

BASEL FINALIZATION AND U.S. BANK CAPITAL REQUIREMENTS

May 1, 2023

The final round of Basel III reforms (“**Basel Finalization**”)<sup>1</sup> may significantly increase U.S. bank capital requirements. Any such increase would come at a time when U.S. bank capital levels are already very high and would problematically coincide with the ongoing efforts of the Federal Reserve to reduce inflation using contractionary monetary policy. In this statement, the Committee on Capital Markets Regulation (the “**Committee**”) explains why increasing bank capital requirements under such circumstances is undesirable and calls on U.S. bank regulators to adopt adjustments to Basel Finalization that would neutralize any such increases.

There are three key reasons that U.S. bank regulators should not increase capital requirements at this time. First, there is no need for a capital increase to maintain the stability of the banking system, as U.S. bank capital levels are strong. Second, there would be significant economic costs from raising bank capital requirements, as there is extensive empirical evidence that increasing capital requirements reduces banks’ lending and capital markets activities and increases borrowing costs. Third, raising bank capital requirements during a monetary policy tightening cycle would amplify costs and increase economic uncertainty, as the economic literature shows that contractionary monetary policy amplifies negative effects on bank lending. An increase in bank capital requirements could also pose issues after inflation has been contained. At that time, the Federal Reserve will likely need to steady or lower interest rates to facilitate an economic recovery, but high bank capital requirements cannot be rapidly moderated like short-term interest rates and could thus reduce the financing available to facilitate an economic recovery, and make available financing more expensive, thereby undercutting the Fed’s efforts.

We also note that the recent crisis of Silicon Valley Bank (“**SVB**”) does not evidence a need to increase bank capital requirements. SVB failed to manage interest rate risk that significantly reduced the market value of its portfolio of Treasuries and mortgage-backed securities. When concerned depositors withdrew en masse, SVB was unable to fund the withdrawals by selling its portfolio assets, despite remaining solvent under relevant accounting rules.<sup>2</sup> SVB is thus a case of a bank-specific liquidity crisis, not a banking system-wide capital shortage. Furthermore, Basel Finalization would do nothing to address mismanagement of interest rate risk or liquidity risk, which were central to SVB’s failure.

We therefore recommend that U.S. regulators adopt adjustments to Basel Finalization that neutralize the capital increases that would otherwise result. If regulators nonetheless determine that capital increases are necessary (which we do not believe is the case), then they should be implemented only *after* monetary policy efforts to slow the economy have ceased and the economy

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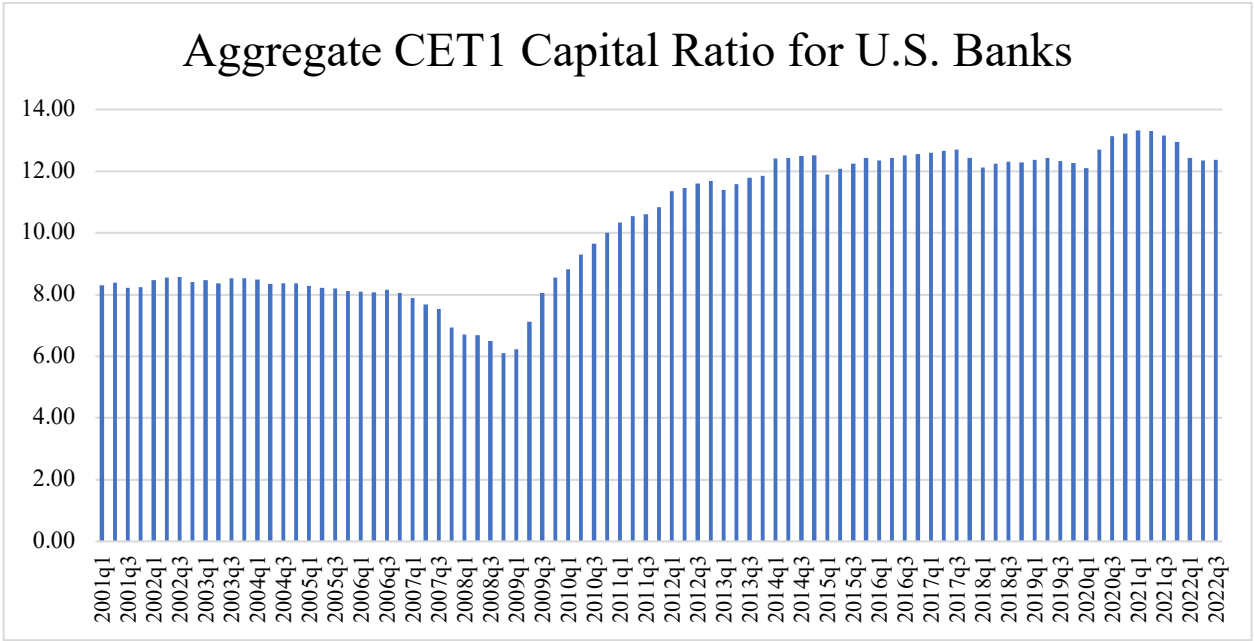
<sup>1</sup> We use “Basel Finalization” to refer to the reforms contained in the 2017 proposal “Basel III: Finalising Post-Crisis Reforms” (<https://www.bis.org/bcbs/publ/d424.htm>) and the 2019 reforms known as the “Fundamental Review of the Trading Book” (<https://www.bis.org/publ/bcbs265.htm>).

<sup>2</sup> Hal Scott, *Fed Action Could Have Prevented SVB’s Collapse* WALL STREET JOURNAL (Mar. 16, 2023), <https://www.wsj.com/articles/fed-action-could-have-prevented-the-run-on-svb-lender-last-resort-fdic-systemic-risk-guarantee-deposit-e84ba1f1>.

has recovered. Bank regulators could do so by conditioning implementation of Basel Finalization on the occurrence of a set of economic variables indicating that the economy has returned to a steadier state.

1. Current U.S. bank capital levels are high, and an unmodified implementation of Basel Finalization will raise them further.

In the years since the 2008 financial crisis, U.S. banks have significantly increased their capital levels. For example, the aggregate CET1 capital ratio of U.S. banks for the 2001-2007 period was 8.25% but has since increased nearly four percentage points to 12.37% as of Q3 2022.<sup>3</sup> Bank capital was also not strained by the severe market turmoil that occurred in March 2020. The aggregate CET1 capital ratio across U.S. banks declined by only 15 basis points, from 12.25% as of year-end 2019 to its lowest point in 2020 of 12.10%.<sup>4</sup> In addition, many of the largest banks—those that would be subject to Basel Finalization—served as a source of strength to the banking system during the recent SVB-related crisis, including by voluntarily making \$30 billion in uninsured deposits in First Republic Bank when it was under stress. And most recently by JPMorgan’s acquisition of First Republic Bank’s deposits and assets.<sup>5</sup>



The current strength of capital levels indicates that there is no need to increase bank capital to ensure the stability of the U.S. banking system. Nonetheless, Basel Finalization will push U.S.

<sup>3</sup> FEDERAL RESERVE BANK OF NEW YORK, QUARTERLY TRENDS FOR CONSOLIDATED U.S. BANKING ORGANIZATIONS, Q3 2022, [https://www.newyorkfed.org/research/banking\\_research/quarterly\\_trends](https://www.newyorkfed.org/research/banking_research/quarterly_trends). SIFMA, SIFMA RESEARCH QUARTERLY – 3Q22 (2022), <https://www.sifma.org/wp-content/uploads/2022/08/US-Research-Quarterly-Financial-Institutions-2022-11-30-SIFMA.pdf>.

<sup>4</sup> *Id.*

<sup>5</sup> JPMorgan Chase Bank, National Association, Columbus, Ohio Assumes All the Deposits of First Republic Bank, San Francisco, California, May 1, 2023. Available at: <https://www.fdic.gov/news/press-releases/2023/pr23034.html>

bank capital even higher unless U.S. regulators modify its provisions or adopt offsetting modifications to existing domestic requirements.<sup>6</sup> According to one estimate by then-Federal Reserve Board Vice Chair Randy Quarles, Basel Finalization could increase capital requirements for the largest U.S. banks by up to 20%.<sup>7</sup>

Under the existing U.S. implementation of Basel III, all banks must calculate their risk-weighted assets under the “standardized” approach, whereby risk weightings are determined entirely by standardized formulas. Banks with at least \$700 billion in total assets or \$75 billion in cross-jurisdictional exposures must also calculate their risk-weighted assets using the “advanced” approaches, which involve the use of firm-specific models to assign risk weightings.

Operational risks are currently excluded from the standardized approach, though they are included in the advanced approaches.<sup>8</sup> The existing standardized approach (even without operational risk) nevertheless requires more overall capital than the advanced approaches and is thus binding on large banks, in part because the standardized approach applies in combination with the stress capital buffer whereas the advanced approaches do not.

Basel Finalization, however, would create a new version of the standardized approach that will likely apply to all banks with at least \$250 billion in total assets. This new version of the standardized approach would also introduce new capital requirements for operational risks and change the calculation for market and credit risk. The net effect of the new standardized approach is expected to be a substantial increase in the overall amount of capital for the banks required to apply it. Although improved risk sensitivity with respect to certain exposure classes may lower capital requirements with respect to credit risk, any such reduction would be more than offset by the new operational risk charge and expected increases in market risk requirements due to the changes in that element of the framework.

Specifically, the set of Basel Finalization reforms known as the “Fundamental Review of the Trading Book” (“**FRTB**”) will change the methodologies for the calculation of risk-weightings for banks’ trading assets.<sup>9</sup> For example, FRTB introduces stringent eligibility requirements for the use of internal models. Assets that cannot meet those requirements must either be subject to a stress test or to the standardized approach. As a result, the estimated riskiness of those assets will rise materially, ultimately leading to an increase in capital requirements.<sup>10</sup>

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<sup>6</sup> BANK POLICY INSTITUTE, *BASEL FINALIZATION: THE HISTORY AND IMPLICATIONS FOR CAPITAL REGULATION – PART I* (2023), <https://bpi.com/basel-primer-series-introduction/>.

<sup>7</sup> Governor Randal K. Quarles, *Between the Hither and the Farther Shore: Thoughts on Unfinished Business* (Dec. 2, 2021), <https://www.federalreserve.gov/newsevents/speech/quarles20211202a.htm>.

<sup>8</sup> Bank Policy Institute, *supra* note 6.

<sup>9</sup> BASEL COMMITTEE ON BANKING SUPERVISION, *MINIMUM CAPITAL REQUIREMENTS FOR MARKET RISK* (2019), <https://www.bis.org/bcbs/publ/d457.pdf>.

<sup>10</sup> BANK POLICY INSTITUTE, *As U.S. Regulators Implement the 2017 Basel Accord, It’s Time for a Reality-Based Assessment of Current Capital Levels* (2017), <https://bpi.com/as-u-s-regulators-implement-the-2017-basel-accord-its-time-for-a-reality-based-assessment-of-current-capital-levels/>.

Basel Finalization’s overall capital requirement increases are expected to be most significant for banks that focus on capital markets activities, since any lower risk weightings for credit risk would have less of an offsetting effect for such banks.<sup>11</sup>

In the United States, capital markets activities have a larger role in financing the economy than bank lending. For example, in 2022, capital markets generated 77.5% of debt funding for non-financial corporations in the United States.<sup>12</sup> As such, capital increases for banks engaged in capital markets activities are of heightened importance to the U.S. economy. This is particularly true with respect to small and start-up businesses, which receive a greater portion of financing from banks than other enterprises. Increasing capital requirements would shift such financing to less transparent and less regulated corners of the market.

2. Higher bank capital requirements reduce bank lending and capital markets activities and thereby slow economic growth.

There is a substantial body of empirical literature demonstrating that higher capital requirements reduce bank lending and increase the cost of borrowing, which slows economic growth.

A 2010 survey by the Bank for International Settlements (“BIS”) of modelling conducted by the International Monetary Fund, central banks and bank regulators in 15 jurisdictions found that a 1% increase in bank capital ratios implemented over 8 years in these jurisdictions would increase borrowing costs and reduce credit supply, reducing forecasted GDP by a median 0.15%.<sup>13</sup> A 2017 Federal Reserve study similarly concluded that a 1% increase in bank capital ratios increases borrowing costs and reduces long-run U.S. GDP growth by 0.074%.<sup>14</sup> De-Ramon (2016) concluded that a 1% increase in bank capital requirements in the United Kingdom lowered annual loan growth by 0.12%.<sup>15</sup> Acharya et al. (2017) found that the implementation of Dodd Frank bank capital stress testing in 2009 increased U.S. bank loan spreads by 0.48% and reduced credit supply.<sup>16</sup> Finally, a 2016 BIS literature review summarizes: “Overall, the empirical evidence reported in the literature suggests that an increase in capital requirements by one percentage point

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<sup>11</sup> Dr. Peter Ryan and Dr. Guowei Zhang, SIFMA, *How the Basel III “Endgame” Reforms Will Transform U.S. Capital Requirements* (Feb. 27, 2023), <https://www.sifma.org/resources/news/how-the-basel-iii-endgame-reforms-will-transform-us-capital-requirements/>.

<sup>12</sup> SIFMA, 2022 CAPITAL MARKETS FACT BOOK 6 (2022), <https://www.sifma.org/wp-content/uploads/2022/07/CM-Fact-Book-2022-SIFMA.pdf>.

<sup>13</sup> BANK FOR INT’L SETTLEMENTS, *ASSESSING THE MACROECONOMIC IMPACT OF THE TRANSITION TO STRONGER CAPITAL AND LIQUIDITY REQUIREMENTS* (2010), <https://www.bis.org/publ/othp12.pdf>.

<sup>14</sup> Simon Firestone et al., *An Empirical Economic Assessment of the Costs and Benefits of Bank Capital in the US*, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, Finance and Economics Discussion Series 2017-034 (2017), <https://www.federalreserve.gov/econres/feds/files/2017034pap.pdf>.

<sup>15</sup> Sebastian de-Ramon et al., *Bank Capital Requirements and Balance Sheet Management Practices: Has the Relationship Changed after the Crisis*, Bank of England Working Paper No. 635 (2016), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2885244](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2885244).

<sup>16</sup> Viral V. Acharya et al., *Lending Implications of U.S Bank Stress Tests: Costs or Benefits?* JOURNAL OF FINANCIAL INTERMEDIATION (2017), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2972919](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2972919).

forces banks to cut their lending in the long run by 1.4–3.5% or reduce credit growth by 1.2–4.6%.<sup>17</sup>

The costs from reduced lending activity due to higher capital requirements can fall disproportionately on specific economic sectors, particularly smaller banks, small businesses, and retail consumers. For example, Greene & Lux (2015) found that higher capital requirements resulted in lower levels of lending by U.S. banks, particularly loans by community banks and loans to small businesses.<sup>18</sup> Acharya et al. (2017) found that the reduction in bank lending stemming from Dodd Frank stress testing was particularly pronounced for credit card and small business borrowers.<sup>19</sup>

On the contrary, a recent empirical study, Begenau & Landvoigt (2022),<sup>20</sup> suggests that the optimal capital level for U.S. banks is higher than current levels. However, it fails to take into account several important factors.<sup>21</sup> For example, the analysis assumes that banks exclusively hold risky assets when in fact Basel III liquidity rules require banks to devote a significant percentage of their portfolios to highly liquid assets such as Treasury securities.<sup>22</sup> The analysis also assumes that all bank liabilities consist of insured deposits, when in fact a significant percentage of bank liabilities consist of long-term debt convertible to equity and only approximately half of bank deposits are insured.<sup>23</sup> These inaccurate assumptions result in an overestimation of the likelihood and costs of bank failures, and thus an overestimation of optimal capital levels.<sup>24</sup>

In the case of capital markets activities, Baker et al. (2017) found that CET1 capital requirements imposed greater constraints on the activities of banks with a capital markets focus compared to traditional banks, requiring capital markets banks to continuously build more CET1 capital in the post-2008 period.<sup>25</sup> Indeed, banks have demonstrated a strong tendency to reduce the ratio of their trading assets to total assets since late 2008.<sup>26</sup> And Cimon (2019) found that Basel III caused bank-affiliated dealers to change their market making business models by holding fewer positions on their balance sheets and increasingly operating on an agency basis, which reduced investor welfare.<sup>27</sup> Liang & Parkinson (2020) further observed that elements of the methodology for the

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<sup>17</sup> BASEL COMMITTEE ON BANKING SUPERVISION, BANK FOR INT’L SETTLEMENTS, *Literature Review on Integration of Regulatory Capital and Liquidity Instruments* 7 (2016). <https://www.bis.org/bcbs/publ/wp30.pdf>.

<sup>18</sup> Marshall Lux & Robert Greene, *The State and Fate of Community Banking* (2020), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2913096](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2913096).

<sup>19</sup> Acharya et al., *supra* note 16.

<sup>20</sup> Juliane Begenau & Tim Landvoigt, *Financial Regulation in a Quantitative Model of the Modern Banking System* 89(4) THE REVIEW OF ECONOMIC STUDIES 1748, <https://academic.oup.com/restud/article-abstract/89/4/1748/6482752?redirectedFrom=fulltext>.

<sup>21</sup> FRANCISCO COVAS, BANK POLICY INSTITUTE, CAPITAL REQUIREMENTS, NONBANK FINANCE, AND FINANCIAL FRAGILITY (Mar. 1, 2023), <https://bpi.com/capital-requirements-nonbank-finance-and-financial-fragility/>.

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> Colleen Baker et al., *The Impacts of Financial Regulations: Solvency and Liquidity in the Post-Crisis Period*, FRB of Philadelphia Working Paper No. 17-10 (2017), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2958121](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2958121).

<sup>26</sup> *Id.*

<sup>27</sup> David A. Cimon & Corey Garriott, *Banking Regulation and Market Making* (2019), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2882594](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2882594).

calculation of the capital surcharge for global-systemically important banks “may be unnecessarily restraining market-making by bank-affiliated dealers in times of market stress.”<sup>28</sup> Wang & Zhong (2019) also found that higher capital requirements under Basel III led to an overall decrease in market making by banks.<sup>29</sup> And a 2014 BIS study observed that, following the implementation of Basel III, bank market-makers increased their focus on activities requiring less capital and balance sheet capacity and that banks in many jurisdictions allocated less capital to their market-making activities and reduced their holdings of less liquid assets.<sup>30</sup>

3. The interaction of monetary policy tightening and higher capital requirements would amplify economic costs and make both policies less precise.

While higher capital requirements work in the same direction as contractionary monetary policy by reducing bank lending and capital markets activity, the magnitude of the impact of increases to bank capital requirements on bank lending and capital markets activity is uncertain and difficult to adjust on a continuous basis. Moreover, once the current contractionary monetary policy cycle ceases, higher bank capital requirements could make it more difficult to restore lost financing activity with lower interest rates.

Estimating the costs and benefits of higher bank capital requirements is subject to considerable imprecision under any circumstances and becomes less precise as bank capital increases above current regulatory requirements. De Ramon (2012), for example, found that estimating the economic effects of increasing capital ratios is subject to significant uncertainty and that there is decreasing statistical confidence that net benefits are positive for capital levels beyond Basel III standards as they are currently implemented.<sup>31</sup>

There is also a significant body of economic literature indicating that contractionary monetary policy amplifies the negative effect of higher capital on bank lending while blunting the ability of expansionary monetary policy to stimulate bank lending. For example, Markovic (2006)<sup>32</sup> finds that the interaction of monetary policy and capital requirements is “asymmetric” such that higher interest rates increase the constraining effect of capital requirements on bank lending, whereas lower interest rates do not produce an offsetting effect.<sup>33</sup> Similarly, Kishan & Opieala (2006),<sup>34</sup>

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<sup>28</sup> Nellie Liang & Pat Parkinson, *Enhancing Liquidity of the U.S. Treasury Market Under Stress*, Hutchins Center Working Paper No. 72, 3 (2020), [https://www.brookings.edu/wp-content/uploads/2020/12/WP72\\_Liang-Parkinson.pdf](https://www.brookings.edu/wp-content/uploads/2020/12/WP72_Liang-Parkinson.pdf).

<sup>29</sup> Xinjie Wang & Zhaodong Zhong, *Post-Crisis Regulations, Market Making, and Liquidity in Over-the-Counter Markets* (2019), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3318671](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3318671).

<sup>30</sup> BANK FOR INT’L SETTLEMENTS, COMMITTEE ON THE GLOBAL FINANCIAL SYSTEM, *Market-Making and Proprietary Trading: Industry Trends* (2014), <https://www.bis.org/publ/cgfs52.pdf>.

<sup>31</sup> Sebastian de-Ramon et al., *Measuring the Impact of Prudential Policy on the Macroeconomy: A Practical Application to Basel III and Other Responses to the Financial Crisis*, FSA Occasional Paper No. 42 (2012), <https://ideas.repec.org/p/pramprapa/69423.html>.

<sup>32</sup> Bojan Markovic, *Bank Capital Channels in the Monetary Transmission Mechanism*, Bank of England Working Paper No. 313 (2006), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=965470](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=965470).

<sup>33</sup> *Id.*

<sup>34</sup> Ruby P. Kishan & Timothy P. Opieala, *Bank Capital and Loan Asymmetry in the Transmission of Monetary Policy* 30(1) J. OF BANKING & FIN. 259 (2006), <https://www.sciencedirect.com/science/article/abs/pii/S0378426605000956>.

Bolton & Freixas (2006),<sup>35</sup> and Chami & Cosimano (2001) find that higher bank capital requirements increase the negative effect of contractionary monetary policy on loan growth while decreasing the effectiveness of expansionary monetary in stimulating loan growth.<sup>36</sup>

Although these studies evidence the existence of a complex interaction between interest rates, capital requirements, and lending, they are based on theoretical models and do not provide a definitive basis from which to sufficiently calculate the interaction between an increase in capital requirements under Basel Finalization and the Federal Reserve's current monetary policies. Furthermore, the existing literature focuses on bank lending and not capital markets activities, which as noted above are of even greater relevance to the U.S. economy. A capital increase under existing circumstances would therefore not only produce unnecessary costs, but also make the extent of these costs and the effect of ongoing monetary policy efforts more unpredictable.

Furthermore, banks typically seek to maintain buffers above anticipated regulatory minimums, and if bank regulators announce future increases to bank capital requirements, then the empirical evidence, including for example Eber & Minoiu (2016), demonstrates that banks would begin to increase capital before the implementation date of those reforms.<sup>37</sup>

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<sup>35</sup> Patrick Bolton & Xavier Freixas, *Corporate Finance and the Monetary Transmission Mechanism* 19(3) R. OF FIN. STUDIES 829 (2006), <https://www0.gsb.columbia.edu/faculty/pbolton/transmission.pdf>.

<sup>36</sup> Ralph Chami & Thomas F. Cosimano, *Monetary Policy with a Touch of Basel* IMF Working Paper WP/1/151, 29 (2001), <https://www.imf.org/external/pubs/ft/wp/2001/wp01151.pdf>.

<sup>37</sup> Maximilian Eber & Camelia Minoiu, *How Do Banks Adjust to Stricter Supervision* (2016), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2662502](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2662502).

**Recommendations**

U.S. bank capital levels are very strong and demonstrated their strength by effectively withstanding the 2020 market turmoil. The economic costs in the form of reduced lending and capital markets activities that would stem from even higher bank capital requirements are thus unnecessary. This could be particularly problematic in the current environment, as the recent rapid withdrawals of uninsured depositors are likely to incent banks to further tighten the availability and terms of credit to U.S. borrowers. Furthermore, the interaction of higher capital requirements with contractionary monetary policy would make the effect of both policies less certain and impracticable for regulators to monitor as well as amplifying their economic costs. We therefore recommend that U.S. regulators adopt adjustments or offsets to Basel Finalization that neutralize any capital requirement increases that would otherwise result from the implementation of those reforms.

If regulators nonetheless believe that capital requirements should be increased, no such increase should become effective until after the existing monetary policy tightening cycle has ceased and the economy has recovered. Furthermore, the effective date of such an increase should not be specified in advance. Instead, these reforms should only become effective after economic indicators demonstrate that the economy has returned to a steady state. There is a precedent for an approach that links implementation to economic circumstances rather than a specific date: The countercyclical capital buffer (“CCyB”) framework specifies a non-exhaustive set of financial-sector and macroeconomic indicators that the Federal Reserve considers in determining whether to implement the CCyB, such as real estate prices, credit-to-GDP ratios, and GDP growth rates.<sup>38</sup>

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<sup>38</sup> FEDERAL RESERVE SYSTEM, REGULATORY CAPITAL RULES: THE FEDERAL RESERVE BOARD’S FRAMEWORK FOR IMPLEMENTING THE U.S. BASEL III COUNTERCYCLICAL CAPITAL BUFFER, Docket No. R-1529, 26-27 (2016), <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20160908b1.pdf>.