that such functions give rise to,<sup>5</sup> particularly whether systemic risk is implicated. The approach may also highlight the functional similarities and differences with already-regulated financial activity in order to form views as to the regulatory perimeter for shadow banking activities.<sup>6</sup> The functional approach to shadow banking is therefore a prima facie useful approach to surveying the universe of shadow banking and informing the policy-making process in relation to shadow banking activities and transactions at national and international levels.

This Article raises concerns as to the limitations of the functional approach, and whether such limitations would ultimately hamper the development of regulatory policy.

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1. Gary Gorton & Andrew Metrick, *Regulating the Shadow Banking System*, 261–62 (Brookings Papers on Economic Activity, 2010), [https://www.brookings.edu/wp-content/uploads/2010/09/2010b\\_bpea\\_gorton.pdf](https://www.brookings.edu/wp-content/uploads/2010/09/2010b_bpea_gorton.pdf); Morgan Ricks, *Money and (Shadow) Banking: A Thought Experiment*, 31 REV. BANKING & FIN. L. 731, 731 (2012). This will be discussed in greater detail shortly.

2. ZOLTAN POZSAR ET AL., SHADOW BANKING 29 (Fed. Res. Bank of N.Y. Staff Rep. No. 458, Feb. 2012), [https://www.newyorkfed.org/medialibrary/media/research/staff\\_reports/sr458.pdf](https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr458.pdf); FIN. STABILITY BD., SHADOW BANKING: STRENGTHENING OVERSIGHT AND REGULATION 6 (2011), [http://www.fsb.org/wp-content/uploads/r\\_111027a.pdf?page\\_moved=1](http://www.fsb.org/wp-content/uploads/r_111027a.pdf?page_moved=1) [hereinafter FIN. STABILITY BD., SHADOW BANKING]; FIN. STABILITY BD., STRENGTHENING OVERSIGHT AND REGULATION OF SHADOW BANKING: AN OVERVIEW OF POLICY RECOMMENDATIONS 7 (2013), [http://www.fsb.org/wp-content/uploads/r\\_130829a.pdf?page\\_moved=1](http://www.fsb.org/wp-content/uploads/r_130829a.pdf?page_moved=1) [hereinafter FIN. STABILITY BD., STRENGTHENING OVERSIGHT]; FIN. STABILITY BD., GLOBAL SHADOW BANKING MONITORING REPORT 2015, 20 (2015), <http://www.fsb.org/wp-content/uploads/global-shadow-banking-monitoring-report-2015.pdf> [hereinafter FIN. STABILITY BD., GLOBAL SHADOW BANKING]; FIN. STABILITY BD., TRANSFORMING SHADOW BANKING INTO RESILIENT MARKET-BASED FINANCE 5 (2015), [http://www.fsb.org/wp-content/uploads/shadow\\_banking\\_overview\\_of\\_progress\\_2015.pdf](http://www.fsb.org/wp-content/uploads/shadow_banking_overview_of_progress_2015.pdf) [hereinafter FIN. STABILITY BD., TRANSFORMING SHADOW BANKING].

3. FIN. STABILITY BD., GLOBAL SHADOW BANKING, *supra* note 2, at 6.

4. Stijn Claessens & Let Ratnovski, *What is Shadow Banking?* 3 (Int’l Monetary Fund, Working Paper No. 14/25, Feb. 2, 2015), <http://ssrn.com/abstract=2559504>.

5. FIN. STABILITY BD., TRANSFORMING SHADOW BANKING, *supra* note 2, at 11.

6. Benjamin F Jackson, Note, *Danger Lurking in the Shadows: Why Regulators Lack the Authority to Effectively Fight Contagion in the Shadow Banking System*, 127 HARV. L. REV. 729, 737 (2013); Ricks, *supra* note 1, at 731.

In particular, I question whether the functional approach is too embedded in market-liberal assumptions, and gives rise to a “like-for-like” presumption in favor of the design of regulatory methodology. Further, I question whether the functional approach, though conceptually promising, is subject to the legal arbitrage that it seeks to overcome. Nevertheless, this Article does not deny the achievements made by adopting the functional approach and suggests how it should be put to optimal use.

The Article begins by briefly sketching why commentators and policy-makers have endorsed a functional approach to understanding shadow banking. It then proceeds to examine the nature and origins of the functional approach in financial regulation more generally. I assess the achievements of the functional approach in understanding and mapping shadow banking, followed by exploring the limitations I perceive. I suggest that the optimal application of the functional approach must be stakeholder-inclusive and focused primarily on global surveillance. Such an approach is therefore not frontloaded with implications for policy-making, leaving policy choices to be debated in open and inclusive dialogues, so that the relevant international and national authorities may determine their policy choices. I argue that such an approach is optimal as it is likely to produce more objective factual findings that are unpartisan in nature and accessible to many. I argue that such an approach may be regarded as part of an endeavor toward a near-Habermasian dialogue between economy and society. Such a dialogue is desirable and may be an important piece in the wider context of the political economy of financial regulation.<sup>7</sup>

## II. WHY A FUNCTIONAL APPROACH TO UNDERSTANDING SHADOW BANKING?

A number of commentators define shadow banking as credit, liquidity, or maturity transformation activities that are carried out without recourse to emergency liquidity assistance or a public backstop<sup>8</sup> (i.e., depositary bank-like activities without the usual public sector supporting infrastructure and often also outside of the usual regulatory frameworks that apply to banks).<sup>9</sup> A rather crude way of looking at shadow banking is to regard all non-bank financial intermediation activities as shadow banking, an approach taken by the European Central Bank,<sup>10</sup> for example albeit mainly for surveillance purposes and not for the purposes of determining regulatory policy. This approach, perhaps more than anything, highlights the inadequacies of current regulatory approaches. The Financial Stability Board acknowledges that the existing mode of regulatory thinking revolves around distinguishing the banking from the non-banking

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7. See, e.g., Pierre-Hugues Verdier, *The Political Economy of International Financial Regulation*, 88 IND. L.J. 1405, 1447–59 (2013) (discussing current and historical international regulatory systems); Susanne Lütz, *Political Economy Approach to Financial Reform*, in THE POLITICAL ECONOMY OF FINANCIAL MARKET REGULATION: THE DYNAMICS OF INCLUSION AND EXCLUSION 35–40 (Peter Mooslechner ed., 2006).

8. TOBIAS ADRIAN ET AL., SHADOW BANK MONITORING, FED. RES. BANK N.Y. 3–4 (Staff Report No. 638, Sept. 2013), [https://www.newyorkfed.org/medialibrary/media/research/staff\\_reports/sr638.pdf](https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr638.pdf); Claessens & Ratnovski, *supra* note 4, at 3–7; ZOLTAN POZSAR ET AL., *supra* note 2, at 1.

9. A number of commentators define shadow banking as money creation activities, mimicking banking but avoiding regulatory constraints, see, e.g., Jackson, *supra* note 6, at 730–44; Margaret M. Blair, *Making Money: Leverage and Private Sector Money Creation*, 36 SEATTLE U. L. REV. 417, 421–35 (2013); Thorvald Grung Moe, *Shadow Banking: Policy Challenges for Central Banks* 2–5 (Levy Econ. Inst., Working Paper No. 802, 2014), [www.levyinstitute.org/pubs/wp\\_802.pdf](http://www.levyinstitute.org/pubs/wp_802.pdf).

10. REPORT ON FINANCIAL STRUCTURES, EUR. CENT. BANK 46–49 (2015).

sector.<sup>11</sup> Current regulatory approaches are often based on the label of the firm (i.e., making sectoral differentiations between banks, insurers, and investment firms).

Moreover, the adoption of conventional regulatory paradigms is inappropriate for understanding shadow banking as it is inaccurate to only view non-bank institutions as part of the shadow banking landscape. This seems to suggest that such institutions are conducting covert or unconventional activities or are not adequately regulated. On the contrary, such institutions may be regulated under a different label, such as investment management. Thus, sectoral regulation may fail to accommodate financial innovation that firms carry out to mimic activities in another regulated sector. Further, many banking institutions are indeed involved in various activities that could be described as shadow banking. Banks carry out significant credit, liquidity or maturity transformation outside of the conventional regulatory framework, and these activities may pose risks that are not taken into account in those regulatory frameworks.

Fein is right in pointing out that much of shadow banking is actually conducted by banks, and hence, existing regulatory labels based on sectoral differentiation do not provide much guidance in understanding the nature of shadow banking and implications for regulatory policy.<sup>12</sup> The limitations in current regulatory definitions leave non-bank institutions that perform economically similar functions out of the regulatory perimeter for banks. Further, unconventional activities undertaken by banks are also arguably beyond the regulatory perimeter. Hence, pockets of regulatory arbitrage can be taken advantage of by financial institutions, due to anomalous differences in regulatory treatment.

Shadow banking involves financial innovation, which on the one hand may be regarded as serving genuinely useful purposes, but on the other hand may be perceived as a form of regulatory arbitrage.<sup>13</sup> As such, it can be argued that existing sectoral regulation or the non-bank/bank distinctions are inherently unable to capture the novelty and the boundary-shifting nature of shadow banking activities or transactions. A functional approach to understanding shadow banking is necessary as the regulatory/legal understanding of banking has become obsolete and unduly narrow in scope. Whether or not it is purposed to overcome regulatory arbitrage, the functional approach reaches into the economic structures and models of financial intermediation activity to discern the objectives, methodology, and risk profiles of innovative or alternative activity. The adoption of a functional approach in understanding shadow banking transcends the limitations of currently fragmented regulatory approaches adopted in different jurisdictions. It may also be the first step towards developing regulatory policy, but here I urge the exercise of caution, as will be shortly discussed. For example, a functional approach to shadow banking is able to unpack the economic purposes of the rehypothecation market (repo market), while highlighting which aspects of the market are in the “shadows”—with distinguishing characteristics like being *unmonitored*, *unregulated* (whether or not for the purposes of regulatory arbitrage or avoidance), and *unconventional* (or as an alternative or innovative means of achieving similar economic

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11. FIN. STABILITY BD., SHADOW BANKING, *supra* note 2, at 3–6.

12. Melanie L. Fein, *The Shadow Banking Charade*, SEC 29–32 (Feb. 15, 2013), <https://www.sec.gov/comments/s7-04-09/s70409-95.pdf>.

13. TOBIAS ADRIAN, FINANCIAL STABILITY POLICIES FOR SHADOW BANKING, FED. RES. BANK N.Y. 3–4 (Staff Report No. 664, Feb. 2014), [https://www.newyorkfed.org/medialibrary/media/research/staff\\_reports/sr664.pdf](https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr664.pdf).

effects traditionally achieved via other means, usually regulated). I argue that the functional approach is able to provide an objective narrative of the nature of shadow banking in terms of their economic and legal functions. Such analysis is also able to tease out the shadowy aspects of such activities. However, I suggest that the functional approach should not be used to justify policy-making based on a “like-for-like” approach with reference to what is already regulated, an argument that will be developed in Part IV.

I next turn to how the functional approach can be used to flesh out the nature and key attributes of three shadow banking areas: the repo markets, money market funds, and securitization.

#### *A. A Functional Approach to Understanding Repo Markets*

In repo markets, highly liquid securities such as government debt may be used to fund short term borrowing by banks and other wholesale sector institutions. For example, in the overnight repo market, financial institutions, usually banks, enter into agreements to sell such securities to a dealer (likely another bank) in order to buy them back the following day at a premium. The dealer is able to rehypothecate the same security instrument for the same short term funding purpose. Manmohan Singh and Peter Stella report a high level of rehypothecation, or collateral re-use, in shadow banking markets.<sup>14</sup> Such short term funding is essentially perpetuated by constant use of collateralization to meet short term liabilities, as long as the market for the underlying collateral remains liquid and market confidence remains stable. The repo market is an innovative means of meeting banks’ short term funding needs, as traditional deposit inflows may be too inadequate and slow to meet banks’ business demands. Such shadow banking creates short term credit and cash for wholesale sector purposes. But on the other hand, it circumvents the existing avenue of funding by deposits and thereby circumvents the regulatory framework governing depositary banking, which could involve meeting a reserve ratio, pre-funding deposit guarantee schemes, and meeting microprudential regulatory standards in order to be eligible for public sector backstop.

Repo markets meet banks’ needs for increased avenues of short term funding by allowing banks to use “safe assets” to mimic a high quality backstop for cash and credit creation.<sup>15</sup> In this way, safe assets perform the equivalent function of a “public backstop” like in the market for deposits. This creates a parallel funding system which is relatively unregulated, alongside the regulated deposit markets. It should be noted that safe assets can only perform the equivalent appearance of safety as long as the markets for them remain liquid and confident.<sup>16</sup> Thus, some commentators are concerned that this parallel

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14. Manmohan Singh & Peter Stella, *Money and Collateral* 15 (Int’l Monetary Fund, Working Paper No. 12/95, 2012), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2050268](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2050268); Manmohan Singh, *Financial Plumbing and Monetary Policy* 5–6 (Int’l Monetary Fund, Working Paper No. 14/111, 2014), <https://www.imf.org/external/pubs/ft/wp/2014/wp14111.pdf>; Manmohan Singh, *Collateral and Monetary Policy* 12 (Int’l Monetary Fund, Working Paper No. 13/186, 2013), <https://www.imf.org/external/pubs/ft/wp/2013/wp13186.pdf>.

15. See Claessens & Ratnovski, *supra* note 4, at 5 (describing how shadow banking creates assets perceived as fully safe); Gorton & Metrick, *supra* note 1, at 269–79 (describing the rise of shadow banking).

16. See Robert J. Barro & Andrew Mollerus, *Safe Assets* 1 (NBER, Working Paper No. 20652, 2014), <http://www.nber.org/papers/w20652> (detailing that safe assets are viewed as insulated from shocks but actually only redistribute risk); Ricardo J. Caballero & Emmanuel Farhi, *The Safety Trap* 1 (NBER, Working Paper No.

funding system is not self-sustaining, as market participants may look ultimately to the public backstop enjoyed by many banks, resulting in the creation of dangerous risk connections between the shadow and conventional funding markets. A few commentators are of the view that the franchise value of the borrower bank, which is backed by the public sector backstop, remains the ultimate confidence backstop in shadow banking, even if on the face of it, the quality of the safe assets used as collateral by banks seem to be the equivalent of a privately created backstop in repo markets.<sup>17</sup> Yet, the boundaries of safe assets are being pushed as a wide range of collateral is used in repo markets, including not only government securities, but also corporate securities and securitized assets.<sup>18</sup> Further, in tri-party repo transactions, the clearing banks' role in guaranteeing and settling repo transactions is starkly supported by such implicit public sector "puts."<sup>19</sup> It may be argued that funding via repo markets is a way of avoiding regulatory compliance and cost associated with the traditional avenue of deposit funding, making regulatory arbitrage an important and relevant consideration in this form of shadow banking.<sup>20</sup> That said, central banks themselves participate actively in repo markets, and set standards for acceptable collateral.

Repo markets have become a fundamental institution of short term funding for the wholesale sector. Applying a functional approach to understand such markets allows us to see them as performing an equivalent economic function of supplying short term funding to depository banks, using different legal structures and avoiding current regulatory application. Repo markets have been unregulated, framed only by the established institutions of contract, property, and bankruptcy laws. These legal institutions of rights in property, legal certainty in enforcement against collateral, and bankruptcy remoteness provide the conditions for instituting repo markets.<sup>21</sup> In other words, *unconventional* activities such as short term credit and money creation based on private, safe asset strength (as explained above) could flourish despite the lack of a regulatory framework to protect participants' interests. Repo markets have been unmonitored as being wholesale sector markets outside of the scope of regulation (which has hitherto targeted retail markets).<sup>22</sup> Adopting a functional approach to understanding

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19927, 2014), <http://www.nber.org/papers/w19927> (describing how safe assets supply destruction was at the center of financial turmoil); Anna Gelpern & Erik F. Gerding, *Inside Safe Assets* 33 Yale J. Reg. 1, 4, n.11 (forthcoming 2016) (noting that safe assets are similar to legal fictions); ADRIAN ET AL., *supra* note 8, at 6 (noting that loss of confidence has been the root cause of financial panics).

17. See Manmohan Singh, "Puts" in the Shadow 19 (Int'l Monetary Fund, Working Paper No. 12/229, 2012), <https://www.imf.org/external/pubs/ft/wp/2012/wp12229.pdf> (suggesting a "regulatory environment" where puts are not ambiguous will likely lower the cost of bail-outs after a crisis); Claessens & Ratnovski, *supra* note 4, at 5.

18. See generally Gelpern & Gerding, *supra* note 16 (analyzing and offering prescriptions concerning the topic of safe assets, especially in relation to financial crisis).

19. Singh, *supra* note 17, at 4.

20. See generally Erik F. Gerding, *The Shadow Banking System and its Legal Origins* (Working Paper, Jan. 24, 2012), <http://ssrn.com/abstract=1990816> (defining the shadow banking system and describing the role the law played in shaping it); Emily Lee, *The Shadow Banking System: Why It Will Hamper the Effectiveness of Basel III*, 30 J. INT'L BANKING L. & REG. 373 (2015).

21. See generally Rizwaan J. Mokal, *Liquidity, Systemic Risk, and the Bankruptcy Treatment of Financial Contracts*, 10 BROOK. J. CORP., FIN. & COM. L. 15 (2015) (discussing how bankruptcy remoteness laws protect collateral holders).

22. It was only in 2015 that the European Union instituted a skeletal framework for mandatory disclosure of repo transaction details, in the form of the Securities Financing Transactions Regulation.

the economic role and legal structures of repo markets, I am able to map the risks of these markets in order to ascertain if these *unmonitored* and *unconventional* attributes raise concerns of public interest.

First, we need to discern the scale of such markets and whether there are risks to market stability and order. For example, research into the E.U. showed that the extent of reliance by banks on short term funding using repo markets for credit transformation is staggering, representing at least 79% of their short term funding sources.<sup>23</sup> Such findings may indicate the public interest importance of repo markets and perhaps the need for regulators to consider providing public/collective goods such as market order and stability via regulatory frameworks.

Next, we need to consider whether the legal structures in private law, i.e., contract, property, and bankruptcy remoteness, are able to support notions of market stability and order. Pistor argues that private legal structures favor individualistic actions that may undermine the collective good and cause market disorder and instability.<sup>24</sup> For example, the loss of market confidence in collateral based on securitized assets in the global financial crisis resulted in individual dealer banks asking for collateral top-ups. Such pressures may force borrowing banks to liquidate good assets in order to meet the top-up requests. Where such pressures are applied across many financial institutions, the collective behavior of liquidation may create depression for market prices of assets and result in a downward market spiral. We need to question the adequacy of private legal structures in sustaining important markets in both good and bad times.

Further, at a broader and more general level, we need to ask questions regarding the normative and macro-economic implications of such private credit and money creation. Is such private money creation, albeit limited to wholesale institutions, socially desirable, leaving aside the actual micro-economic phenomena of supply and demand?

The functional approach does not translate into a like-for-like assumption in policy-making. We should not merely liken the repo markets to being functionally equivalent to traditional short term funding channels for depositary banks and therefore bring on the automatic implications of applying depositary bank regulation to repo funding. Such an approach is inappropriate as depositary bank regulation, based on micro-prudential requirements and the public backstop, is founded upon the unsecured nature of bank deposits. In secured repo funding, the relevant legal structures for protection of the creditor continue to play a part and should be harnessed to protect creditors while not triggering systemic market crashes. The functional approach acts as a key analytical tool for understanding shadow banking activities that can highlight potential regulatory arbitrage, but should not be used as a means of merely extending existing regulatory boundaries.

In the E.U., a like-for-like approach has not been taken to regulate repo markets like deposit markets. Instead, policy-makers are of the view that private market monitoring should continue to be harnessed, while regulators monitor for future developments that

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23. See Antoine Bouveret, *An Assessment of the Shadow Banking Sector in Europe* 21 (Working Paper, July 6, 2011), <http://ssrn.com/abstract=2027007> (comparing the European shadow banking system to the U.S. shadow banking system); Esther Jeffers & Claudia Baicu, *The Interconnections Between the Shadow Banking System and the Regular Banking System. Evidence from the Euro Area* 7 (CITYPERC, Working Paper Series No. 2013/07, Feb. 1, 2013), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2220822](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2220822).

24. Katharina Pistor, *A Legal Theory of Finance*, 41 J. COMPARATIVE ECON. 315, 319 (2013), <http://www.sciencedirect.com/science/article/pii/S014759671300036X>.

may require policy adjustment. Hence, the new E.U. Regulation introduces more mandatory transparency in securities financing transactions for counterparties. In particular, transparency is created as to the extent of rehypothecation of collateral. Further, rehypothecation is now based on counter-parties' consent and may reduce the number of times of re-use of collateral, mitigating counterparty risk as well as systemic risk.<sup>25</sup> The Financial Stability Board has also proposed minimum haircuts to be applied to collateral to mitigate the risks of re-use.<sup>26</sup>

However, the E.U. Regulation has not engaged with more fundamental questions such as regulatory frameworks and powers for maintaining market stability, the need for a public backstop, or liquidity provider of last resort as Steven Schwarcz suggests.<sup>27</sup> In this case, the E.U. Regulation has taken the approach of being incremental and largely non-disruptive. This is a political choice and not necessarily as a result of functionally studying the nature of repo markets. I argue that the E.U. Regulation may be an example of inadequate consideration of the full implications of a functional study into the nature of repo markets. In Part V, I will explore how the functional approach to understanding shadow banking can be put to more optimal use in order to more powerfully inform policy-making.

### B. A Functional Approach to Understanding Money Market Funds

Money market funds (MMFs) are another example of what may be found in the shadow banking realm. MMFs are funds that invest in short term wholesale money market instruments such as short term treasury bills, certificates of deposit, and municipal and corporate debt securities, which cannot be directly accessed by the retail market. These funds have arisen in the United States due to regulations capping deposit interest rates,<sup>28</sup> and they cater to the demand of savers who seek safe avenues with a better rate of return than bank deposits. The MMF may be regarded as a form of regulatory arbitrage, allowing depositors to save in a highly liquid instrument mimicking the on-demand liquid characteristic of deposits, while enjoying a higher rate of return. Nevertheless, MMFs also cater to genuine wholesale sector demands such as institutional cash pools (i.e., institutions who desire a relatively safe parking place for their assets, meeting quick liquidity demands), whose other less favorable alternative would be uninsured deposits.

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25. See generally Regulation of the European Parliament and of the Council on Transparency of Securities Financing Transactions and of Reuse and Amending Regulation (EU) No. 648/2012, EUR. UNION (Nov. 25, 2015), <http://data.consilium.europa.eu/doc/document/PE-41-2015-REV-1/en/pdf> (explaining the range of measures the E.U. has adopted in order to render the banking system more stable and solid).

26. *Transforming Shadow Banking into Resilient Market-based Finance: Regulatory framework for haircuts on non-centrally cleared securities financing transactions*, FIN. STABILITY BD. (Nov. 12, 2015), [http://www.fsb.org/wp-content/uploads/SFT\\_haircuts\\_framework.pdf](http://www.fsb.org/wp-content/uploads/SFT_haircuts_framework.pdf).

27. Steven L. Schwarcz, *The Case for a Market Liquidity Provider of Last Resort*, 5 N.Y.U. J.L. & BUS. 346, 350 (2009), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1346542](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1346542).

28. Capping this rate at 5.5% in the 1960s was Section 11 of the Banking Act of 1933 (12 U.S.C. § 371a (1997)), which was implemented by Regulation Q (12 C.F.R. pt. 217), until the cap was lifted in the Depository Institutions Deregulation and Monetary Control Act of 1980 (Pub. L. No. 96-221, 94 Stat. 132 (1980)). See Matthew P. Fink, *Historical Rationale for US Money Market Funds*, in MONEY MARKET FUNDS IN THE EU AND THE US: REGULATION AND PRACTICE 85-97 (Viktoria Baklanova & Joseph Tanega eds., 2013) (discussing issues under both U.S. Federal Securities and Banking Laws in relation to regulations capping the deposit interest rates); Viktoria Baklanova, *Money Market Funds: An Introduction to the Literature*, U. WESTMINSTER L. SCH. 12 (2010), [https://www.law.berkeley.edu/files/bclbe/Intro\\_MMFLiterature.pdf](https://www.law.berkeley.edu/files/bclbe/Intro_MMFLiterature.pdf).

The chief attraction to MMFs is the promise of redemption at constant net-asset value, thereby guaranteeing savers' capital safety and distinguishing MMFs from other investment funds. Hence, MMFs perform the functional equivalent of depository banks' ability to provide a full intermediation service of savers' capital. MMFs are able to do so based on the perceived safety and liquidity of MMF holdings—largely government securities and highly liquid corporate covered bonds and repo paper. The relative safety of such instruments lies in their very short maturity terms.

As long as the issuers of paper that MMFs are holding remain solvent and the markets for such paper remain liquid, MMFs' mimicking of the safety and liquidity attributes of deposits would hardly be called into question. The backstop for MMFs' promises is nevertheless less strong than the public backstop of emergency liquidity facilities and deposit guarantee for bank deposits. The key shadow banking implication for MMFs lies in the expectations created by MMFs in mimicking the deposit-like characteristics of safety and liquidity. Such expectations, if disappointed, could result in a major loss of market confidence and market panic. Such an episode occurred during the global financial crisis of 2007–2009. During the crisis in September 2008, MMF investors were skeptical that a number of MMFs could actually maintain a net asset value of one U.S. dollar and started to withdraw from the funds in droves. This is because a number of MMFs held Lehman Brothers' repo paper and the failure of Lehman on September 15, 2008 sharply brought into question the value of such paper backed by Lehman's assets as collateral. A high profile MMF, the Reserve Primary Fund, which held a substantial quantity of Lehman repo paper, "broke the buck" and resiled from its promise to maintain net asset value at one dollar.<sup>29</sup> The fund froze redemptions and was valued at \$0.97 on the dollar at the peak of its crisis.<sup>30</sup>

Applying a functional approach to understanding MMFs, we see that the economic function of the MMF is to provide liquidity intermediation and transformation through markets instead of through banking institutions. In a way, it could be said that under normal conditions, the MMF may be *safer* than banking institutions in providing such liquidity transformation, as MMFs do not lend long term like banks do and instead hold relatively short term assets. The characteristics of the MMF do not necessarily warrant a like-for-like comparison with bank deposits entailing the full application of bank prudential regulation to the MMF.<sup>31</sup> The U.K. and E.U. in the early 2000s considered that MMFs could be classified as undertakings in collective investments in transferable securities (UCITS), i.e., collective retail investment funds that are available to retail investors.<sup>32</sup> Thus, for MMFs that are structured as UCITS, the UCITS regime of prudential and financial conduct of business regulation would apply. However, the MMF is not like an investment fund. Although it is a form of collective pooling of investors'

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29. Diya Gullapalli et al., *Money Fund, Hurt by Debt Tied to Lehman, Breaks the Buck*, WALL ST. J. (Sept. 17, 2008, 12:01 AM), <http://www.wsj.com/Articles/SB122160102128644897>.

30. *Id.*

31. There are prudential requirements imposed on MMFs that are UCITS but they are relatively light compared to banks, i.e., at a level of 125,000 euros of initial capital and 0.02% of own funds as to assets in the UCITS fund. Directive 2009/65/EC, of the European Parliament and of the Council of 13 July 2009 on the Coordination of Laws, Regulations and Administrative Provisions Relating to Undertakings for Collective Investment in Transferable Securities (UCITS), 2009 O.J. (L 302) art. 7, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02009L0065-20140917>.

32. *Id.* at art. 78.

capital to purchase assets, the MMF makes promises of higher liquidity than investment funds in general, and could therefore be more susceptible to run risk than investment funds in general. The UCITS Directive's provisions on fund valuations and redemption that are applicable to all collective investment schemes therefore do not directly address MMFs' extremely liquid promises and the guarantee of constant net asset value.<sup>33</sup> In other words, the Directive's approach to treating some MMFs as UCITS is characteristic of the sub-optimal sectorial approach to understanding shadow banking discussed earlier—a form of categorization that attempts to fit financial innovation into existing brackets without addressing their specific economic functions and risk profiles.

A functional approach to understanding MMFs should address the particular *unconventional* aspects of MMFs as a means of financial innovation, and whether they give rise to concerns for being relatively *unmonitored* or *unregulated*. We need to question whether the liquidity assumptions made by MMFs are sound to support their business model, and whether private market monitoring is sufficient to ensure that MMFs can meet their liquidity promises. We need to ask if there is any deficit in investor protection or investor education in relation to the business model of MMFs.

Post-crisis, reforms have been introduced in the United States and European Union to regulate the MMF more robustly. These measures, as will be discussed shortly, take different positions but are broadly in the vein of a like-for-like approach, framing MMFs to fit into one of the established categories of financial regulation. The European Union has taken the approach of forcing MMFs to be treated more like investment funds, and therefore regulated as such.<sup>34</sup> MMFs are now required to maintain a floating net-asset value or to erect redemption gates, therefore limiting their former ability to mimic deposit-like attributes, so as to manage market expectations with regard to their risks.<sup>35</sup> In the United States, a different approach is taken to ensure that MMFs can more robustly meet the constant net asset value and liquidity promises. MMFs are now more tightly regulated in terms of the types of liquid securities they can invest in, and would also be required to compute weekly mark-to-market shadow fund values for transparency purposes.<sup>36</sup> The U.S. approach therefore tends to preserve MMFs' deposit-mimicking

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33. *Id.* at art. 76, 84.

34. The European Commission has proposed a Regulation to prescribe a floating net asset value for money market funds as well as prudential requirements in the form of capital adequacy. *Proposal for a Regulation of the European Parliament and of the Council on Money Market Funds* 6 EUR. COMM'N, COM (Sept. 2013), [http://ec.europa.eu/internal\\_market/investment/docs/money-market-funds/130904\\_mmfs-regulation\\_en.pdf](http://ec.europa.eu/internal_market/investment/docs/money-market-funds/130904_mmfs-regulation_en.pdf). In March 2015, the impact study commissioned by the European Parliament was of the view that, although the reforms may move most MMFs to a variable net asset value and investors' expectations could be managed, the systemic risk implications of the run on MMFs is not entirely mitigated. *Money Market Funds: Impact Assessment of Substantive EP Amendments*, EUR. PARLIAMENT 37 (Mar. 2015), [http://www.europarl.europa.eu/RegData/etudes/STUD/2015/547545/EPRS\\_STU\(2015\)547545\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2015/547545/EPRS_STU(2015)547545_EN.pdf). Nevertheless, in April, Parliament approved the draft Regulation with amendments.

35. See generally Viktoria Baklanova & Joseph Tanega, *European Money Market Funds: A Comparative Analysis of U.S. and European De Facto and De Jure Micro-Processes*, 19 COLUM. J. EUR. L. 175 (2013) (discussing the E.U. approach and comparing it with the U.S. approach).

36. Press Release, SEC Adopts Money Market Fund Reform Rules, SEC (July 23, 2014), <http://www.sec.gov/News/PressRelease/Detail/PressRelease/1370542347679#.VOH54fmsWSo>; 17 C.F.R. § 270.2a-7(c) (2015); see Martin N. Baily et al., *Reforming Money Market Funds*, SQUAM LAKE GRP. 3 (Jan. 14, 2011), <http://www.squamlakegroup.org/Squam%20Lake%20MMF%20January%202014%20Final.pdf> (explaining it as a "floating NAV" alternative); Jeffrey N. Gordon & Christopher M. Gandia, *Money Market Funds Run Risk: Will Floating Net Asset Value Fix The Problem?*, 2014 COLUM. BUS. L. REV. 313, 323–24 (arguing other

characteristics and the regulatory approach is in the vein of prudential regulation. Although the functional analysis of MMFs has given rise to two different responses—the E.U. response likening MMFs to investment funds and therefore extending the regulatory perimeter in that direction, and the U.S. response likening MMFs to deposits and therefore extending more prudential-like regulation in composition restrictions and risk valuation. The two regulatory approaches have not transcended the limitations of a like-for-like approach. This arguably hampers the potential of a functional analysis, as MMFs are clearly different from deposits and investment funds. MMFs are different from deposits because they rely on market liquidity that is not available to many bank deposit transformations; and they are different from investment funds because they are not savings products and they offer liquidity horizons that meet different wholesale needs. I argue that the functional analysis could be more optimally deployed to analyze the economic functions of MMFs and perhaps be able to inform a more *suis generis* approach to regulating them where relevant.

### C. A Functional Approach to Understanding Securitization

The functional approach to understanding shadow banking can also provide the first steps to constructing a narrative of novel financial transactions or institutions that have no existing equivalents, such as securitization which took off since the late 1990s,<sup>37</sup> and recent developments in credit and investment intermediation in peer-to-peer lending and equity crowdfunding.

Gerding defines shadow banking as novel financial transactions that pool financial assets, restructure risks and cash streams, and create new assets that theoretically achieve low risk and high liquidity.<sup>38</sup> Such novel financial instruments are often the culmination of stages of processes in financial intermediation undertaken by different intermediary institutions at each stage. This definition is very much based on the nature of securitization, possibly the most innovative and controversial of financial innovations that have come to dominate the concept of shadow banking itself. The example of securitization highlights the wide scope of shadow banking—from alternative means of achieving traditional economic functions in credit, liquidity, or maturity transformation to completely new means of financial risk management and product development.

Securitization can be carried out at various levels of complexity and opacity,<sup>39</sup> but put briefly, it involves turning traditionally illiquid assets, such as residential mortgages on banks' loan books, into less risky and more liquid assets for investors in the market. This is achieved by transferring the illiquid assets to special purpose vehicles which then structure and package these assets into securities. Securitization often involves structuring assets with tranches of varying degrees of credit risk, in order to improve the

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reforms are needed to enhance stability).

37. Gerding, *supra* note 20, at 48; TOBIAS ADRIAN & HYUN SONG SHIN, THE SHADOW BANKING SYSTEM: IMPLICATIONS FOR FINANCIAL REGULATION, FED. RESERVE BANK N.Y. 3–4 (Fed. Res. Bank of N.Y. Staff Rep. No. 382, July 2009), [https://www.newyorkfed.org/medialibrary/media/research/staff\\_reports/sr382.pdf](https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr382.pdf); Gorton & Metrick, *supra* note 1, at 264.

38. Gerding, *supra* note 20, at 3.

39. See Richard E. Mendales, *Collateralized Explosive Devices: Why Securities Regulation Failed to Prevent the CDO Meltdown, and How to Fix It*, 2009 UNIV. ILL. L. REV. 1359, 1367 (discussing the origins of securitization).

overall risk profile of the asset. The securities are then warehoused with another layer of financial intermediaries before being distributed and placed with investors. Securitization achieves risk transformation of illiquid and perhaps less attractive assets into investible securities, at the same time generating fee income for originating lenders, freeing up banks' lending capacity, and mitigating the cost of compliance with capital adequacy requirements in regulation.<sup>40</sup> With the help of credit rating agencies, these novel assets often have optimistic ratings and are sold widely in wholesale markets.<sup>41</sup> Institutional investors have been attracted to such products and so have banks in general, as the high credit ratings attached to such products allow them to be regarded as good collateral in the repo markets.

Genuine advantages in risk management can be achieved by securitization as credit risk can be more efficiently spread in the markets, and banks' credit creating capacity for socially useful economic activity can be enhanced.<sup>42</sup> However, the structuring of assets can be a complex and opaque process, making quality difficult to discern. The prospect of securitization may also allow lenders to originate loans with less care, having a myopic focus only on the immediate fee income that can be generated from the bringing to market of securitized products.<sup>43</sup> Defects in risk quality may not be detected by credit rating agencies given that the structures in securitized assets are sufficiently complex and opaque.

Securitized assets involved different types of credit products such as residential mortgage loans, auto loans, and even types of personal unsecured loans and student loans. One popular category of securitized assets marketed before the global financial crisis of 2007–2009 was the mortgage-backed securities, largely based on prime and sub-prime mortgage loans originating in the United States. In fact, securitization was the main means by which banks would make loans to highly dubious borrowers in terms of credit-worthiness, as they would be purchased by Fannie Mae and Freddie Mac.<sup>44</sup> Fannie Mae was an agency that was originally formed by the post-Depression government to buy

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40. Gerding, *supra* note 20, at 11–12.

41. See Jacques de Larosière et al., *The High-Level Group on Financial Supervision in the EU*, EUR. UNION 9 (Feb. 25, 2009), [http://ec.europa.eu/internal\\_market/finances/docs/de\\_larosiere\\_report\\_en.pdf](http://ec.europa.eu/internal_market/finances/docs/de_larosiere_report_en.pdf).

42. See *Action Plan on Building a Capital Markets Union*, EUR. COMM'N 12 (Sept. 30, 2015), [http://ec.europa.eu/finance/capital-markets-union/docs/building-cmu-action-plan\\_en.pdf](http://ec.europa.eu/finance/capital-markets-union/docs/building-cmu-action-plan_en.pdf) (discussing methods to increase banks' capacity to lend); *The case for a better-functioning securitisation market in the European Union*, EUR. CENT. BANK (Oct. 2014), <https://www.ecb.europa.eu/pub/pdf/other/141013-abs-synthesis-responses.en.pdf>.

43. This became the main business model of Northern Rock, exposing it to the risk of unviability in its business model when the market for mortgaged backed securities and repo markets trading in such securities dried up in late 2007. As many mortgage backed securities contained tranches of subprime mortgage loans originating from the United States, subprime defaults shook investor confidence in these securitized products whose value became uncertain and difficult to determine given its complex and bundled structure. See David G. Mayes & Geoffrey Wood, *Lessons from the Northern Rock Episode*, 114 INT'L ECON. 5, 8 (2008), [http://www.cass.city.ac.uk/\\_data/assets/pdf\\_file/0006/67308/Mayes-and-Wood-Final-Paper-LESSONS-FROM-THE-NORTHERN-ROCK-.pdf](http://www.cass.city.ac.uk/_data/assets/pdf_file/0006/67308/Mayes-and-Wood-Final-Paper-LESSONS-FROM-THE-NORTHERN-ROCK-.pdf) (offering suggestions for other countries); FIN. SERVS. AUTH., *The SUPERVISION OF NORTHERN ROCK: A LESSONS LEARNED REVIEW 1* (Mar. 2008), [http://www.fsa.gov.uk/pubs/other/nr\\_report.pdf](http://www.fsa.gov.uk/pubs/other/nr_report.pdf).

44. Ramon P. DeGennaro, *Government Sponsored Entities: Fannie Mae and Freddie Mac*, 14 J. STRUCTURED FIN. 18, 21 (2008); Richard K. Green & Ann Schnare, *The Rise and Fall of Fannie Mae and Freddie Mac: Lessons Larned and Options for Reform*, EMPIRIS LLC 2 (Nov. 19, 2009), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1509722](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1509722).

loans off banks so that banks could be freed to participate in economic reconstruction. Freddie Mac was subsequently created to prevent Fannie Mae from having a monopoly in the market. The market for mortgage-backed securities grew to be substantial in the pre-crisis period, estimated at about one trillion dollars.<sup>45</sup>

The global financial crisis of 2007–2009 was, however, triggered by a collapse in market confidence in the value of such mortgage-backed securities, especially the more complex collateralized obligations and their synthetic versions, held by many financial institutions worldwide.<sup>46</sup> As many mortgage backed securities contained tranches of subprime mortgage loans originating from the United States, subprime mortgage defaults shook investor confidence in these securitized products whose value became uncertain and difficult to determine given their complex and bundled structure. Liquidity in these products dried up, and this affected other markets such as repos where these products are used as collateral. Many banks and institutions faced short term funding squeezes due to the seizure in repo markets and also suffered losses on their books from such asset holdings. Where collateral had to be realized or topped up, book losses quickly became real losses as assets were fire sold in a falling and increasingly illiquid market. Further, such losses had knock-on effects on banks' capital adequacy positions and this further exacerbated deteriorating market confidence in banks and institutions holding such securitized assets. As a result, the U.S. banking sector was shaken by one insolvency: Lehman Brothers, in September 2008, and a few near failures were averted only because of government intervention that brokered private sector deals, such as Merrill Lynch, Washington Mutual, and Bear Stearns. The U.K. featured a similar scenario, with government bailouts of Northern Rock, Halifax Bank of Scotland (HBOS), and Royal Bank of Scotland (RBS). Although these U.K. banks were not directly affected by losses in holdings of U.S. mortgage-backed securities, Northern Rock<sup>47</sup> and HBOS<sup>48</sup> were affected by short term funding squeezes particularly because they ran highly risky business models relying excessively on the repo market. RBS was affected by the enormous holdings of U.S. mortgaged-backed securities in ABNAMRO which it acquired shortly before the crisis.<sup>49</sup>

The adverse effects of securitization related in the global financial crisis story of 2007–2009 were due to inadequate risk profiling and pricing of such innovative products in an era of over-confidence in the transformative efficiencies of shadow banking. Further, as the wholesale sector is intimately inter-connected in different transactional contexts, adverse knock-on effects were able to translate into several rungs of morbid blows for financial institutions,<sup>50</sup> which were inadequately foreseen and risk-managed.

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45. See *Mortgage Debt Outstanding*, BD. GOVERNORS FED. RES. (Mar. 2009), <http://www.federalreserve.gov/econresdata/releases/mortoutstand/mortoutstand20090331.htm> (charting outstanding mortgage debt).

46. See THE TURNER REVIEW: A REGULATORY RESPONSE TO THE GLOBAL BANKING CRISIS, FIN. SERVS. AUTH. 11–50 (Mar. 2009), [http://www.fsa.gov.uk/pubs/other/turner\\_review.pdf](http://www.fsa.gov.uk/pubs/other/turner_review.pdf) (providing an example discussion) [hereinafter FIN. SERVS. AUTH., THE TURNER REVIEW].

47. FIN. SERVS. AUTH., *supra* note 43, at 1.

48. PARLIAMENTARY COMMISSION ON BANKING STANDARDS, 'AN ACCIDENT WAITING TO HAPPEN': THE FAILURE OF HBOS, 2012-3, HL 144, HC 705, at 3 (UK), <http://www.publications.parliament.uk/pa/jt201213/jtselect/jtpebs/144/144.pdf>.

49. FIN. SERVS. AUTH., THE FAILURE OF THE ROYAL BANK OF SCOTLAND: FINANCIAL SERVICES AUTHORITY BOARD REPORT 169–70 (2011), <http://www.fsa.gov.uk/static/pubs/other/rbs.pdf>.

50. Dan Awrey, *Complexity, Innovation, and the Regulation of Modern Financial Markets*, 2 HARV. BUS.

Commentators are only beginning to unpack the fragilities caused by interconnections in the financial sector,<sup>51</sup> whether within a group or between financial institutions.<sup>52</sup> Hence, learning lessons from the global financial crisis, regulatory policy in relation to securitization deals not only with the investor protection aspects of such innovative products but also the risk implications of such products for prudential and systemic risk regulation.

First, securitized products are now subject to prescriptive disclosure regimes in the pre-sale stage if marketed to the public.<sup>53</sup> However, regulation has not moved away from the *unregulated* nature of the product if marketed only to sophisticated investors. In general, securities marketed to only sophisticated investors are exempt from prospectus regulation as sophisticated investors and issuers can govern their relations by contract. One would have thought that in the wake of the global financial crisis, which was based on misjudgment of novel securitized assets by the wholesale sector, some regulatory rethinking in this area may occur. However, the functional analysis of securitized assets has been applied to liken such products to securities. In securities regulation, investor protection is at its most extensive for retail investors, and this is reflected in the E.U. Prospectus Directive regime and U.S. securities regulation. The same position of exempting sophisticated investors and issuers from prospectus regulation remains, although problems have been highlighted in the crisis.

Adopting a like-for-like approach to extending securities regulation to securitized products based on the existing regime shows a lack of advancement in regulatory thinking. This is in spite of securitized products being *unconventional* even for wholesale sector institutions that may not fully grasp the risks of their transactions. There seems to be a case for a *sui generis* regime of mandatory disclosure, at least in relation to the risk management of such products. However, one may argue that as securitized products rely on credit ratings assigned by external credit rating agencies to appeal to investors, the

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L. REV. 235, 238–39 (2012); Augusto de la Torre & Alain Ize, *Regulatory Reform: Integrating Paradigms*, 13 INT'L FIN. 109, 110–11 (2010); Sara Hsu et al., *Shadow Banking and Systemic Risk in Europe and China 1* (City Univ. London, City Pol. Econ. Res. Ctr., CITYPERC Working Paper Series No. 2013/02, 2013), [openaccess.city.ac.uk/2099/1/CITYPERC-wps-2013\\_02.pdf](http://openaccess.city.ac.uk/2099/1/CITYPERC-wps-2013_02.pdf); Steven L. Schwarcz, *Regulating Shadow Banking*, 31 REV. BANKING & FIN. L. 619, 638–39 (2012); Stephan Luck & Paul Schempp, *Banks, Shadow Banking, and Fragility 6–7* (Eur. Cent. Bank, Working Paper Series No. 1726, 2014), <https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1726.pdf?c3e13c57f91d8bf9d4065042337eb10c>.

51. Fragilities such as a combination of liquidity, leverage, linkages, and losses. See Monica Billio et al., *Measuring Systemic Risk in the Finance and Insurance Sectors 7–15* (MIT Sloan Sch. Mgmt., MIT Sloan Sch. Working Paper No. 4774-110, 2010), <http://www.bis.org/bcbs/events/sfrworkshopprogramme/billio.pdf> (comparing sources of systemic risk); Rosa María Lastra, *Systemic Risk, SIFIs and Financial Stability*, 6 CAP. MKTS. L.J. 197, 197 (2011) (reviewing “the transmission mechanisms [of systemic risk], the notion of systemically important financial institutions (SIFIs) and the concept of macro-prudential supervision”).

52. For example, illiquidity, linkages among financial institutions, leverage, and business scope are considered most highly correlated with systemic risk. *Supra* note 51; see Gianni De Nicoló & Myron L. Kwast, *Systemic Risk and Financial Consolidation: Are They Related?* 1 (Int'l Monetary Fund, Working Paper No. 02/55, 2002), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=879527](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=879527) (arguing firm interdependencies are an indicator of systemic risk); Tao Sun, *Identifying Vulnerabilities in Systemically-Important Financial Institutions in a Macro-financial Linkages Framework 4* (Int'l Monetary Fund, Working Paper No. W11/111, 2011), <http://www.imf.org/external/pubs/ft/wp/2011/wp11111.pdf>.

53. Commission Regulation 486/2012 of 30 March 2012, Amending Regulation (EC) No 809/2004 as regards the format and the content of the prospectus, the base prospectus, the summary and the final terms and as regards the disclosure requirements, 2012 O.J. (L 150) ch. IIIa (Mar. 30, 2012), <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32012R0486>.

E.U. regulation of credit rating agencies<sup>54</sup> in terms of their governance and rating methodologies provides the relevant support for investor protection in the wholesale market. Further, investors may be able to sue credit rating agencies for losses caused by inaccurate ratings, if such is a result of a gross breach of regulatory duties.<sup>55</sup> However, such regulation is not specific to securitized products, and the threshold for investor litigation is relatively high.

Nevertheless, the risk implications of these complex products were recognized and new policy thinking for securitized products was achieved in the realm of prudential regulation. The Basel Committee immediately regarded holdings of securitized assets to be in need of high risk weightings so that banks will be subject to appropriate capital adequacy requirements for holding them. A minimum floor of 25% risk weight is applied to all securitized assets with a maximum of 1250% applied if certain underlying information regarding the quality of such assets is unclear.<sup>56</sup> The E.U. also introduced a mandatory five percent risk retention rule<sup>57</sup> for originating institutions so that they may be incentivized to exercise care in lending even if such loans are to be subsequently securitized. Risk retention is intended to ensure the maintenance of quality in securitized assets. Further, longer-term regulatory thinking is being developed in new European initiatives that intend to overhaul securitized products regulation and their markets.<sup>58</sup>

The functional analysis of shadow banking can usefully provide a starting point for understanding the economic functions and legal structures in shadow banking to discern if there are any issues in relation to the aspects of being *unregulated*, *unmonitored*, and *unconventional*. In some cases, such analysis has given rise to like-for-like treatments with equivalent existing mechanisms or transactions. Where that has occurred, pockets of regulatory arbitrage may be exposed, but the extension of regulatory perimeter may not always be apt due to finer distinguishing features. Hence, like-for-like approaches can be susceptible to being relatively unimaginative, and we continue to observe lacunae in policy thinking. That said, I acknowledge that a like-for-like approach is not always sub-

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54. Regulation (EC) No. 1060/2009 of 16 Sept. 2009, European Parliament and of the Council on Credit Rating Agencies, 2009 O.J. (L 302) (amended as of 2011, 2013), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:302:0001:0031:EN:PDF>.

55. *Id.* at pt. 35.

56. BASEL III, A GLOBAL REGULATORY FRAMEWORK FOR MORE RESILIENT BANKS AND BANKING SYSTEMS, BANK INT'L SETTLEMENTS 27 (2011), <http://www.bis.org/publ/bcbs189.pdf>. This has, however, been amended as different types of securitized assets are regarded as deserving of different risk weighting treatment. Hence assets subject to high standardization, relatively simple in structure, and rated highly by external credit ratings, could be subject to a minimum floor of 10% risk weighting in the latest revisions as of July 2016. *See REVISIONS TO THE SECURITISATION FRAMEWORK, BANK INT'L SETTLEMENTS 37* (July 2016), <http://www.bis.org/bcbs/publ/d374.pdf>.

57. Directive 2009/11/EC of the European Parliament and of the Council of 16 Sept. 2009, amending Directives 2006/48/EC, 2006/49/EC and 2007/64/EC as regards banks affiliated to central institutions, certain own funds items, large exposures, supervisory arrangements, and crisis management, 2009 O.J. (L 302), at art. 122a, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0111&from=EN>.

58. ACTION PLAN ON BUILDING A CAPITAL MARKETS UNION, EUR. COMM'N 15–17 (Sept. 30, 2015), [http://ec.europa.eu/finance/capital-markets-union/docs/building-cmu-action-plan\\_en.pdf](http://ec.europa.eu/finance/capital-markets-union/docs/building-cmu-action-plan_en.pdf); *Proposal for a Regulation of the European Parliament and of the Council, laying down common rules on securitisation and creating a European framework for simple, transparent and standardised securitisation and amending Directives 2009/65/EC, 2009/138/EC, 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012*, EUR. COMM'N 1–6 (Sept. 30, 2015), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52015PC0472> [hereinafter EUR. COMM'N, *Proposal*].

optimal as it is useful for discerning where areas of regulatory arbitrage should be brought under more oversight and control. Regulatory policy thinking has not been so limited overall, as discussed in the examples above, but reforms, such as securities, financing transparency, and the risk-weighting and risk retention of securitized assets, are incremental rather than fundamental in nature. In sum, I am of the view that the functional analysis of shadow banking can support a more comprehensive and discursive process for evaluating financial innovation, feeding into more thoroughly considered and perhaps innovative regulatory reform. I next discuss the origins of the functional approach and some of its inherent biases and limitations. I then suggest how such limitations and biases may be mitigated to make the functional analysis of shadow banking serve a more optimal purpose in financial regulatory policy.

### III. THE FUNCTIONAL APPROACH AND ITS ORIGINS

This Part charts the general development of the functional approach in financial regulation. I argue that the functional approach to financial regulation was first discussed in the context of global movements toward restructuring financial regulatory architecture, principally in the adoption by many jurisdictions of a single regulator model for regulatory supervision. I highlight the development of the United Kingdom Financial Services Authority (FSA) as an example of such movement and also argue that the ultimate restructuring of the FSA has not eclipsed the functional approach to financial regulation. In this discussion, I point out that the adoption of the functional approach to financial regulation is a manifestation of regulatory capitalism—a political perspective that embraces market capitalism and liberal approaches while at the same time supporting the growth of administrative structures and rules to overcome market failures, supply public goods, or govern behavior for public interest purposes. As such, I argue that the functional approach has an inherent bias towards market-liberalism and financial innovation that serves market needs. I will argue in Part IV that such a bias needs to be overcome so that the functional approach can be developed into a more robust analytical framework for evaluating the financial innovation underlying shadow banking.

Many commentators are of the view that the advent of the single regulator in financial services is a response to the changing structure of the financial sector. Although universal banking has been practiced in much of Continental Europe, the sectoral differentiation in the U.S. financial sector between banking, insurance, and investment services (such as brokerage, underwriting, portfolio management, advice, etc.) only began to change in the wake of the Gramm–Leach–Bliley Act of 1999.<sup>59</sup> The Act allowed the consolidation of banking and investment services in the United States, and it paved the way for mergers and acquisitions, and the eventual growth of large banking groups,<sup>60</sup> such as JP Morgan and Citigroup, and the five large global investment banks:

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59. Gramm–Leach–Bliley, Pub. L. No. 106-102, 113 Stat. 1338 (1999).

60. Arthur E. Wilmarth, Jr., *The Transformation of the U.S. Financial Services Industry, 1975–2000: Competition, Consolidation, and Increased Risks*, 2002 U. ILL. L. REV. 215, 251 (2002); see generally JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES (2001) (discussing financial developments in the United States from 2004–2009); Jerry W. Markham, *Banking Regulation: Its History and Future*, 4 N.C. BANKING INST. 221 (2000); Jerry W. Markham, *Super-Regulator: A Comparative Analysis of Securities and Derivatives Regulation in the United States, the United Kingdom and Japan*, 28 BROOK. J. INT'L L. 319 (2003) [hereinafter Markham, *Super-Regulator*].

Goldman Sachs, Morgan Stanley, Merrill Lynch, Lehman Brothers, and Bear Stearns. In the United Kingdom, the competitive pressures in the changed landscape for global financial services also pushed traditionally dominant retail banks such as Barclays and the Royal Bank of Scotland to grow significant investment banking operations to foray into global financial competition.

As financial institutions increasingly became global financial supermarkets and one-stop shops<sup>61</sup> for a range of financial services and products,<sup>62</sup> financial institutions crossed sectoral boundaries in their business lines and no longer operated under traditional institutional labels. As such, the time became ripe for considering if regulatory structures based on institutional lines were still fit for their intended purpose. Further, more coherent thinking had been developing with regard to the overall objectives of governing finance and what public interests needed to be met.<sup>63</sup> The integration and consolidation of regulatory ideology in finance seemed compatible with the single regulatory structure. The single regulator arguably provided an attractive response to overcoming regulatory and supervisory gaps, more closely matching the industry structure.<sup>64</sup>

The FSA, a single regulator, was set up in 2000 on the premise that it was well-placed to provide effective regulation in the context of changing business models in the financial sector.<sup>65</sup> A single regulator is poised to provide efficient supervision, enjoying economies of scale, bird's eye perspectives, cross-fertilization of thinking and regulatory coherence in applying consistent risk-based frameworks in regulating and supervising the financial sector as a whole.<sup>66</sup> The FSA took an approach to regulating financial services which I regard as being "functional" in nature. This means that the regulatory perimeter was no longer determined according to the label of the institution concerned, such as being a bank, insurance or securities firm, but extended to any institution that is carrying out any of the activities listed in the Financial Services and Markets Act. This is because

61. See generally Markham, *Super-Regulator*, *supra* note 60 (discussing whether financial supermarkets need super regulators); Eilis V. Ferran, *Examining the United Kingdom's Experience in Adopting the Single Financial Regulator Model*, 28 *BROOK. J. INT'L L.* 257, 277 (2003).

62. For example, banking products having insurance add-ons and asset management arms of banks using bank branches to market their investment products. See generally Wilmarth Jr., *supra* note 60.

63. See generally CHARLES GOODHART ET AL., *FINANCIAL REGULATION: WHY, HOW, AND WHERE NOW?* (1998) (restating the purposes and objectives of financial regulation).

64. Eddy Wymeersch, *The Structure of Financial Supervision in Europe: About Single Financial Supervisors, Twin Peaks and Multiple Financial Supervisors*, 8 *EUR. BUS. ORG. L. REV.* 237, 257 (2009); Richard K. Abrams & Michael W. Taylor, *Issues in the Unification of Financial Sector Supervision* 9–19 (Int'l Monetary Fund, Working Paper No. 00/213, 2000), [http://www.fep.up.pt/disciplinas/pgaf924/PGAF/issues\\_in\\_unification\\_supervision.pdf](http://www.fep.up.pt/disciplinas/pgaf924/PGAF/issues_in_unification_supervision.pdf); Ferran, *supra* note 61, at 261–62.

65. The political context is, however, important, as a change of government from Conservative to Labour took place in 1997 and triggered major institutional reforms to dismantle old and undesirable ways of doing things. One such example is financial regulatory architecture reform, the establishment of the FSA to govern financial services, taking away banking supervision from the Bank of England, which has been placed in compromised light due to two bank failures in the 1990s, and replacing a patchwork and largely self-regulatory system for investment regulation under the Securities and Investments Board and the self-regulatory trade organizations established under Conservative rule. See JULIA BLACK, *RULES AND REGULATORS* ch. 2–3 (Oxford: Clarendon 1997) (discussing the development of the regulatory structure and policy in the U.K.).

66. A NEW REGULATOR FOR THE NEW MILLENNIUM, *FIN. SERVS. AUTH.* 33 (2000), <http://www.fsa.gov.uk/pubs/policy/p29.pdf>.

the regulatory framework provides for an authorization regime to perform financial services according to the proposed function of the service, and not according to the label of the institution seeking to be authorized.<sup>67</sup> The FSA's functional approach is illustrated by *FSA v Anderson*.<sup>68</sup> The case involved the FSA taking enforcement action against private individuals who set up a credit intermediation business for a close circle of high net worth contacts.<sup>69</sup> The FSA was of the view that such credit intermediation, based on guaranteed returns of capital and interest, amounted to deposit-taking, which is an activity that falls within the regulatory perimeter.<sup>70</sup> As the individuals concerned were not approved by the FSA, the activity was prohibited.<sup>71</sup> The characterization of the activity in that case was based on a functional approach to understanding the economic and legal nature of the activity.

The adoption of the functional approach meant that financial intermediation activities are not confined to be carried out only by "labelled" incumbent institutions. In *Anderson*, it is theoretically possible for the individuals to have sought FSA authorization, and such authorization may theoretically be obtained if the individuals satisfy threshold conditions for taking deposits.<sup>72</sup> So, in theory, deposit-taking is not confined to deposit-taking banks under a functional approach to financial regulation. It may thus be argued that the adoption of a functional approach to financial regulation is based on market-liberalism as market incumbents in the "sector" can be challenged by entities traditionally outside of the "sector" as long as regulatory approval can be obtained.<sup>73</sup>

On the one hand, a functional approach to financial regulation captures within its scope all forms of organizations or institutions, however rudimentary, based on the economic and legal functions of the activities carried out, and is therefore *extensive* in nature. Yet on the other hand, the functional approach has the potential to allow a wider scope of organizations and persons to carry out financial activities than traditionally thought of, and is thus *liberal* in nature. I argue that the application of the functional approach to financial regulation thus far is characterized by the market-liberal bias.

It may, however, be argued that the functional approach has been used largely to crack down on innovative activities, and thus the regulator (the FSA in particular) has only used the functional approach in a paternalistic way, drawing into the regulatory perimeter "borderline" and unregulated activities. This seems far from a market-liberal approach. For example, the prohibition of the credit intermediation service provided in the *Anderson* case above would seem contrary to a market-liberal approach. I am of the view that the use of the functional approach to crack down on activities that are innovative, but unregulated, has largely been confined to the retail sector. This is especially important, as the FSA had an express mandate for consumer protection, and

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67. Financial Services and Markets Act 2000 c. 8, § 19 (2000), <http://www.legislation.gov.uk/ukpga/2000/8/contents>.

68. *Fin. Servs. Auth. v. Anderson* [2010] EWHC 599 (Ch).

69. *Id.* at [20].

70. *Id.* at [26].

71. *Id.* at [10].

72. Examples are capital adequacy requirements and the fitness of persons managing the business. For more detail, see FCA HANDBOOK, FIN. CONDUCT AUTH., cond. 2.1, <https://www.handbook.fca.org.uk/handbook/COND/2/?view=chapter>.

73. *Anderson*, [2010] EWHC 599 at [62]–[69].

was especially vigilant in functionally characterizing retail sector financial innovation in such a way that consumer protection would be achieved. For example, the FSA was very vigilant in monitoring innovative investment schemes based on collective pooling of monies and risk, and enforcing against such schemes if they were unregulated.<sup>74</sup>

Over the years, various unregulated arrangements that may be perceived as borderline have been held to fall within the regulatory perimeter for collective investment schemes under the Financial Services and Markets Act,<sup>75</sup> thus requiring authorization and oversight. They include purchases of real estate interests by individuals under an understanding that there would be a centrally managed process to secure planning and development permission over the plot;<sup>76</sup> purchases of sub-lease interests in foreign real estate for the purposes of securing income generated by the land in terms of agricultural or carbon credit income,<sup>77</sup> services organized to place horse-racing bets on behalf of subscribers,<sup>78</sup> collective financing of a film venture,<sup>79</sup> and collective financing to acquire patent rights.<sup>80</sup> The above innovative schemes, many of which were not authorized but marketed to retail consumers, were prosecuted to closure by the FSA. However, I argue that the FSA took a different and much lighter-touch approach to the wholesale financial sector, as the relevant participants in these markets needed less top-down investor protection, and it is in the wholesale financial markets that much financial innovation, such as securitization and short term funding based on repo paper, arose.<sup>81</sup> In such markets, unconventional, innovative, but functionally similar financial intermediation activities have been allowed to flourish, and carve outs from regulatory intervention have been applied, such as the exemption from prospectus regulation for securities issued to sophisticated investors as mentioned above. Further, hedge and private equity funds were also treated as outside of the regulatory framework (for retail collective funds) as they catered only to sophisticated investors.<sup>82</sup>

I argue that the functional approach to financial regulation in the pre-crisis era is actually supportive of liberal approaches to financial innovation and the development of new markets, especially in the wholesale sector. It is able to support the rise of alternative institutions, intermediation methodologies, and markets, paving the way for the development of “bank disintermediation,”<sup>83</sup> a phenomenon that refers to the undertaking

74. See Financial Services and Markets Act 2000, sch. 2 (stating that all collective investment schemes have to be conducted by persons approved by the FSA).

75. Financial Services and Markets Act 2000 §235, sch. 1–5.

76. *In re Sky Land Consultants Plc.* [2010] EWHC 399 (Ch); *Fin. Servs. Auth. v. Asset LI Inc.* [2014] EWCA Civ 435.

77. *Fin. Conduct Auth. v. Capital Alts. Ltd. & Others* [2014] EWHC 144 (Ch), [2014] Bus. L.R. 1452 [1499], (appeal taken to) [2015] EWCA Civ 284.

78. *Fin. Servs. Auth. v. Fradley* [2005] EWCA Civ 1183, [2006] L.L.R. 35.

79. *Bieber v. Teathers Ltd. (In Liquidation)* [2012] EWHC 190 (Ch).

80. *Brown v. InnovatorOne Plc.* [2012] EWHC 1321 (Comm).

81. *FIN. SERVS. AUTH.*, *supra* note 46, at 16.

82. Such are the pre-crisis regimes, e.g., Directive 2003/71/EC of the European Parliament and of the Council of 4 Nov. 2003, on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC, 2003 O.J. (L 345) art. 3, 71 (EU), and the lack of a regulatory framework for alternative fund managers until the Alternative Investment Fund Managers Directive was introduced post-crisis in 2011.

83. Schwarcz, *supra* note 50, at 626; see generally Steven L. Schwarcz, *Regulating Shadows: Financial Regulation and Responsibility Failure*, 70 WASH. & LEE L. REV. 1781 (2013) (discussing the concept of bank disintermediation).

of innovative and alternative means of financial intermediation beyond that assumed by banks, therefore opening up the choice options of financial market participants in the wholesale sector. The functional approach to financial regulation served the policy of differentiating between the wholesale and retail sectors, allowing market-liberalism to flourish while dedicating resources to consumer protection in the retail sector. I argue that, even though the U.K. has now restructured its single financial regulator into two regulators, the Prudential Regulation Committee under the Bank of England that oversees microprudential compliance by large banks and insurers and the Financial Conduct Authority (FCA) that continues to oversee consumer protection and choice,<sup>84</sup> as well as market order and stability,<sup>85</sup> the functional approach to financial regulation has persisted.

Although the single regulator structure has been dismantled in the U.K., many jurisdictions such as Germany, the Scandinavian countries, Korea, and others, have retained this regulatory architecture pre and post-global financial crisis of 2007–2009.<sup>86</sup> The regulatory architecture in the U.K. has been partly blamed for not having been able to cope with certain risks in the U.K. financial markets that culminated in the banking crisis of 2008–2009,<sup>87</sup> but it is the deregulatory bias in U.K. financial regulation that has come under fire,<sup>88</sup> and not the functional approach to financial regulation itself. Ferran was also of the view that the demise of the U.K. FSA was due to political change rather than the ideological failure of integrated financial services regulation.<sup>89</sup> The U.K. has now adopted a twin peaks<sup>90</sup> approach, empowering the Bank of England (the PRA, or Prudential Regulation Committee) to oversee the safety and soundness of systematically important financial institutions such as most banks and large insurers, while leaving the FCA to deal with conduct of business regulation. The two bodies are dedicated to different objectives, allowing them to pursue their respective aims with more focus, while being compelled under legislation to coordinate with each other to maintain coherent oversight and supervision in key areas.<sup>91</sup> In particular, the FCA still has a comprehensive picture of the conduct of business across all financial intermediation activity, as the institution of the two authorities does not follow sectoral lines. Hence, the functional approach to financial regulation has not been departed from but arguably refined, as (a)

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84. Bank of England and Financial Services Act, c. 14 (2016) (U.K.), <http://www.legislation.gov.uk/ukpga/2016/14/contents/enacted/data.htm>.

85. The Financial Services Act, c. 28 (2010) (U.K.) (amending the Financial Services and Markets Act 2000).

86. James R. Barth et al., *Bank Regulation and Supervision in 180 Countries from 1999 to 2011*, 5 J. FIN. ECON. POL'Y 111, 130–31 (2013), [http://faculty.haas.berkeley.edu/ross\\_levine/papers/Bank\\_Regulation\\_and\\_Supervision\\_Around\\_the\\_World\\_15\\_JAN2013.pdf](http://faculty.haas.berkeley.edu/ross_levine/papers/Bank_Regulation_and_Supervision_Around_the_World_15_JAN2013.pdf).

87. See FIN. SERVS. AUTH. THE TURNER REVIEW, *supra* note 46, at 29–35 (noting that light-touch regulation was a likely cause of the banking crisis in the U.K.).

88. See generally MARKUS BRUNNERMEIER ET AL., THE FUNDAMENTAL PRINCIPLES OF FINANCIAL REGULATION, GENEVA REPORTS ON THE WORLD ECONOMY (2009) (arguing for reregulation in the U.K., as opposed to pure deregulation).

89. See generally Eilis Ferran, *The Break-up of the Financial Services Authority*, 31 OXFORD J.L. STUD. 455 (2011) (arguing that politics dictated the demise of the FSA).

90. See generally Giorgio Di Giorgio & Carmine Di Noia, *Financial Market Regulation and Supervision: How Many Peaks for the Euro Area?*, 28 BROOK. J. INT'L. L. 463 (2003) (arguing that regulation should be expanded into a “four-peak” system).

91. Financial Services Act 2012, c. 21, pt. 2, § 6 (containing sections 3D and 3E that are inserted into the Financial Services and Markets Act 2000).

the regulatory jurisdiction of the PRA is based on the risk profile generated by the economic and legal functions of financial intermediation activities and (b) the formal coordination apparatus for the PRA and FCA ensures that a form of integrated supervision (which is rooted in the functional perspective of financial services) remains important.

Next, the application of the functional approach in financial regulation is also heavily infused by the historical legacy of sectoral financial regulation. The functional approach to financial regulation has not yet led to a movement of internal rationalization of regulatory rules and making them consistent and coherent. The substantive rules have been developed over years of sectoral differentiation, giving rise to largely separate bodies of regulatory rules for depositary banks, insurance companies, investment in securities, collective investments, and investment intermediation.<sup>92</sup> The historical legacy of sectoral differentiation remains infused in the functional approach. To an extent, it provides some ready categories for policy-making over different types of financial services. However, this legacy can limit the application of the functional approach in developing regulatory innovation to govern financial innovation. I am of the view that the like-for-like extensions of regulatory perimeter that have occurred in regulating some aspects of shadow banking are based on such a limited application of the functional approach.

Having now sketched the nature of the functional approach in financial regulation and the key characteristics of market-liberalism and sectoral infusion in its application thus far, the next Part critically discusses the limitations in using the functional approach to inform regulatory policy-making. First, the roots of the functional approach in market-liberalism may obscure certain possibilities in regulatory policy thinking. Second, the functional approach has been used too readily in favor of the presumption towards a like-for-like approach in regulatory thinking, thus limiting thorough and innovative regulatory policy solutions. Third, the functional approach in financial regulation has been used to favor deregulation for the wholesale sector leading up to the crisis, and is still susceptible to arguments in legal arbitrage that influence regulatory policy-making.

#### IV. LIMITATIONS OF THE FUNCTIONAL APPROACH

First, I argue that the functional approach to shadow banking is fundamentally rooted in market-liberalism. A market-liberal paradigm accepts as legitimate the economic functions that shadow banking mechanisms serve in meeting supply and demand needs. The social utility of such mechanisms are seldom critically questioned.

Although the functional approach to shadow banking frames shadow banking activities in terms of their economic functions and the nature of the demand that gives rise to such activities, the approach arguably does not take us further beyond accepting such demand as legitimate.<sup>93</sup> In other words, as long as the demand and supply are a demonstration of the working of market forces, the micro-economic behavior is not subject to further critical inquiry as to its social utility. For example, the E.U.'s adoption of the Securities Financing Transactions Regulation demonstrates that policymakers

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92. This is the case with the United States, as well as the European Union and individual jurisdictions, such as the United Kingdom.

93. ADRIAN & SHIN, *supra* note 37, at 14–15.

accept the necessity of the repo markets, and therefore aim to provide an environment for such markets to be conducted with more confidence by participants. More fundamental questions are not raised about the normative desirability of such short term funding, and whether it is ideal for such markets to be constituted upon private legal structures. Indeed, the functional approach may achieve the effect of “normalizing” or “mainstreaming” shadow banking activities in due course. The functional analysis of shadow banking activities is inherently biased towards providing justification for such activities as long as the economic function of the activities can be clarified.<sup>94</sup> Arguably, there is an inherently persuasive aspect that mitigates the exotic and unconventional perspectives related to such activities, lending support for such activities to be treated as regular. The regularization of such shadow banking activity can be achieved by the reduction of its unregulated or unmonitored nature, by extending some form of regulatory perimeter over it. In this way, the market-liberal bias in the functional approach frames the role of regulation as a legitimizing tool—regularizing shadow banking activity through regulatory capitalism.

Further, I am also of the view that the market-liberal bias in the functional approach shapes regulatory policy in the process of informing it. The resulting regulatory policy is generally incremental in nature rather than representing fundamental change. The mandatory transparency in relation to collateral in the Securities Financing Transactions Regulation is an example of such incremental regulatory policy that seeks not to be too intrusive for the markets, as market participants are still relatively free to conduct their activities as long as the required transparency is provided. I am of the view that the market-liberal bias in the functional approach to understanding shadow banking is likely to result in regulatory policy that is pro-market and facilitative in nature. The danger is that such regulatory policy could subsequently be discovered to be inadequate, needing intrusive corrective actions in due course. An example would be the extensive regulation of over-the-counter derivatives markets after decades of self-regulation ended in the wake of the global financial crisis of 2007–2009.<sup>95</sup>

Moreover, incremental regulatory policy that is pro-market will entail an expansion of the list of legitimate risks that financial institutions can undertake. This could inadvertently bolster their systemic risk profile and the necessity of the public sector backstop for them. This is not an unfamiliar phenomenon as it has happened before—in the mainstreaming of universal banking in the United States by the abolition of the Glass–Steagall Act. In spite of the Glass–Steagall restrictions, the U.S. financial sector has developed shadow banking solutions to avoid the restrictions over many years, and hence the abolition of the restrictions merely reflected the needs of market forces. However, the abolition has allowed universal banking to grow more legitimately and explosively in the United States, greatly increasing the systemic risk profile of very large global banking institutions.<sup>96</sup>

Indeed, some commentators who have applied a functional analysis to study shadow

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94. Claessens & Ratnovski, *supra* note 4, at 3.

95. An example is in the form of mandatory central clearing and prudential requirements such as margin and collateral, see Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012, on OTC derivatives, central counterparties and trade repositories, 2012 O.J. (L 201), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0648>.

96. SUZANNE MCGEE, CHASING GOLDMAN SACHS: HOW THE MASTERS OF THE UNIVERSE MELTED WALL STREET DOWN . . . AND WHY THEY’LL TAKE US TO THE BRINK AGAIN 185 (2010).

banking argue that many aspects of shadow banking need the equivalent of established backstops for existing financial intermediation mechanisms. They suggest how backstops may be extended accordingly.<sup>97</sup> It is at this point we should question the market-liberal bias in functionally recognizing the legitimacy of the shadow banking activity—is it right to assume that society as a whole should support such extension of backstops, effectively extending its social contract with depositary banks to shadow banking entities?

However, it could be argued that the market-liberal bias in functionally recognizing the legitimacy of shadow banking activity is consistent with the social benefits of market choice and with E.U. policy in market integration. Normalizing shadow banking activities and placing them on a level-playing field as mainstream regulated financial intermediation means that they can be more appropriately priced and openly offered in the markets, while being subject to an extent of regulation and supervision.<sup>98</sup>

Further, it is likely the incremental nature of the regulatory policy discussed above would draw heavily upon a like-for-like approach in functionally equivalent existing regulation. This is because a like-for-like approach derives from an existing regime and is less likely to give rise to controversy. Further, a like-for-like approach is favored by the E.U., as the European Commission supports achieving consistent regulation in similar issue areas across similar financial intermediation. This approach has already been taken in the imposition of consistent European remuneration regulation across banks, investment firms, mutual and alternative (hedge and private equity) funds,<sup>99</sup> as well as in the conduct of business regulation for the purposes of investor protection (such as in transparency, communications, or acting in the best interests of investors).

I argue that a like-for-like approach in regulatory policy is not always optimal, as it can in some cases result in over-extension of the regulatory perimeter where it is not necessarily warranted—or under-inclusion. Under-inclusion is a likely phenomenon if the like-for-like extension results in significant regulatory burdens, and lobbyists mount arguments in legal arbitrage to challenge the like-for-like comparisons. Such is the case

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97. Daniel L. Otto & Robert R. Reed, *Repos, Bailouts, and Instability in the Shadow Banking System* 2 (Mar. 2015), <http://ssrn.com/abstract=2589381>; Morgan Ricks, *Shadow Banking and Financial Regulation* 50–51 (Columbia Law & Econ., Working Paper No. 370, 2010), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1571290](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1571290); Claessens & Ratnovski, *supra* note 4, at 4; Gorton & Metrick, *supra* note 1, at 290; Schwarcz, *supra* note 50, at 626–27.

98. Jonathan Macey, *It's All Shadow Banking, Actually*, 31 REV. BANKING & FIN. L. 593, 626–27 (2012).

99. Directive 2011/61 art. 13 of the European Parliament and of the Council of 8 June 2011, on Alternative Investment Fund Managers and Amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No. 1060/2009 and (EU) No. 1095/2010, 2011 O.J. (L 174) 24 (EU); Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on Access to the Activity of Credit Institutions and the Prudential Supervision of Credit Institutions and Investment Firms, Amending Directive 2002/87/EC and Repealing Directives 2006/48/EC and 2006/49/EC (1), 2013 O.J. (L 176) 385 (EU); Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on Markets in Financial Instruments and Amending Directive 2002/92/EC and Directive 2011/61/EU, 2014 O.J. (L 173) 390 (EU); Directive 2014/91/EU of the European Parliament and of the Council of 23 July 2014 Amending Directive 2009/65/EC on the Coordination of Laws, Regulations and Administrative Provisions Relating to Undertakings for Collective Investment in Transferable Securities (UCITS) as Regards Depositary Functions, Remuneration Policies and Sanctions, 2014 O.J. (L 257) 193 (EU); PRA RULEBOOK, REMUNERATION, Para. 15, <http://www.prarulebook.co.uk/rulebook/Content/Part/292166/04-10-2016>; FIN. CONDUCT AUTH., SYSC 19A, <https://www.handbook.fca.org.uk/handbook/SYSC/19A/?view=chapter> (last visited Nov. 13, 2016); FIN. CONDUCT AUTH., FCA HANDBOOK SYSC 19B, <https://www.handbook.fca.org.uk/handbook/SYSC/19B/1.html> (last visited Nov. 13, 2016).

regarding asset managers who have resisted systemic risk regulation being extended to them,<sup>100</sup> although they are increasingly conducting a range of financial intermediation activities that give them enormous power with savers and the markets. I argue that the functional analysis should not be immediately applied in like-for-like comparisons to inform regulatory policy. It should instead be framed in a more open and discursive manner so that more discourse on evaluating financial innovation can be stimulated, and can subsequently feed into more holistic policy thinking about shadow banking and mitigating the market-liberal bias inherent in the functional approach.

In the E.U., we have observed a number of over-extended regulatory areas. I am of the view that seeking regulatory convergence may result in over-inclusive regulatory regimes that are not always appropriate. For example, why should hedge and private equity managers' remuneration, which is heavily subject to arms-length contractual scrutiny, be regulated in accordance with the same prudential concerns that affect banks that have a large retail footprint?<sup>101</sup> Further, Payne has also criticized the indiscriminate treatment of hedge and private equity funds in the E.U. Alternative Investment Fund Managers Directive 2011.<sup>102</sup> The drive for regulatory consistency is likely to increase regulatory cost across the board, and make financial services more expensive to access. At worst, extensive and over-inclusive regulatory regimes could cause financial services to become so costly or inaccessible that they give rise to financial repression and the migration of shadow activity to further unregulated channels.<sup>103</sup>

It may be argued that an apt price has to be paid for a better-regulated financial services sector, where regulatory arbitrage and the false sense of cost-effectiveness are reduced.<sup>104</sup> Further, as financial regulation has moved towards more precautionary applications,<sup>105</sup> it could be argued that a like-for-like extension of regulatory perimeter

100. Barney Jopson et al., *Fund managers to escape 'systemic' label*, FIN. TIMES (July 14, 2015), <https://www.ft.com/content/4e9d566e-2999-11e5-8613-e7aeddb7bdb7>. However, the Financial Stability Board continues to press for more systemic risk supervision of asset managers, as in FIN. STABILITY BD., PROPOSED POLICY RECOMMENDATIONS TO ADDRESS STRUCTURAL VULNERABILITIES FROM ASSET MANAGEMENT ACTIVITIES (June 22, 2016), [www.fsb.org/wp-content/uploads/FSB-Asset-Management-Consultative-Documents.pdf](http://www.fsb.org/wp-content/uploads/FSB-Asset-Management-Consultative-Documents.pdf).

101. Ivan Guidotti & Istvan Nagy, *The Role of Remuneration Structures in Hedge Fund Performance*, MIDWEST FIN. ASS'N 2 (Annual Meeting Paper, Aug. 15, 2013), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2138860](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2138860); Robert C. Illig, *The Promise of Hedge Fund Governance: How Incentive Compensation Can Enhance Institutional Investor Monitoring*, 60 ALA. L. REV. 41, 65–66 (2008).

102. See generally Jennifer Payne, *Private Equity and Its Regulation in Europe*, 12 EUR. BUS. ORG. L. REV. 559 (2011) (discussing concerns about how the Alternative Investment Fund Managers Directive will impact private equity).

103. Li Guo & Daile Xia, *In Search of a Place in the Sun: The Shadow Banking System with Chinese Characteristics*, 15 EUR. BUS. ORG. L. REV. 387, 411 (2014); Awrey, *supra* note 50, at 238.

104. Jackson, *supra* note 6, at 749.

105. For an example of judgment-based supervision, see BANK ENG., *Our Approach to Banking Supervision* (2011, 2013). To see this with the concept of macro-prudential regulation and the Prudential Regulation Authority's role of providing stability to the region's financial system, see generally BANK ENG., *The Role of Macroprudential Policy* (Nov. 19, 2009), <http://www.bankofengland.co.uk/publications/Documents/other/financialstability/roleofmacroprudentialpolicy091121.pdf>; Hilary J. Allen, *A New Philosophy for Financial Stability Regulation*, 45 LOY. U. CHI. L.J. 173, 173 (2013); Samuel G. Hanson et al., *A Macroprudential Approach to Financial Regulation*, 25 J. ECON. PERSPECTIVES 3, 3 (2011); see also Iman Anabtawi & Steven Schwarcz, *Regulating Ex Post: How Law Can Address the Inevitability of Financial Failure*, 92 TEX. L. REV. 75, 91 (2013) (discussing the appropriate

may mitigate future problems.<sup>106</sup> One such example is in the large exposure reforms carried out in the E.U.<sup>107</sup> and by the Basel Committee.<sup>108</sup> This regime deals with capping banks' exposures to a single or connected group of institutions in proportion to banks' equity capital position, so that such exposures would not result in failure risk for the bank if a counter-party should fail. The Basel Committee has proposed relatively conservative thresholds for the cap to be applied to systemically important banks, for large exposures to be limited to no more than 15% of the bank's own funds.<sup>109</sup> The E.U. now counts exposures to shadow banking entities as being caught by the definition of large exposures, and applies a wide definition of connected institutions to limit concentrations of credit risk.<sup>110</sup> As the scope of shadow banking entities is widely defined, the like-for-like analysis underlying the extensive application of the large exposures regime has closed gaps in the regulatory net.

Turning to under-inclusion, this is usually underpinned by regulatory arbitrage and powerful lobbying, which can also be supported by the functional analysis. Where functional equivalencies between financial activities are rationalized at a rather high level, for example the money creation function of the repo market for short term funding and the money creation function undertaken by banks based on deposit-taking, we may argue that the same microprudential regulation that applies to bank lending on the basis of deposits should apply to money market lending on the basis of collateral. But as differences in the legal structures of the market are fleshed out, it may be argued that the high-level like-for-like comparison is misleading. In the repo market, the laws of property and security rights operate and so counterparties are more protected than unsecured depositor/creditors. Therefore, one can argue that the necessary confidence and stability mechanisms needed are different in such markets. For example, such markets need a sufficient supply of safe assets to use as collateral,<sup>111</sup> and perhaps a framework to ensure that collateral remains valuable in its use and re-use. Such needs are different from the needs of unsecured depositors. Where the like-for-like application of regulatory policy becomes no longer persuasive, it is possible for regulatory thinking to be developed in a

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balance between ex ante and ex post regulation).

106. Although Kaal argues that post-crisis reforms are generally too stringent, only asking for relaxation in normal times, in his writing Wulf A. Kaal, *Dynamic Regulation of the Financial Services Industry*, 48 WAKE FOREST L. REV. 791, 802, 820 (2013). Hence, how effective precautionary measures could be in financial regulation remains uncertain.

107. An example of this can be found in the entirety of EUR. BANKING AUTH., LIMITS ON EXPOSURES TO SHADOW BANKING ENTITIES WHICH CARRY OUT BANKING ACTIVITIES OUTSIDE A REGULATED FRAMEWORK UNDER ARTICLE 395(2) OF REGULATION (EU) NO 575/2013 (Dec. 14, 2015), <https://www.eba.europa.eu/documents/10180/1310259/EBA-GL-2015-20+GL+on+Limits+to+Exposures+to+Shadow+Banking+Entities.pdf/f7e7ce6b-7075-44b5-9547-5534c8c39a37>.

108. Press Release, Final Standard for Measuring and Controlling Large Exposures, BASEL COMM. FOR BANKING SUPERVISION (Apr. 15, 2014), [www.bis.org/press/p140415.htm](http://www.bis.org/press/p140415.htm).

109. BASEL COMMITTEE, SUPERVISORY FRAMEWORK FOR MEASURING AND CONTROLLING LARGE EXPOSURES para D.16 (April 2014), <http://www.bis.org/publ/bcbs283.pdf>.

110. EBA GUIDELINES, LIMITS ON EXPOSURES TO SHADOW BANKING ENTITIES WHICH CARRY OUT BANKING ACTIVITIES OUTSIDE A REGULATED FRAMEWORK UNDER ARTICLE 395(2) OF REGULATION (EU) NO 575/2013 (Dec. 2015); EBA Consultation Paper on Guidelines on Connected Clients under Article 4(1) (39) of Regulation (EU) No. S75/2013 (July 26, 2016), <https://www.eba.europa.eu/documents/10180/1531170/EBA-CP-2016-09+CP+on+Guidelines+on+Connected+Clients.pdf/ebfe2bd2-ddcb-46ed-94ac-b104e4d051e9>.

111. Gary Gorton et al., *The Safe Asset Share*, 102 AM. ECON. REV. 101, 101 (2012).

completely novel manner, or regulatory policy may settle for the minimal and uncontroversial. The latter approach has arguably been taken in the European Securities Financing Transactions Regulation 2015.<sup>112</sup>

The functional analysis of shadow banking can give rise to the teasing out of different legal and economic structures, and therefore the distinguishing of shadow banking activities from similar but regulated activities. This may entail the development of specific rules and regimes for distinct shadow banking activities, tending towards being narrow in scope, and perhaps even substantively undistruptive to existing practices. In such a landscape, regulation may continue to develop specifically to catch up with the distinguishing features of various activities, which is a tenet of regulatory capitalism as discussed earlier. But such regulation may nevertheless develop in pockets and incrementally, leaving new gaps where regulatory arbitrage and financial innovation could occur. I observe that although the Financial Stability Board has a general interest in shadow banking,<sup>113</sup> its recommendations have inevitably boiled down to specific and distinct activities, shaping special regulatory regimes for rather specific activities such as money market funds and securities financing.<sup>114</sup> In this way, although the functional approach may promise inclusivity in thinking about shadow banking, regulatory implementation may be dogged by lobbying and legal arbitrage and therefore become more specific and arguably under-inclusive.

Most importantly however, I am of the view that the functional approach to studying shadow banking, which is inherently biased towards market-liberalism, and perhaps places too much faith in a form of regulatory capitalism that is incremental instead of fundamental, would inevitably shut out normative and critical queries in relation to the desirability and social utility of shadow banking activities. For example, even if shadow banking activities perform liquidity transformation on a larger scale than existed in markets before, is such liquidity an unequivocal good? Is the chasing of ever more liquidity, and even hyper-liquidity in speedy trading environments, a desirable phenomenon?<sup>115</sup> Or as Blair insightfully suggested, shadow banking activities are often aimed to increase the level of leverage in the financial sector and real economy, but is credit creation an unequivocal good?<sup>116</sup> I will further extrapolate this argument in relation to the specific example of securitization below.

In the United States, securitization has made voluminous mortgage lending possible, and the expansive growth of home loans is regarded as a legitimate economic activity, supported by the policy of encouraging home ownership. The demand for home loans, giving rise to financial innovation that facilitates ever more such lending, is not

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112. Regulation (EU) 2015/2365 of the European Parliament and of the Council of 25 November 2015, on Transparency of Securities Financing Transactions and of Reuse and Amending Regulation (EU) No 648/2012, 2015 O.J. (L 337), <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R2365&from=EN>.

113. See generally FIN. STABILITY BD., GLOBAL SHADOW BANKING, *supra* note 2 (providing a global landscape of shadow banking statistics and perspectives).

114. See generally FIN. STABILITY BD., STRENGTHENING OVERSIGHT, *supra* note 2 (providing a policy recommendation that focuses specifically on MMFs); FIN. STABILITY BD., TRANSFORMING SHADOW BANKING, *supra* note 2 (providing an overview of the successes of such regulation).

115. John Kay, *A fixation on liquidity is not healthy for financial markets*, FIN. TIMES (Sept. 17, 2013), <https://www.ft.com/content/5e70c3b8-1f83-11e3-aa36-00144feab7de>.

116. See Blair, *supra* note 9, at 417 (discussing shadow banking's impact on the economy and the financial industry).

questioned.<sup>117</sup> Securitization transactionalizes and changes the nature of long-term relationships in residential mortgage lending, and therefore affects underwriting standards and investor protection. Although long-term credit transactions create illiquidity for banks that keep these assets in its books, can securitization really transform the nature of such relational and illiquid assets into investible and more liquid assets on investment markets? Investment markets require much more standardization and genericity to generate a trading environment, i.e., liquidity for investors with varying time horizons, from short to long term. How would such marketization affect the nature of the long-term underwriting and its relational dimension? As the collapse of mortgaged-backed securities and their complex versions, such as collateralized debt obligations, has shown in the global financial crisis, the endeavor in financial alchemy to turn relatively illiquid loans into liquid money-like instruments did not succeed<sup>118</sup>—the markets were ultimately unsure of the underlying characteristics that would sustain the liquidity of such products. Hence, did securitization and marketization of long-term illiquid products only produce a temporary and false bubbly market that led to overdrive in the real economy?

Fundamentally, the normative question as to the appropriateness of marketizing essentially long-term relationship products is not asked. Financial innovation may meet the needs of market demand, but if such financial innovation merely capitalizes on greed to meet immediate market demand in a way that is ultimately unsustainable, a normative query ought to be raised on the nature of such innovation.<sup>119</sup> Further, the nature of market demand for home ownership should also perhaps be questioned. The functional approach to understanding securitization has not produced a fruitful conversation on normative aspects such as the dilemmas between the demand for home ownership and issues of consumer affordability and financial literacy,<sup>120</sup> and the question of whether residential real estate is being overly commoditized and effecting asset price inflation.<sup>121</sup> As a matter of economic policy, universal home ownership is not pursued as a matter of course everywhere. Many continental European countries, such as France and Germany, pursue policies that ensure affordable rental housing and adequate tenant protection, and treat home ownership in a more nuanced manner.<sup>122</sup> At a broader level, policy questions should be asked as to the desirability and contrary implications of encouraging home

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117. Arnoud W. A. Boot & Anjan V. Thakor, *Commercial Banking and Shadow Banking: The Accelerating Integration of Banks and Markets and Its Implications for Regulation*, in OXFORD HANDBOOK OF BANKING, 47, 52 (2d. ed. 2014).

118. Alan Moreira & Alexi Savov, *The Macroeconomics of Shadow Banking* 1 (NBER, Working Paper No. 20335, 2014), <http://www.nber.org/papers/w20335>.

119. For broader questions on the social utility of finance and alternative structural visions for finance that ought to be raised, see generally Tamara Lothian, *Law and Finance in the Context of Crisis: The Imperative of Structural Vision* (Colum. L. Econ., Working Paper No. 433, 2012), [https://papers.ssm.com/sol3/papers.cfm?abstract\\_id=2153974](https://papers.ssm.com/sol3/papers.cfm?abstract_id=2153974).

120. For critical discussions regarding consumer financial literacy programs as ways to shift more responsibility onto the consumer who may not be best placed to understand the nature of financial products, see generally Ronen Shamir, *The Age of Responsibilization: On Market-Embedded Morality*, 37 *ECON. & SOC'Y* 1 (2008); Toni Williams, *Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services*, 29 *L. & POL'Y* 226 (2007).

121. See generally Manuel B. Aalbers, *The Financialization of Home and the Mortgage Market Crisis*, 12 *COMPETITION & CHANGE* 148 (2008), <http://cch.sagepub.com/content/12/2/148.abstract> (discussing this question).

122. JOHN KAY, *OTHER PEOPLE'S MONEY: THE REAL BUSINESS OF FINANCE* 148–50 (PublicAffairs, 2016).

ownership.

Asking the normative questions above also helps to forge a constructive conversation in where securitization may play a viable role for needs in the real economy. Perhaps asset classes that are shorter term in duration may make better securitized products, and perhaps greater standardization can be achieved to provide adequate comfort for investors. The E.U. is pushing for a rejuvenation of the securitized products market where such products are highly standardized and transparent.<sup>123</sup> Such policy is based on expanding the financing options for small and medium-sized enterprises and nascent conversations are only beginning to take place on the objectives of real economy financing, and the different channels that can be involved in such intermediation in a manner that is sustainable and responsible.

This Part has suggested that although the functional approach overcomes, to an extent, regulatory fragmentation in purposefully studying the nature of shadow banking activities, one needs to beware of its limitations: (a) the market-liberalism bias inherent in the approach may obscure the raising of more fundamental and critical questions in relation to the nature of demand and supply of financial innovation; and (b) the legacy of sectoral differentiation continues to infuse the functional approach, encouraging incremental and like-for-like approaches to regulatory thinking instead of more fundamental rethinking in regulatory innovation. The result may be the design of sub-optimal and superficial regulatory policies, including minimal regulatory policies that are pro-market and arguably under-inclusive in regulating and supervising expansions in institutional and market risk, and/or like-for-like extensions of regulatory policy which may be unnecessarily over-inclusive and precludes more imaginative thinking about regulatory solutions. The next Part therefore makes some suggestions as to the optimal application of the functional approach in regulatory policy-making.

#### V. THE OPTIMALITIES OF THE FUNCTIONAL APPROACH AND CONCLUSION

I have argued that the functional approach to understanding shadow banking overcomes the conventional analysis that is limited by fragmented regulatory frameworks based on sectoral differentiation, and is able to provide an account of economic objectives and risks associated with shadow banking activities. I warn, however, that this approach may be inherently biased towards market-liberalism and should not be used to preclude normative queries regarding the social utility of certain financial activities. Regulatory policy-makers have used this approach in a like-for-like application of existing regulation in many areas, which is not always optimal.

The above limitations of the functional approach can be overcome by a deliberate channeling of the functional approach into a rational communicative framework that is inclusive, so that financial innovation and its merits can be fully debated upon to feed into regulatory policy-making. Such a rational communicative framework would ensure that a wide range of stakeholders can provide a voice in the financial regulatory policy process, which has hitherto been dominated by the financial sector and policy-making elites in the national and international spheres.<sup>124</sup>

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123. EUR. COMM'N, *Proposal*, *supra* note 58; EUR. COMM'N, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*, (Mar. 19, 2014), [http://ec.europa.eu/europe2020/pdf/europe2020stocktaking\\_en.pdf](http://ec.europa.eu/europe2020/pdf/europe2020stocktaking_en.pdf).

124. See MADSEN ANDENAS & IRIS H-Y CHIU, *THE FOUNDATIONS AND FUTURE OF FINANCIAL REGULATION*:

Such a rational communicative framework can be built upon the work of Jürgen Habermas.<sup>125</sup> Habermas was of the view that a utopian democracy is based on human communication and discourse that is achieved at an objective, truthful, and rational level.<sup>126</sup> Therefore, Habermasian discourse is built upon the sharing of facts, the rational communication of knowledge without bias of political or partisan position, and inclusive discourse which results in a mutual understanding and achievement of consensus.<sup>127</sup>

The functional approach to understanding shadow banking works to achieve fact-finding in shadow banking activities, their economic functions, and legal structures. Such analysis can be undertaken in a neutral and objective manner, seeking to foster a body of knowledge. Such a body of knowledge should be fostered independent of power domination, interest preferences, and arguments rooted in national legal structures. This knowledge should be placed on a transnational platform and be accessible to all. It should form the basis for inclusive and imaginative discourse, opening up for all aspects of discussion related to fundamental objectives and purposes of shadow banking activities, such as: inclusiveness and exclusiveness in such activities; what benefits entail and who enjoys them; what risks entail and who bears them; what aspects of private law apply and whose interests are protected; what aspects of regulatory law apply and whose interests are protected; and what changes in any of the above are needed. This discourse is necessary to evaluate the nature and development of financial innovation underlying shadow banking so that a mutual understanding can be reached in terms of achieving a democratic social response to determining the desirability of such innovation. The communicative framework for shadow banking would allow for a discourse on financial innovation, and such discourse could not be artificially prevented or circumscribed by financial sector elites. It would also form a more robust basis for regulatory policy, so that regulatory thinking is not confined to existing structures/parameters and can be more thorough, well-founded, and imaginative.

One commentator observed that the interplay between the economy and society has become disengaged in the era of neo-classical and laissez-faire markets.<sup>128</sup> Such

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GOVERNANCE FOR RESPONSIBILITY ch. 3 (Routledge, 1st ed. 2013) (discussing how final regulatory policy making has been dominated by financial sector and policy making elites).

125. See generally JÜRGEN HABERMAS, BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY (Cambridge, Mass: MIT Press, 1996) (arguing that theories of law and democracy are built upon a theory of discourse, communication and deliberation in the manner espoused in earlier works); JÜRGEN HABERMAS, COMMUNICATION AND THE EVOLUTION OF SOCIETY (Beacon Press, 1979) [hereinafter HABERMAS, COMMUNICATION AND THE EVOLUTION OF SOCIETY] (developing a theory of communication in society that is premised on language, seeking the technical qualities of language that can achieve universal conditions for understanding); JÜRGEN HABERMAS, MORAL CONSCIOUSNESS AND COMMUNICATIVE ACTION (MIT Press, 1990) (espouses the discourse theory of ethics where ethical values in shared social understandings are developed by communication in the manner espoused in earlier works); JÜRGEN HABERMAS, THE THEORY OF COMMUNICATIVE ACTION, VOL. 2: LIFEWORLD AND SYSTEM: A CRITIQUE OF FUNCTIONALIST REASON (Boston: Beacon Press, 1985) (sketching out a social system whereby social order and integration is maintained by shared understandings and values developed through communication, developed from his earlier work above).

126. See generally HABERMAS, COMMUNICATION AND THE EVOLUTION OF SOCIETY, *supra* note 125 (developing a theory of communication in society that is premised on language, seeking the technical qualities of language that can achieve universal conditions for understanding).

127. See *supra* note 125 (summarizing the effects of the above cited works).

128. Alexander Ebner, *The Regulation of Markets: Polanyian Perspectives*, in REGULATORY TRANSFORMATIONS: RETHINKING ECONOMY-SOCIETY INTERACTIONS 31 (Bettina Lange et al. eds., Oxford: Hart 2015).

disengagement has led to narrow-minded perspectives of economic activities, markets, and objectives, such as the “rational economic man,” over-reliance on market competition as a governance mechanism, and on private as opposed to regulatory law. The rejuvenation of such a conversation would be in line with the Polanyian vision of social embedment of markets and the economy.<sup>129</sup> In this light, using the functional approach to understanding shadow banking can be constructed as part of the broader context of economy-society interaction and conversation, ushering in a more inclusive and more informed form of capitalism, ameliorating the adverse effects associated with finance capitalism.<sup>130</sup> Further, Decker observes that the limitations of neo-classical economic models have been revealed over the years as being narrowly focused and excessively insular.<sup>131</sup> Hence, the rise of theories in economic justice, economic distribution, and behavioral economics, for example, shows how the social is necessarily re-embedded in the economy and markets.

It may be argued that the objectivity in constructing such a Habermasian economy-society conversation on shadow banking cannot be perfectly achieved, as we need to use economic and legal frameworks to constitute the knowledge relating to shadow banking. Hence, law or economics as a body of established ideas and perspectives could be used to distort the communication. Further, it may be argued that a communicative framework is not possible as it assumes all participants are equal. It may be argued that shadow banking issues only affect wholesale sector users and macroprudential regulators, and so why should others be allowed to shape regulatory policy-making in this area? Further, the level of sophistication required for understanding shadow banking is not compatible with the average level of education and financial literacy in the general demographics of even developed countries. It may also be argued that ignoring differences in national legal structures in constructing a Habermasian discourse is wrong, as that artificially assumes that individual jurisdictions have not already made certain political, economic or social choices in respect of how rights ought to be governed. The transnational level of the Habermasian discourse may be used to subvert the democratic choices already made in individual jurisdictions.

The rational communicative framework as part of the re-engagement of economy-society conversations may be an ideal that is impracticable, or ironically prone to tyranny. This does not, however, mean that we cannot start by using the functional analysis of shadow banking in such a way as to contribute to such a re-engagement with a wider social landscape, in phases or stages. The market-liberal bias in the functional analysis can be questioned in the rational communicative framework, so that contrary voices may provide constructive and alternative views to the normative desirability of certain financial innovations. Mainstream citizenry, such as the Occupy movement,<sup>132</sup>

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129. *Id.*

130. For example, see critical accounts of finance capitalism throughout the entireties of PAUL H. DEMBINSKI, *FINANCE: SERVANT OR DECEIVER? FINANCIALIZATION AT THE CROSSROADS* (Kevin Cook trans., Palgrave Macmillan, 2009); MICHAEL HUDSON, *FINANCE CAPITALISM AND ITS DISCONTENTS* (Islet Verlag, 2012); SUSAN LONG & BURKARD SIEVERS, *TOWARDS A SOCIOANALYSIS OF MONEY, FINANCE AND CAPITALISM* (Routledge, 2013).

131. Christopher Decker, *Economics and Transnational Risk Regulation*, in *REGULATORY TRANSFORMATIONS: RETHINKING ECONOMY-SOCIETY INTERACTIONS* 55 (Bettina Lange et al. eds., Hart 2015).

132. See #OCCUPYTOGETHER, <https://web.archive.org/web/20130514230107/http://www.occupytogether.org> (last visited Nov. 13, 2016)

arose briefly to reflect social interest in engaging with fundamental social discourse on finance, and should not be shut out by the use of jargon. Such discussions can be important for regulatory policy-making, for example, in prohibiting certain products or services altogether or in more boldly proscribing their scope. Regulation has not made negative substantive judgments on financial innovation so far, even if procedural regulation may be used to manage risks, such as the Volcker rule in the United States,<sup>133</sup> and ring-fencing legislation in the United Kingdom.<sup>134</sup> I think there may be such a role for regulation.<sup>135</sup> I also think a communicative framework for the functional understanding of shadow banking opens up more imaginative possibilities in regulatory policy, and makes us less confined to like-for-like applications of existing regulatory paradigms.

As the global financial crisis has made us more socially aware of financial sector risks and their impact, it is timely to build such a communicative framework, to embrace the “cosmopolitan moment” as described by Beck.<sup>136</sup> It is noted that the Bank of England, a traditionally closed organization, has started Open Forums<sup>137</sup> to lead and invite open discussions by participants in all walks of life. Such are examples of the first steps towards a more systematic and deliberate institution of a rational communicative framework. Presumptions that regulatory policy-making in the wholesale financial sector is confined to participants in the sector and should not enroll other citizens’ opinions are merely elitist and insular in nature. At a transnational level, the Financial Stability Board is poised to lead such a direction; although, it is at the moment behaving more like a closed think-tank of technocratic elites. Perhaps its global surveillance in shadow banking will place it in a position to reach out for wider discourse.

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(discussing the general goals for the movement); Hannah Kuchler & Claire Jones, *BoE’s Haldane says Occupy was Right*, FIN. TIMES (Oct. 30, 2012), <https://www.ft.com/content/09b53a94-2271-11e2-8edf-00144feabdc0>.

133. Dodd–Frank Wall Street Reform and Consumer Protection Act (Dodd–Frank Act), Pub. L. No. 111-203, 124 Stat. 1376 § 619 (2010); see generally Julian T.S. Chow & Jay Surti, *Making Banks Safer: Can Volcker and Vickers Do It?* (Int’l Monetary Fund Working Paper, WP/11/236, Nov. 2011), <http://www.imf.org/external/pubs/ft/wp/2011/wp11236.pdf> (discussing the Volcker rule in the United States).

134. INDEP. COMM’N ON BANKING, FINAL REPORT RECOMMENDATIONS 233–37 (Sept. 2011), <http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/d/ICB-Final-Report.pdf>; HM TREASURY, BANKING REFORM: DELIVERING STABILITY AND SUPPORTING A SUSTAINABLE ECONOMY 15–32 (White Paper, Cm 8356, June 2012), [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/32556/whitepaper\\_banking\\_reform\\_140512.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32556/whitepaper_banking_reform_140512.pdf).

135. See generally Dania Thomas, *Risk-Free Debt: The Distorting Promissory Narratives in Sovereign Debt Law and Policy*, in REGULATORY TRANSFORMATIONS: RETHINKING ECONOMY-SOCIETY INTERACTIONS (Bettina Lange et al. eds., 2015) (suggesting regulation through a social sphere, recognizing that economic transactions are imbedded in the social and political sphere).

136. ULRICH BECK, *WORLD AT RISK* 55–59 (1st ed. 2009). Beck argues that global financial risks inevitably present “risk conflicts” when the private sector engages in risky activities which put increasing numbers at risk of harm. Economists might call these externalities, although the risks may never materialize. Beck calls this “organized irresponsibility,” a shifting of risk through deliberate and rational organization in private spheres. One of the consequences of “organized irresponsibility” is the rise of Beck’s “cosmopolitan moment,” where the collective consciousness of society rises up to challenge the situation of “irresponsibility” and frames the discourse not in economic, rational and efficiency terms, but in terms of justice and rights.

137. This was started on November 11, 2015. See generally *Open Forum 2015*, BANK ENG. (Nov. 11, 2015), <http://www.bankofengland.co.uk/markets/Documents/openforumagenda.pdf> (outlining the agenda for the November 11, 2015 Open Forum).