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## Rethinking Countercyclical Financial Regulation

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## Rethinking Countercyclical Financial Regulation

### Cover Page Footnote

✉ Assistant Professor of Business Law, University of Michigan Ross School of Business. Kress was previously an attorney in the Federal Reserve Board's Legal Division. ✉ Associate Professor of Business Law, Indiana University – Kelley School of Business. For helpful comments and conversations, we thank Gregg Gelzins, Patricia McCoy, Lev Menand, Graham Steele, David Zaring, and the participants in the Wharton Financial Regulation Conference. We also thank Jake Zaslou and Wei-Chung Lin for excellent research assistance.

## RETHINKING COUNTERCYCLICAL FINANCIAL REGULATION

Jeremy C. Kress\* & Matthew C. Turk<sup>◊</sup>

*The 2008 financial crisis exposed a longstanding problem in financial regulation: traditional regulatory strategies tend to be procyclical. That is, regulatory tools—most notably, bank capital requirements—incentivize excessive credit growth during economic expansions and insufficient lending during contractions. The procyclicality of U.S. financial regulation was a key driver of the housing bubble in the mid-2000s and the massive credit crunch that followed. To combat this phenomenon, Congress and the federal banking agencies attempted to mitigate procyclical boom-and-bust cycles by implementing regulatory approaches that were explicitly countercyclical. The Dodd-Frank Act and related post-crisis reforms included several countercyclical features that were designed to become stricter during periods of economic growth and more lenient during contractions, with the goal of smoothing economic cycles.*

*Less than a decade later, however, these countercyclical tools failed to prevent unprecedented financial stress during the COVID-19 recession. This Article is the first legal scholarship to revisit the design of countercyclical rules in light of the COVID-19 pandemic. It reveals weaknesses in Dodd-Frank's countercyclical approach and the significant costs of failing to implement an effective countercyclical strategy. The Article also establishes a blueprint for strengthening the United States' countercyclical framework going forward. The Article identifies three principles—automaticity, portfolio strategy, and market-*

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\* Assistant Professor of Business Law, University of Michigan Ross School of Business. Kress was previously an attorney in the Federal Reserve Board's Legal Division.

<sup>◊</sup> Associate Professor of Business Law, Indiana University – Kelley School of Business. For helpful comments and conversations, we thank Gregg Gelzimis, Patricia McCoy, Lev Menand, Graham Steele, David Zaring, and the participants in the Wharton Financial Regulation Conference. We also thank Jake Zaslow and Wei-Chung Lin for excellent research assistance.

*wide coverage—that should guide countercyclical policymaking. It then applies these principles to five specific areas in which financial regulators should bolster countercyclical oversight: bank capital requirements, accounting standards, securitization rules, early remediation guidelines, and margin requirements. Taken together, these reforms are critical to making countercyclical financial regulation work and creating a more stable and prosperous financial system.*

## TABLE OF CONTENTS

I. INTRODUCTION.....	499
II. THE 2008 CRISIS AND THE CASE FOR COUNTERCYCLICAL FINANCIAL REGULATION.....	505
III. POST-CRISIS COUNTERCYCLICAL REGULATION: LESSONS (ALMOST) LEARNED.....	513
A. COUNTERCYCLICAL CAPITAL REQUIREMENTS.....	513
B. CECL ACCOUNTING STANDARD.....	520
C. RISK RETENTION RULE.....	524
D. EARLY REMEDIATION REQUIREMENTS.....	529
IV. THE COVID-19 PANDEMIC: RELEARNING THE LESSONS OF 2008.....	533
A. FINANCIAL SECTOR FRAGILITIES AND THE EMERGENCY RESPONSE.....	533
1. <i>Government Support for the Financial System</i> .....	534
2. <i>Relaxation of Regulatory Requirements</i> .....	538
B. LESSONS FOR COUNTERCYCLICAL REGULATION.....	543
1. <i>Countercyclical Regulation's Unfulfilled Promise</i> .....	544
2. <i>The Costs of Inadequate Countercyclical         Adjustments</i> .....	547
V. MAKING COUNTERCYCLICAL FINANCIAL REGULATION WORK .....	552
A. PRINCIPLES FOR EFFECTIVE COUNTERCYCLICAL REGULATION.....	553
1. <i>Automaticity</i> .....	553
2. <i>Portfolio Strategy</i> .....	555
3. <i>Market-wide Coverage</i> .....	557
B. IMPLEMENTING EFFECTIVE COUNTERCYCLICAL REGULATION.....	558
1. <i>Automate and Expand the Countercyclical Buffer</i> .....	559

2. <i>Enact the CECL Accounting Standard</i> .....	563
3. <i>Strengthen the Risk Retention Rule</i> .....	564
4. <i>Finalize Early Remediation Requirements</i> .....	566
5. <i>Institute Countercyclical Margin and Haircut Requirements</i> .....	567
VI. CONCLUSION .....	571

## I. INTRODUCTION

Financial regulation has long suffered from a critical shortcoming: traditional regulatory approaches tend to be procyclical. That is, financial regulatory tools—most notably, bank capital requirements—exacerbate boom-and-bust cycles by incentivizing financial institutions to lend too much during economic expansions and not enough during contractions.<sup>1</sup> At no time has this dynamic been more apparent—or more harmful—than during the 2008 financial crisis. In the early 2000s, financial regulations encouraged institutions to create exotic new financial instruments and engage in excessive mortgage lending.<sup>2</sup> When the housing bubble burst a few years later, the same rules drove banks to all but stop extending credit to households, businesses, and the broader U.S. economy.<sup>3</sup>

In the aftermath of the 2008 crisis, a consensus began to emerge that in order to combat procyclicality, financial regulators should adopt approaches that are explicitly *countercyclical*. Scholars urged policymakers to counteract the boom-and-bust cycle by implementing rules that would become stricter during periods of economic expansion and more lenient in times of economic contraction.<sup>4</sup> International financial regulators likewise endorsed a

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<sup>1</sup> See Markus Behn, Rainer Haselmann & Paul Wachtel, *Procyclical Capital Regulation and Lending*, 71 J. FIN. 919, 920–24 (2016) (“[W]ell-intentioned regulatory policy can amplify business cycle fluctuation.”); Anil K Kashyap & Jeremy C. Stein, *Cyclical Implications of the Basel II Capital Standards*, 28 ECON. PERSPS. 18, 18 (2004) (noting that capital rules may force banks to maintain more capital during an economic downturn, thereby requiring banks to cut back on their lending activity and “contributing to a worsening of the initial downturn”); Rafael Repullo & Javier Suarez, *The Procyclical Effects of Bank Capital Regulation*, 26 REV. FIN. STUD. 452, 452–53 (2013) (“In recessions, losses erode banks’ capital, while risk-based capital requirements . . . become higher. If banks cannot quickly raise sufficient new capital, their lending capacity falls and a credit crunch may follow.”).

<sup>2</sup> See, e.g., BASEL COMM. ON BANKING SUPERVISION, THE JOINT F., REPORT ON ASSET SECURITISATION INCENTIVES 11–12 (2011) (contending that pre-crisis bank capital requirements promoted securitization).

<sup>3</sup> See BASEL COMM. ON BANKING SUPERVISION, THE BASEL COMMITTEE’S RESPONSE TO THE FINANCIAL CRISIS: REPORT TO THE G20, at 1 (2010) (“The crisis was exacerbated by a procyclical deleveraging process . . .”).

<sup>4</sup> See Julie Andersen Hill, *Bailouts and Credit Cycles: Fannie, Freddie, and the Farm Credit System*, 2010 WIS. L. REV. 1, 69–72 (urging policymakers to adopt countercyclical capital requirements for Fannie Mae, Freddie Mac, and the Farm Credit System); Jonathan S. Masur & Eric A. Posner, *Should Regulation Be Countercyclical?*, 34 YALE J. ON REGUL. 857, 877–79 (2017) (“[I]t is plausible that countercyclical capital regulation could have desirable

countercyclical approach. At an emergency summit shortly after the crisis, G20 leaders declared their intent to pursue strategies “to mitigate pro-cyclicality.”<sup>5</sup>

The rationale for countercyclical regulation is two-fold. First, regulatory rules that become more stringent during expansionary cycles can prevent the economy from overheating and create a cushion in the financial system to absorb losses when the economy ultimately sours.<sup>6</sup> Second, countercyclical rules allow policymakers to loosen financial regulations during contractionary periods in order to boost the economy without compromising financial stability.<sup>7</sup> Thus, effective countercyclical financial regulation can help moderate extreme fluctuations in the economic cycle.

U.S. policymakers embraced this new approach by adopting several countercyclical reforms in the wake of the financial crisis. For example, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) expressly directed the financial regulatory agencies to make bank capital “requirements countercyclical, so that the amount of capital required . . . increases in times of economic expansion and decreases in times of economic contraction.”<sup>8</sup> The federal banking agencies implemented this mandate by establishing a countercyclical capital buffer (CCyB)—a

macroeconomic effects.”); Patricia A. McCoy, *Countercyclical Regulation and Its Challenges*, 47 ARIZ. ST. L.J. 1181, 1186–88, 1217 (2016) (noting that “[c]ountercyclical regulation seeks to defuse [the] boom-and-bust cycle by making financial institutions more resilient during financial crises” and concluding that the initial results from countercyclical regulation are promising); Brett McDonnell, *Dampening Financial Regulatory Cycles*, 65 FLA. L. REV. 1597, 1607 (2013) (asserting that “financial regulation should optimally be countercyclical”).

<sup>5</sup> SUMMIT ON FIN. MKTS. & THE WORLD ECON., ACTION PLAN TO IMPLEMENT PRINCIPLES FOR REFORM 2 (2008), [https://www.fsb.org/wpcontent/uploads/g20\\_leaders\\_declaration\\_washingt\\_on\\_2008.pdf](https://www.fsb.org/wpcontent/uploads/g20_leaders_declaration_washingt_on_2008.pdf).

<sup>6</sup> See McCoy, *supra* note 4, at 1187–88, 1193–94 (stating that an objective of countercyclical regulation is to allow firms to build “capital reserves in good economic times . . . to cushion them from losses when downturns strike”).

<sup>7</sup> See Masur & Posner, *supra* note 4, at 868, 877–79 (asserting that countercyclically increasing capital requirements during booms and reducing capital requirements in recessions can “generate cost savings within an order of magnitude of automatic fiscal stabilizers”).

<sup>8</sup> Dodd-Frank Wall Street Reform and Consumer Protection (Dodd-Frank) Act, Pub. L. No. 111-203, § 616(a)(2), 124 Stat. 1376, 1615 (2010) (codified as amended at 12 U.S.C. § 1844(b)). A parallel set of international standards published in 2010, known as Basel III, includes similar directives. BASEL COMM. ON BANKING SUPERVISION, BASEL III: A GLOBAL REGULATORY FRAMEWORK FOR MORE RESILIENT BANKS AND BANKING SYSTEMS 57–60 (2010), <https://www.bis.org/publ/bcbs189.pdf>.

discretionary capital cushion the agencies may require systemically-important banks to maintain when macroeconomic conditions warrant.<sup>9</sup> Other Dodd-Frank provisions—such as early remediation requirements for distressed banks and risk retention rules for securitizations—implicitly tracked a countercyclical logic, as well.<sup>10</sup>

Despite these countercyclical policies, however, the U.S. financial system remained vulnerable when the COVID-19 pandemic emerged in early 2020. At the time, the United States was in the midst of a decade-long expansion—the longest period of economic growth in the nation’s history.<sup>11</sup> Yet, by the spring of 2020, policymakers had to inject unprecedented fiscal support and emergency liquidity to prevent financial markets from collapsing.<sup>12</sup> Meanwhile, the federal banking agencies rolled back regulations and enacted a slew of forbearance policies to prevent banks from breaching minimum requirements.<sup>13</sup> Federal Reserve stress tests revealed that, despite these extraordinary accommodations, one-quarter of the United States’ largest banks would be unable to maintain the required minimum level of capital in a double-dip recession.<sup>14</sup>

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<sup>9</sup> See *infra* Section III.A.

<sup>10</sup> See *infra* Sections III.C–D.

<sup>11</sup> See David John Marotta, *Longest Economic Expansion in United States History*, FORBES (Jan. 21, 2020, 12:47 PM), <https://www.forbes.com/sites/davidmarotta/2020/01/21/longest-economic-expansion-in-united-states-history/> (stating that the economic expansion had lasted for 126 months by December 2019, the longest in U.S. history).

<sup>12</sup> See Justin Baer, *The Day Coronavirus Nearly Broke the Financial Markets*, WALL ST. J. (May 20, 2020, 9:44 AM), <https://www.wsj.com/articles/the-day-coronavirus-nearly-broke-the-financial-markets-11589982288> (explaining that “government programs . . . brought markets back from the brink” after investors panicked).

<sup>13</sup> See David Zaring, *The Government’s Economic Response to the COVID Crisis*, 40 REV. BANKING & FIN. L. 315, 387–95 (2020) (stating that regulators announced a “panoply of measures” that can be characterized as forbearance); see also Howell E. Jackson & Steven L. Schwarcz, *Protecting Financial Stability: Lessons from the COVID-19 Pandemic*, 11 HARV. BUS. L. REV. 193, 206–07 (2021) (explaining that forbearance was part of a range of regulatory and supervisory accommodations in the pandemic); Graham S. Steele, *The Tailors of Wall Street*, 93 U. COLO. L. REV. 993, 1026–32 (2022) (discussing regulatory forbearance during the pandemic).

<sup>14</sup> See Victoria Guida, *Fed Suspends Stock Buybacks, Caps Dividends for Big Banks*, POLITICO (June 25, 2020, 9:05 PM), <https://www.politico.com/news/2020/06/25/fed-suspends-stock-buybacks-caps-dividends-for-big-banks-340803> (noting that stress tests suggested that in a “double-dip recession scenario, roughly a quarter of banks would breach their minimum capital requirements”).

The U.S. financial sector's fragility during the COVID-19 pandemic was due, in part, to the failure of the post-2008 countercyclical regulatory framework. Despite the historic economic expansion of the 2010s, policymakers neglected to use their countercyclical tools as intended. In some cases, the financial regulatory agencies failed to activate discretionary countercyclical policies.<sup>15</sup> For example, the Federal Reserve never triggered the CCyB despite numerous economists and former regulators urging the central bank to do so.<sup>16</sup> In other cases, the financial sector successfully pushed for delays or exemptions to countercyclical rules, such as Dodd-Frank's early remediation requirements.<sup>17</sup> Thus, although Dodd-Frank and other post-2008 reforms established a countercyclical framework, the United States never fully realized the promise of countercyclical financial regulation.

This Article is the first legal scholarship to revisit the design of countercyclical rules in the wake of the COVID-19 pandemic. It reveals the serious costs of the United States' failure to implement meaningful countercyclical policies during the historic economic expansion of the 2010s. Widespread government interventions to stabilize financial markets in early 2020 incurred substantial direct costs.<sup>18</sup> Even more troubling, the government's pervasive support for the financial system is likely to increase moral hazard and discourage financial institutions from practicing sound risk management in the future.<sup>19</sup> Better countercyclical financial regulation is therefore necessary to minimize these costs and maintain financial stability.

This Article establishes a blueprint for strengthening the United States' countercyclical financial regulatory framework. It identifies three principles that should guide countercyclical policymaking going forward. First, policymakers should embed automatic triggers in countercyclical rules where feasible to correct for regulators' bias toward inaction during expansionary periods. Second, instead of relying exclusively or primarily on the CCyB, regulators should

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<sup>15</sup> See, e.g., *infra* notes 222–224 and accompanying text.

<sup>16</sup> See *infra* Section II.A.

<sup>17</sup> See *infra* Section II.D.

<sup>18</sup> See *infra* Section IV.B.2.

<sup>19</sup> See, e.g., John Crawford, *The Moral Hazard Paradox of Financial Safety Nets*, 25 CORNELL J.L. & PUB. POL'Y 95, 119–28 (2015) (arguing that “bailouts of specific institutions or their creditors” increase moral hazard costs).

adopt a portfolio of complementary countercyclical rules to mitigate policymaking uncertainty. Finally, in contrast to Dodd-Frank's rules—which apply predominantly to large banks—countercyclical policies should apply market-wide to encompass all financial institutions that might transmit systemic risk.

Applying these principles, this Article recommends specific countercyclical reforms U.S. policymakers should implement. It identifies five areas in which financial regulators should bolster countercyclical oversight: bank capital requirements,<sup>20</sup> accounting standards,<sup>21</sup> securitization rules,<sup>22</sup> early remediation guidelines,<sup>23</sup> and margin and haircut requirements.<sup>24</sup> Importantly, these reforms can generally be implemented without new legislation by leveraging the financial regulatory agencies' existing rulemaking authority. Taken together, these reforms are critical to making countercyclical financial regulation work and creating a more stable and prosperous financial system.

Skeptics contend that countercyclical financial regulation cannot work in practice, but their arguments are unpersuasive. Federal Reserve Chairman Jerome Powell, for example, has cast doubt on countercyclical regulation's efficacy.<sup>25</sup> In Powell's view, regulators are unable to time countercyclical interventions appropriately to match fluctuations in the business cycle.<sup>26</sup> But skeptics of countercyclical regulation ignore that economists have identified reliable macroeconomic indicators to signal when countercyclical adjustments are warranted.<sup>27</sup> Critics also overlook the fact that

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<sup>20</sup> See *infra* Section V.B.1.

<sup>21</sup> See *infra* Section V.B.2.

<sup>22</sup> See *infra* Section V.B.3.

<sup>23</sup> See *infra* Section V.B.4.

<sup>24</sup> See *infra* Section V.B.5.

<sup>25</sup> Fed. Rsrv., *FOMC Press Conference, January 27, 2021*, YOUTUBE (Jan. 27, 2021), <https://www.youtube.com/watch?v=R8wxdyEULtg> (“[W]e rely on . . . always-on, through-the-cycle macroprudential policy tools . . . . We don’t use time-varying . . . tools as some other countries do. And we think it’s a good approach because—for us to use [tools] that are always-on—because we don’t really think we’d be successful in every case in picking the exact right time to intervene . . .”).

<sup>26</sup> See *id.* (indicating uncertainty about whether regulators could properly determine when to intervene in the market).

<sup>27</sup> See generally David Aikman, Michael T. Kiley, Seung Jung Lee, Michael G. Palumbo & Missaka N. Warusawitharana, *Mapping Heat in the U.S. Financial System* (Divs. Rsch. & Stat. & Monetary Affs., Fed. Rsrv. Bd., Fin. & Econ. Discussion Series, Working Paper No. 2015-059, 2015), <https://www.federalreserve.gov/econresdata/feds/2015/files/2015059pap.pdf>

other jurisdictions—including France, Germany, and Hong Kong—successfully implemented a countercyclical approach after the 2008 crisis and were therefore better prepared than the United States to withstand the COVID-19 pandemic’s economic impact.<sup>28</sup>

It is especially urgent that policymakers implement effective countercyclical financial regulation because the United States’ new approach to monetary policy intensifies risks in financial markets. In mid-2020, the Federal Reserve adopted a new “lower-for-longer” monetary policy framework: the central bank committed to maintaining rock-bottom interest rates despite rising inflation until the United States achieves maximum employment.<sup>29</sup> As Federal Reserve officials acknowledged, persistently low interest rates may lead to the development of asset bubbles and other financial stability risks.<sup>30</sup> In light of this new “lower-for-longer” approach, policymakers must use countercyclical financial regulation to address emerging financial risks and ensure that the next economic contraction is less disorderly than the previous two.<sup>31</sup>

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(“develop[ing] an algorithmic approach to monitoring vulnerabilities” in the financial sector); Mathias Drehmann, Claudio Borio, Leonardo Gambacorta, Gabriel Jiménez, and Carlos Trucharte, *Countercyclical Capital Buffers: Exploring Options* (Bank for Int’l Settlements, Working Paper No. 317, 2010), <https://www.bis.org/publ/work317.pdf> (identifying macroeconomic indicators to guide countercyclical regulatory judgments). An effective countercyclical approach would embrace what Professor Hilary Allen calls the “precautionary principle”—erring on the side of activating financial stability safeguards, even if that means overregulating in some circumstances. Hilary J. Allen, *A New Philosophy for Financial Stability Regulation*, 45 *LOY. U. CHI. L.J.* 173, 191 (2013).

<sup>28</sup> See *infra* Section II.A.

<sup>29</sup> See Jeanna Smialek, *Fed Chair Sets Stage for Longer Periods of Lower Rates*, *N.Y. TIMES* (Sept. 16, 2020), <https://www.nytimes.com/2020/08/27/business/economy/federal-reserve-inflation-jerome-powell.html> (“[T]he chair of the Federal Reserve[] announced a major shift in how the central bank guides the economy, signaling it will make job growth pre-eminent and will not raise interest rates to guard against coming inflation just because the unemployment rate is low.”).

<sup>30</sup> See, e.g., Lael Brainard, Member, Bd. of Governors of the Fed. Rsrv. Sys., *Bringing the Statement on Longer-Run Goals and Monetary Policy Strategy into Alignment with Longer-Run Changes in the Economy* 8 (Sept. 1, 2020), <https://www.federalreserve.gov/newsevents/speech/files/brainard20200901a.pdf> (“The resulting expectation of lower-for-longer interest rates . . . is conducive to increasing risk appetite, reach-for-yield behavior, and incentives for leverage—which can boost financial imbalances as an expansion extends.”).

<sup>31</sup> See James Politi, *Federal Reserve Debates Tougher Regulation to Prevent Asset Bubbles*, *FIN. TIMES* (Oct. 17, 2020), <https://www.ft.com/content/5c2b7d15-7e37-475a-8d42-1e8e0a3b8708> (“Officials worry that low interest-rate policies could encourage excessive risk-taking.”).

This Article proceeds as follows. Part II presents the theoretical case for countercyclical financial regulation and explains how the 2008 financial crisis demonstrated the need for a countercyclical regulatory approach. Part III then analyzes policymakers' attempts to establish a countercyclical framework in the wake of the crisis and the ways in which those efforts ultimately fell short. Part IIV examines how the lack of effective countercyclical regulation during the historic 2010s economic expansion ultimately undermined policymakers' response to the COVID-19 recession. Finally, Part V proposes guiding principles and specific tools for strengthening the United States' countercyclical regulatory framework. The Article concludes that these reforms are essential for preserving long-term financial stability and economic prosperity.

## II. THE 2008 CRISIS AND THE CASE FOR COUNTERCYCLICAL FINANCIAL REGULATION

Traditional financial regulatory strategies tend to be procyclical. That is, they amplify fluctuations in the economic cycle by encouraging banks to lend too much during economic expansions and too little during economic contractions. The 2008 financial crisis demonstrated the risks of procyclicality when financial regulations—most notably, bank capital requirements—contributed to the creation and eventual collapse of a nationwide housing bubble. In response to the 2008 crisis, scholars and policymakers proposed to mitigate financial regulation's inherent procyclicality by incorporating *countercyclical* strategies into the U.S. regulatory framework. At least in theory, a countercyclical approach can help moderate economic fluctuations by strengthening regulation during boom times and relaxing oversight during downturns. This Part explains why traditional financial regulation tends to be procyclical, how procyclicality contributed to the 2008 crisis, and why countercyclical financial regulation is an appropriate policy response.

Bank capital requirements are a classic example of how well-intentioned financial regulations can backfire by creating procyclicality. Generally speaking, bank capital is analogous to

equity.<sup>32</sup> Thus, the more capital that a bank maintains, the less likely it is to become insolvent and inflict losses on depositors, other creditors, and the banking system as a whole.<sup>33</sup> As a result, regulators have typically required banks to maintain a minimum level of capital as a cushion to absorb losses.<sup>34</sup> For example, in the lead-up to the 2008 financial crisis, regulators required most banks to maintain a simple leverage ratio—calculated as a bank’s capital divided by its total assets—of at least 3%.<sup>35</sup>

A static minimum capital requirement—such as a 3% leverage ratio—appears to provide a neutral standard. In practice, however, it indirectly biases the measure of a bank’s health because it does not account for fluctuations in asset prices over the business cycle.<sup>36</sup> This bias works in both directions. During an economic expansion, a bank’s assets rise in value, boosting its equity and making its capital levels appear artificially high.<sup>37</sup> During a recession, however, the same portfolio of assets depreciates, shrinking the bank’s equity and yielding a lower level of capital.<sup>38</sup> The magnitude

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<sup>32</sup> See MICHAEL S. BARR, HOWELL E. JACKSON & MARGARET E. TAHYAR, *FINANCIAL REGULATION: LAW AND POLICY* 265 (2d ed. 2018) (“In functional and simplified terms, capital measures the amount of losses that an institution can suffer without impairing its obligations to creditors and other claimants.”).

<sup>33</sup> See *id.* at 266 (“An institution with a greater reliance on capital will have a larger cushion against losses . . .”).

<sup>34</sup> For a discussion of the historical evolution of bank capital requirements, see generally DANIEL K. TARULLO, *BANKING ON BASEL: THE FUTURE OF INTERNATIONAL FINANCIAL REGULATION* (2008).

<sup>35</sup> To comply with a 3% leverage capital requirement, a bank must maintain at least \$3 worth of equity for every \$97 worth of debt. See BARR ET AL., *supra* note 32, at 265–67. (explaining leverage ratios).

<sup>36</sup> See Repullo & Suarez, *supra* note 1, at 452 (“[I]n recessions, losses erode banks’ capital, while risk-based capital requirements . . . become higher. If banks cannot quickly raise sufficient new capital, their lending capacity falls and a credit crunch may follow.”); see also Samuel G. Hanson, Anil K Kashyap & Jeremy C. Stein, *A Macroprudential Approach to Financial Regulation*, 25 J. ECON. PERSPS. 3, 7–9 (2011) (presenting “time-varying capital requirements” as an alternative to static minimums because of the negative implications associated with the latter).

<sup>37</sup> See BARR ET AL., *supra* note 32, at 265–67 (discussing the relationship between capital and equity); Linda Allen & Anthony Saunders, *A Survey of Cyclical Effects in Credit Risk Measurement Models 2* (Bank for Int’l Settlements, Working Paper No. 126, 2003), <https://www.bis.org/publ/work126.pdf> (“[G]ood economic times provide the rising tide that lifts even the shakiest of financial boats.”).

<sup>38</sup> See Repullo & Suarez, *supra* note 1, at 452 (“In recessions, losses erode banks’ capital, while risk-based capital requirements . . . become higher.”).

of this distortion is substantial and well-documented. According to a 2003 study by Professors Anil Kashyap and Jeremy Stein, a time-invariant capital ratio overstates the level of bank capital by approximately 30% to 45%.<sup>39</sup> Other studies by financial economists from the early 2000s find similar results.<sup>40</sup>

The procyclicality of bank capital requirements is not simply a matter of measurement error. It also introduces serious problems for financial stability. When a recession hits, asset write-downs erode a bank's equity, potentially threatening its ability to satisfy minimum regulatory capital requirements. Declining equity leaves the bank with two options to remain in compliance. One strategy is to raise more capital. In the midst of a recession however, however, issuing equity to private investors is usually considered impracticable due to risk-averse investors and limited demand.<sup>41</sup>

The bank's second option to offset its declining equity is to shrink its asset portfolio and thereby reduce the denominator of its capital ratio.<sup>42</sup> This strategy can be achieved in two ways. First, the bank can sell its existing assets, also known as "deleveraging." Alternatively, the bank may pull back from making new loans.<sup>43</sup> Unfortunately, both of these strategies impose costs on the broader financial system. Deleveraging is problematic because banks' asset portfolios consist of illiquid, long-term loans that generally cannot be sold on short notice for full value.<sup>44</sup> An economic contraction that

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<sup>39</sup> Kashyap & Stein, *supra* note 1, at 19.

<sup>40</sup> See Eva Catarineu-Rabell, Patricia Jackson & Dimitrios P. Tsomocos, *Procyclicality and the New Basel Accord – Banks' Choice of Loan Rating System*, 26 *ECON. THEORY* 537, 538 (2005) (finding "a 40% to 50% increase in capital requirements" associated with the 1990–1992 recession); Linda Allen & Anthony Saunders, *A Survey of Cyclical Effects in Credit Risk Measurement Models* 1 (Bank for Int'l Settlements, Working Paper No. 126, 2003), <https://www.bis.org/publ/work126.pdf> ("[O]verly optimistic estimates of default risk during boom times reinforces the natural tendency of banks to overlend . . .").

<sup>41</sup> See MARKUS BRUNNERMEIER, ANDREW CROCKET, CHARLES GOODHART, AVINASH D. PERSAUD & HYUN SHIN et al., *THE FUNDAMENTAL PRINCIPLES OF FINANCIAL REGULATION*, GENEVA REPORTS ON THE WORLD ECONOMY NO. 11, at 1010 (Jan. 6, 2009) ("Raising new equity is notoriously difficult in distressed market conditions.").

<sup>42</sup> See *id.* at 20–21 (explaining that a borrower can sell its assets to respond to declining equity). A third option to offset declining equity is to retain earnings, but this route may not be available if a bank is unprofitable during times of stress.

<sup>43</sup> See Repullo & Suarez, *supra* note 1, at 452 (noting that banks without an ability to raise more capital will be forced to reduce their lending capacity).

<sup>44</sup> See Douglas W. Diamond & Raghuram G. Rajan, *Fear of Fire Sales, Illiquidity Seeking, and Credit Freezes*, 126 *Q. J. ECON.* 557, 557 (2011) ("A financial crisis, especially one that

leads many banks to engage in fire sales at the same time can generate a vicious cycle, which accelerates the downward spiral in asset prices that caused banks to deleverage in the first place.<sup>45</sup> Meanwhile, banks that choose to curtail new lending further impair the economy because households and businesses need access to credit the most during recessionary times.<sup>46</sup> Procyclicality, in sum, is a vexing unintended consequence of modern financial regulation.<sup>47</sup>

The 2008 financial crisis provided direct evidence of the procyclical effects of bank capital rules. As the U.S. housing bubble inflated during the early 2000s, housing assets appreciated rapidly, and banks reported rising capital ratios.<sup>48</sup> These large equity cushions, in turn, allowed banks to invest more in the housing market, adding more fuel to the bubble.<sup>49</sup> When the housing market began to sour in 2007, however, the process reversed: as prices fell, banks suffered write-downs on mortgage assets, and their capital

embeds fears of a potential future liquidity shock, in which highly leveraged financial institutions will be forced to sell illiquid assets at fire sale prices, can lead to a variety of seemingly perverse behaviors . . . .”); Andrei Shleifer & Robert Vishny, *Fire Sales in Finance and Macroeconomics*, 25 J. ECON. PERSPS. 29, 42 (2011) (explaining that deleveraging through sale of assets can “drive the prices of those assets below fundamental value”).

<sup>45</sup> See BRUNNERMEIER ET AL., *supra* note 41, at 22 (defining the “fire-sale externality” as occurring when “fire-sales by some institutions spillover, and adversely affect the balance sheet of others, causing a negative externality”); Stephen Morris & Hyun Song Shin, *Liquidity Black Holes*, 8 REV. FIN. 1, 2 (2004) (“Market distress can feed on itself. When asset prices fall, some traders may get close to their loss limits and are induced to sell. But this selling pressure sets off further downward pressure on asset prices, which induces a further round of selling, and so on.”).

<sup>46</sup> See BRUNNERMEIER ET AL., *supra* note 41, at 5 (“Instead of, or as well as, selling financial assets to regain liquidity, and to improve capital ratios, a bank . . . may seek to restrict new credit extension . . . . Thus there is yet a further self-amplifying spiral whereby credit restriction weakens the economy, which leads to more default and asset price declines, which causes yet more credit restrictions.”).

<sup>47</sup> For further discussion of procyclicality in financial regulation, see ERIK F. GERDING, LAW, BUBBLES, AND FINANCIAL REGULATION 311–28 (2014).

<sup>48</sup> See *Bank Capital to Total Assets for United States*, FED. RSRV. BANK OF ST. LOUIS, <https://fred.stlouisfed.org/series/DDSI03USA156NWDB> (last updated Oct. 21, 2019) (reporting that the ratio of U.S. bank capital to total assets increased from 9.2% to 10.5% between 2003 and 2006).

<sup>49</sup> See, e.g., FIN. CRISIS INQUIRY COMM’N, THE FINANCIAL CRISIS INQUIRY REPORT: FINAL REPORT OF THE NATIONAL COMMISSION ON THE CAUSES OF THE FINANCIAL AND ECONOMIC CRISIS IN THE UNITED STATES 106–07 (2011), <https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf> (discussing Wachovia’s 2006 acquisition of subprime mortgage lender Golden West).

levels drew closer to their minimum legal requirements.<sup>50</sup> Predictably, declining capital ratios caused financial institutions to pull back on lending.<sup>51</sup> They also resorted to emergency fire sales, increased margin calls, and made related balance sheet adjustments.<sup>52</sup> These activities increased the fragility of the banking system, froze credit markets, and deepened the severity of the financial crisis.<sup>53</sup>

While some banks successfully scrambled to satisfy their minimum capital requirements during the crisis, many others became insolvent, further compounding the economic contraction. Between 2008 and 2013, nearly 500—or approximately one out of every sixteen—U.S. banks failed.<sup>54</sup> Other banks only survived thanks to unprecedented bailouts administered under the Treasury Department’s Troubled Asset Relief Program (TARP) and associated rescue measures financed by Congress.<sup>55</sup>

The 2008 financial crisis was catastrophic for the U.S. and global economies. It was also perceived as a black eye for policymakers and economists, many of whom had downplayed the possibility of a

<sup>50</sup> See BRUNNERMEIER ET AL., *supra* note 41, at 15 (demonstrating how the cyclical process often leads to “attempts by individual institutions to remain solvent [that] can push the system into collapse” and suggesting that this occurred in 2007 and 2008).

<sup>51</sup> See Victoria Ivashina & David Scharfstein, *Bank Lending During the Financial Crisis of 2008*, 97 J. FIN. ECON. 319, 321 (2010) (“The decline in new loans accelerated during the banking panic. In the fourth quarter of 2008, the dollar volume of lending was 47% lower than it was in the prior quarter and the number of issues was 33% lower than it was in the prior quarter.”).

<sup>52</sup> See Markus K. Brunnermeier, *Deciphering the Liquidity and Credit Crunch 2007–2008*, 23 J. ECON. PERSPS. 77, 85 (2009) (discussing fire sales during 2007).

<sup>53</sup> See *id.* (“At that time, the perceived default and liquidity risks of banks rose significantly, driving up the LIBOR [London Interbank Offered Rate]. In response to the freezing up of the interbank market on August 9, the European Central Bank injected €95 billion in overnight credit into the interbank market.”).

<sup>54</sup> FED. DEPOSIT INS. CORP., *CRISIS AND RESPONSE: AN FDIC HISTORY, 2008–2013*, at 119 (2017), <https://www.fdic.gov/bank/historical/crisis/crisis-complete.pdf>.

<sup>55</sup> Although the TARP returned a nominal profit to the U.S. Treasury, the program did not adequately compensate taxpayers for the risks the program assumed. See Thomas Flanagan & Amiyatosh Purnanandam, *Did Banks Pay “Fair” Returns to Taxpayers on TARP?* 33 (Mar. 23, 2021) (unpublished manuscript), <https://ssrn.com/abstract=3595763> (concluding that TARP benefited shareholders at the expense of taxpayers). The TARP program was mainly directed at larger banks. For a review of financial rescue measures extended to smaller banks, see Jeremy C. Kress & Matthew C. Turk, *Too Many to Fail: Against Community Bank Deregulation*, 115 NW. U. L. REV. 647, 651, 659–63 (2020).

severe crash.<sup>56</sup> Perhaps the lone bright spot, from the latter perspective, was a vindication of economic research that warned of procyclical distortions caused by pre-crisis capital regulation.<sup>57</sup> Rarely are abstract social science models proven by real world events so decisively.

The basic logic of countercyclical regulation is straightforward. To smooth fluctuations in the economic cycle, countercyclical theory suggests that regulatory restrictions should tighten during economic booms and relax during economic contractions.<sup>58</sup> By intensifying restrictions during good times, policymakers can prevent the economy from overheating and ensure that firms build sufficient financial resources to withstand the inevitable

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<sup>56</sup> Compare Ben S. Bernanke, Governor, Fed. Rsrv. Bd., Remarks at the Meetings of the Eastern Economic Association: The Great Moderation (Feb. 20, 2004), <https://www.federalreserve.gov/boarddocs/speeches/2004/20040220/> (“My view is that improvements in monetary policy, though certainly not the only factor, have probably been an important source of the Great Moderation. In particular, I am not convinced that the decline in macroeconomic volatility of the past two decades was *primarily* the result of good luck . . .”), with RICHARD A. POSNER, A FAILURE OF CAPITALISM: THE CRISIS OF ’08 AND THE DESCENT INTO DEPRESSION 117–18 (2009) (“[I]t seems unlikely that such experts on the business cycle as the Federal Reserve’s chairman, Ben Bernanke, are constrained to base their predictions on naïve extrapolation. This makes his neglect, and that of other experts both inside and outside the government, of warning signs of a coming crash extremely puzzling.”). For further insights, see Andrew G. Haldane, Exec. Dir., Fin. Stability, Bank of Eng., Speech at the Federal Reserve Bank of Kansas City’s 366th Economic Policy Symposium: The Dog and the Frisbee 1 (Aug. 31, 2012), <https://www.bis.org/review/r120905a.pdf> (“No regulator had the foresight to predict the financial crisis, although some have since exhibited supernatural powers of hindsight.”); and John Tamny, *If they Tell you they Predicted the Financial Crisis, They’re Lying*, FORBES (Oct. 8, 2013, 2:00 PM), <https://www.forbes.com/sites/johntamny/2013/10/08/if-they-tell-you-they-predicted-the-financial-crisis-theyre-lying/?sh=2e13a87567a2> (“What about those people whom we all know who kept telling us that housing was headed for a collapse in the years leading up 2007 and 2008. Did they predict a crisis? No, they did not.”).

<sup>57</sup> See Masur & Posner, *supra* note 4, at 878 (“Even before the financial crisis, financial economists worried about the macroeconomic effects of this approach [to capital requirements]. The financial crisis shows that these worries were justified.” (footnote omitted)).

<sup>58</sup> See McCoy, *supra* note 4, at 1181 (“[F]inancial regulation would be more effective if financial regulation clamped down during financial expansions and lightened up during economic slumps . . .”).

downturn.<sup>59</sup> By contrast, loosening rules during economic contractions may spur economic growth and kick-start a recovery.<sup>60</sup>

Countercyclical rules can, in principle, be applied in any area of the law and are not necessarily limited to financial regulation.<sup>61</sup> The most familiar example comes from monetary policy.<sup>62</sup> Central banks typically do not hold the money supply constant over the business cycle. Instead, central banks lower interest rates during a recession to stimulate economic activity and then raise rates during the recovery to prevent the economy from “overheating.”<sup>63</sup> By varying their regulatory target over time, central banks aim to reduce volatility in the business cycle and ensure more stable economic growth over the long term.<sup>64</sup>

At least in theory, countercyclical financial regulation could work the same way. Financial regulators could ratchet up rules as the economy expands, curbing excess credit growth and forcing banks

<sup>59</sup> See *id.* at 1184–85 (“[R]egulation during asset bubbles can leave financial institutions with insufficient capital and reserves to survive a market crash. . . . Countercyclical regulation responds by designing rules that become binding at the top of the business cycle, when financial firms are profitable and catastrophic risks seem small . . .”).

<sup>60</sup> See *id.* at 1185 (“Countercyclical regulation . . . eas[es] regulation at the bottom of the business cycle in order to stimulate the economy.”).

<sup>61</sup> See Masur & Posner, *supra* note 4, at 873–77 (exploring how countercyclical regulation could be applied in a number of contexts, including environmental law, consumer protection, workplace safety, and immigration law); Aneil Kovvali, *Countercyclical Corporate Governance*, 101 N.C. L. REV. (forthcoming 2022) (manuscript at 56–64), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4043883](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4043883) (exploring the potential of countercyclical corporate governance schemes); Tianna Larson, Note, *Countercyclical Antitakeover Policy*, 21 WAKE FOREST J. BUS. & INT’L PROP. L. 319, 360–376 (2021) (proposing a countercyclical approach to antitakeover law).

<sup>62</sup> See Masur & Posner, *supra* note 4, at 862–65 (discussing the frequent intervention by the Federal Reserve, aiming to “reduce variance in economic growth”); see also McCoy, *supra* note 4, at 1196–99 (presenting debates on the countercyclical role of monetary policy).

<sup>63</sup> See Masur & Posner, *supra* note 4, at 862 (“Monetary policy takes place through the central bank, the Federal Reserve (‘Fed’). As an economy enters recession, the Fed attempts to lower market interest rates. . . . As the economy leaves recession and heats up, the Fed reverses course . . .”).

<sup>64</sup> See *id.* (“The goal [of central bank monetary policy] is to reduce variance in economic growth, as well as manage inflation and mitigate cyclical unemployment . . .”); see also Ben S. Bernanke & Mark Gertler, *Inside the Black Box: The Credit Channel of Monetary Policy Transmission*, 9 J. ECON. PERSPS. 27, 27 (1995) (“According to many textbooks, monetary policymakers use their leverage over short-term interest rates to influence the cost of capital and, consequently, spending on durable goods, such as fixed investment, housing, inventories and consumer durables. In turn, changes in aggregate demand affect the level of production.”).

to maintain bigger buffers. Then, when the economic cycle turns, regulators could relax limits and thereby encourage banks to continue lending despite the contracting economy. In this way, countercyclical strategies could combat the procyclicality embedded in the traditional financial regulatory framework.

Effective countercyclical financial regulation might have mitigated—or entirely avoided—the 2008 crisis. If pre-crisis capital requirements were structured to allow for upward adjustments in response to the housing bubble that inflated over the previous decade, banks would have had a larger equity cushion as the bubble burst and thus been more likely to remain solvent during the downturn. Indeed, David Aikman and co-authors estimated that a 3% CCyB would have obviated the need for the TARP capital injections during the 2008 financial crisis.<sup>65</sup> If banks had been required to build up an extra capital cushion as the bubble inflated, regulators could have relaxed capital requirements when the housing bubble popped and allowed banks to use that additional capital to stabilize the economy. Similarly, banks could have used their additional capital buffers to acquire failing nonbank financial companies—such as Bear Stearns and Lehman Brothers—with less government support. Thus, with effective countercyclical regulation, the U.S. housing bubble and ensuing economic collapse could have been much less dramatic.

Given the promising theory behind countercyclical financial regulation, scholars and policymakers embraced countercyclical strategies in the aftermath of the 2008 crisis. As Congress began drafting Dodd-Frank and international financial regulators revised global bank capital standards, it was widely recognized that countercyclical regulation would become a cornerstone of post-crisis policy reforms.<sup>66</sup> As the next Part demonstrates, however, while policymakers attempted to implement countercyclical strategies, their efforts were ultimately unsuccessful.

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<sup>65</sup> See David Aikman, Jonathan Bridges, Anil Kashyap & Caspar Siegert, *Would Macroprudential Regulation Have Prevented the Last Crisis?*, 33 J. ECON. PERSPS. 107, 117 (2019) (“Had a countercyclical capital buffer of 3 percent been built-up in the run-up to the crisis, it would have, in effect, brought the capital raising that ultimately proved necessary forward in time, substituting public provision of capital for private sector resources.”).

<sup>66</sup> See SUMMIT ON FIN. MKTS. & THE WORLD ECON., DECLARATION 3–4 (2008), [https://www.fsb.org/wp-content/uploads/g20\\_leaders\\_declaration\\_washington\\_2008.pdf](https://www.fsb.org/wp-content/uploads/g20_leaders_declaration_washington_2008.pdf) (declaring international policymakers’ intent to pursue countercyclical strategies).

### III. POST-CRISIS COUNTERCYCLICAL REGULATION: LESSONS (ALMOST) LEARNED

In response to the 2008 crisis, U.S. policymakers adopted a series of countercyclical regulatory reforms. Key elements of Dodd-Frank and other post-crisis rules were expressly designed to intensify during expansionary periods and abate during times of stress. Despite policymakers' intentions, however, these reforms were ultimately implemented in a way that failed to achieve their countercyclical aims. In some cases, the financial regulatory agencies failed to activate discretionary countercyclical tools during the late 2010s expansion; in other cases, the financial sector successfully pushed for delays in or exemptions to countercyclical rules. This Part examines four elements of the post-crisis regulatory framework—bank capital requirements, accounting standards, securitization rules, and early remediation requirements—that were supposed to be countercyclical. It also explains how each fell short in practice.

#### A. COUNTERCYCLICAL CAPITAL REQUIREMENTS

Most notably, policymakers tried to make bank capital requirements countercyclical. A bank's capital is the financial buffer available to absorb losses and protect the bank from insolvency.<sup>67</sup> Before the 2008 crisis, the United States' bank capital requirements were static: banks had to maintain the same minimum capital ratios regardless of economic conditions.<sup>68</sup> After the crisis, Congress directed the federal banking agencies to convert this static capital framework into one that adjusts countercyclically. Specifically, Section 616 of Dodd-Frank instructs the banking agencies "to make [bank] capital standards . . . countercyclical so that the amount of capital required to be maintained by an insured depository institution increases in times of economic expansion and decreases

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<sup>67</sup> See BARR ET AL., *supra* note 32, at 265–67 (illustrating how capital protects institutions from insolvency).

<sup>68</sup> See 12 C.F.R. §§ 6.4(b)(2), 208.43(b)(2), 325.103(b)(2) (2006) (requiring a bank to maintain at least a 4% Tier 1 and 8% total risk-based capital ratio, as well as a 4% leverage ratio).

in times of economic contraction.”<sup>69</sup> In response, the regulatory agencies established a new tool to implement this mandate: the countercyclical capital buffer.<sup>70</sup> As the U.S. economy expanded in the late 2010s, however, the regulatory agencies opted not to activate this discretionary buffer, thereby leaving the banking sector vulnerable when the COVID-19 pandemic hit.<sup>71</sup>

At least in theory, the CCyB is well designed to achieve countercyclical regulatory goals. The CCyB is an extra buffer of up to 2.5% common equity Tier 1 capital that the banking agencies can require systemically important banks to maintain at the agencies’ discretion, as macroeconomic and financial stability conditions warrant.<sup>72</sup> When activated, this additional capital cushion serves two purposes. First, the accumulation of an extra capital buffer during expansionary periods increases the resilience of the banking system during economic downturns.<sup>73</sup> Second, by forcing banks to maintain more capital during economic expansions, the CCyB could slow the growth of credit bubbles and help prevent the economy from overheating in the first place.<sup>74</sup> The agencies cited both of these justifications when they adopted the CCyB framework in 2013.<sup>75</sup>

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<sup>69</sup> Dodd-Frank Wall Street Reform and Consumer Protection (Dodd-Frank) Act, Pub. L. No. 111-203, § 616(c), 124 Stat. 1376, 1615–16 (2010) (codified as amended at 12 U.S.C. § 3907(a)(1)). The statute contains a parallel requirement for bank holding company capital requirements. *Id.* § 616(a) (codified as amended at 12 U.S.C. §1844(b)).

<sup>70</sup> See Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, 78 Fed. Reg. 62,018, 62,037–40 (Oct. 11, 2013) (codified at 12 C.F.R. §§ 3.11(b), 217.11(b), 324.11(b) (2021)) (implementing the countercyclical buffer).

<sup>71</sup> See Reuters Staff, *Fed Keeps Countercyclical Capital Buffer at Zero*, REUTERS (Dec. 18, 2020, 5:06 PM), <https://www.reuters.com/article/us-usa-fed-buffer-idUSKBN28S31S> (noting that the Federal Reserve has never triggered the buffer).

<sup>72</sup> See *id.* at 62,038–39 (explaining the buffer). The Basel Committee on Banking Supervision—an international standard-setting body—adopted the CCyB as part of its post-crisis Basel III reforms, and most developed countries have implemented the CCyB within their jurisdictions. See *Countercyclical Capital Buffer (CCyB)*, BANK FOR INT’L SETTLEMENTS, <https://www.bis.org/bcbs/ccyb/> (last updated Dec. 17, 2020) (discussing the Basel III countercyclical buffer and listing the countries that have adopted it).

<sup>73</sup> See Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, 78 Fed. Reg. at 62,038 (explaining that the buffer would “absorb the above-normal losses that a banking organization likely would face” during a downturn).

<sup>74</sup> See *id.* (“[A] countercyclical capital buffer also may reduce systemic vulnerabilities and protect the banking system by mitigating excessive credit growth and increases in asset prices that are not supported by fundamental factors.”).

<sup>75</sup> *Id.*

After implementing the CCyB regulation, the Federal Reserve established guidelines for when it would activate the buffer and what factors it would consider when setting the CCyB. In a policy statement, the Federal Reserve explained that it would activate the CCyB “when systemic vulnerabilities are meaningfully above normal.”<sup>76</sup> Federal Reserve Governor Lael Brainard interpreted this statement to mean that “the criterion for raising the CCyB above its minimum value of zero is that financial risks are assessed to be in the upper one-third of their historical distribution.”<sup>77</sup> In assessing financial sector vulnerabilities, the Federal Reserve stated that it “intends to monitor a wide range of financial and macroeconomic quantitative indicators including, but not limited to, measures of relative credit and liquidity expansion or contraction, a variety of asset prices, funding spreads, credit condition surveys, . . . and measures of systemic risk.”<sup>78</sup> The Federal Reserve committed to voting annually on whether to activate the CCyB and, if so, at what level to set the buffer.<sup>79</sup>

As the economic expansion of the 2010s progressed, pressure grew on the Federal Reserve to activate the CCyB. Many other

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<sup>76</sup> Regulatory Capital Rules: The Federal Reserve Board’s Framework for Implementing the U.S. Basel III Countercyclical Capital Buffer, 81 Fed. Reg. 63,682, 63,682 (Sept. 16, 2016) (codified at 12 C.F.R. pt. 217 app. A (2021)). The Federal Reserve elaborated that it would consider financial system vulnerabilities to be “meaningfully above normal” when vulnerabilities “were either already at, or expected to build to, levels sufficient to generate material unexpected losses in the event of an unfavorable development in financial markets or the economy.” *Id.* at 63,684.

<sup>77</sup> Lael Brainard, Member, Bd. of Governors of the Fed. Rsrv. Sys., Remarks at the Center for Global Economy and Business, Stern School of Business: An Update on the Federal Reserve’s Financial Stability Agenda 10 (Apr. 3, 2018), <https://www.federalreserve.gov/newsevents/speech/files/brainard20180403a.pdf>.

<sup>78</sup> 12 C.F.R. pt. 217 app. A § 4(b).

<sup>79</sup> *Id.* § 5(a).

jurisdictions—including France,<sup>80</sup> Germany,<sup>81</sup> and Hong Kong<sup>82</sup>—increased their countercyclical buffers. In the United States, numerous economists and policymakers urged the Federal Reserve to activate the CCyB in light of escalating risks.<sup>83</sup> In 2019, for example, former Federal Reserve Chair Janet Yellen urged the central bank to turn on the buffer, saying, “I am concerned that asset valuations . . . are elevated and I see dangers relating to the large volume [of] leveraged lending . . . . Raising the [CCyB] now would improve the resilience of the banking system, enabling it to better weather a future downturn.”<sup>84</sup> Several regional Federal Reserve Bank presidents echoed Yellen’s assessment.<sup>85</sup>

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<sup>80</sup> See David Keohane, *France Tells Banks to Set Aside More Capital*, FIN. TIMES (Mar. 18, 2019), <https://www.ft.com/content/5c575cfc-49a5-11e9-8b7f-d49067e0f50d> (describing France’s decision to raise its CCyB from .25% to .5% out of concern that “credit in the country might be growing too quickly”).

<sup>81</sup> See Reuters Staff, *Germany Planning to Set 0.25% Countercyclical Capital Buffer for Banks*, REUTERS (May 27, 2019, 8:24 AM), <https://www.reuters.com/article/germany-banks/germany-planning-to-set-0-25-countercyclical-capital-buffer-for-banks-idUSS8N21S03D> (describing the Germany Financial Stability Board’s recommendation for a .25% CCyB as a precaution).

<sup>82</sup> See Press Release, Hong Kong Monetary Auth., *Monetary Authority Announces Countercyclical Capital Buffer for Hong Kong* (Jan. 10, 2018), <https://www.hkma.gov.hk/eng/news-and-media/press-releases/2018/01/20180110-4/> (explaining that an increase in the buffer from 1.875% to 2.5% was necessary to avoid systemic risk to the Hong Kong economy).

<sup>83</sup> See, e.g., Jason Furman, Opinion, *The Fed Should Raise Rates, but Not the Ones You’re Thinking*, WALL ST. J. (Aug. 20, 2018, 6:23 PM), <https://www.wsj.com/articles/the-fed-should-raise-rates-but-not-the-ones-youre-thinking-1534803795> (“It’s high time for the Fed to raise countercyclical capital-buffer rates . . . . [Doing so] would reduce the risk of financial instability, set a precedent for sound macroeconomic management, and build up a bigger cushion for the next downturn.”); Press Release, Sen. Sherrod Brown, *Brown Statement on Federal Reserve’s Vote Against Big Bank Safeguards* (Mar. 8, 2019), <https://www.banking.senate.gov/newsroom/minority/brown-statement-on-federal-reserves-vote-against-big-bank-safeguards> (“I’m disappointed with the Fed’s decision to not raise the countercyclical capital buffer . . . . Banks are doing well, but there are certainly growing risks in the economy.”); Bloomberg Daybreak: Americas, *Sheila Bair: Banks Stronger Than Before Crisis, but Not Strong Enough*, BLOOMBERG (June 27, 2019, 10:11 AM), <https://www.bloomberg.com/news/videos/2019-06-27/sheila-bair-banks-stronger-than-before-crisis-but-not-strong-enough-video?sref=S5RPfkRP> (urging the Federal Reserve to activate the buffer).

<sup>84</sup> Janet L. Yellen, *Seven Questions for Janet Yellen on Financial Stability*, BROOKINGS (Jan. 3, 2019), <https://www.brookings.edu/blog/up-front/2019/01/03/seven-questions-for-janet-yellen-on-financial-stability/>.

<sup>85</sup> See Greg Robb, *Fed Votes Not to Impose Capital Buffer on Banks*, MARKETWATCH (Mar. 7, 2019, 9:36 AM), <https://www.marketwatch.com/story/fed-votes-not-to-impose-capital->

Despite these entreaties, the Federal Reserve consistently declined to activate the CCyB. Beginning in 2016, the Federal Reserve voted annually to maintain the buffer at 0%.<sup>86</sup> Federal Reserve policymakers acknowledged some increasing risks in the financial system, including elevated asset prices relative to underlying fundamentals and “historically high” borrowing by businesses relative to gross domestic product.<sup>87</sup> Nonetheless, the Federal Reserve’s Vice Chair for Supervision, Randal Quarles, concluded that “[t]he overall risk to financial stability is swamped by the extremely low leverage in the financial sector.”<sup>88</sup> Thus, Quarles asserted on behalf of the Federal Reserve Board in March 2019 that “we do not see financial stability concerns as elevated.”<sup>89</sup>

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buffer-on-banks-2019-03-06 (noting that at least three Federal Reserve Bank presidents supported activating the CCyB).

<sup>86</sup> Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Board Announces It Has Voted to Affirm Countercyclical Capital Buffer (CCyB) at Current Level of 0 Percent (Oct. 24, 2016), <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20161024a.htm>; Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Board Announces It Has Voted to Affirm Countercyclical Capital Buffer (CCyB) at Current Level of 0 Percent (Dec. 1, 2017), <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20171201a.htm>; Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Board Votes to Affirm the Countercyclical Capital Buffer (CCyB) at the Current Level of 0 Percent (Mar. 6, 2019), <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20190306c.htm>.

<sup>87</sup> BD. OF GOVERNORS OF THE FED. RSRV. SYS., FINANCIAL STABILITY REPORT 7 (2019), <https://www.federalreserve.gov/publications/files/financial-stability-report-20191115.pdf>.

<sup>88</sup> Lalita Clozel, *Fed Considers New Tool for a Downturn*, WALL ST. J. (Aug. 12, 2019, 9:00 AM), <https://www.wsj.com/articles/fed-considers-new-tool-for-a-downturn-11565614800> (quoting Federal Reserve Vice Chair for Supervision Randal Quarles).

<sup>89</sup> Randal K. Quarles, Vice Chairman for Supervision, Fed. Rsrv. Sys., Remarks at the Economic Club of New York 21 (Oct. 18, 2018), <https://www.econclubny.org/documents/10184/109144/2018QuarlesTranscript.pdf>. Quarles also insisted that the Federal Reserve should not activate the CCyB because the United States sets its baseline capital requirements higher than other jurisdictions, and thus, the U.S. CCyB is “always on.” Jeanna Smialek, Peter Eavis & Emily Flitter, *Banks Want Efficiency. Critics Warn of Backsliding.*, N.Y. TIMES (Aug. 20, 2019), <https://www.nytimes.com/2019/08/20/business/bank-regulation-federal-reserve.html>. This argument, however, misreads history. When the Federal Reserve adopted its CCyB framework in 2016, it expressly envisioned activating the countercyclical buffer “to augment minimum capital requirements . . . when systemic vulnerabilities are somewhat above normal.” Regulatory Capital Rules: The Federal Reserve Board’s Framework for Implementing the U.S. Basel III Countercyclical Capital Buffer, 81 Fed. Reg. 63,682, 63,682 (Sept. 16, 2016) (codified at 12 C.F.R. pt. 217 app. A (2021)). Quarles’ argument that the U.S. CCyB is “always on” ignores the Federal Reserve’s original intent to use the CCyB as an additional capital buffer, regardless of how U.S. minimum capital requirements compare to those of other jurisdictions.

Governor Brainard dissented from this view, citing escalating risks.<sup>90</sup> She maintained that the Board should activate the CCyB because the buffer “was intended to be used for precisely these kinds of circumstances.”<sup>91</sup> Notwithstanding Governor Brainard’s dissent, however, the CCyB remained in disuse, even as the late 2010s economic expansion reached historic levels.<sup>92</sup>

Nor did the Federal Reserve’s annual stress tests fulfill Dodd-Frank’s countercyclical capital mandate. Since the 2008 financial crisis, the Federal Reserve has subjected the largest bank holding companies to yearly stress tests that assess how each firm would perform in a hypothetical economic downturn.<sup>93</sup> Firms that fare poorly on the stress tests generally must limit their capital distributions to shareholders and bonus payments to executives.<sup>94</sup>

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<sup>90</sup> Paul Kiernan, *Fed’s Brainard Urges More Action Against Financial Risks*, WALL ST. J. (Nov. 20, 2019, 12:06 PM), <https://www.wsj.com/articles/feds-brainard-urges-more-action-against-financial-risks-11574269613> (noting that Governor Brainard did not believe that the Federal Reserve’s actions were sufficient to counter “low interest rates and heightened economic uncertainty”).

<sup>91</sup> *Id.* (quoting Federal Reserve Governor Lael Brainard).

<sup>92</sup> See *America’s Economic Expansion Is Now the Longest on Record*, ECONOMIST (July 2, 2019), <https://www.economist.com/graphic-detail/2019/07/02/americas-economic-expansion-is-now-the-longest-on-record> (“As of today, the economic expansion that began in America in June 2009 has continued, uninterrupted, for more than 120 months . . . making it the longest in history.”); *supra* note 86.

<sup>93</sup> See Matthew C. Turk, *Stress Testing the Banking Agencies*, 105 IOWA L. REV. 1701, 1713–15 (2020) (detailing the stress test procedures instituted by Dodd-Frank); Mehrsa Baradaran, *Regulation by Hypothetical*, 67 VAND. L. REV. 1247, 1283–94 (2014) (“The stress tests were envisioned as a diagnostic endeavor to determine which firms could withstand the next crisis and which could not.”); Robert Weber, *A Theory for Deliberation-Oriented Stress Testing Regulation*, 98 MINN. L. REV. 2236, 2291–94 (2014) (“To many in the financial community, the stress tests’ purpose was plainly to reassure the public of the solvency of the [financial] sector.”).

<sup>94</sup> Originally, firms that did not satisfy minimum capital requirements under the severely adverse economic scenario “failed” the stress tests and were barred from making capital distributions. Turk, *supra* note 93, at 1714. In 2020, the Federal Reserve amended its stress testing framework by introducing a “stress capital buffer” roughly equivalent to the difference between a company’s actual capital ratio and its stressed capital ratio. See Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Board Approves Rule to Simplify Its Capital Rules for Large Banks, Preserving the Strong Capital Requirements Already in Place (Mar. 4, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200304a.htm>. A firm generally must maintain sufficient capital to satisfy its minimum capital requirements plus its stress capital buffer to avoid limitations on capital distributions and executive bonus payments. See *id.*

Commentators have observed that certain elements of the stress tests could mitigate procyclicality in bank capital requirements.<sup>95</sup> But the stress tests are *not* a countercyclical tool. Indeed, the Federal Reserve’s stress testing policy statement affirms that “[t]he purpose of the stress test scenarios is to make sure that the companies are properly capitalized to withstand severe economic and financial conditions, *not to serve as an explicit countercyclical offset to the financial system.*”<sup>96</sup> In fact, Federal Reserve research has demonstrated that constructing hypothetical economic scenarios sufficiently adverse to achieve countercyclical outcomes would likely be infeasible.<sup>97</sup> Thus, the Federal Reserve’s stress tests are no substitute for the CCyB—perhaps financial regulators’ most powerful countercyclical tool.

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<sup>95</sup> As former Federal Reserve officials Donald Kohn and Nellie Liang explained, “In the [stress test] scenarios, certain critical variables—importantly the unemployment rate—are stressed to at least a minimum level of 10 percent each year, which implies that the lower (higher) the current unemployment rate, the greater (lesser) the increase and hence degree of stress.” DONALD KOHN & NELLIE LIANG, UNDERSTANDING THE EFFECTS OF THE U.S. STRESS TESTS 4 (2019), <https://www.brookings.edu/wp-content/uploads/2019/07/effects-of-stress-test-paper.pdf>. Thus, Kohn and Liang assert, “[O]ther things equal, stress test-related capital requirements should increase in good times (and decrease in bad after losses have already been realized).” *Id.* Kohn and Liang, however, conclude that, in practice, the stress tests’ countercyclical effects are modest, at best, and largely attributable to the stress tests’ assumptions regarding the pre-funding of bank dividends. *Id.* The Federal Reserve relaxed these pre-funding assumptions in 2020, thereby reducing the extent to which the stress tests mitigate procyclicality. *See* Regulations Q, Y, and YY: Regulatory Capital, Capital Plan, and Stress Test Rules, 85 Fed. Reg. 15,576, 15,579 (Mar. 18, 2020) (codified at 12 C.F.R. § 225.8 (2021)) (explaining the changes to pre-funding assumptions).

<sup>96</sup> Policy Statement on the Scenario Design Framework for Stress Testing, 12 C.F.R. pt. 252 app. A § 4.2.2(g) (2021) (emphasis added).

<sup>97</sup> In an empirical study, Federal Reserve economist Jose Berrospide and colleagues determined that “while it may be possible to use more severe economic scenarios to counteract the procyclical elements of the stress test, it is very difficult to push beyond that in order to engineer countercyclical stress test outcomes.” JOSE BERROSPIDE ET AL., CYCLICALITY AND THE SEVERITY OF THE U.S. SUPERVISORY STRESS TEST: 2014 TO 2018 (2019), <https://www.federalreserve.gov/econres/notes/feds-notes/cyclicality-and-the-severity-of-the-us-supervisory-stress-test-2014-to-2018-20190607.htm>. Thus, the researchers concluded, “[U]sing the stress tests as a lever to generate countercyclical capital requirements . . . is likely not possible without increasing the severity of the stress scenario to levels well beyond those used over the 2014–2018 stress test cycles.” *Id.*

## B. CECL ACCOUNTING STANDARD

In addition to countercyclical capital requirements, policymakers also attempted to implement countercyclical bank accounting standards after the 2008 crisis. One example is loan loss provisioning, a longstanding accounting tool that “require[s] banks to set aside reserves for losses on individual loans.”<sup>98</sup> Historically, the United States’ loan loss accounting rules have had procyclical effects during economic expansions and contractions.<sup>99</sup> Policymakers tried to adopt reforms to mitigate this procyclicality in the early 2010s,<sup>100</sup> but the financial sector successfully pushed for delays,<sup>101</sup> leaving the U.S. financial system exposed when the COVID-19 pandemic hit.

Historically, the United States’ loan loss accounting rules amplified economic expansions and worsened economic contractions. Under the traditional methodology—known as the incurred-loss model—banks set aside reserves for a given loan only when it was “probable” that the loan had already experienced a loss.<sup>102</sup> Thus, as the economy grew, the incurred-loss model required banks to recognize few losses on their loans.<sup>103</sup> This backward-looking approach therefore fueled even more profligate lending

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<sup>98</sup> McCoy, *supra* note 4, at 1206.

<sup>99</sup> See *id.* at 1206–07 (“Traditionally, provisioning rules have had a procyclical effect because they have been computed based on losses *already incurred*, instead of on projected future losses. This backward-looking approach produces low reserves when economic conditions are favorable and high reserves during economic declines.” (footnote omitted)).

<sup>100</sup> See, e.g., McCoy, *supra* note 4, at 1208 (recounting the 2011 International Accounting Standards Boards and Financial Accounting Standards Boards’ “expected loss provisioning” proposal to increase countercyclical provisioning); *infra* note 113 and accompanying text.

<sup>101</sup> See, e.g., *infra* notes 113–117 and accompanying text.

<sup>102</sup> See Larry D. Wall, *Procyclicality: CECL Versus Incurred Loss Model*, FED. RES. BANK OF ATLANTA (Oct. 2019), <https://www.frbatlanta.org/cenfig/publications/notesfromthevault/10-procyclicality-cecl-versus-incurred-loss-model-2019-10-31> (“The method in effect back in 2009 and in effect for all U.S. banks through the end of 2019 is called the incurred loss model. Under this model, management estimates the losses on loans in which a loss has already been incurred. That is, no loss is recorded on a loan until it is ‘probable’ that the bank has already incurred losses based on information available at that time.”).

<sup>103</sup> See CRISTIAN DERITIS & MARK ZANDI, MOODY’S ANALYTICS, GAUGING CECL CYCLICALITY 3 (2018), <https://www.economy.com/mark-zandi/documents/2018-12-03-Gauging-CECL-Cyclicality.pdf> (“During the [housing] boom [about a decade ago] when unemployment was at its nadir and house prices at their peak, loss reserves were low and falling.”).

during the housing boom in the mid-2000s.<sup>104</sup> By contrast, the incurred-loss model stalled the recovery from the Great Recession: banks recognized widespread loan losses as the economy crashed in late 2008 and early 2009, thereby eroding their capital and triggering a credit crunch.<sup>105</sup> Banks' sudden recognition of losses, in other words, inhibited their ability to lend and exacerbated the crisis.

After the crisis, policymakers developed an alternative financial accounting standard designed to reduce the procyclicality inherent in the incurred-loss model. This new framework—known as the current expected credit loss (CECL) methodology—directs banks to recognize estimated lifetime losses on a loan at origination, rather than waiting until losses become probable.<sup>106</sup> In theory, the forward-looking CECL standard is less procyclical than the backward-looking incurred-loss model since banks must increase their loan loss provisions during economic booms and thereby moderate their lending.<sup>107</sup> Furthermore, under CECL, banks are not required to recognize sudden, widespread loan losses that could deepen an economic downturn.<sup>108</sup> Thus, as the Government Accountability Office concluded in 2013, the CECL methodology would “help address the cycle of losses and failures that emerged in the recent

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<sup>104</sup> See *id.* (describing the housing boom of the mid-2000s as an example of a “period[] when loan defaults are low, lending standards are loose, and credit is amply available”).

<sup>105</sup> Mark Zandi & Cris DeRitis, *CECL Will Strengthen, Not Hinder, Financial System*, AM. BANKER (Nov. 30, 2018, 9:25 AM), <https://www.americanbanker.com/opinion/cecl-will-strengthen-not-hinder-financial-system>.

<sup>106</sup> See Michael J. Walker, *Benefits and Challenges of the “CECL” Approach* 1 (Fed. Rsrv. Bank of Bos., Working Paper SRA Note No. 1, 2019), <https://www.bostonfed.org/-/media/Documents/Workingpapers/PDF/2019/sra-note-1901.pdf> (“The CECL approach requires financial institutions to record allowances for credit losses for loans, leases, and certain other financial assets upon issuance or acquisition (i.e. on ‘day one’) . . .”).

<sup>107</sup> See Zandi & DeRitis, *supra* note 105 (“The economic logic of moving from incurred loss accounting to CECL is that CECL is less procyclical. That is, in a recession when unemployment is rising quickly and borrowers fall short on their loan payments, banks must start adding more to their loss reserves, hurting profitability and capital. Banks have no choice but to tighten their underwriting standards, curtailing the availability of credit and adding to the economy’s woes.”).

<sup>108</sup> See *id.* (discussing how early loan loss provisioning under CECL prevents sudden recognition of losses and associated deleveraging).

crisis as banks were forced to increase loan loss allowances and raise capital when they were least able to do so.”<sup>109</sup>

While some observers contested whether CECL would, in fact, be less procyclical than the incurred-loss model, the weight of the empirical evidence supports the theoretical basis for the CECL methodology. Banking trade groups asserted that CECL would actually increase procyclicality during economic downturns because a bank might refuse to lend if it were required to provision for losses immediately.<sup>110</sup> Analyses by policymakers and academics, however, generally refuted these claims and confirmed that the CECL methodology was less prone to procyclicality.<sup>111</sup> Thus, the CECL model appears to be a substantial improvement over the incurred-loss model.<sup>112</sup>

Despite CECL’s promise, policymakers delayed its implementation in response to the financial sector’s objections. The Financial Accounting Standards Board (FASB) initially proposed

<sup>109</sup> U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-13-704T, FINANCIAL INSTITUTIONS: CAUSES AND CONSEQUENCES OF RECENT COMMUNITY BANK FAILURES (2013), <https://www.gao.gov/assets/660/655193.pdf>.

<sup>110</sup> See, e.g., Francisco Covas & William Nelson, *Current Expected Credit Loss: Lessons from 2007–2009*, at 24–28 (Bank Pol’y Inst., Staff Working Paper No. 2018-1, 2018), <http://bpi.com/wp-content/uploads/2018/07/CECL-Lessons-2007-2009-WP-July-12-2018.pdf> (contending that “CECL would have been very procyclical had it been in place during the 2007–2009 financial crisis”); AM. BANKERS ASS’N, ABA SNAPSHOT OF BANKS’ CECL ESTIMATES – MAY 2019, at 1–3 (2019), <https://www.aba.com/-/media/documents/data/cecl-loss-rate-expectations-may-2019.pdf> (noting that “[a]n analysis of credit loss estimates compiled by [various banks] appears to support the banking industry’s concern that significantly increased capital and earnings volatility will result from CECL,” which “could potentially undermine bank lending”).

<sup>111</sup> See, e.g., Sarah Chae, Robert F. Sarama, Cindy M. Vojtech & James Wang, *The Impact of the Current Expected Credit Loss Standard (CECL) on the Timing and Comparability of Reserves* 2, 23 (Bd. of Governors of the Fed. Rsrv. Sys., Fin. & Econ. Discussion Series, No. 2018-020, 2018), <https://www.federalreserve.gov/econres/feds/files/2018020pap.pdf> (concluding that “CECL should be less pro-cyclical” than the incurred-loss standard); Bert Loudis & Ben Ranish, *CECL and the Credit Cycle* 15–23 (Bd. of Governors of the Fed. Rsrv. Sys., Fin. & Econ. Discussion Series, No. 2019-061, 2019), <https://www.federalreserve.gov/econres/feds/files/2019061pap.pdf> (explaining that “CECL appears slightly less procyclical than [the incurred-loss method]”); Benjamin H. Cohen & Gerald A. Edwards Jr., *The New Era of Expected Credit Loss Provisioning*, BIS Q. REV., Mar. 2017, at 39, 49–53 (demonstrating how CECL “should reduce the procyclicality of the financial system”); DERITIS & ZANDI, *supra* note 103, at 9–10 (finding that CECL “will be meaningfully less procyclical than the current incurred loss standard”).

<sup>112</sup> See *supra* note 111 and accompanying text; see also DERITIS & ZANDI, *supra* note 103, at 3–4 (discussing limitations in critics’ analyses).

the CECL framework in 2012.<sup>113</sup> In response, the FASB received more than 3,300 comments—many from bankers who feared the CECL methodology would increase compliance costs and weaken their profitability.<sup>114</sup> After three rounds of public consultation, the FASB finally adopted the CECL framework in 2016, with an effective date of December 15, 2019.<sup>115</sup> Under pressure from the financial sector, however, the FASB later delayed CECL’s effective date until January 2023 for smaller banks.<sup>116</sup> Then, at the onset of the COVID-19 pandemic, Congress intervened and delayed the CECL effective date for all banks—regardless of size—until the earlier of January 1, 2021, or the expiration of the national emergency.<sup>117</sup>

Due to these delays, U.S. banks were still using the backward-looking incurred-loss methodology when the COVID-19 pandemic

<sup>113</sup> See FIN. ACCT. STANDARDS BD., FIN. ACCT. FOUND., PROPOSED ACCOUNTING STANDARDS UPDATE: FINANCIAL INSTRUMENTS—CREDIT LOSSES (SUBTOPIC 825-15) 1–2 (2012), [https://www.fasb.org/jsp/FASB/Document\\_C/DocumentPage?cid=1176160587228](https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176160587228) (proposing CECL).

<sup>114</sup> See John Reosti, *Banks Buckle Down for Hard Transition to New Loan-Loss Rule*, AM. BANKER (June 17, 2016, 2:42 PM), <https://www.americanbanker.com/news/banks-buckle-down-for-hard-transition-to-new-loan-loss-rule> (“[T]he FASB . . . worked through three separate requests for comment, 3,360 comment letters and more than 220 meetings with bankers, regulators, auditors and accountants. . . . One of the big concerns . . . was whether lenders would be required to use costly complex modeling to develop the loan-loss forecasts that the rule requires.”).

<sup>115</sup> See FIN. ACCT. STANDARDS BD., ACCOUNTING STANDARDS UPDATE NO. 2016-13: FINANCIAL INSTRUMENTS—CREDIT LOSSES (TOPIC 326) 5, 251–58 (2016), [https://www.fasb.org/jsp/FASB/Document\\_C/DocumentPage?cid=1176168232528](https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176168232528) (explaining the FASB’s rationales for adopting the CECL framework and setting the effective date).

<sup>116</sup> See John Reosti, *Emboldened by CECL Delay, Industry Seeks Repeal*, AM. BANKER (July 17, 2019, 4:16 PM), <https://www.americanbanker.com/news/emboldened-by-cecl-delay-industry-seeks-repeal> (discussing the FASB’s decision to delay CECL’s effective date for smaller banks). Under pressure from the financial sector, the banking agencies also allowed a three-year phase-in period for the regulatory capital effects of the CECL methodology. See Joint Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Fed. Deposit Ins. Corp. & Off. of the Comptroller of the Currency, Agencies Allow Three-Year Regulatory Capital Phase-In for New Current Expected Credit Losses (CECL) Accounting Standard (Dec. 21, 2018), <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20181221a.htm> (“[F]ederal bank regulatory agencies approved a final rule . . . providing an option to phase in over a period of three years the day-one regulatory capital effects of updated accounting standard known as the ‘Current Expected Credit Losses’ (CECL) methodology.”).

<sup>117</sup> Coronavirus Aid, Relief, and Economic Security (CARES) Act, Pub. L. No. 116-136, § 4014(b), 134 Stat. 281, 481 (2020) (to be codified at 15 U.S.C. § 9052(b)).

hit in early 2020. If policymakers had implemented the forward-looking CECL methodology in a timely manner, U.S. banks would have prospectively set aside loss provisions for the loans they made during the 2010s and would not have suffered a massive spike in loan losses as a result of COVID-19. Instead, under the incurred-loss framework, banks were forced to recognize unprecedented loan losses when the pandemic hit.<sup>118</sup> These sudden losses triggered doubts about the financial system's ability to continue serving as a source of credit to the real economy absent extraordinary government support.<sup>119</sup> The delay in CECL implementation, in sum, intensified the procyclicality of yet another economic cycle.

### C. RISK RETENTION RULE

As an additional countercyclical regulatory tool, policymakers adopted a risk retention rule, which requires banks to retain a portion of the structured financial products they issue. Before the 2008 financial crisis, many banks engaged in securitization by packaging loans—oftentimes mortgages—into a pool and selling interests in that pool to third parties.<sup>120</sup> In practice, securitization had a procyclical effect on the economy because it allowed banks to continue lending—and offloading risks to others—even as vulnerabilities emerged in the financial system.<sup>121</sup> After the crisis,

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<sup>118</sup> See, e.g., Laura Noonan & Robert Armstrong, *Three US Banks Set Aside Record \$28bn for Loan Losses*, FIN. TIMES (July 14, 2020), <https://www.ft.com/content/f1bbaf65-7cb7-4855-ba7f-d9bda5f4b053> (“Three of America’s biggest banks have set aside a combined \$28bn for current and future loan losses, pushing Wells Fargo to a quarterly loss and hitting profits at JPMorgan Chase and Citigroup as lenders count the cost of the coronavirus crisis.”).

<sup>119</sup> See Jeanna Smialek, *Fed Warns of Financial Risks as Coronavirus Downturn Persists*, N.Y. TIMES (May 15, 2020), <https://www.nytimes.com/2020/05/15/business/economy/fed-financial-stability-coronavirus.html> (describing fears about economic fallout and the Federal Reserve’s intervention in the spring of 2020 with “a series of emergency lending facilities” meant to ease the economic crisis).

<sup>120</sup> See Steven L. Schwarcz, *The Future of Securitization*, 41 CONN. L. REV. 1313, 1316 (2009) (describing securitization); Matthew C. Turk, *Securitization Reform After the Crisis: Regulation by Rulemaking or Regulation by Settlement?*, 37 REV. BANKING & FIN. L. 861, 866–74 (2018) (explaining the mechanics and history of securitization); Dov Solomon, *The Rise of a Giant: Securitization and the Global Financial Crisis*, 49 AM. BUS. L.J. 859, 871–79 (2012) (analyzing how “a securitization transaction enables the originator to externalize its bankruptcy risk onto its creditors”).

<sup>121</sup> See TIMOTHY F. GEITHNER, FIN. STABILITY OVERSIGHT COUNCIL, MACROECONOMIC EFFECTS OF RISK RETENTION REQUIREMENTS 30 (2011) (“The academic literature indicates that there may be a connection between asset-backed securitization and an exacerbation of

policymakers established a risk retention requirement to help mitigate securitization's procyclical effects.<sup>122</sup> The financial sector, however, challenged this rule and ultimately won a court order exempting some of the riskiest structured financial products from the risk retention requirement.<sup>123</sup>

Securitization was a key catalyst of the 2008 financial crisis. Securitization allows a financial institution to transfer assets to a special-purpose vehicle (SPV), which issues securities to investors.<sup>124</sup> The security holders then receive "a stream of payments based on the performance of the underlying asset[s]."<sup>125</sup> The securitization market boomed in the mid-2000s, with more than \$1 trillion in private-label mortgage-backed securities issued in 2006 alone.<sup>126</sup> In retrospect, however, securitization skewed financial institutions' incentives and encouraged risky lending. Because issuers did not retain credit exposure to the assets they securitized, banks had little reason to care about a borrower's creditworthiness.<sup>127</sup> Further, banks did not internalize the risks of their loans, as they were not required to maintain capital against assets they securitized.<sup>128</sup>

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pro-cyclical lending."); Erik F. Gerding, *Bank Regulation and Securitization: How the Law Improved Transmission Lines Between Real Estate and Banking Crises*, 50 GA. L. REV. 89, 117–23 (2015) (discussing cyclicity risks in securitization).

<sup>122</sup> See GEITHNER, *supra* note 121, at 2 (noting that the Dodd-Frank Act imposed a 5% credit risk retention requirement).

<sup>123</sup> See *Loan Syndications & Trading Ass'n v. SEC*, 882 F.3d 220, 221–22 (D.C. Cir. 2018) (holding that the Credit Risk Retention Rule issued pursuant to the Dodd-Frank Act did not apply to collateralized loan obligation manager activities).

<sup>124</sup> See Turk, *supra* note 120, at 866–69 (describing how securitization functions and the process through which a sponsor creates an SPV).

<sup>125</sup> *Id.* at 866.

<sup>126</sup> See FIN. CRISIS INQUIRY COMM'N, *supra* note 49, at 102 ("In just two years, private-label mortgage-backed securities had grown more than 30%, reaching \$1.15 trillion in 2006 . . .").

<sup>127</sup> See Steven L. Schwarcz, *Systematic Regulation of Systemic Risk*, 2019 WIS. L. REV. 1, 10 (explaining that "[s]ecuritization depends in part on an originate-to-distribute . . . model," which "discourages lender monitoring and is believed to encourage lenders to make riskier loans"); see also Amiyatosh Purnanandam, *Originate-to-Distribute Model and the Subprime Mortgage Crisis*, 24 REV. FIN. STUD. 1881, 1912 (2011) (concluding that banks with high involvement in the originate-to-distribute model of securitization issued inferior quality mortgages).

<sup>128</sup> See McCoy, *supra* note 4, at 1201 (explaining that under Basel I "banks did not have to hold full capital against assets that they shifted off their balance sheets"). Even if banks retained portions of their structured financial products, securitizations were often subject to lower capital charges than they would have been if the bank held the underlying assets

Securitization had a strongly procyclical effect on the U.S. financial system. As the housing bubble inflated, securitization increased the supply of mortgage credit, thereby boosting home prices.<sup>129</sup> At the peak of the housing market, banks doing on-balance-sheet lending might have pulled back from residential mortgages, but because they were able to offload their mortgage exposures into securitizations, they continued lending to borrowers with dubious repayment prospects.<sup>130</sup> Thus, the Financial Stability Oversight Council concluded “that securitization may have contributed to an expansion of credit in the run-up to the financial crisis, which in turn facilitated increases in housing prices and worsened the ensuing contraction in credit when the housing bubble burst.”<sup>131</sup>

In the aftermath of the crisis, policymakers adopted a new risk retention requirement to address perceived problems in the securitization market. Implementing a provision in Dodd-Frank, the federal financial regulatory agencies established a rule requiring a securitization sponsor to retain 5% of the credit risk of any securitization it issues.<sup>132</sup> This new requirement ensures securitization sponsors have “skin in the game.”<sup>133</sup> At least in theory, because a sponsor must retain some credit risk in the securitization, the sponsor’s incentives will be better aligned with investors in the securitization, and the sponsor will be less likely to issue securitizations of questionable value.<sup>134</sup>

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directly. William W. Bratton & Adam J. Levitin, *A Tale of Two Markets: Regulation and Innovation in Post-Crisis Mortgage and Structured Finance Markets*, 2020 U. ILL. L. REV. 47, 72.

<sup>129</sup> See, e.g., Alejandro Justiniano, Giorgio E. Primiceri & Andrea Tambalotti, *Credit Supply and the Housing Boom* 5 (Fed. Rsv. Bank of N.Y., Staff Rep. No. 709, 2015), [https://www.newyorkfed.org/medialibrary/media/research/staff\\_reports/sr709.pdf](https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr709.pdf) (explaining how mortgage-backed securities expanded the supply of credit).

<sup>130</sup> See BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT’L SETTLEMENTS, THE JOINT FORUM: REPORT ON ASSET SECURITIZATION INCENTIVES 10 (2011), <https://www.bis.org/publ/joint26.pdf> (“Risk transfer was another important motivator for securitisation and was cited . . . as an important reason for engaging in securitisation.”).

<sup>131</sup> GEITHNER, *supra* note 121, at 30.

<sup>132</sup> Credit Risk Retention, 79 Fed. Reg. 77,602, 77,603 (Dec. 24, 2014) (codified at 12 C.F.R. pts. 43, 244, 373, 1234, 17 C.F.R. pt. 246, 24 C.F.R. pt. 267 (2021)).

<sup>133</sup> Bratton & Levitin, *supra* note 128, at 66–67.

<sup>134</sup> See *id.* (“Requiring securitizers to retain some of the risk on the assets that they are securitizing—making them eat their own cooking—should ensure better quality assets in securitizations, which will, in turn, cut off the financing for shoddily underwritten loans.”).

The risk retention requirement was an explicitly countercyclical reform. Policymakers reasoned that the risk retention rule would reduce procyclicality in credit markets by better “aligning incentives and improving underwriting standards.”<sup>135</sup> In addition, by forcing sponsors to tie up financial resources that could otherwise be used to make additional loans, the risk retention requirement would further mitigate procyclicality.<sup>136</sup> Thus, the financial regulatory agencies concluded that “[r]isk retention requirements may help mitigate pro-cyclicality in credit formation and real estate values, contributing to the stability of the financial system, the real estate sector, and the economy.”<sup>137</sup>

Despite the risk retention rule’s promise, it contained a critical omission: the rule did not apply to collateralized loan obligations (CLOs), one of the riskiest and most prevalent structured financial products. Generally speaking, a CLO is a securitization in which the underlying asset pool is comprised of loans to corporations—oftentimes heavily indebted corporations—purchased by the CLO sponsor on behalf of the SPV.<sup>138</sup> Initially, many market participants thought that the risk retention requirement would be “a death knell” for CLOs.<sup>139</sup> The asset management industry, however, challenged the application of the risk retention rule to CLOs. In 2018, the D.C. Circuit held that the risk retention rule does not apply to CLOs because CLO SPVs purchase loans directly from the open market, rather than receiving loans transferred by the sponsor, as in a traditional securitization.<sup>140</sup>

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<sup>135</sup> GEITHNER, *supra* note 121, at 30.

<sup>136</sup> *See id.* at 27 (“[R]isk retention could diminish the amount of credit available by tying up cash that would otherwise be used to make additional loans—an effect that could further mitigate some of the pro-cyclicality in credit supply that has been attributed to securitization.”).

<sup>137</sup> *Id.*

<sup>138</sup> *See* Bratton & Levitin, *supra* note 128, at 97–100 (explaining that CLOs are comprised of “the debt collateralized . . . [by] loans to corporations, often but not necessarily made by banks”). CLOs come in two different varieties. In a balance-sheet CLO, a loan originator transfers a corporate loan portfolio to an SPV, which issues securities. *Id.* at 98. By contrast, in an arbitrage CLO, a sponsor purchases corporate loans issued by third parties to create the underlying pool of assets. *Id.* at 98–99. Arbitrage CLOs are more common than balance-sheet CLOs. *Id.*

<sup>139</sup> *Id.* at 102.

<sup>140</sup> *See* Loan Syndications & Trading Ass’n v. SEC, 882 F.3d 220, 223–24, 229 (D.C. Cir. 2018) (“The language [of the Dodd-Frank Act Section 941] does not seem to apply to a person or firm that causes an SPV, whose value belongs to the investors, to make an open-market

The exclusion of CLOs from the risk retention rule exposed the corporate credit market to procyclical risks similar to those that plagued the mortgage market in the lead-up to and during the 2008 crisis. After the D.C. Circuit's ruling, the CLO market ballooned to more than \$750 billion, as financial institutions continued churning out loans to highly-leveraged corporations and transferring them to CLOs.<sup>141</sup> Meanwhile, underwriting criteria for corporate loans deteriorated, just as they declined for mortgage loans in the mid-2000s.<sup>142</sup> Thus, when the COVID-19 pandemic hit and shut down many businesses, observers predicted that losses on CLOs could destabilize the broader financial system.<sup>143</sup> These vulnerabilities necessitated emergency programs—such as the Paycheck Protection Program and the Main Street Lending Program<sup>144</sup>—to assist companies whose debt comprised the CLO market.<sup>145</sup> When those efforts proved inadequate, the Federal Reserve began purchasing certain CLOs directly to prevent the CLO market from

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*purchase* from wholly independent third parties.”). Professors Bill Bratton and Adam Levitin have noted that, even before the D.C. Circuit's ruling, the asset management industry had engineered a workaround and began structuring CLOs to avoid application of the risk retention rules. See Bratton & Levitin, *supra* note 128, at 102 (“But the hurdle was surmounted by the time the risk retention rules became effective.”).

<sup>141</sup> See Saikat Chatterjee, *Booming Securitized Loan Market Has Echoes of Financial Crisis*, *BIS Warns*, REUTERS (Sept. 22, 2019, 12:19 PM), <https://www.reuters.com/article/us-bis-survey/booming-securitized-loan-market-has-echoes-of-financial-crisis-bis-warns-idUSKBN1W70MQ> (“The number of [CLOs] . . . has ballooned in recent years as investors hunt for higher returns by buying into loans to lower-rated and riskier companies.”).

<sup>142</sup> See Lisa Lee, Jesse Hamilton, Sally Bakewell & Craig Torres, *Fed Fires Warning Shot at Wall Street's Riskier Loan Deals*, *BLOOMBERG* (Oct. 25, 2018, 12:47 PM), <https://www.bloomberg.com/news/articles/2018-10-25/fed-fires-warning-shot-at-wall-street-s-riskier-loan-deals> (describing loose regulations and enforcement practices that led banks to “pil[e] risky loans onto highly indebted companies”).

<sup>143</sup> See, e.g., Frank Partnoy, *The Looming Bank Collapse*, *ATLANTIC*, July–August 2020, <https://www.theatlantic.com/magazine/archive/2020/07/coronavirus-banks-collapse/612247/> (predicting the “worst-case scenario” for the U.S. economy early in the COVID-19 pandemic and focusing on CLOs as “the most troubling assets held by the banks”).

<sup>144</sup> See Eric Milstein & David Wessel, *What Did the Fed Do in Response to the COVID-19 Crisis?*, *BROOKINGS* (Dec. 17, 2021), <https://www.brookings.edu/research/fed-response-to-covid19/> (chronicling the Federal Reserve's “broad array of actions” meant to limit economic fallout from COVID-19).

<sup>145</sup> See Joe Rennison & Robert Smith, *CLOs: Ground Zero for the Next Stage of the Financial Crisis?*, *FIN. TIMES* (May 13, 2020), <https://www.ft.com/content/f10eaaac-0f4e-46bc-8f78-0754028da46a> (noting that the Federal Reserve's support for lower-rated companies boosted the CLO market).

collapsing.<sup>146</sup> Thus, although the risk retention rule was designed to mitigate procyclicality in structured credit products, it was not broad enough to capture CLOs, which proved to be highly procyclical in the pandemic.

#### D. EARLY REMEDIATION REQUIREMENTS

Finally, in the wake of the 2008 crisis, policymakers tried to implement early remediation requirements to prevent procyclical bank failures. Historically, regulators often waited as long as possible to close a distressed bank in the hope that the bank might recover.<sup>147</sup> This practice proved procyclical when regulators shuttered many banks simultaneously in the depths of the 1980s Savings and Loan (S&L) Crisis and the 2008 financial crisis, fostering even wider panic.<sup>148</sup> To prevent widespread, simultaneous bank failures in the future, the Dodd-Frank Act directed the Federal Reserve to establish early remediation standards that would force authorities to intervene quickly, rather than allowing them to wait until a bank is on the verge of collapse.<sup>149</sup> To date, however, the Federal Reserve has not finalized the early remediation requirements, threatening another wave of procyclical bank failures.

Excessive regulatory forbearance—for instance, waiting too long to close a nonviable bank—can worsen economic downturns. That is exactly what happened during the S&L Crisis, when regulators delayed closing insolvent banks and thrifts, thereby inflicting large losses on the United States’ deposit insurance systems when the

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<sup>146</sup> See Matt Wirz, *Fed TALF Revision Could Help Clear CLO Logjam*, WALL ST. J. (May 13, 2020, 4:26 PM), <https://www.wsj.com/articles/fed-talf-revision-could-help-clear-clo-logjam-11589383995> (describing the Federal Reserve’s “relief program for asset-backed debt” that sought to “unclog a logjam in Wall Street’s pipeline of” CLOs).

<sup>147</sup> See Jonathan M. Edwards, *FDICIA v. Dodd-Frank: Unlearned Lessons About Regulatory Forbearance*, 1 HARV. BUS. L. REV. 279, 281–82 (2011) (explaining how bank regulators regularly postponed closures with both “case-by-case forbearance” and “wholesale forbearance” measures).

<sup>148</sup> See David Zaring, *A Lack of Resolution*, 60 EMORY L.J. 97, 117 (2010) (“The government has always followed a boom and bust, rather procyclical approach to bank failures, despite the best efforts of Congress to encourage the contrary.”).

<sup>149</sup> See Dodd-Frank Wall Street Reform and Consumer Protection (Dodd-Frank) Act, Pub. L. No. 111-203, § 166, 124 Stat. 1376, 1432 (2010) (codified at 12 U.S.C. § 5366) (directing the “establish[ment] [of] requirements to provide for the early remediation of financial distress” of a bank holding company).

firms eventually collapsed.<sup>150</sup> The FDIC's practice of forbearance was procyclical because it concentrated disruptions to the financial system during the nadir of the crisis, rather than spreading out insolvencies over several years.<sup>151</sup> Thus, one of the lasting lessons of the S&L Crisis was that the longer authorities wait to close a distressed bank, the worse the losses are likely to be.

In response to the S&L Crisis, Congress adopted a countercyclical policy intended to limit regulatory forbearance. The Federal Deposit Insurance Corporation Improvement Act of 1991 established a system of "prompt corrective action" (PCA).<sup>152</sup> The law directed the regulatory agencies to close a distressed depository institution within ninety days after its leverage ratio falls below 2%.<sup>153</sup> As Professor David Zaring explained, PCA "was designed to cajole regulators into closing banks quickly and more countercyclically."<sup>154</sup> PCA therefore sought to avoid a situation where the FDIC would have to close hundreds of insolvent banks simultaneously and rapidly deplete its Deposit Insurance Fund.

Despite its promise, the PCA framework did not perform well during the 2008 financial crisis. The PCA approach linked regulatory intervention to a bank's capital levels—specifically, its leverage ratio.<sup>155</sup> A bank's capital ratios, however, are "a lagging indicator" of its financial condition.<sup>156</sup> Because several quarters may elapse before a bank's weaknesses are reflected in its capital ratios, the PCA framework was late in triggering regulatory intervention as the financial system deteriorated in 2008.<sup>157</sup> As a result, the FDIC was slow to close failing depository institutions, resulting in

<sup>150</sup> See Edwards, *supra* note 147, at 281–82 (describing forbearance policies used in the 1980s that delayed closing banks, exacerbating losses by an estimated tens of billions of dollars).

<sup>151</sup> See Zaring, *supra* note 148, at 109, 112 (concluding that the FDIC "acts procyclically").

<sup>152</sup> See Federal Deposit Insurance Corporation Improvement Act of 1991, Pub. L. No. 102-242, § 131(a), 105 Stat. 2236, 2253 (codified at 12 U.S.C. § 1831o) ("Each appropriate Federal banking agency and the Corporation . . . shall carry out the purpose of this section by taking prompt corrective action to resolve the problems of insured depository institutions.").

<sup>153</sup> *Id.* § 131(b)(3)(B), 105 Stat. at 2255.

<sup>154</sup> Zaring, *supra* note 148, at 109.

<sup>155</sup> See *supra* note 153 and accompanying text.

<sup>156</sup> See Edwards, *supra* note 147, at 288 (discussing criticisms of the PCA framework, including that it "links intervention to a bank's capital, which is a lagging indicator of problems").

<sup>157</sup> See *id.* at 288–89 ("PCA's capital categories are late in alerting regulators that enforcement actions are needed.").

widespread, simultaneous bank failures reminiscent of the S&L Crisis.<sup>158</sup> The FDIC, for example, shuttered 140 banks in 2009, only 19% of which had been subject to PCA orders.<sup>159</sup> The capital-focused PCA framework, in sum, failed to prevent significant losses to the Deposit Insurance Fund.<sup>160</sup>

To fix PCA's shortcomings, Congress established new early remediation requirements in Dodd-Frank. Section 166 of Dodd-Frank directed the Federal Reserve to apply the same principle as PCA—early intervention to prevent a more dramatic collapse later on—but to rely on a broader range of forward-looking financial metrics in addition to a bank's capital levels.<sup>161</sup> The Federal Reserve proposed a rule to implement Dodd-Frank's early remediation requirements for large bank holding companies (BHCs) in 2012.<sup>162</sup> The proposal identified several triggers for remediation—including a BHC's liquidity levels, risk-management weaknesses, stress test results, and market indicators.<sup>163</sup> If a BHC breached any of the prescribed thresholds, the Federal Reserve would apply increasingly-severe penalties such as restrictions on growth, capital distributions, and executive compensation, as well as compulsory capital raising or asset sales.<sup>164</sup> By instituting these remedial measures based on early warning signs of a BHC's distress, the Federal Reserve could help rehabilitate the firm, or at least minimize losses to the Deposit Insurance Fund, if the company ultimately failed.

The Federal Reserve, however, never finalized its early remediation framework. In a 2014 final rule implementing key

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<sup>158</sup> See Zaring, *supra* note 148, at 117–20 (demonstrating that during the 2008 crisis, “the FDIC did not use its PCA authority frequently” and that the government’s response to the 2008 financial crisis, like the S&L crisis, “tended to fail institutions when times [we]re bad”).

<sup>159</sup> *Id.* at 119.

<sup>160</sup> See U.S. GOV'T ACCOUNTABILITY OFF., GAO-11-612, BANK REGULATION: MODIFIED PROMPT CORRECTIVE ACTION FRAMEWORK WOULD IMPROVE EFFECTIVENESS 15–23 (2011), <https://www.gao.gov/new.items/d11612.pdf> (documenting how the capital-based PCA regime contributed to significant losses to the Deposit Insurance Fund).

<sup>161</sup> See Wall Street Reform and Consumer Protection (Dodd-Frank) Act, Pub. L. No. 111-203, § 166, 124 Stat. 1376, 1432 (codified at 12 U.S.C. § 5366) (calling for regulations that “define measures of the financial condition of the company, including regulatory capital, liquidity measures, and other forward-looking indicators”).

<sup>162</sup> Enhanced Prudential Standards and Early Remediation Requirements for Covered Companies, 77 Fed. Reg. 594, 634–42 (Jan. 5, 2012) (codified at 12 C.F.R. pt. 252 (2021)).

<sup>163</sup> *Id.* at 639–640.

<sup>164</sup> *Id.* at 634–38.

Dodd-Frank provisions, the Federal Reserve punted on the early remediation requirements,<sup>165</sup> stating that it “continues to review the [public] comments” on the proposal.<sup>166</sup> Since then, however, the early remediation proposal “appears to have vanished.”<sup>167</sup> As the *American Banker* put it, “The Fed has made little to no mention of [the proposal], and it’s not clear when or even if the central bank plans to finalize it.”<sup>168</sup>

Thus, as the COVID-19 pandemic hit in early 2020, one of Dodd-Frank’s primary countercyclical tools remained unfinished. Despite the Dodd-Frank drafters’ intentions, the Federal Reserve still lacks a framework for addressing early warning signs in the banking sector. If the banking system experiences extreme stress as a result of the pandemic, the ineffectual PCA framework will guide regulators’ decisions to shut down failing banks. The U.S. financial system therefore remains at risk of widespread, concurrent bank failures, similar to the S&L Crisis and 2008 financial crisis.

In sum, despite the countercyclical framework established in Dodd-Frank, regulators failed to implement effective countercyclical rules in the decade following the legislation’s enactment. Policymakers’ failure to capitalize on this opportunity proved problematic when the COVID-19 pandemic shocked the U.S. financial system, as the next Part examines.

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<sup>165</sup> See Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations, 79 Fed. Reg. 17,240, 17,243 (Mar. 27, 2014) (codified at 12 C.F.R. pt. 252 (2021)) (stating that “the Board continues to develop . . . early remediation requirements for bank holding companies and foreign banking organizations”).

<sup>166</sup> *Id.*

<sup>167</sup> John Heltman, *Key Part of Dodd-Frank Remains Missing in Action*, AM. BANKER (Aug. 31, 2017, 3:19 PM), <https://www.americanbanker.com/news/key-part-of-dodd-frank-remains-missing-in-action>.

<sup>168</sup> *Id.* The Federal Reserve has arguably implemented some early remediation requirements as part of other Dodd-Frank regulations. *See id.* (citing a banking industry official’s claim that the Fed effectively “baked [Section 166’s early remediation requirements] into almost all of its [Section] 165 rules”). For example, the Federal Reserve’s liquidity coverage ratio rule requires a BHC to develop a remedial plan when its liquidity ratio falls below a given threshold. 12 C.F.R. § 249.40(b) (2021). Nonetheless, central elements of the early remediation proposal—including the risk-management and market indicator provisions—have not been codified. *See Heltman, supra* note 167 (highlighting the required remediation rules under Section 166 that remain unimplemented).

#### IV. THE COVID-19 PANDEMIC: RELEARNING THE LESSONS OF 2008

In early 2020, the U.S. financial system teetered on the brink of collapse for the second time in a decade, this time due to the COVID-19 pandemic. The *Wall Street Journal* proclaimed that “coronavirus nearly broke financial markets” as the pandemic swept through the United States that spring.<sup>169</sup> Commentators questioned whether banks and other financial institutions could survive a steep recession.<sup>170</sup> Policymakers responded by flooding financial markets with unprecedented government support and granting banks extraordinary regulatory relief to stave off collapse. This Part contends that the distress triggered by the COVID-19 pandemic and subsequent government interventions were byproducts of policymakers’ failure to enact meaningful countercyclical policies in the wake of the 2008 crisis. Section III.A analyzes the federal government’s economic and regulatory interventions to stabilize the financial system throughout 2020. Section III.B then demonstrates that policymakers’ failure to implement countercyclical reforms during the 2010s exacerbated the fragility of the financial sector when it encountered the COVID-19 pandemic.

##### A. FINANCIAL SECTOR FRAGILITIES AND THE EMERGENCY RESPONSE

As the COVID-19 pandemic ravaged the United States, the federal government responded to vulnerabilities in financial markets in two ways: by injecting trillions of dollars into the economy and by granting banks extraordinary regulatory relief. Collectively, these emergency interventions buoyed banks and other financial institutions and helped prevent the types of catastrophic insolvencies that occurred in 2008. This Section examines the government’s responses to COVID-19 and discusses how these extraordinary interventions helped keep banks afloat during the pandemic.

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<sup>169</sup> Baer, *supra* note 12.

<sup>170</sup> See, e.g., Partnoy, *supra* note 143 (“[W]e could be on the precipice of another crash, one different from 2008 less in kind than in degree. This one could be worse.”).

1. *Government Support for the Financial System.* The most visible way in which the federal government responded to the COVID-19 recession was by providing direct fiscal and monetary support to the economy. The federal government injected trillions of dollars of liquidity into the financial system, granted emergency assistance to bank borrowers, and created new government-backed loan programs administered by banks.<sup>171</sup> Taken together, these interventions halted a debilitating run on nonbank financial institutions, reduced the volume of loan defaults, and generated lucrative new revenue streams for financial institutions.<sup>172</sup> In doing so, these extraordinary government support mechanisms helped prevent a potentially catastrophic collapse of the financial system.

At the first sign of COVID-induced distress in March 2020, the federal government flooded financial markets with liquidity through fiscal and monetary channels. To begin, the Federal Reserve shored up shadow banks by expanding its backstop of the Treasury repurchase market with an additional \$1.5 trillion in funding.<sup>173</sup> The Federal Reserve also revived its 2008-era emergency liquidity programs, such as the Term Asset-Backed Securities Loan Facility (TALF) and Primary Dealer Credit Facility (PDCF), which allowed banks and broker-dealers to borrow from the Federal Reserve against marketable collateral.<sup>174</sup> In the same week, the

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<sup>171</sup> For an overview of the U.S. government's fiscal and monetary policy interventions in response to COVID-19, see generally Lev Menand, *Unappropriated Dollars: The Fed's Ad Hoc Lending Facilities and the Rules That Govern Them* (Eur. Corp. Governance Inst., Working Paper No. 518/2020, 2020), [https://ecgi.global/sites/default/files/working\\_papers/documents/menandfinal.pdf](https://ecgi.global/sites/default/files/working_papers/documents/menandfinal.pdf).

<sup>172</sup> See *id.* at 12, 21 (describing the new ad hoc lending programs designed “to prevent a wave of debt defaults that could fuel a deflationary spiral” and new credit facilities “designed to actively *expand* credit to mitigate the impact of lost revenues”).

<sup>173</sup> *Statement Regarding Treasury Reserve Management Purchases and Repurchase Operations*, FED. RSRV. BANK OF N.Y. (Mar. 12, 2020), [https://www.newyorkfed.org/markets/opolicy/operating\\_policy\\_200312a](https://www.newyorkfed.org/markets/opolicy/operating_policy_200312a). As Graham Steele and Matt Stoller pointed out, the Federal Reserve's backstopping of short-term wholesale funding markets actually pre-dated the COVID-19 pandemic. See Graham Steele & Matt Stoller, *The Crisis in Financial Markets Began Before COVID-19*, AM. PROSPECT (Mar. 19, 2020), <https://prospect.org/economy/the-crisis-in-financial-markets-began-before-covid-19/> (describing the Federal Reserve's interventions in the repurchase agreement market beginning in 2019).

<sup>174</sup> See Press Release, Bd. of Governors of the Fed. Rsr. Sys., *Federal Reserve Announces Extensive New Measures to Support the Economy* (Mar. 23, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm> (announcing the establishment of TALF); Press Release, Bd. of Governors of the Fed. Rsr.

Federal Reserve also reduced the interest rate at which it lends to banks through the discount window,<sup>175</sup> and it committed to purchasing \$700 billion worth of government securities to further increase liquidity.<sup>176</sup> Congress then augmented the Federal Reserve's efforts by providing \$454 billion of CARES Act funding to establish additional facilities "for the purpose of providing liquidity to the financial system."<sup>177</sup> The Federal Reserve established a liquidity facility for assets owned by money market mutual funds (MMMFs) with an equity backstop from the Treasury Department to absorb losses.<sup>178</sup>

The government's liquidity support benefitted banks in several ways. For example, the Federal Reserve's emergency lending programs lubricated critical financial markets that had initially

Sys., Federal Reserve Board Announces Establishment of a Primary Dealer Credit Facility (PDCF) to Support the Credit Needs of Households and Businesses (Mar. 17, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200317b.htm> (announcing the establishment of PDCF); *see also* Jackson & Schwarcz, *supra* note 13, at 205 (referring to this lending facility as "TALF 2.0"). As Professors Jackson and Schwarcz note, the term sheets released by the Federal Reserve in connection with the TALF and other lending facilities were often updated versions of similar documents from the 2008 crisis. *Id.*

<sup>175</sup> *See* Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Actions to Support the Flow of Credit to Households and Businesses (Mar. 15, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315b.htm> ("The Federal Reserve encourages depository institutions to turn to the discount window to help meet demands for credit from households and businesses at this time. In support of this goal, the Board today announced that it will lower the primary credit rate . . .").

<sup>176</sup> *See* Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Issues FOMC Statement (Mar. 15, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315a.htm> ("To support the smooth functioning of markets for Treasury securities and agency mortgage-backed securities . . . the Committee will increase its holdings of Treasury securities by at least \$500 billion and its holdings of agency mortgage-backed securities by at least \$200 billion.").

<sup>177</sup> Coronavirus Aid, Relief, and Economic Security (CARES) Act, Pub. L. No. 116-136, § 4003(b), 134 Stat. 281, 470 (2020) (codified at 15 U.S.C. § 9042).

<sup>178</sup> Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Board Broadens Program of Support for the Flow of Credit to Households and Businesses by Establishing a Money Market Mutual Fund Liquidity Facility (MMLF) (Mar. 18, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200318a.htm>. Congress also reversed the Emergency Economic Stabilization Act of 2008's prohibition on the Treasury Department's ability to backstop MMMFs. *See* CARES Act § 4015, 134 Stat. at 481 ("Section 131 of the Emergency Economic Stabilization Act of 2008 (12 U.S.C. 5236) shall not apply during the period beginning on the date of enactment of this Act and ending on December 31, 2020.").

threatened to grind to a halt.<sup>179</sup> The central bank's backstop prevented debilitating runs by short-term creditors from triggering a full-scale collapse, as they did in 2008.<sup>180</sup> Moreover, large banks including JPMorgan, Goldman Sachs, and Morgan Stanley earned record-high trading revenues as clients rapidly revamped their portfolios in reaction to government stimulus measures and stock market volatility.<sup>181</sup>

The federal government also bolstered the banking system by providing liquidity assistance and direct grants to bank borrowers. For example, the CARES Act established the Paycheck Protection Program (PPP), which extended forgivable loans of up to \$10 million to eligible small businesses.<sup>182</sup> Recipients of PPP loans were permitted to use these funds to make interest payments on their mortgages and “on any other debt obligations” they incurred before the pandemic.<sup>183</sup> Meanwhile, Congress authorized \$1,200 checks and an additional \$600 per week of unemployment benefits to eligible Americans, many of whom used this assistance to pay off existing debts.<sup>184</sup> Collectively, these stimulus measures reduced

<sup>179</sup> See, e.g., Jane Ihrig, Gretchen C. Weinbach & Scott A. Wolla, *COVID-19's Effects on the Economy and the Fed's Response*, FED. RESRV. BANK OF ST. LOUIS: PAGE ONE ECON. (Sept. 2020), <https://research.stlouisfed.org/publications/page1-econ/2020/08/10/covid-19s-effects-on-the-economy-and-the-feds-response> (explaining how the Federal Reserve's lending facilities helped “unfreeze” the financial markets).

<sup>180</sup> For a discussion of short-term creditor runs during the 2008 crisis, see MORGAN RICKS, *THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION* 93–101 (2016).

<sup>181</sup> See Rey Mashayekhi, *Big Banks' Trading Revenues Soar 30% Amid Coronavirus-Related Stock Market Volatility*, FORTUNE (Apr. 20, 2020, 3:13 PM), <https://fortune.com/2020/04/20/coronavirus-big-banks-trading-stock-market-volatility/> (“Trading revenues at the ‘big five’ U.S. banks—Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase, and Morgan Stanley—swelled 30% in the first quarter of the year . . .”).

<sup>182</sup> See CARES Act §1102(a), 134 Stat. at 286 (codified at 15 U.S.C. § 636(a)) (describing what types of businesses qualify as a small business under the Act and the maximum amount of loan relief they could obtain).

<sup>183</sup> *Id.* §1102(a)(1)(F), 134 Stat. at 290 (codified at 15 U.S.C. § 636(a)(36)(F)). Congress re-  
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<sup>184</sup> See Siobhan Hughes et al., *What's in the \$2 Trillion Senate Coronavirus Bill*, WALL ST. J. (Mar. 26, 2020), <https://www.wsj.com/articles/whats-in-the-2-trillion-senate-coronavirus-bill-11585185450> (discussing federal stimulus checks and unemployment benefits); see also

borrower defaults on outstanding loans and mitigated the extent of banks' COVID-related write-downs.<sup>185</sup> According to a Federal Reserve Bank of Minneapolis study, the government's fiscal support programs shielded banks from as much as \$300 billion in loan losses that otherwise would have depleted their capital cushions.<sup>186</sup>

Finally, the federal government propped up the financial system by deputizing banks to administer COVID relief efforts. Most notably, policymakers tasked banks with processing loan applications and disbursing funds for the PPP.<sup>187</sup> In exchange, banks earned fees ranging from 1% to 5%, depending on the size of a loan.<sup>188</sup> In total, banks reaped an estimated \$24 billion in fees from administering the first round of PPP loans.<sup>189</sup> Because PPP loans were fully guaranteed by the Small Business Administration, issuing banks faced no credit risk from potential borrower defaults.<sup>190</sup> Meanwhile, the Federal Reserve agreed to lend to participating banks and accept PPP loans as collateral to ensure

Matthew Dalton & AnnaMaria Andriotis, *Consumers, Flush With Stimulus Money, Shun Credit-Card Debt*, WALL ST. J. (Aug. 2, 2020, 9:00 AM), <https://www.wsj.com/articles/consumers-flush-with-stimulus-money-shun-credit-card-debt-11596373201> (noting the decline in credit card delinquencies after federal stimulus payments).

<sup>185</sup> See Philip van Doorn, *Big U.S. Banks' Day of Reckoning is Delayed*, MARKETWATCH (Oct. 24, 2020, 9:28 AM), <https://www.marketwatch.com/story/big-us-banks-day-of-reckoning-is-delayed-2020-10-22> ("Stimulus from the federal government and Federal Reserve help[ed] banks put off big losses[.]").

<sup>186</sup> Ron J. Feldman & Jason Schmidt, *Government Fiscal Support Protected Banks from Huge Losses During the COVID-19 Crisis*, FED. RSRV. BANK OF MINNEAPOLIS (May 26, 2021), <https://www.minneapolisfed.org/article/2021/government-fiscal-support-protected-banks-from-huge-losses-during-the-covid-19-crisis>; see also Neel Kashkari, *Banks Cannot Expect Government to Bail Them Out of Every Crisis*, FIN. TIMES (June 28, 2021), <https://www.ft.com/content/760f8a05-d5be-4066-8f3d-802d78c33bce> (noting that the study's estimated \$100 to \$300 billion in losses is "probably on the low side because, without aggressive government support, it is unlikely that the economy would be recovering nearly as quickly" and possible that "banks might still be facing losses").

<sup>187</sup> See Business Loan Program Temporary Changes; Paycheck Protection Program, 85 Fed. Reg. 20,811, 20,815 (Apr. 15, 2020) (listing entities eligible to administer PPP loans).

<sup>188</sup> *Id.* at 20,816.

<sup>189</sup> See David Benoit & Peter Rudegeair, *Banks Could Get \$24 Billion in Fees From PPP Loans*, WALL ST. J. (July 7, 2020, 11:07 AM), <https://www.wsj.com/articles/banks-could-get-24-billion-in-fees-from-ppp-loans-11594134444> ("In total, the more than 4,000 lending institutions in the analysis are in line to split \$14.3 billion to \$24.6 billion in processing fees for PPP loans . . .").

<sup>190</sup> Business Loan Program Temporary Changes; Paycheck Protection Program, 85 Fed. Reg. at 20,812.

that a bank's participation in the PPP did not create liquidity pressure.<sup>191</sup> Thus, the government's decision to funnel COVID relief through the banking system generated substantial fee income for banks with negligible commensurate risk.<sup>192</sup>

*2. Relaxation of Regulatory Requirements.* In addition to injecting unprecedented sums of money into the economy, policymakers also supported the banking system by relaxing or outright waiving various regulatory requirements. In response to the COVID-19 pandemic, the federal banking agencies loosened capital requirements for both large and small banks, weakened liquidity rules, waived accounting standards, suspended affiliate transaction limits, and relaxed mortgage-underwriting guidelines. Policymakers generally justified these actions on the ground that they would facilitate the flow of credit to households and businesses.<sup>193</sup> Taken together, however, this flurry of deregulatory activity rolled back many key Dodd-Frank safeguards. Gradually easing restrictions during times of stress is fully consistent with

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<sup>191</sup> See Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Takes Additional Actions to Provide Up To \$2.3 Trillion in Loans to Support the Economy (Apr. 9, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm> (announcing that the Paycheck Protection Program Liquidity Facility would extend credit to banks that originate PPP loans).

<sup>192</sup> To be sure, the argument here is not that the government's use of the financial system as a lending intermediary was unjustified but simply that it was structured in a way that provided a windfall to the banking sector. See Todd Baker & Kathryn Judge, *How to Help Small Businesses Survive COVID-19*, at 2 (Columbia Univ. Sch. of L., Ctr. for L. & Econ. Stud., Working Paper No. 620, 2020), [https://scholarship.law.columbia.edu/faculty\\_scholarship/2639/](https://scholarship.law.columbia.edu/faculty_scholarship/2639/) ("The government lacks the means to provide full support to all of the people and businesses that will suffer; so . . . it must consider how best to leverage the money it is investing to get the economy back on track . . . Banks and other lenders . . . can help.").

<sup>193</sup> See, e.g., Joint Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Fed. Deposit Ins. Corp. & Off. of the Comptroller of the Currency, Regulators Temporarily Change the Supplementary Leverage Ratio to Increase Banking Organizations' Ability to Support Credit to Households and Businesses in Light of the Coronavirus Response (May 15, 2020) [hereinafter May 15 Joint Press Release], <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200515a.htm> (stating that changes to the supplementary leverage ratio would allow depository institutions to continue providing credit to households and businesses); see also Regulatory Capital Rule: Temporary Exclusion of U.S. Treasury Securities and Deposits at Federal Reserve Banks from the Supplementary Leverage Ratio for Depository Institutions, 85 Fed. Reg. 32,980, 32,984 (June 1, 2020) ("If depository institutions become constrained by supplementary leverage ratio requirements, this could adversely affect their ability to intermediate in financial markets and hamper their ability to provide credit to households and businesses.").

countercyclical logic. In this case, however, relaxing limits during the pandemic unduly intensified the financial sector's fragility because policymakers had failed to strengthen safeguards countercyclically during the record-setting expansion of the 2010s.

In one of their first actions in response to the pandemic, the federal banking agencies eased capital requirements for the United States' largest banks.<sup>194</sup> After the 2008 crisis, the banking agencies established a supplementary leverage ratio (SLR) requirement of 3%—calculated as capital divided by total assets—for banks with more than \$250 billion in assets.<sup>195</sup> When the pandemic hit, however, the agencies weakened this requirement by allowing banks to exclude cash and Treasury securities from their SLR denominator until the second quarter of 2021.<sup>196</sup> In practice, this

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<sup>194</sup> See Regulatory Capital Rule: Temporary Exclusion of U.S. Treasury Securities and Deposits at Federal Reserve Banks from the Supplementary Leverage Ratio for Depository Institutions, 85 Fed. Reg. 32,980, 32,982 (June 1, 2020) (codified in scattered sections of 12 C.F.R.) (altering leverage requirements for banks “[i]n response to volatility and market strains” in order “to support market functioning and the flow of credit to the economy”).

<sup>195</sup> See 12 C.F.R. §217.10(a)(1)(v) (2021) (stating that the minimum capital requirements for Category III Board-regulated institutions include a SLR of 3%); *id.* § 217.2 (defining a Category III Board-regulated institution as one that has \$250 billion in assets or more).

The SLR differed from the United States' pre-crisis leverage ratio because it required banks to recognize off-balance sheet exposures, such as derivatives, in the ratio's denominator. See Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule, 78 Fed. Reg. 62,018, 62,031–33 (Oct. 11, 2013) (codified in scattered sections of 12 C.F.R.) (“[T]he agencies believe that total leverage exposure should include banking organizations' off-balance sheet exposures . . .”).

<sup>196</sup> See Regulatory Capital Rule: Temporary Exclusion of U.S. Treasury Securities and Deposits at Federal Reserve Banks from the Supplementary Leverage Ratio for Depository Institutions, 85 Fed. Reg. at 32,982–83 (“For purposes of reporting the [SLR] as of June 30, 2020, an electing depository institution may reflect the exclusion of Treasuries and deposits at Federal Reserve Banks from total leverage exposure . . .”). As with many pandemic-related regulatory rollbacks, the agencies couched this move as an effort to enhance banks' ability to lend to households and businesses. See, e.g., May 15 Joint Press Release, *supra* note 193 (explaining that the changes to the SLR because of the Coronavirus will “provide flexibility to certain depository institutions to expand their balance sheets in order to provide credit to households and businesses”). As some commentators have noted, however, the exclusion of cash and Treasury securities from banks' SLR denominator may have the opposite effect. See, e.g., GREGG GELZINIS, CTR. FOR AM. PROGRESS, BANK CAPITAL AND THE CORONAVIRUS CRISIS 10–13 (2020), [https://cf.americanprogress.org/wp-content/uploads/2020/05/Banking-Capital.pdf?\\_ga=2.63708396.2119495594.1642907645-](https://cf.americanprogress.org/wp-content/uploads/2020/05/Banking-Capital.pdf?_ga=2.63708396.2119495594.1642907645-)

carve-out permitted the United States' largest bank holding companies to reduce their capital levels by up to \$76 billion.<sup>197</sup>

Policymakers also granted small banks relief from their capital requirements. In 2018, Congress exempted any community bank with less than \$10 billion in assets from complex risk-based capital requirements if the bank satisfied a “community bank leverage ratio” (CBLR) between 8 and 10%.<sup>198</sup> The federal banking agencies initially fixed the CBLR at 9%.<sup>199</sup> When the COVID-19 pandemic hit, however, Congress temporarily lowered the CBLR to 8% through the end of 2020.<sup>200</sup> The federal banking agencies later extended CBLR relief through 2021.<sup>201</sup>

In addition to capital requirements, the federal banking agencies also weakened bank liquidity safeguards. In March 2020, the Federal Reserve permanently eliminated the requirement that depository institutions maintain a minimum quantity of reserves at the central bank.<sup>202</sup> This rule change freed 2,500 depository institutions from keeping \$150 billion in Federal Reserve accounts to satisfy reserve requirements.<sup>203</sup> While this reform ultimately had

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1910003458.1642907645 (criticizing the SLR exclusion and proposing alternative measures that may have been effective at achieving the same goals). Indeed, by reducing the capital impact of holding cash and Treasury securities relative to loans, the SLR exclusion actually incentivizes banks to hold more of these assets while engaging in relatively less lending. *See id.* at 12 (explaining that the exemption of cash and Treasury securities “made those assets more financially attractive for banks than before,” which made lending to those institutions “more expensive in relation to these exempted assets”).

<sup>197</sup> *See* Temporary Exclusion of U.S. Treasury Securities and Deposits at Federal Reserve Banks from the Supplementary Leverage Ratio, 85 Fed. Reg. 20,578, 20,580 n.8 (Apr. 14, 2020) (codified at 12 C.F.R. pt. 217 (2021)) (“The interim final rule would reduce the amount of tier 1 capital required to meet the [SLR] ratio requirements by around \$76 billion at holding companies.”).

<sup>198</sup> Kress & Turk, *supra* note 55, at 688. For background on the CBLR, see *id.* at 686–91.

<sup>199</sup> Regulatory Capital Rule: Capital Simplification for Qualifying Community Banking Organizations, 84 Fed. Reg. 61,776, 61,780 (Nov. 13, 2019) (codified in scattered sections of 12 C.F.R.).

<sup>200</sup> Coronavirus Aid, Relief, and Economic Security (CARES) Act, Pub. L. No. 116-136, § 4012(b), 134 Stat. 281, 479 (2020) (to be codified at 15 U.S.C. § 9050).

<sup>201</sup> *See* Regulatory Capital Rule: Transition for the Community Bank Leverage Ratio Framework, 85 Fed. Reg. 22,930, 22,932 (Apr. 23, 2020) (codified in scattered sections of 12 C.F.R.) (setting the CBLR at 8.5% for the 2021 calendar year).

<sup>202</sup> *See* Regulation D: Reserve Requirements of Depository Institutions, 85 Fed. Reg. 16,525, 16,525 (Mar. 24, 2020) (codified at 12 C.F.R. pt. 204 (2021)) (“[T]he Board has determined to reduce the reserve requirement ratios to zero percent . . .”).

<sup>203</sup> *Id.*

minimal practical effect because the financial system remained flush with liquidity due to the government interventions (as discussed in Section IV.A.1), this outcome was not certain at the outset.

More consequentially, policymakers overhauled accounting standards to shield banks from recognizing losses on their loans. In March 2020, the federal banking agencies encouraged financial institutions to modify loans for borrowers affected by COVID-19 by announcing that any such modified loan would not be classified as a troubled debt restructuring and therefore would not be subject to adverse regulatory or supervisory treatment.<sup>204</sup> Later that month, the CARES Act delayed the scheduled implementation of the CECL accounting methodology through the end of 2020, which would have required a bank to recognize anticipated losses when it makes a loan rather than when those losses become reasonably certain.<sup>205</sup> The banking agencies later delayed CECL's implementation for an additional two years.<sup>206</sup>

In addition, regulators relaxed longstanding limits on affiliate transactions, thereby allowing financial conglomerates to move billions of dollars of risky exposures into their federally-insured banks.<sup>207</sup> After banks incurred losses on preferential loans to their affiliates during the Great Depression, Congress enacted Section 23A of the Federal Reserve Act to protect federally-insured depository institutions by restricting transactions with their

<sup>204</sup> See Press Release, Bd. of Governors of the Fed. Rsrv. Sys. et al., Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus 2–3 (Mar. 22, 2020), <https://www.fdic.gov/news/press-releases/2020/pr20038a.pdf> (announcing new treatment of modified loans).

<sup>205</sup> CARES Act § 4014, 134 Stat. at 481 (providing temporary delay of CECL standards); see also *supra* Section III.B (discussing CECL methodology).

<sup>206</sup> See Joint Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Fed. Deposit Ins. Corp. & Off. of the Comptroller of the Currency, Agencies Announce Two Actions to Support Lending to Households and Businesses (Mar. 27, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200327a.htm> (“Banking organizations that are required under U.S. accounting standards to adopt CECL this year can mitigate the estimated cumulative regulatory capital effects for up to two years.”). For additional discussion of the CECL accounting methodology and its potential countercyclical benefits, see *infra* Section IV.B.

<sup>207</sup> See, e.g., Dave Michaels, *Goldman Steps in to Shore up Two Money Funds*, WALL ST. J. (Mar. 24, 2020, 5:30 AM), [https://www.wsj.com/articles/goldman-steps-in-to-shore-up-two-money-funds-11585042200?mod=hp\\_lead\\_pos4](https://www.wsj.com/articles/goldman-steps-in-to-shore-up-two-money-funds-11585042200?mod=hp_lead_pos4) (reporting financial conglomerates utilizing relaxed limits in the spring of 2020).

affiliates.<sup>208</sup> When financial conglomerates' broker-dealer and MMMF affiliates began experiencing distress in March 2020, however, the Federal Reserve issued temporary exemptions to Section 23A, permitting banks to purchase assets from their affiliates.<sup>209</sup> These exemptions mirrored similar regulatory relief the Federal Reserve granted during the 2008 crisis.<sup>210</sup> This time, financial companies including Goldman Sachs, Bank of New York Mellon, and PNC Financial Services took advantage of Section 23A exemptions to move billions of dollars of risk from their broker-dealer and MMMF affiliates into their federally-insured banks.<sup>211</sup>

Lastly, policymakers relaxed banks' mortgage origination requirements. For example, Fannie Mae and Freddie Mac—the government-sponsored mortgage giants—eased guidelines concerning lending standards, such as income verification for home

<sup>208</sup> 12 U.S.C. § 371c; Saule T. Omarova, *From Gramm-Leach-Bliley to Dodd-Frank: The Unfulfilled Promise of Section 23A of the Federal Reserve Act*, 89 N.C. L. REV. 1683, 1692–95 (2011) (“Congress enacted section 23A of the Federal Reserve Act in 1933, in response to one of the perceived causes of the banking crisis of the early 1930s: preferential loans banks made to their affiliates.”).

<sup>209</sup> See Template Letter from Ann E. Misback, Sec’y, Bd. of Governors of the Fed. Rsrv. Sys. (Mar. 18, 2020), <https://www.federalreserve.gov/supervisionreg/legalinterpretations/fedreserseactint20200318.pdf> (issuing temporary exemptions from Section 23A for the “purchase [of] certain assets from affiliated broker-dealers”); Template Letter from Ann E. Misback, Sec’y, Bd. of Governors of the Fed. Rsrv. Sys. (Mar. 17, 2020), <https://www.federalreserve.gov/supervisionreg/legalinterpretations/fedreserseactint20200317.pdf> (issuing temporary exemptions from Section 23A for the “purchase [of] certain assets from affiliated money market mutual funds”). In addition, the Securities and Exchange Commission temporarily waived its Rule 17a-9, which would have restricted a bank’s purchase of assets from its MMMF affiliate. See Letter from Thoreau Bartmann, Senior Special Couns., U.S. Sec. & Exch. Comm’n, to Susan Olson, Inv. Co. Inst. (Mar. 19, 2020), <https://www.sec.gov/investment/investment-company-institute-031920-17a> (declining to recommend an enforcement action to the SEC under Rule 17a-9 on a temporary basis due to the COVID-19 outbreak).

<sup>210</sup> As Professor Saule Omarova wrote, during the 2008 crisis, the Federal Reserve “granted numerous financial institutions exemptions from . . . section 23A in order to prevent the failure of their nonbank businesses and to avert broader market dislocations, even though such emergency measures contradicted the fundamental policy goals behind section 23A.” Omarova, *supra* note 208, at 1729.

<sup>211</sup> See, e.g., Letter from Ann E. Misback, Sec’y, Bd. of Governors of the Fed. Rsrv. Sys., to Joseph M. Otting, Comptroller, Off. of the Comptroller of the Currency (Mar. 25, 2020), <https://www.federalreserve.gov/supervisionreg/legalinterpretations/fedreserseactint20200325.pdf> (granting PNC Bank’s request for Section 23A exemption); Michaels, *supra* note 207 (reporting various banks using new exemptions “to shore up . . . [MMFs] after the Federal Reserve created a backstop to stem a wave of investor redemptions from the products”).

mortgages.<sup>212</sup> Similarly, the Consumer Financial Protection Bureau delayed reporting requirements for home lenders that would otherwise need to disclose data on borrowers' ability to repay their mortgages under Dodd-Frank.<sup>213</sup>

In sum, policymakers responded to the COVID-19 pandemic by granting banks relief from key financial safeguards, including many that had been adopted just a decade earlier in Dodd-Frank. Of course, relaxing regulatory requirements in reaction to an economic crisis is perfectly consistent with countercyclical logic.<sup>214</sup> In this case, however, aggressive regulatory relief was unduly costly because policymakers failed to use countercyclical tools during the economic expansion that preceded the pandemic, as the next Section explains.

## B. LESSONS FOR COUNTERCYCLICAL REGULATION

The COVID-19 pandemic revealed two valuable lessons for countercyclical financial regulation. First, the pandemic and subsequent recession exposed weaknesses in the post-2008 regulatory framework. Although Dodd-Frank promised a countercyclical regulatory approach, the federal banking agencies did not follow through, leaving the financial system unprotected when the pandemic emerged. Second, the agencies' failure to implement meaningful countercyclical rules necessitated costly federal subsidies to prop up the banking sector throughout the pandemic. These subsidies will not only burden future U.S. taxpayers but also exacerbate the problem of moral hazard and thereby threaten the stability of the financial system going forward.

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<sup>212</sup> See Holly Spencer Bunting, Christopher G. Smith & Kelly F. Truesdale, *Origination in the Era of COVID-19: The GSEs, FHA, and VA Issue Guidance for Appraisals and Income Verification*, MAYER BROWN (Apr. 7, 2020), <https://www.mayerbrown.com/en/perspectives-events/publications/2020/04/origination-in-the-era-of-covid-19--the-gses-fha-and-va-issue-guidance-for-appraisals-and-income-verification> (describing how the government-sponsored enterprises temporarily relaxed standards early in the COVID-19 pandemic).

<sup>213</sup> See Press Release, Consumer Fin. Prot. Bureau, CFPB Provides Flexibility during COVID-19 Pandemic (Mar. 26, 2020), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-provides-flexibility-during-covid-19-pandemic/> ("The Bureau is postponing some data collections from industry on Bureau-related rules to allow companies to focus on responding to consumers in need and making changes to its supervisory activities to account for operational challenges at regulated entities.").

<sup>214</sup> See *supra* notes 7 & 60 and accompanying text.

This Section examines the shortcomings of Dodd-Frank's countercyclical framework and the long-term costs that the failed countercyclical approach will impose on the U.S. financial system.

1. *Countercyclical Regulation's Unfulfilled Promise.* Policymakers' failure to enact effective countercyclical financial regulation in the aftermath of the 2008 crisis was a critical missed opportunity to cushion the COVID-19 pandemic's effects on the U.S. financial system. Despite an emerging consensus that Dodd-Frank prevented widespread bank failures during the pandemic,<sup>215</sup> the post-2008 regulatory framework in fact fell short, as evidenced by the numerous government interventions that buoyed the financial system. A strong countercyclical framework, by contrast, could have obviated the need for many of the emergency policy interventions that kept the U.S. financial system functioning during the pandemic.

As the COVID-19 virus spread throughout the United States, so too did a narrative that Dodd-Frank and other post-crisis regulations protected the financial system from collapse. Federal Reserve Vice Chair for Supervision Randal Quarles, for example, declared that although "[t]he COVID event precipitated the most abrupt decline in U.S. and global economic activity in recorded history[,] . . . the banking system remained resilient."<sup>216</sup> Quarles also proclaimed that the banking system, "[s]trengthened by a decade of improvements in capital, liquidity, and risk management, . . . became an important shelter from financial distress."<sup>217</sup> Economists Viral Acharya and Sascha Steffen likewise concluded that "it is a testament to the success of the post-[2008] reforms . . . that the present levels of capitalisation . . . appear adequate to deal

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<sup>215</sup> See, e.g., Julia Giese & Andy Haldane, *COVID-19 and the Financial System: A Tale of Two Crises*, 36 OXFORD REV. ECON. POL'Y S200, S201 (2020) ("[R]esponses to the global financial crisis [of 2008] left the financial system much better-equipped to cope with the COVID crisis while offering support to the wider economy.").

<sup>216</sup> Randal K. Quarles, Vice Chair for Supervision, Bd. of Governors of the Fed. Rsrv. Sys., Remarks at the Institute of International Finance: What Happened? What Have We Learned from It? Lessons from COVID-19 Stress on the Financial System 11 (Oct. 15, 2020), <https://www.federalreserve.gov/newsevents/speech/files/quarles20201015a.pdf>.

<sup>217</sup> Randal K. Quarles, Vice Chair for Supervision, Bd. of Governors of the Fed. Rsrv. Sys., Statement Before the U.S. Senate Committee on Banking, Housing, and Urban Affairs 1 (Nov. 10, 2020), <https://www.federalreserve.gov/newsevents/testimony/files/quarles20201110.pdf>.

with liquidity stress . . . in line with the past two recessions or the global financial crisis.”<sup>218</sup>

This emerging conventional wisdom represents a false triumphalism, though. Put simply, the financial system has not remained stable because banks were sufficiently well-capitalized on the eve of the COVID-19 recession. If that were the case, there would have been no need for federal regulators to ratchet down capital and liquidity requirements below previously applicable levels. Likewise, it would have been unnecessary for the Treasury Department and Federal Reserve to open emergency credit facilities and buy up mortgage-backed securities—at least not at the scale that those operations have taken thus far. Nor would it have been necessary for policymakers to delay the recognition of banks’ losses under existing accounting standards. The conventional wisdom, in sum, overlooks the severe weaknesses that the banking system exhibited during the pandemic and the extraordinary government support that propped up the entire financial sector.

Indeed, the U.S. financial system has failed the COVID-19 stress test in a literal sense, due in part to the banking agencies’ failure to follow through with implementing countercyclical policies. The Federal Reserve is required to run annual stress tests on large financial institutions.<sup>219</sup> The 2020 test was sobering. When the Federal Reserve released its stress test results that June, it reported that, in the absence of emergency funding assistance from the federal government, nearly a quarter of large U.S. banks would breach their minimum capital requirements in a double-dip recession.<sup>220</sup> This finding stood in stark contrast to the 2019 stress test results, which prompted regulators to conclude that the

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<sup>218</sup> Viral Acharya & Sascha Steffen, ‘*Stress Tests*’ for Banks as Liquidity Insurers in a Time of COVID, VOXEU (Mar. 22, 2020), <https://voxeu.org/article/stress-tests-banks-liquidity-insurers-time-covid>.

<sup>219</sup> See Dodd-Frank Wall Street Reform and Consumer Protection (Dodd-Frank) Act, Pub. L. No. 111-203, § 165(i), 124 Stat. 1376, 1430 (2010) (codified at 12 U.S.C. § 5365(i)) (directing the Federal Reserve to conduct stress tests to assess whether banks maintain capital levels “necessary to absorb losses as a result of adverse economic conditions”).

<sup>220</sup> See BD. OF GOVERNORS OF THE FED. RSRV. SYS., DODD-FRANK ACT STRESS TEST 2020: SUPERVISORY STRESS TEST RESULTS 24 (2020), <https://www.federalreserve.gov/publications/files/2020-dfast-results-20200625.pdf> (showing eight of the thirty-three analyzed firms breaching the minimum requirement in a “severely adverse scenario”).

banking system was well prepared to withstand even a severe adverse turn in macroeconomic conditions.<sup>221</sup>

A major culprit in this outcome was policymakers' failure to implement meaningful countercyclical regulatory rules, as envisioned under Dodd-Frank. If policymakers had activated countercyclical tools during the historic economic expansion of the 2010s, the U.S. financial system would have been more resilient when the pandemic emerged, and some government interventions might have been avoided. Community bank capital requirements are one clear example. When policymakers reduced the CBLR from 9% to 8%, the goal was to ensure that small banks would not be forced to pull back on lending or engage in asset fire sales if they approached the regulatory floor.<sup>222</sup> But if policymakers had raised the CBLR in countercyclical fashion during the past decade of economic expansion—say, from 9% to 10%—there would have been more room to ratchet down regulatory minimums in 2020 without leaving small banks exposed to the risks of a more thinly capitalized balance sheet.<sup>223</sup> The Federal Reserve's refusal to activate the CCyB is yet another example. If the central bank had turned on the CCyB—as many other central banks did—policymakers could have deactivated the CCyB when the pandemic hit rather than weakening the SLR.<sup>224</sup>

Some observers have wrongly contended that activating countercyclical tools in the lead-up to the COVID-19 pandemic would have had minimal salutary effects. These commentators express concern about the “usability” of countercyclical buffers; they believe that banks may be reluctant to deploy excess capital, even after the countercyclical trigger is lifted, due to potential negative

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<sup>221</sup> See Randall K. Quarles, Vice Chair for Supervision, Bd. of Governors of the Fed. Rsrv. Sys., *Stress Testing: A Decade of Continuity and Change 1* (July 9, 2019), <https://www.federalreserve.gov/newsevents/speech/files/quarles20190709a.pdf> (“[O]ur financial system remains resilient . . . . The largest and most complex banks were tested against a severe hypothetical recession and retained strong capital levels, well above their minimum requirements. They demonstrated the ability to withstand a severe and lasting economic downturn and still be able to lend to households and businesses.”).

<sup>222</sup> See *supra* notes 200–201 and accompanying text.

<sup>223</sup> See Kress & Turk, *supra* note 55, at 712 (urging policymakers to increase the CBLR to 10%).

<sup>224</sup> For a discussion of the relaxation of the SLR, see *supra* notes 195–197.

responses by regulators or investors.<sup>225</sup> Federal Reserve Vice Chair Randal Quarles, for example, has noted that foreign banks in countries that activated their CCyBs generally did not deploy excess capital even after the relevant authorities deactivated the buffer requirement in early 2020.<sup>226</sup> This critique, however, misunderstands one of the essential purposes of the CCyB. The extra buffer provided by the CCyB is a critical cushion against losses—losses that, fortunately, were largely averted during the pandemic.<sup>227</sup> Banks would have “used” their countercyclical buffers to absorb losses while continuing to lend if governments around the world had not stepped in with extraordinary fiscal and monetary support. The fact that banks generally did not dip into their buffers during the pandemic should not be interpreted as an indictment of countercyclical capital policy.

All of this is not to say that an effective countercyclical approach would have completely alleviated the need for government interventions in the financial system as the pandemic spread. Indeed, even with strong countercyclical measures aimed at dampening regular fluctuations in the economic cycle, the financial system might not have been prepared to withstand a global pandemic on its own.<sup>228</sup> Nonetheless, policymakers’ failure to follow through on Dodd-Frank’s countercyclical promise was a major missed opportunity to mitigate the effects of the COVID-19 pandemic on financial markets.

2. *The Costs of Inadequate Countercyclical Adjustments.* The COVID-19 pandemic exposed the deleterious consequences of policymakers’ failure to enact countercyclical policies during the

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<sup>225</sup> See Alice Abboud et al., *COVID-19 as a Stress Test: Assessing the Bank Regulatory Framework* 15–16 (Fed. Rsv. Bd. Fin. & Econ. Discussion Series, Working Paper No. 2021-024, 2021), <https://www.federalreserve.gov/econres/feds/files/2021024pap.pdf> (“[L]arge banks, both domestic and foreign, have shown considerable reluctance to lower their capital levels below these buffers . . . . One potential reason for this is that banks may be quite concerned about the response of investors and other market participants to their capital level falling below their buffer requirement . . .”).

<sup>226</sup> See Hannah Lang, *Fed Official Backs Using Capital Buffer to Reduce Impact of Future Crises*, AM. BANKER (Apr. 12, 2021, 2:35 PM), <https://www.americanbanker.com/news/fed-official-backs-using-capital-buffer-to-reduce-impact-of-future-crises> (“When you look at some of those other jurisdictions that were in a position to have turned on their countercyclical capital buffer going into this stress and then turned it down, it didn’t actually prove to be that useful in creating the space for those institutions to continue to lend through the crisis.”).

<sup>227</sup> See *supra* notes 171–172 and accompanying text.

<sup>228</sup> See *supra* notes 119, 185–186 and accompanying text.

economic expansion of the 2010s. Fortunately, the U.S. banking system appears to have withstood the pandemic despite policymakers' shortsightedness.<sup>229</sup> Nonetheless, the banking agencies' failure to enact countercyclical policies has inflicted long-lasting damage. Indeed, the absence of effective countercyclical financial regulation has created direct fiscal costs, increased the fragility of the financial system, and magnified long-term moral hazard.<sup>230</sup>

First, ineffectual countercyclical regulation during the economic expansion of the 2010s may have required policymakers to inject more fiscal and monetary support than otherwise would have been necessary when the COVID-19 pandemic hit. The U.S. budget deficit reached a record \$3.1 trillion in 2020, with roughly two-thirds of that figure resulting from emergency outlays under the CARES Act and other pandemic relief programs.<sup>231</sup> To be sure, the COVID pandemic likely would have necessitated fiscal support to households and businesses even if policymakers had activated countercyclical tools prior to the outbreak. The government's fiscal interventions, however, could have been more limited in size if the banking system had been better equipped to extend credit despite the economic downturn.

Another relatively direct cost emerged from the Federal Reserve, which expanded its balance sheet at a record pace in response to COVID-19. From the start of the pandemic to the end of 2020, the central bank nearly doubled its balance sheet with open market purchases totaling more than \$3 trillion.<sup>232</sup> Some of these purchases

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<sup>229</sup> BD. OF GOVERNORS OF THE FED. RSRV. SYS., SUPERVISION AND REGULATION REPORT: NOVEMBER 2020, at 1 (2020), <https://www.federalreserve.gov/publications/files/202011-supervision-and-regulation-report.pdf> ("Unlike 2008, banking organizations have been a source of strength, rather than strain, to the economy . . .").

<sup>230</sup> See *supra* notes 29–31 and accompanying text; *infra* note 238 and accompanying text.

<sup>231</sup> Alan Rappaport, *Budget Deficit Hits Record \$3.1 Trillion*, N.Y. TIMES (Jan. 20, 2021), <https://www.nytimes.com/live/2020/10/16/business/us-economy-coronavirus>.

<sup>232</sup> *Credit and Liquidity Programs and the Balance Sheet: Recent Balance Sheet Trends*, BD. OF GOVERNORS OF THE FED. RSRV. SYS., [https://www.federalreserve.gov/monetarypolicy/bst\\_recenttrends.htm](https://www.federalreserve.gov/monetarypolicy/bst_recenttrends.htm) (last updated Jan. 21, 2022) (showing a stark jump in the Federal Reserve's balance sheet from just over \$4 trillion to around \$7 trillion beginning in March 2020); Jordan Jackson, *The Fed's Balance Sheet: To Infinity and Beyond*, J.P. MORGAN ASSET MGMT. (May 30, 2020), <https://am.jpmorgan.com/au/en/asset-management/adv/insights/market-insights/market-bulletins/the-feds-balance-sheet-to-infinity-and-beyond/> ("The scale and timing of monetary stimulus from the Federal Reserve (the Fed) in recent weeks has dwarfed its response during the Global Financial Crisis.").

involved unusually risky assets, such as corporate junk bonds.<sup>233</sup> Open market purchases on such a scale also create distortions in the pricing of debt and capital markets.<sup>234</sup> The rapid expansion of the Federal Reserve's balance sheet represents one of its grander policy experiments to date, with uncertain implications for the future course of monetary policy and economic growth.<sup>235</sup> The Federal Reserve's aggressive interventions have also reopened questions into the central bank's democratic legitimacy, political accountability, and technocratic expertise.<sup>236</sup>

In addition, inadequate countercyclical regulation increased the fragility of the financial system throughout 2020. The U.S. Office of Financial Research Financial Stress Index—a measure of stress in global financial markets—peaked in March 2020 at a level

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<sup>233</sup> *The Fed's Radical Policies Are Uncharted Territory*, FIN. TIMES (Apr. 9, 2020), <https://www.ft.com/content/70a0d2ca-7987-11ea-af44-daa3def9ae03> (“Purchases of corporate credit and commercial paper already moved the Fed into uncharted territory. The decision to buy junk debt is even more radical.”).

<sup>234</sup> See Michael Mackenzie, *The Federal Reserve Has Gone Well Past the Point of 'QE Infinity'*, FIN. TIMES (Mar. 23, 2020), <https://www.ft.com/content/11b338a2-6d0c-11ea-89df-41bea055720b> (“One way of looking at this is to note that the Fed has joined [other central banks] in supporting credit markets. Viewed another way, it complicates any future exit strategy and extends a long post-Lehman crisis legacy of distorted risk premia in markets.”); cf. MKTS. COMM., BANK FOR INT'L SETTLEMENTS, *LARGE CENTRAL BANK BALANCE SHEETS AND MARKET FUNCTIONING*, 1 (2019), <https://www.bis.org/publ/mkts11.pdf> (noting that “[w]hile adverse effects” of central bank balance sheet expansions “have often been transitory, they can have an enduring impact when policies are in place for a prolonged period”).

<sup>235</sup> See *The Fed's Radical Policies Are Uncharted Territory*, *supra* note 233 (discussing the unprecedented nature of the Federal Reserve's recent interventions).

<sup>236</sup> See Menand, *supra* note 171, at 27–28, 55 (contesting the Federal Reserve's legal authority to conduct emergency lending programs); Peter Conti-Brown & David A. Wishnick, *Technocratic Pragmatism, Bureaucratic Expertise, and the Federal Reserve*, 130 YALE L.J. 636, 683–86 (2021) (questioning whether the Federal Reserve's policy experimentation during the COVID-19 pandemic tested the outer limits of its institutional expertise); Zaring, *supra* note 13, at 58–59 (expressing doubt as to the Federal Reserve's legal authority for pandemic-related interventions); Daniel D. Bradlow & Stephen Kim Park, *A Global Leviathan Emerges: The Federal Reserve, COVID-19, and International Law*, 114 AM. J. INT'L L. 657, 662 (2020) (noting “that the Fed is influencing the welfare of people around the world in the absence of any clear international standards or principles”); see also Kathryn Judge, *Why the Fed Should Issue a Policy Framework for Credit Policy* 6–7 (Colum. Univ. Sch. of L., Ctr. for L. & Econ. Stud., Working Paper No. 632, 2020), [https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3720&context=faculty\\_scholarship](https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3720&context=faculty_scholarship) (urging greater transparency in the Federal Reserve's credit policy decision making).

equivalent to when Bear Stearns failed in early 2008.<sup>237</sup> If policymakers had implemented effective countercyclical regulations before the pandemic, they could have relaxed the countercyclical buffers and alleviated some of this financial stress. In the absence of countercyclical buffers, however, policymakers were constrained in their ability to respond to financial stress through regulatory adjustments without compromising the system's stability.

Perhaps most importantly, the 2020 regulatory response intensified the problem of moral hazard in the banking sector. Moral hazard refers to an incentive that insured parties have to increase their exposure to risks when the costs of those risks are borne by third parties.<sup>238</sup> Federal deposit insurance is an explicit source of moral hazard for banks, but the same problem also exists to the extent that banks receive ad hoc government bailouts, such as the TARP program that was used in the 2008 crisis.<sup>239</sup> If a bank's executives think that the bank will be bailed out when it gets into trouble, the decisionmakers will take more risks than if they believe the firm would be allowed to fail.

One of Dodd-Frank's primary objectives was to address this moral hazard problem.<sup>240</sup> The statute's preamble states that the legislation was designed to "to end 'too big to fail', [and] to protect

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<sup>237</sup> *OFR Financial Stress Index*, OFF. OF FIN. RSCH. <https://www.financialresearch.gov/financial-stress-index/> (last visited Jan. 25, 2022).

<sup>238</sup> Moral hazard is particularly relevant for risks that are hard for the insurer to observe and therefore cannot be fairly priced into an insurance contract *ex ante*. See Bengt Holmström, *Moral Hazard and Observability*, 10 *BELL J. ECON.* 74, 74 (1979) ("The source of this moral hazard or incentive problem is an asymmetry of information among individuals that results because individual actions cannot be observed and hence contracted upon. A natural remedy to the problem is to invest resources into monitoring of actions . . . . Generally, however, full observation of actions is either impossible or prohibitively costly.").

<sup>239</sup> See John Crawford, *The Moral Hazard Paradox of Financial Safety Nets*, 25 *CORNELL J.L. & PUB. POL'Y* 95, 103–19 (2015) (analyzing moral hazard from both deposit insurance and ad hoc bailouts such as the TARP); see also Kathryn Judge, *Guarantor of Last Resort*, 97 *TEX. L. REV.* 707, 709 (2019) ("How best to fight financial panics is a matter of ongoing debate. On the one hand, concerns about moral hazard abound. When bank depositors and other short-term creditors anticipate government protection, they have little incentive to undertake costly monitoring. This reduces market discipline and can lead to excessive risk taking.").

<sup>240</sup> See Franklin Allen, Elena Carletti, Itay Goldstein & Agnese Leonello, *Moral Hazard and Government Guarantees in the Banking Industry*, 1 *J. FIN. REGUL.* 30, 31 (2015) ("The main goals of the new regulatory framework are to reduce the use of taxpayers' money in the future and limit excessive risk taking, or in other words, moral hazard, resulting from widespread support to the financial system.").

the American taxpayer by ending bailouts.”<sup>241</sup> Dodd-Frank also enacted a set of changes that limit emergency rescues of the financial sector by the federal government.<sup>242</sup> Most notably, Dodd-Frank narrowed the Federal Reserve’s emergency lending powers under Section 13(3) of the Federal Reserve Act, which the central bank used extensively in 2008.<sup>243</sup> Dodd-Frank also cabined the FDIC’s emergency lending authority under its “systemic risk exception,”<sup>244</sup> and the Economic Stabilization Act limited the Treasury Department’s use of its Exchange Stabilization Fund (ESF) to backstop financial markets.<sup>245</sup>

As detailed above, however, policymakers generally circumvented Dodd-Frank’s restrictions to provide emergency aid to the financial sector in 2020.<sup>246</sup> The Federal Reserve once again

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<sup>241</sup> Dodd-Frank Wall Street Reform and Consumer Protection (Dodd-Frank) Act, Pub. L. No. 111-203, 124 Stat. 1376, 1376 (2010).

<sup>242</sup> See Colleen Baker, *The Federal Reserve as Last Resort*, 46 U. MICH. J.L. REFORM 69, 77, 87–90 (2012) (“In sum, Dodd-Frank circumscribed the Federal Reserve’s 13(3) emergency authority while adding several new, significant accountability and transparency requirements for its use.”).

<sup>243</sup> Dodd-Frank Act § 1101, 124 Stat. at 2113 (amending the Federal Reserve’s Section 13 emergency lending authority); see also Alexander Mehra, *Legal Authority in Unusual and Exigent Circumstances: The Federal Reserve and the Financial Crisis*, 13 U. PA. J. BUS. L. 221, 234–60 (2010) (providing an overview of the Federal Reserve’s use of its Section 13(3) lending powers during the 2008 financial crisis).

<sup>244</sup> Dodd-Frank Act §§ 1104–06, 124 Stat. at 2120–25 (codified at 12 U.S.C. §§ 5611–13) (amending 12 U.S.C. § 1823(c)(4)(G)).

<sup>245</sup> See 12 U.S.C. § 5236 (requiring the Treasury Secretary to reimburse the ESF for funds “used for the Treasury Money Market Funds Guaranty Program” and prohibiting “any future guaranty programs for the United States money market mutual fund industry”).

<sup>246</sup> See *supra* Section IV.B.1. In that sense, 2020 is a repeat of the 2008 bailouts, which are sometimes considered to have extended beyond regulators’ existing legal authority. See Cheryl D. Block, *A Continuum Approach to Systemic Risk and Too-Big-to-Fail*, 6 BROOK. J. CORP. FIN. & COM. L. 289, 313 n.117 (2012) (“Certain 2008–2009 Federal Reserve and FDIC actions to assist struggling firms arguably were outside the scope of even their emergency authority.”); Eric A. Posner, *What Legal Authority Does the Fed Need During a Financial Crisis?*, 101 MINN. L. REV. 1529, 1529 (2017) (“During the collapse of Lehman Brothers, the Federal Reserve (Fed) refused to issue an emergency loan because of legal hurdles. However, in the cases of Bear Stearns and AIG, the Fed violated the law, or interpreted it in an extremely narrow way, rather than refraining from the emergency actions that events called for. The Fed and the Department of the Treasury relied on additional questionable legal interpretations for the numerous credit facilities that they established, and in the bailouts of Fannie Mae, Freddie Mac, General Motors, and Chrysler. In many cases, the agencies evaded the law by engaging in elaborate legal maneuvers that obfuscated their actions.”).

exercised its emergency lending authority under Section 13(3).<sup>247</sup> The CARES Act appropriated \$500 billion to the ESF and made those funds eligible for use in the Federal Reserve's liquidity facilities.<sup>248</sup> Meanwhile, the CARES Act authorized the FDIC to trigger its systemic risk exception to backstop bank debt, overriding Dodd-Frank's prohibition.<sup>249</sup>

As a result of these actions, financial markets will now likely perceive federal financial rescues as the norm going forward. According to the logic of moral hazard, this means another round of excessive risk-taking is to be expected in the subsequent cycle of economic expansion. That is, market participants may aggressively invest in emerging asset bubbles in the coming years based on the anticipation that losses on those investments may be socialized through interventions by the Treasury Department, Federal Reserve, FDIC, or Congress when the next recession occurs. Thus, the need for countercyclical regulation, which was already apparent heading into the COVID-19 recession, has become even more urgent after the events of 2020.

## V. MAKING COUNTERCYCLICAL FINANCIAL REGULATION WORK

The COVID-19 pandemic underscored the need for effective countercyclical financial regulation in the United States. Fortunately, new legislation is not necessary to implement countercyclical principles in the U.S. regulatory system. To the contrary, the Dodd-Frank Act and other banking laws already provide a framework for a successful countercyclical approach. The federal banking agencies simply need to use their existing authority to incorporate prudent countercyclical policies.

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<sup>247</sup> See *supra* note 174 and accompanying text; see also JAY B. SYKES, CONG. RSCH. SERV., LSB10435, THE FEDERAL RESERVE'S LEGAL AUTHORITIES FOR RESPONDING TO THE ECONOMIC IMPACTS OF COVID-19, at 1–4 (2020) (discussing the legal basis for the Federal Reserve's actions during the pandemic).

<sup>248</sup> Coronavirus Aid, Relief, and Economic Security (CARES) Act, Pub. L. No. 116-136, §§ 4003, 4027, 134 Stat. 281, 470, 496 (2020) (codified at 15 U.S.C. §§ 9042, 9061); see ANDREW P. SCOTT, MARC LABONTE, RACHEL Y. TANG, BEN WILHELM, CONG. RSCH. SERV., R46329, TREASURY AND FEDERAL RESERVE FINANCIAL ASSISTANCE IN TITLE IV OF THE CARES ACT (P.L. 116-136), at 1–20 (2021) (detailing the financial assistance provided in Section 4003 and related provisions of the CARES Act).

<sup>249</sup> CARES Act § 4008, 134 Stat. at 477 (codified at 12 U.S.C. § 5612) (amending the Dodd-Frank Act to allow the FDIC to launch emergency financial aid programs).

This Part proposes a comprehensive countercyclical regulatory strategy for the United States. It first recommends three principles—automaticity, portfolio strategy, and market-wide coverage—that should guide policymakers’ implementation of countercyclical rules. Applying these principles, it then suggests specific policies that the agencies should adopt to strengthen the countercyclical toolkit discussed in Part II. Taken together, these countercyclical strategies would help to ensure that the United States experiences more sustainable economic expansions and less catastrophic financial collapses in the future.

#### A. PRINCIPLES FOR EFFECTIVE COUNTERCYCLICAL REGULATION

To enhance countercyclicality in financial regulation, policymakers should abide by three principles that they have heretofore neglected. Specifically, an effective countercyclical framework should (1) adjust automatically to correct for policymakers’ bias toward inaction during expansionary periods, (2) include a portfolio of complementary rules to mitigate policymaking uncertainty, and (3) apply market-wide to encompass all financial institutions that might transmit financial instability. This Section explains why these three principles are essential for achieving countercyclicality in the U.S. financial regulatory system and thereby alleviating systemic risks.

1. *Automaticity.* First, countercyclical rules should adjust automatically, when possible, to combat regulatory inertia. Post-2008 legal reforms granted regulators significant discretion to decide when to activate countercyclical tools. This discretion, however, creates the risk that regulators will not activate countercyclical policies even when conditions warrant, such as in the late 2010s. Accordingly, policymakers should embed automatic triggers in countercyclical rules where feasible to ensure that regulatory inertia does not impede effective countercyclical oversight.

In the wake of the 2008 crisis, U.S. policymakers entrusted too many countercyclical rules to future regulators’ discretion. The CCyB, for example, relied entirely on the Federal Reserve’s voluntary determination to activate the buffer based on its

evaluation of economic and financial conditions.<sup>250</sup> Likewise, Dodd-Frank authorized the Federal Reserve to establish discretionary thresholds for triggering early remediation of a financial company's distress.<sup>251</sup>

Reliance on discretionary countercyclical rules is problematic because regulators may be biased toward inaction during economic expansions when countercyclical interventions are needed most. Discretionary countercyclical rules require regulators to intervene proactively to slow an overheating financial system.<sup>252</sup> Due to external pressures or internal biases, however, regulators may try to avoid the “difficult and unpopular position” of activating countercyclical policies during an economic boom.<sup>253</sup> Indeed, regulators may fear immediate backlash for slowed growth or decreased credit availability.<sup>254</sup> By contrast, the stability-enhancing benefits of countercyclical policies will be realized at some indeterminate time in the future.<sup>255</sup> Thus, “allowance for regulatory discretion can lead to a bias towards forbearance,”<sup>256</sup> or a predisposition not to activate countercyclical policies. As former Federal Reserve Governor Tarullo put it, “the structural incentives

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<sup>250</sup> See *supra* Section III.A.

<sup>251</sup> See *supra* Section III.D.

<sup>252</sup> To borrow a phrase from Federal Reserve Chairman William McChesney Martin, regulators must be “the chaperone who . . . order[s] the punch bowl removed just when the party [is] really warming up.” William McChesney Martin Jr., Chairman, Bd. of Governors of the Fed. Rsrv. Sys., Address Before the New York Group of the Investment Bankers Association of America 12 (Oct. 19, 1955), <https://fraser.stlouisfed.org/title/statements-speeches-william-mcchesney-martin-jr-448/address-new-york-group-investment-bankers-association-america-7800>.

<sup>253</sup> Neville Arjani, *Procyclicality and Bank Capital*, BANK CAN. FIN. SYS. REV., June 2009, at 33, 36.

<sup>254</sup> See Michal Kowalik, *Countercyclical Capital Regulation: Should Bank Regulators Use Rules or Discretion?*, FED. RSRV. BANK OF KAN. CITY ECON. REV., 2d Q. 2011, at 63, 71–73 (“[T]he [regulatory] authority may face pressure from groups, such as politicians, that are more concerned about short-term economic growth.”).

<sup>255</sup> See Daniel K. Tarullo, *Time-Varying Measures in Financial Regulation*, 83 L. & CONTEMP. PROBS. 1, 11 (2020) (asserting that central banks’ “own risk management strategies will tend to err on the side of measures that may stave off recessions, even at the expense of greater risk to financial stability at some indeterminate future time”).

<sup>256</sup> GEITHNER, *supra* note 121, at 29.

faced by Federal Reserve officials create some bias toward underuse” of countercyclical tools.<sup>257</sup>

To solve this problem, policymakers should strive to establish countercyclical rules that adjust automatically as financial conditions change. As Professor Patricia McCoy has written, “[t]he most effective way to overcome regulators’ propensity toward inertia at the top of the business cycle is to tie their hands in advance through rules that automatically kick in when markets heat up.”<sup>258</sup> The CCyB, for example, could be calibrated to adjust automatically based on a prespecified formula using a wide variety of economic and financial data as inputs.<sup>259</sup> Risk retention requirements could likewise be tied to economic and financial conditions.<sup>260</sup> Policymakers could grant future regulators authority to override automatic triggers when appropriate, but automaticity should be the default approach for many countercyclical rules that shifts the burden of proof from action to inaction. Automating countercyclical rules in this way would make it less likely that regulators fail to activate countercyclical tools when conditions warrant.

*2. Portfolio Strategy.* Second, countercyclical regulation should not be limited to a single policy instrument, such as the CCyB. Instead, the regulatory framework should reflect a portfolio strategy, in which multiple rules with countercyclical features are applied in conjunction. The rationale for this approach follows the same logic as portfolio diversification by investors in capital markets: because the future performance of any particular stock is uncertain, a superior risk-return profile can be achieved by splitting a single investment across multiple securities.<sup>261</sup>

Just like private investors, policymakers must also navigate an uncertain financial environment. Countercyclical regulation aims to

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<sup>257</sup> Tarullo, *supra* note 255, at 11. Tarullo hypothesizes that European countries may be more inclined than the United States to activate discretionary countercyclical policies because of peer review pressure by the European Systemic Risk Board. *Id.* at 19.

<sup>258</sup> McCoy, *supra* note 4, at 1230.

<sup>259</sup> See *infra* Section V.B.1.

<sup>260</sup> See *infra* Section V.B.3.

<sup>261</sup> See generally Matthew C. Turk, *A Portfolio Approach to Policymaking Uncertainty*, 49 FLA. ST. U. L. REV. 381 (2022) (developing this analogy at length); Matthew C. Turk, *Overlapping Legal Rules in Financial Regulation and the Administrative State*, 54 GA. L. REV. 791 (2020) (providing a similar analysis with respect to post-crisis reforms in the Dodd-Frank Act).

dampen the effect of asset bubbles and related sources of fragility caused by upward pressures in the business cycle.<sup>262</sup> The particular source of those pressures, however, is difficult for policymakers to determine *ex ante*.<sup>263</sup> In the 2008 crisis, the primary culprit was the residential housing market,<sup>264</sup> but there is no guarantee that unsustainable home prices will be the main source of systemic risk when the next economic downturn materializes.

Likewise, there is no way to predict with confidence how a large fluctuation in a given asset class or economic sector may undermine the balance sheets of individual financial institutions. Perhaps, as in 2008, the mechanism will be securitization activities at large banks.<sup>265</sup> But there are many other activities besides securitization that could serve as a conduit instead. Simply put, just as a prudent investor should avoid undiversified one-way bets on a rising asset bubble; a prudent regulator should diversify the countercyclical regulatory tools intended to prick those bubbles.

Therefore, as economic cycles evolve, policymakers should deploy a variety of countercyclical tools from a well-stocked regulatory toolkit. This multifaceted approach stands in contrast to much of the existing commentary on countercyclical regulation, which tends to focus more narrowly on how the CCyB rule is applied to bank capital levels.<sup>266</sup> In the event that bank capital is not the exclusive focal point at which future systemic risks materialize—or, even more likely, that the CCyB is not perfectly calibrated to account for the specific form those risks take—the application of complementary countercyclical regulations will prove useful. Thus,

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<sup>262</sup> See, e.g., *supra* notes 6–7, 74 and accompanying text.

<sup>263</sup> See Markus K. Brunnermeier & Martin Oehmke, *Bubbles, Financial Crises, and Systemic Risk* 3 (Nat'l Bureau of Econ. Rsch., Working Paper No. 18398, 2012) (“During the *run-up phase* [of a financial crisis], asset price bubbles and imbalances form. Most of the time, these imbalances build up slowly in the background and volatility is low. Initially, the imbalances that ultimately lead to a financial crisis are often hard to detect. For example, at first a boom in asset prices can often be rationalized by appealing to some form of innovation.”).

<sup>264</sup> On the role of housing prices and home mortgages in the 2008 crisis, see generally Kristopher Gerardi, Andreas Lehnert, Shane M. Sherlund & Paul Willen, *Making Sense of the Subprime Crisis*, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 2008, at 69; and Christopher Mayer, Karen Pence & Shane M. Sherlund, *The Rise in Mortgage Defaults*, 23 J. ECON. PERSPS. 27 (2009).

<sup>265</sup> See FIN. CRISIS INQUIRY COMM'N, *supra* note 49, at 38–52 (summarizing the role of securitization in the 2008 crisis).

<sup>266</sup> See *supra* Part II (reviewing the relevant literature).

a diversified suite of countercyclical rules should also encompass tools like the CECL accounting standards and early remediation measures that were initially part of the post-2008 policy response but never fully implemented.<sup>267</sup>

3. *Market-wide Coverage.* Finally, policymakers should expand countercyclical financial regulation market-wide to address additional potential sources of systemic risk. To date, the United States has adopted countercyclical strategies primarily for large BHCs. For example, the CCyB and Dodd-Frank's early remediation requirements apply only to BHCs with more than \$250 billion in assets.<sup>268</sup> But large BHCs are far from the only source of systemic risk. Indeed, nonbank financial institutions and smaller banks may likewise exacerbate boom-and-bust cycles, and they could therefore benefit from countercyclical regulation.

Countercyclical regulation should encompass nonbank financial companies, which were key catalysts of the 2008 and 2020 crises. Broker-dealers and insurance companies like Bear Stearns, Lehman Brothers, and AIG fed the pre-2008 housing bubble, and their collapses precipitated the ensuing market-wide credit crunch.<sup>269</sup> A little more than a decade later, nonbanks intensified the 2020 crisis when MMMFs and exchange-traded funds experienced significant outflows and dealers withdrew from intermediating in funding markets, propagating extreme liquidity stress.<sup>270</sup> To date, however, the United States has not implemented a comprehensive nonbank financial regulatory framework, and the minimal prudential oversight that does exist generally does not involve countercyclical strategies.<sup>271</sup> Going forward, incorporating

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<sup>267</sup> See *supra* Sections III.B & III.D.

<sup>268</sup> See 12 C.F.R. §§ 3.11(b), 217.11(b), 324.11(b) (2021) (applying CCyB to BHCs with more than \$250 billion in assets); 12 U.S.C. §§ 5365(a), 5366 (applying early remediation requirements to BHCs with more than \$250 billion in assets).

<sup>269</sup> See Jeremy C. Kress, Patricia A. McCoy & Daniel Schwarcz, *Regulating Entities and Activities: Complementary Approaches to Nonbank Systemic Risk*, 92 S. CAL. L. REV. 1455, 1466–67 (2019) (explaining how systemically important nonbank financial institutions contributed to the 2008 crisis); Daniel Schwarcz & David Zaring, *Regulation by Threat: Dodd-Frank and the Nonbank Problem*, 84 U. CHI. L. REV. 1813, 1824–30 (2017) (discussing the factors that caused major nonbank financial institutions to fail during the 2008 financial crisis).

<sup>270</sup> See FIN. STABILITY BD., *HOLISTIC REVIEW OF THE MARCH MARKET TURMOIL 2* (2020), <https://www.fsb.org/wp-content/uploads/P171120-2.pdf> (discussing the factors that contributed to the 2020 crisis).

<sup>271</sup> See Kress et al., *supra* note 269, at 1473–80 (discussing post-crisis nonbank regulation).

countercyclical tools into the nonbank regulatory framework would mitigate the risk that nonbank financial companies transmit financial instability once again.

Similarly, community and regional banks should be subject to certain forms of countercyclical regulation along with their larger, multinational counterparts. As we have documented in other work, all banking crises throughout U.S. history—up to and including 2008—have been characterized by the simultaneous failure of many small institutions.<sup>272</sup> The widespread collapse of many small and mid-sized banks creates credit shortages, especially for small businesses and local communities that are generally underserved by larger financial institutions.<sup>273</sup> Applying some forms of countercyclical regulation—such as a countercyclical adjustment to the community bank leverage ratio—could help prevent these credit crunches without unduly increasing complexity or compliance costs for smaller firms.

In sum, countercyclical regulation that focuses only on large BHCs ignores many potential sources of financial instability. To address systemic risks comprehensively, policymakers should apply countercyclical regulatory strategies across the financial system, not just to large BHCs.

## B. IMPLEMENTING EFFECTIVE COUNTERCYCLICAL REGULATION

To date, U.S. policymakers have failed to adopt a regulatory framework that fulfills countercyclical objectives. Applying the guiding principles enumerated in Section V.A, this Section recommends five specific policies to bolster the existing countercyclical toolkit: (1) automating and expanding the countercyclical buffer, (2) enacting the CECL accounting standard, (3) strengthening the risk retention rule, (4) finalizing early remediation requirements, and (5) instituting countercyclical margin and haircut requirements. Together, these strategies represent a comprehensive approach to enacting meaningful

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<sup>272</sup> See Kress & Turk, *supra* note 55, at 655–63 (explaining the “too many to fail” problem and discussing why smaller institutions are “especially susceptible to concurrent failures”).

<sup>273</sup> See *id.* at 664–65 (“The failure of 480 community banks and the distress of 900 more restricted the supply of financial intermediation to small businesses and entrepreneurs that fuel the real economy in normal times.”).

countercyclical financial regulation and thereby combatting dangerous boom-and-bust cycles.

*1. Automate and Expand the Countercyclical Buffer.* As an initial step, policymakers should revisit the design of the CCyB. As discussed above, the Federal Reserve relegated the CCyB—its most prominent and powerful countercyclical tool—to the sideline during the record-setting economic expansion of the 2010s.<sup>274</sup> Going forward, policymakers should calibrate the CCyB to adjust automatically based on specified market indicators so that regulators cannot ignore it during future booms. In addition, policymakers should expand the CCyB to include a countercyclical leverage requirement and to apply the buffer to a broader range of banks.

First, policymakers should adopt a rule-based approach to the CCyB to ensure that banks' capital buffers are based on economic fundamentals and not left to regulators' discretion. The existing CCyB framework biases capital levels downward because it leaves the buffer entirely to regulators' discretion.<sup>275</sup> As discussed above, regulators may be inclined to avoid forcing banks to raise capital in the middle of an economic expansion.<sup>276</sup> As the Financial Stability Oversight Council asserted, policymakers are likely to be "bias[ed] towards forbearance," making them less likely to increase the CCyB when granted discretion over the matter.<sup>277</sup> This bias was especially pronounced during the Trump Administration, which generally disfavored higher bank capital requirements.<sup>278</sup>

To negate this downward bias, policymakers should set the CCyB to adjust automatically based on specified market indicators. Under a rule-based approach, policymakers would establish a formula designed to identify periods of elevated financial sector risks. Inputs into the formula could include credit-to-GDP ratios, real estate prices, credit default swap spreads, and price-to-earnings ratios—all factors that regulators purportedly consider when setting the

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<sup>274</sup> See *supra* Section III.A.

<sup>275</sup> See, e.g., *supra* notes 70–71, 76–79, 86–92 and accompanying text.

<sup>276</sup> See *supra* Section V.A.1.

<sup>277</sup> GEITHNER, *supra* note 121, at 29.

<sup>278</sup> See GELZINIS, *supra* note 196, at 7–13 (discussing the Trump Administration's reductions in bank capital requirements).

CCyB on a discretionary basis.<sup>279</sup> The CCyB would then automatically adjust when the formula output—or any of the individual variables—breaches certain levels.<sup>280</sup> Regulators could retain discretion to override the automatic triggers when necessary—for example, when a pandemic hits unexpectedly. But a rule-based system would make automaticity the default approach to the CCyB.<sup>281</sup>

Automating the CCyB would have several salutary effects. Most importantly, a rule-based CCyB would constrain regulatory discretion that biases banks' capital requirements downward.<sup>282</sup> Automaticity would pre-commit future regulators to increase the capital buffer when financial conditions warrant. In addition, a rule-based CCyB would enhance predictability. By monitoring market indicators, banks could proactively build up extra capital before the CCyB officially resets and thereby reduce the costs of adjusting

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<sup>279</sup> See 12 C.F.R. pt. 217 app. A (2021) (outlining the factors that the Federal Reserve Board considers when setting the CCyB).

<sup>280</sup> Several academics and policy experts have proposed shifting to a rule-based CCyB. See, e.g., Kowalik, *supra* note 254, at 74–75 (arguing that a rules-based CCyB would “eliminate the problem of adverse implementation incentives by explicitly stating how capital requirements should vary over the business cycle”); Brett H. McDonnell, *Designing Countercyclical Capital Buffers*, 18 N.C. BANKING INST. 123, 134–36 (2013) (concluding that a rule-based CCyB would significantly decrease the probability of a “type I error” during an economic expansion, i.e. “failing to increase the countercyclical buffer when conditions warrant an increase”); Tarullo, *supra* note 255, at 19–20 (asserting that rule-based CCyB would “buttress[] resiliency while financial stress is rising”); FILIPPO OCCHINO, *Are the New Basel III Capital Buffers Countercyclical? Exploring the Option of a Rule-Based Countercyclical Buffer*, in FED. RSRV. BANK OF CLEVELAND, ECONOMIC COMMENTARY (2018) <https://www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2018-economic-commentaries/ec-201803-countercyclical-capital-buffers> (proposing a rule-based countercyclical buffer). In addition, some empiricists have suggested formulas that reliably identify periods of elevated financial stability risks in which the CCyB should be activated. See, e.g., Aikman et al., *supra* note 27, at 2–6 (introducing a formula of forty-four indicators that consistently predicts heightened vulnerabilities in the U.S. financial system); Drehmann et al., *supra* note 27, at 1–23 (analyzing how certain variables should impact “design of countercyclical prudential capital standards”).

<sup>281</sup> Professor Natasha Sarin has proposed a related approach in which policymakers would require banks to automatically, or “dynamically,” recapitalize in response to market indicators. See Natasha Sarin, *Dynamic Regulation*, 94 S. CAL. L. REV. 1005, 1064–65 (2021) (explaining that market indicators should determine whether banks need to recapitalize).

<sup>282</sup> See Kowalik, *supra* note 254, at 74 (“The rule-based approach would eliminate the problem of adverse implementation incentives by explicitly stating how capital requirements should vary over the business cycle.”).

their capital ratios when required.<sup>283</sup> Finally, automating the CCyB would avoid adverse informational signals that may be sent when regulators increase the buffer on a discretionary basis. Because the buffer would be tied to a pre-specified formula, activating the CCyB would not signal regulators' concerns about market stability that might make it more difficult for banks to raise capital.<sup>284</sup>

To be sure, a rule-based approach to the CCyB would not be perfect. Identifying the appropriate market variables for the CCyB formula and setting their relative weights would be critical and may involve some trial and error. Moreover, there is only so much that regulators can do to tie the hands of their successors. Depending on how a rule-based CCyB is structured, future regulators could override automatic increases in the buffer or repeal the rule entirely.<sup>285</sup> On balance, however, a rule-based CCyB would be better than a purely discretionary countercyclical buffer. The United States' experience during the late 2010s exposed the folly of relying on regulators to affirmatively activate or increase the CCyB when economic conditions warrant.<sup>286</sup>

In addition to automating the CCyB, policymakers should expand the buffer on two dimensions. First, regulators should add a leverage component to the CCyB. As currently implemented, the CCyB is measured as a percentage of banks' risk-weighted assets.<sup>287</sup> Limiting the CCyB to risk-based capital, however, ignores leverage capital rules like the SLR, which the banking agencies weakened when the COVID pandemic hit.<sup>288</sup> Adding a leverage component to the CCyB would ensure that changes in the level of the CCyB do not

<sup>283</sup> *See id.* at 70, 74 (“For example, anticipating that relaxed lending and capital ratios could lead to an increase in capital requirements in the future, banks might build up cushions of equity capital to reduce the costs of adjusting capital ratios when required.”).

<sup>284</sup> *See id.* at 75 (“[B]y tying the countercyclical capital requirements to a pre-specified formula, any change in banks' capital requirements would not provide any new information that could harm banks' ability to raise capital when required.”).

<sup>285</sup> Although future regulators would retain discretion to override the automatic triggers, a rules-based formula would anchor regulators' expectations as to what level the CCyB should be. *See* RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE* 23–24 (2008) (discussing the anchoring bias). In addition, regulators' bias toward inaction would limit the risk that they inappropriately deactivate or decrease the buffer. *See id.* at 34–35 (discussing the status quo bias).

<sup>286</sup> *See supra* notes 70–71 and accompanying text.

<sup>287</sup> *See* 12 C.F.R. §§ 3.11(b), 217.11(b), 324.11(b) (2021) (establishing the CCyB as a percentage of a banking organization's risk-weighted assets).

<sup>288</sup> *See supra* note 196 and accompanying text.

alter the delicate balance between risk-based and leverage capital requirements as binding constraints throughout changes in the economic cycle.<sup>289</sup> Furthermore, absent a countercyclical leverage buffer, banks might satisfy a risk-based CCyB requirement by strategically shifting assets to lower risk buckets without actually reducing their risk profiles.<sup>290</sup> For these reasons, the Bank of England has already adopted a countercyclical leverage buffer.<sup>291</sup> The Federal Reserve should do the same.

Finally, policymakers should expand the CCyB to encompass more banks. As currently implemented, the CCyB applies only to BHCs with more than \$250 billion in assets.<sup>292</sup> Large BHCs, however, are not the only banking organizations that contribute to boom-and-bust cycles. Rather, smaller institutions can create equivalent systemic risks, as evidenced by recurrent small-bank crises such as the 1980s Savings & Loan collapse.<sup>293</sup> Regional and community banks should therefore be subject to the CCyB as well.<sup>294</sup> Subjecting smaller firms to countercyclical capital policies need not unduly increase complexity or compliance costs. For example, rules could be crafted to allow smaller firms to satisfy countercyclical buffers by retaining capital instead of raising additional equity. Expanding the CCyB in this way is essential to ensure that the

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<sup>289</sup> Absent a countercyclical leverage buffer, risk-based capital requirements are a relatively more binding constraint when the CCyB is activated, and leverage capital requirements are relatively more binding when the CCyB is deactivated. *Cf.* BANK OF ENG., POLICY STATEMENT: THE FINANCIAL POLICY COMMITTEE'S POWERS OVER LEVERAGE RATIO TOOLS 8 (2015), <https://www.bankofengland.co.uk/-/media/boe/files/statement/2015/the-financial-policy-committees-powers-over-leverage-ratio-tools.pdf> (describing the U.K.'s countercyclical leverage buffer equivalent).

<sup>290</sup> *See, e.g.*, Aaron Klein, Opinion, *Risk Weights or Leverage Ratio? We Need Both*, BROOKINGS (Dec. 22, 2016), <https://www.brookings.edu/opinions/risk-weights-or-leverage-ratio-we-need-both/> (discussing drawbacks of risk-based capital requirements).

<sup>291</sup> The Bank of England sets its countercyclical leverage buffer equivalent to 35% of its risk-based CCyB. BANK OF ENG., *supra* note 289, at 8. Thus, if the Bank of England sets its risk-based CCyB at 1%, the countercyclical leverage buffer is an additional 35 basis points above the minimum 3% leverage requirement. *Id.*

<sup>292</sup> *See supra* note 268.

<sup>293</sup> *See* Kress & Turk, *supra* note 55, at 655–63 (discussing the potential for systemic risk arising from smaller institutions).

<sup>294</sup> Community banks that are subject to the CBLR in lieu of risk-based capital requirements could comply with a countercyclical leverage buffer rather than the risk-based CCyB.

entire banking system remains resilient throughout the economic cycle.

2. *Enact the CECL Accounting Standard.* Next, policymakers should proceed with the scheduled implementation of the CECL accounting methodology. The financial sector has lobbied to indefinitely delay or even rescind CECL in light of the COVID-19 pandemic.<sup>295</sup> Canceling CECL, however, would be a mistake. Although it may be appropriate to delay CECL until after the United States recovers from the pandemic, policymakers should ensure that the new accounting standard goes into effect thereafter to mitigate the procyclical effects of future economic cycles.

Policymakers should implement CECL promptly after the COVID-19 crisis. Congress was correct to delay CECL in the CARES Act.<sup>296</sup> For CECL to work as intended, it should go into effect during a period of economic expansion so that financial institutions have an opportunity to build loan loss reserves before the next economic contraction. Once the pandemic passes, any further delays in the CECL implementation would be unwarranted. When fully implemented, the CECL accounting standard will make economic expansions more sustainable and improve the resiliency of the financial system.<sup>297</sup> As economists Mark Zandi and Cristian DeRitis asserted, “CECL will result in easier underwriting and more lending in recessions, and tighter underwriting and less lending in boom times,” compared to the incurred-loss methodology.<sup>298</sup>

It is critical, however, that the FASB and the federal banking agencies take additional steps to ensure that CECL has its intended countercyclical effect. CECL requires a bank to estimate projected losses on a loan at the time of origination based on a “reasonable and supportable forecast[.]”<sup>299</sup> CECL’s efficacy—and the extent of

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<sup>295</sup> See, e.g., Neil Haggerty, *Bankers Urge Extension of CARES Act Reg Relief*, AM. BANKER (Sept. 18, 2020, 3:12 PM), <https://www.americanbanker.com/news/bankers-urge-extension-of-cares-act-reg-relief> (noting that the Independent Community Bankers of America urged FASB to suspend CECL implementation until 2025); Press Release, U.S. Congressman Blaine Luetkemeyer, Luetkemeyer Statement on Federal Regulators’ Two-Year CECL Delay (Mar. 27, 2020), <https://luetkemeyer.house.gov/news/documentsingle.aspx?DocumentID=400353> (“While a two-year delay in the capital requirements of CECL is certainly welcomed news, it is long-passed [sic] time that FASB fully rescind the standard.”).

<sup>296</sup> See *supra* note 117 and accompanying text (discussing CECL delay).

<sup>297</sup> See *supra* notes 111–112 and accompanying text.

<sup>298</sup> DeRitis & Zandi, *supra* note 103, at 1.

<sup>299</sup> FIN. ACCOUNTING STANDARDS BD., *supra* note 115, at 2.

its countercyclical impact—therefore depend on the accuracy of banks’ internal forecasting models.<sup>300</sup> Although the federal banking agencies have issued a policy statement providing guidance on the measurement of expected credit losses,<sup>301</sup> banks may require more detailed direction in establishing methodologies. In addition, the agencies must closely supervise banks’ CECL implementation to verify the plausibility of their models and to ensure standardization and comparability across the banking sector.<sup>302</sup>

“CECL is not a panacea,” as even its supporters readily admit.<sup>303</sup> Implementation may prove difficult and will require careful supervision, but these challenges are worth addressing when the COVID-19 pandemic abates. Once fully implemented, CECL will help ensure that future economic expansions are more sustained and that contractions are less severe.

3. *Strengthen the Risk Retention Rule.* Policymakers should take two actions to enhance the countercyclicality of Dodd-Frank’s risk retention requirement. The financial regulatory agencies could implement the first reform—dynamic risk retention rules—under current law. The second reform—applying the risk-retention requirement to CLOs—would require congressional action to overturn the D.C. Circuit’s decision exempting CLO managers from the rule.<sup>304</sup>

First, the financial regulatory agencies should strengthen the risk retention rule by instituting requirements that fluctuate with the economic cycle. Recall that the current risk retention rule imposes a static requirement: a securitization sponsor must retain 5% of the credit risk of any securitization it issues.<sup>305</sup> To enhance

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<sup>300</sup> See Joseph L. Breeden, CECL Procyclicality: It Depends on the Model 1 (manuscript) (Sept. 14, 2018), <https://pdfs.semanticscholar.org/ba5e/35dfefb20867b043b800032fb17a58ff1361.pdf> (finding that CECL lifetime loss estimates “change[] dramatically with different modeling techniques”); see also Chae et al., *supra* note 111, at 2–3 (discussing models’ sensitivity to assumptions about future housing prices).

<sup>301</sup> Interagency Policy Statement on Allowances for Credit Losses, 85 Fed. Reg. 32,991, 32,991 (June 1, 2020) (to be codified in scattered sections of 12 C.F.R.).

<sup>302</sup> See Chae et al., *supra* note 111, at 4–6 (discussing comparability of banks’ loan loss provisions under CECL).

<sup>303</sup> DeRitis & Zandi, *supra* note 103, at 10 (“CECL is not a panacea. It will not prevent speculation and bad loans from being made.”).

<sup>304</sup> See *supra* note 140 and accompanying text.

<sup>305</sup> See *supra* note 125 and accompanying text.

countercyclicality, however, the agencies could mandate that a securitization sponsor retain more credit risk when the economy is expanding. Increasing risk retention requirements during economic booms would help constrain unsustainable credit expansion and slow the growth of emerging bubbles.<sup>306</sup> By contrast, the agencies could require securitization sponsors to retain less risk when the economy is contracting. Decreasing risk retention requirements during an economic slowdown could reinvigorate lending and potentially stave off a recession.<sup>307</sup> Dynamic risk retention requirements could automatically adjust based on credit-to-GDP ratios, home price indices, and other market indicators like those used for a rule-based CCyB.<sup>308</sup> This time-varying approach to risk retention would meaningfully improve the rule's countercyclicality.

Second, Congress should clarify that CLO managers are covered by Dodd-Frank's risk-retention rule. Recall that CLO managers successfully challenged the risk-retention requirement in the D.C. Circuit,<sup>309</sup> contributing to the expansion of the CLO market and the decline of corporate lending standards in the lead-up to the COVID-19 pandemic.<sup>310</sup> As Professors Adam Levitin and Bill Bratton stated, there is little "doubt that the statute's drafters, if questioned on the matter, would answer that they intended CLO managers to be

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<sup>306</sup> See GEITHNER, *supra* note 115, at 28 ("Regulations could be written to contain a countercyclical formula linking risk retention or underwriting standards to, for example, home prices. In this example, required risk retention could increase automatically as the economy grows and home prices rise, in order to constrain unsustainable increases in credit supply that could potentially fuel emerging bubbles."). Professors Ryan Bubb and Prasad Krishnamurthy contend that risk retention requirements are ineffective because economic booms cause securitizers to be overoptimistic about the quality of the securitizations they retain. Ryan Bubb & Prasad Krishnamurthy, *Regulating Against Bubbles: How Mortgage Regulation Can Keep Main Street and Wall Street Safe—From Themselves*, 163 U. PA. L. REV. 1539, 1580–81 (2015). Increasing risk retention requirements during economic booms, however, could incentivize securitizers to examine the quality of securitizations that they issue more closely.

<sup>307</sup> See Bubb & Krishnamurthy, *supra* note 306, at 1580–93 (discussing risk retention and securitization during bubbles).

<sup>308</sup> See *supra* note 280 and accompanying text.

<sup>309</sup> See *Loan Syndications & Trading Ass'n v. SEC*, 882 F.3d 220, 222 (D.C. Cir. 2018) (concluding that collateral loan managers are not "securitizers" under the Dodd-Frank Act).

<sup>310</sup> Cf. Chatterjee, *supra* note 141 ("Leveraged loans without maintenance covenants—which help protect investors in the loans—increased to 80% of all outstanding loans in 2018 from 20% in 2012 while the share of low-rated leveraged loans in CLOs has nearly doubled to 18%, BIS data showed.").

covered by” Dodd-Frank’s risk retention requirement.<sup>311</sup> Congress should therefore fix the disputed language in Dodd-Frank to clarify that the requirement affirmatively applies to CLO managers. By overturning the D.C. Circuit’s precedent, legislators could reinstate Congress’s original intent that all securitization sponsors retain some credit risk and thereby help protect the economy from the CLO markets’ procyclical effects.

*4. Finalize Early Remediation Requirements.* To further enhance countercyclicality in financial regulation, the Federal Reserve should finalize its proposed early remediation requirements. As discussed in Part III, Dodd-Frank directed the Federal Reserve to establish early-intervention standards to prevent the type of regulatory forbearance that exacerbated the 1980s S&L crisis and 2008 financial crisis.<sup>312</sup> Despite a statutory deadline of January 2012,<sup>313</sup> the Federal Reserve still has not implemented these rules. The Federal Reserve’s failure to establish early remediation triggers based on a BHC’s liquidity levels, risk management weaknesses, and market indicators exposed the U.S. financial system to the risk of simultaneous, widespread bank failures during the COVID-19 pandemic. The Federal Reserve should therefore finalize its early remediation proposal to prevent procyclical bank collapses in the future.

Better yet, Congress could bypass the Federal Reserve by codifying early remediation standards itself. Congress’s delegation of the early remediation requirements to the Federal Reserve has been characterized as “the biggest legislative punt in the Dodd-Frank Act.”<sup>314</sup> Critics contend that early remediation standards enacted through administrative rulemaking may be insufficient to prevent the federal banking agencies from engaging in regulatory forbearance during times of financial stress.<sup>315</sup> Congressionally-enacted early remediation standards, by contrast, would be more

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<sup>311</sup> See Bratton & Levitin, *supra* note 128, at 103.

<sup>312</sup> See *supra* Section III.D.

<sup>313</sup> See 12 U.S.C. § 5368 (establishing the deadline for early remediation rules).

<sup>314</sup> Edwards, *supra* note 139, at 290.

<sup>315</sup> See *id.* at 287, 290 (contending that Dodd-Frank’s early remediation framework “is prone to regulatory forbearance”); see also Block, *supra* note 246, at 321 (“Dodd-Frank’s . . . early remediation rules may not significantly alter the pre-Dodd-Frank forbearance dynamic . . .”).

difficult for agencies to ignore.<sup>316</sup> Indeed, that is why Congress established numerical PCA capital thresholds by legislation: to limit the banking agencies' discretion to forbear when a bank's capital levels fall too low.<sup>317</sup> Congress should therefore strongly consider enacting the Federal Reserve's proposed early remediation requirements—including liquidity levels, risk management weaknesses, and market indicators—into law. Establishing legislative triggers for early remediation would constrain the banking agencies' penchant for forbearance and thereby help prevent procyclical bank failures.

*5. Institute Countercyclical Margin and Haircut Requirements.* Finally, policymakers should institute countercyclical margin and haircut requirements for derivatives and securities financing transactions (SFTs) to constrain the build-up of leverage across the financial sector. As discussed above, omitting nonbank financial companies from post-2008 countercyclical reforms was a critical mistake.<sup>318</sup> Policymakers currently have limited legal authority to implement countercyclical nonbank regulation given the United States' fragmented and ineffectual nonbank regulatory framework.<sup>319</sup> Nonetheless, existing legal authorities over derivatives and SFTs represent a promising opportunity not only to limit leverage in the banking system but also to expand countercyclical regulation to nonbank financial companies as well.

As European Central Bank economists explained, "Financial institutions, both banks and nonbanks, can build up leverage via the use of derivatives and SFTs."<sup>320</sup> Nonbanks including Lehman Brothers and AIG were particularly heavy users of these

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<sup>316</sup> See Edwards, *supra* note 147, at 292 (emphasizing the importance of "[m]ore mandatory requirements and less discretion" to "limit[] regulatory forbearance").

<sup>317</sup> See *id.* at 285–89 (explaining that "PCA was partly 'designed to limit regulatory forbearance'").

<sup>318</sup> See *supra* Section V.A.3.

<sup>319</sup> See Kress et al., *supra* note 252, at 1505–18 (discussing gaps and fragmentation in U.S. nonbank regulation).

<sup>320</sup> Niccolò Battistini, Michael Grill, Pierre Marmara & Koen van der Veer, *A Case for Macroprudential Margins and Haircuts*, FIN. STABILITY REV., May 2016, at 110, 110. Derivatives—such as interest rate swaps or credit default swaps—are financial instruments whose values are derived from the value of an underlying asset or reference rate. See BARR ET AL., *supra* note 32, at 1156 ("Derivatives are financial contracts between two parties . . . with values that are derived from the value of another item, known as the underlying asset."). SFTs—including repurchase agreements and securities lending transactions—are essentially short-term, collateralized loans. See *id.* at 1329–38 (describing the basics of SFTs).

instruments to create leverage in the lead-up to the 2008 crisis.<sup>321</sup> To protect against risks inherent in derivatives and SFTs, market participants may require counterparties to post margin, or collateral, to guarantee their contractual performance.<sup>322</sup> On a macro level, margining and haircut practices influence the amount of leverage in the financial system.<sup>323</sup> Higher margins on derivative transactions and larger haircuts on SFT collateral reduce the amount of leverage financial institutions can take on.<sup>324</sup>

Historically, financial institutions' margin and haircut practices have exacerbated procyclicality. When economic conditions were strong—as in the mid-2000s—market participants set low margin and haircut requirements in light of minimal perceived risks.<sup>325</sup> Low margin and haircut requirements, in turn, allowed financial institutions to assume more leverage, further inflating asset prices.<sup>326</sup> By contrast, when economic conditions weakened—as in 2008—market participants sought to protect themselves by calling in additional collateral and increasing haircuts.<sup>327</sup> These margin

<sup>321</sup> See BARR ET AL., *supra* note 32, at 1338–39 (discussing nonbank financial institutions' use of derivatives before the 2008 crisis).

<sup>322</sup> See *id.* at 1331, 1337 (describing transaction basics and margin requirements).

<sup>323</sup> See Battistini et al., *supra* note 320, at 110 (“As margin and haircut requirements tend to be a function of recent market developments, these practices stimulate the build-up of excessive leverage and funding risk in good times, while amplifying funding stress and deleveraging in bad times.”).

<sup>324</sup> *Id.* (“The higher the initial margin on a derivative transaction . . . the smaller the exposure that can be created with a given amount of equity. . . . The bigger the haircut on the collateral . . . the smaller the exposure that can be created with a given amount of collateral.”).

<sup>325</sup> See COMM. ON THE GLOB. FIN. SYS., BANK FOR INT'L SETTLEMENTS, THE ROLE OF MARGIN REQUIREMENTS AND HAIRCUTS IN PROCYCLICALITY, 10–11 (2010), <https://www.bis.org/publ/cgfs36.pdf> (noting that “[d]uring the years of economic expansion prior to mid-2007, there was a gradual erosion of risk management,” illustrated by low margin and haircut requirements).

<sup>326</sup> See *id.* (“During . . . economic expansion prior to mid-2007 . . . [h]aircuts fell to low levels, and other credit terms were loosened in response to competitive pressures. This allowed a build-up of leverage inside and outside the regulated sector.”); Battistini et al., *supra* note 320, at 110–11 (“During upturns, low volatility in asset prices and perceived low risks lead to low margins and haircuts. When the cycle turns, rising risk awareness and increasing volatility feed into higher margins and haircuts, leading to deleveraging and increasing margin calls.”).

<sup>327</sup> See *supra* notes 49–53 and accompanying text; cf. COMM. ON THE GLOB. FIN. SYS., *supra* note 303, at 10 (“In a downturn, actions taken by individual market participants to protect themselves, such as calling for additional collateral . . . can induce further contraction of the supply of credit through collateralised lending.”).

calls forced counterparties to de-lever, thereby constraining the supply of credit during a time of financial stress.<sup>328</sup> While post-crisis central clearing mandates for certain derivatives may mitigate some aspects of procyclicality in initial margining, these mandates generally were not designed with countercyclicality as a primary objective.<sup>329</sup>

To constrain excessive credit growth and expand countercyclical regulation to nonbanks, policymakers should enact margin and haircut requirements that are explicitly countercyclical. Increasing margin and haircut requirements during economic booms would slow the build-up of leverage and help prevent the economy from overheating.<sup>330</sup> In addition, dynamically adjusting margin and haircut requirements as the economy expands would ensure that counterparties maintain an extra layer of protection in the event that economic conditions deteriorate.<sup>331</sup> By contrast, limiting margin and haircut requirements as the economy contracts would help prevent sudden collateral calls and deleveraging, such as those experienced by AIG and other nonbanks in 2008.<sup>332</sup> Specific countercyclical policies could include time-varying add-ons to collateral floors and macroprudential margin add-ons during economic upswings, as well as “speed limits” on margin and haircut increases during economic downturns.<sup>333</sup>

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<sup>328</sup> This is exactly what happened to AIG in 2008. When AIG’s credit rating was downgraded, its counterparties demanded large amounts of collateral, which AIG was unable to post without government intervention. *See id.* at 10–11, 18.

<sup>329</sup> *See, e.g.*, EUR. SYSTEMIC RISK BD., *THE MACROPRUDENTIAL USE OF MARGINS AND HAIRCUTS* 31–32 (2017), [https://www.esrb.europa.eu/pub/pdf/reports/170216\\_macroprudential\\_use\\_of\\_margins\\_and\\_haircuts.en.pdf](https://www.esrb.europa.eu/pub/pdf/reports/170216_macroprudential_use_of_margins_and_haircuts.en.pdf) (asserting that centralized counterparties’ risk models reinforce procyclicality); *id.* at 45–46 (noting that centralized counterparties are not required to establish countercyclical margin requirements).

<sup>330</sup> *See* Battistini et al., *supra* note 320, at 111 (“Raising margin and haircut requirements in exuberant times . . . would also lower the impact of procyclical changes in margins and haircuts in bad times driven by higher volatility and higher risk aversion of market participants.”).

<sup>331</sup> *See* EUR. SYSTEMIC RISK BD., *supra* note 329, at 59–60 (“Macroprudential tools could be designed to increase the overall resilience of the financial system by introducing structural changes and the build-up of ‘buffers’ for possible future adverse scenarios in the downturn . . .”).

<sup>332</sup> *See supra* notes 327–328 and accompanying text.

<sup>333</sup> *See* EUR. SYSTEMIC RISK BD., *supra* note 329, at 62 (identifying countercyclical tools appropriate for different phases of the economic cycle).

Fortunately, U.S. regulators already have several tools at their disposal to implement countercyclical margin and haircut requirements. The Federal Reserve, for example, has broad authority under the Securities Exchange Act to establish market-wide margin requirements, which it could use to set countercyclical margin rules for SFTs backed by collateral other than government securities.<sup>334</sup> The Treasury Department could exercise its authority under the Government Securities Act, as Professor Andrew Metrick and former Federal Reserve Governor Daniel Tarullo have proposed, to coordinate Treasury-backed repo margin and haircut rules, which could be set countercyclically.<sup>335</sup> In addition, the Securities and Exchange Commission and Commodities Future Trading Commission could require centralized counterparties to establish countercyclical margin standards for centrally-cleared derivatives.<sup>336</sup> Further, the Financial Stability Oversight Council could coordinate countercyclical margin and haircut practices across the financial regulatory agencies.<sup>337</sup> These market-wide authorities over derivatives and SFTs contrast sharply with

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<sup>334</sup> See 15 U.S.C. § 78g(a) (“[T]he Board of Governors of the Federal Reserve System shall . . . prescribe rules and regulations with respect to the amount of credit that may be initially extended and subsequently maintained on any security . . .”). Under the Obama Administration, the Federal Reserve began to develop “a regulation that would establish minimum haircuts for [SFTs] on a market-wide basis.” Daniel K. Tarullo, Member, Bd. of Governors of the Fed. Rsrv. Sys., Remarks at the Brookings Institution: Thinking Critically About Nonbank Financial Intermediation 11 (Nov. 17, 2015), <https://www.federalreserve.gov/newsevents/speech/files/tarullo20151117a.pdf>. To date, however, it has not proposed such a rule.

<sup>335</sup> See Andrew Metrick & Daniel K. Tarullo, *Congruent Financial Regulation* 27–32 (Mar. 25, 2021) (Conference Draft), [https://www.brookings.edu/wp-content/uploads/2021/03/BPEASP21\\_Metrick-Tarullo\\_conf-draft.pdf](https://www.brookings.edu/wp-content/uploads/2021/03/BPEASP21_Metrick-Tarullo_conf-draft.pdf) (arguing that the “Treasury’s largely unexercised authority gives it the ability to initiate and drive a collaborative effort to achieve congruency in Treasury-backed repo markets” and explaining how the Treasury could promote financial responsibility with repo markets and haircut rules).

<sup>336</sup> See, e.g., David Murphy, Michalis Vasios & Nicholas Vause, *A Comparative Analysis of Tools to Limit the Procyclicality of Initial Margin Requirements* 2, 22 (Bank of Eng., Staff Working Paper No. 597, 2016), <https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2016/a-comparative-analysis-of-tools-to-limit-the-procyclicality-of-initial-margin-requirements.pdf> (suggesting strategies to mitigate procyclicality of centralized counterparties’ margin standards).

<sup>337</sup> Facilitating interagency cooperation on margin and haircuts would be a productive use of the Council’s “activities-based approach” to nonbank financial regulation. See Kress et al., *supra* note 269, at 1519–26 (discussing activities-based nonbank financial regulation).

regulators' otherwise limited authorities to regulate the nonbank financial sector.<sup>338</sup>

In sum, countercyclical regulation would be useful not only for banks but also for nonbank financial companies. Establishing countercyclical margin and haircut requirements for derivatives and SFTs would be an appropriate first step toward ensuring that nonbanks do not exacerbate financial booms and busts in the future.

## VI. CONCLUSION

This Article revisited financial regulation's persistent procyclicality problem in light of the COVID-19 pandemic. Academics and policymakers alike have long acknowledged that modern bank regulatory tools create costly distortions in the financial system by exacerbating booms and busts in the business cycle. Although countercyclical regulation presents a promising response to this procyclicality problem, policymakers have failed to establish a framework that fulfills countercyclical objectives. Indeed, as we have shown, U.S. policymakers never meaningfully implemented countercyclical rules, even after countercyclicality became a centerpiece of post-crisis statutory reforms and related international agreements.

In 2020, the COVID-19 pandemic and accompanying recession once again exposed the shortcomings of a procyclical financial regulatory architecture. Going into the COVID-19 recession, the banking system appeared to be resilient, yet it proved unable to withstand a severe economic downturn. As a result, federal authorities have been forced to shore up the banking sector with the same emergency measures that were used in 2008: extensive public financial assistance from the Treasury and Federal Reserve, along with the waiver of baseline regulatory safeguards that were designed to remain in place under recessionary conditions.

This Article represents the first attempt in the legal scholarship to rethink countercyclical financial regulation in light of these recent events. The emergency rescue of the financial system during 2020 lent even greater urgency to the need for countercyclical rules by establishing a precedent that will encourage risk-seeking in the financial sector as the economy recovers. The federal banking

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<sup>338</sup> See *supra* note 319 and accompanying text.

agencies already have the legal authority to impose meaningful countercyclical rules in a variety of areas. Capitalizing on these opportunities to enact effective countercyclical reforms is a critical policymaking challenge that regulators must confront to ensure a more stable financial system for the future.