

REPORT ON BANK OPERATIONAL STRESS TESTING PILOT EXERCISE

FEBRUARY 27, 2025



I. INTRODUCTION

The April 28, 2023, report by the New York State Department of Financial Services (the “Department” or “DFS”) on its internal review of the supervision and closure of Signature Bank included several recommendations for improvements in the supervision of banking organizations. One such recommendation was that “DFS consider whether banks need to conduct table-top exercises demonstrating their operational readiness to collect and produce accurate financial data at a rapid pace and in a stress scenario.”¹ In connection with this recommendation, the Department developed an operational stress test to be administered to an initial set of regulated banking organizations as part of a pilot program (the “OST Pilot” or “Pilot”).

This white paper describes the role of operational stress testing in a well-functioning regulatory ecosystem and explains the OST Pilot and the Department’s findings. Overall, as noted below, the Department and the participating institutions found that the Pilot was a valuable exercise. Indeed, one participant institution identified a need for further diversification of funding lines as part of the Pilot and subsequently applied to the Federal Reserve Bank of New York to expand its eligible borrowing base, while another undertook improvements to its documented contingency plans to account for lessons learned. The Department’s findings underscore that operational stress testing is useful in preparing for, and mitigating the impact of, potential incidents, including both financial crises and non-financial stress events, such as cyberattacks, pandemics, natural disasters, and terrorist attacks.

II. DFS

Established in 2011 by the consolidation of the New York Banking and Insurance Departments, DFS is charged with regulating banking, insurance, and financial services in New York. DFS supervises and regulates the activities of more than 3,000 financial institutions with total assets of more than \$9.7 trillion as of December 31, 2023, including more than 1,950 insurance companies and over 1,300 banking and other financial institutions. DFS seeks to build an equitable, transparent, and resilient financial system that benefits individuals and supports business. DFS and its employees are responsible for empowering consumers and protecting them from financial harm; ensuring the health of regulated entities; driving economic growth in New York through responsible innovation; and preserving the stability of the global financial system.

Pursuant to Section 10 of the New York Banking Law, DFS is charged with ensuring the safe and sound operation of regulated financial institutions and protecting the public interest and

¹ N.Y. STATE DEP’T OF FIN. SERVS., INTERNAL REVIEW OF THE SUPERVISION AND CLOSURE OF SIGNATURE BANK 7 (Apr. 28, 2023), https://www.dfs.ny.gov/system/files/documents/2023/04/nydfs_internal_review_rpt_signature_bank_20230428.pdf [<https://perma.cc/HQ7V-YQEQ>].

the interests of depositors, creditors, and shareholders.² DFS’s Banking Division supervises bank and non-bank service providers. DFS’s Consumer Protection and Financial Enforcement Division fights consumer fraud, ensures that regulated entities comply with related New York and federal law, and educates consumers about financial services.³

III. BACKGROUND ON OPERATIONAL STRESS TESTING

Operational stress testing is an important tool for managing organizational risk and ensuring operational resilience. This practice involves rigorous, focused evaluations, such as tabletop exercises, that help organizations identify and address vulnerabilities and gaps within their critical systems.⁴ Through operational stress testing, organizations can “evaluate the[ir] people, processes, and tools[,] . . . [to] identify areas of improvement . . . [and] reduce the impact of the inevitable” incidents.⁵ By helping organizations to streamline communication both internally and with external entities, operational stress exercises can significantly mitigate the adverse effects of disruptive events—from those that are infrequent and high-impact to those that are more common and lower-impact.⁶

A. HISTORY AND TYPES OF STRESS TESTS

Stress testing is a well-established means of risk identification and mitigation. Fundamentally, stress testing consists of applying a plausible but severe set of hypothetical circumstances to an institution’s existing condition and analyzing how the institution would perform under those circumstances. Stress tests vary according to the type of response analyzed (e.g., capital adequacy, liquidity); the variables negatively affected (and to what degree); and the parameters of what constitutes a “passing grade.” The purpose is to ensure—before any issues arise—that established crisis plans would be effective during an actual crisis situation. If any faults or shortcomings are identified in the course of assessing the hypothetical scenario, the institution has time to remedy its crisis plans to be more responsive to an actual crisis.

In the banking sector, stress testing has historically focused on financial stress, rather than operational stress. Dating as far back as the mid-19th century, financial stress tests have

² N.Y. BANKING LAW § 10.

³ The other DFS divisions include Insurance, Cybersecurity, Research and Innovation, and Climate. The Cybersecurity Division protects consumers of financial services and the financial services industry from cyber threats by improving cybersecurity in the financial services industry and conducting cybersecurity-related enforcement investigations in cooperation with the Consumer Protection and Financial Enforcement Division. The Research and Innovation Division concentrates on financial services innovation and houses the Department’s virtual currency unit, which licenses and supervises non-bank entities engaging in virtual currency business activities. Lastly, the Climate Division, established in 2021, is tasked with ensuring that climate risks are integrated into the governance frameworks, business strategies, and risk management processes of regulated institutions.

⁴ See, Steven Grimberg & Mark Ray, *A Call to Action: Cybersecurity Due Diligence in Today’s Business Climate*, 5 EMORY CORP. GOVERNANCE ACCOUNTABILITY REV. 73, 74 (2018).

⁵ *Id.* at 73–74.

⁶ *Id.* at 74–75.

been voluntarily conducted by firms to assess internal risk.⁷ The significance of the practice grew towards the end of the 20th century, as regulators began integrating stress testing into their frameworks, beginning with Federal Home Loan Bank-directed sensitivity analysis for mortgage portfolios first required in 1988.⁸ The 2008 financial crisis highlighted the need for stress testing to evolve from a “formalistic box-checking exercise which left the relevant legal requirements toothless as a practical matter” into an active and central component of regulatory oversight.⁹ Although the majority of participating banks failed the initial stress tests implemented in response to the 2008 crisis, nonetheless, the concept of a stress testing program generated a positive response from the market.¹⁰

Moving beyond mere financial modeling requirements, the Dodd-Frank Act mandated that the Federal Reserve Board and the Federal Deposit Insurance Corporation (“FDIC”) require periodic resolution plans from bank holding companies with more than \$50 billion in total consolidated assets.¹¹ These resolution plans report on an institution’s ability to maintain operational continuity during and through material financial distress. Relatedly, the Securities Industry and Financial Markets Association (“SIFMA”) conducts annual industry-wide business continuity tests.¹² The most recent SIFMA test, conducted in October 2024, was designed to determine the impact of “theft, disruption, and destruction” on market participants’ data centers, work area recovery sites, and backup communications with the markets.¹³ Globally, financial regulatory authorities and international standards setting bodies have also turned their focus to operational resilience as a means of bolstering systemic financial resilience against operational failures and disruptions.¹⁴

⁷ Matthew C. Turk, *Stress Testing the Banking Agencies*, 105 IOWA L. REV. 1701, 1707–08 (2020).

⁸ *Id.* at 1708.

⁹ After the 2008 financial crisis, the Federal Reserve started to run stress testing, then known as the Supervisory Capital Assessment Program, on the major U.S. banks as part of the TARP bailout package authorized by Congress. *Id.* at 1710–11.

¹⁰ Turk, *supra* note 7, at 1712.

¹¹ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111–203, § 165(d), 124 Stat. 1376, 1430–31 (2010). A subsequent statutory amendment revised the asset threshold for mandatory resolution planning to \$250 billion in total consolidated assets and accorded the Federal Reserve Board discretion to require resolution plans from bank holding companies with \$100 billion or more in total consolidated assets. Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. 115–174, § 401, 132 Stat. 1296, 1356–57 (2018), *codified at* 12 U.S.C. 5365(a).

¹² See, e.g., SEC. INDUS. & FIN. MKT ASS’N, SIFMA Conducts Successful Industry-Wide Business Continuity Test (Oct. 7, 2024), <https://www.sifma.org/resources/news/sifma-conducts-successful-industry-wide-business-continuity-test-2/> [<https://perma.cc/U8WX-M7RW>]. The tests involve exchanges, markets, and industry utilities from at least 90 entities and seven different business areas, including transactions in commercial paper, equities, options, fixed income, settlement, payments, Treasury auctions, and market data.

¹³ *Id.*

¹⁴ Chase England & Carlos Sosa, *An Approach to Quantifying Operational Resilience Concepts*, FEDS Notes (July 1, 2022), <https://www.federalreserve.gov/econres/notes/feds-notes/an-approach-to-quantifying-operational-resilience-concepts-20220701.html> [<https://perma.cc/7PTD-Z24J>].

In the transportation sector, the U.S. Department of Transportation (“DOT”) implements tabletop exercises to monitor whether a transportation system can withstand and minimize the effects of a traffic disruption.¹⁵ The DOT exercises are less concerned with numerical analysis and instead focus on operational and cohesiveness and communications issues that may arise from such an incident. The analysis consists of questions such as who discovers a hazardous crash in the middle of the night, what their first steps would be, how the police and other relevant agencies would be notified, and what their response would be.¹⁶

In the cybersecurity sphere, domestic and international entities such as the U.S. National Institute of Standards and Technology and the U.K. National Cyber Security Centre offer guidelines, which are considered major pillars of cybersecurity, for testing an organization’s information security program.¹⁷ Those guidelines speak to a range of potential incidents to be tested, including incidents that may result from internet/virtual threats (*e.g.*, a hacked or compromised system, a threat from an unknown Wi-Fi network, a ransomware and/or phishing attack, a threatened leak of sensitive data, an insider threat leading to a data breach, a heightened cyber threat environment, and issues related to remote work), physical threats (*e.g.*, mobile phone theft, bring-your-own-device policy weaknesses, and issues related to remote work), and threats connected to outside organizations (*e.g.*, reliance on third-party software, supply chains, supply chain software, and ransomware attacks on an element of the supply chain).¹⁸

In sum, practical assessment of institutions’ financial and operational resilience under adverse hypothetical scenarios has been embraced by a wide range of entities across various sectors. This broad adoption underscores the critical role of operational stress testing in maintaining the stability and resilience of organizations in an increasingly complex, globalized environment.

B. SPRING 2023 BANKING TURMOIL

Market conditions now evolve more rapidly in response to modern communications methods, meaning that banks need to be able to respond nimbly to changing conditions. The banking turmoil in 2023 demonstrated that social factors remain a critical driver of depositor behavior.¹⁹ In March 2023, following the collapse of Silicon Valley Bank, Signature Bank

¹⁵ U.S. DEP’T OF TRANSP. & FED. HIGHWAY ADMIN., FHWA-HOP-15-004, TABLETOP EXERCISE INSTRUCTIONS FOR PLANNED EVENTS AND UNPLANNED INCIDENTS/EMERGENCIES 5 (Mar. 2015), <https://ops.fhwa.dot.gov/publications/fhwahop15004/fhwahop15004.pdf> [<https://perma.cc/PYH9-TH3C>].

¹⁶ *Id.* at 7–9.

¹⁷ Grimberg & Ray, *supra* note 4, at 73.

¹⁸ NAT’L CYBER SEC. CTR., *Exercise in a Box: Tabletop Exercises*, <https://www.ncsc.gov.uk/section/exercise-in-a-box/tabletop-exercises> [<https://perma.cc/X3BE-9TE6>].

¹⁹ U.S. DEP’T OF THE TREASURY, Remarks by Under Secretary for Domestic Finance Nellie Liang at the 2024 OCC Bank Research Symposium (June 24, 2024), <https://home.treasury.gov/news/press-releases/jy2429> [<https://perma.cc/T9ED-DG3V>]; N.Y. STATE DEP’T OF FIN. SERVS., *supra* note 1, at 31.

(“Signature”) experienced a rush of deposit withdrawals.²⁰ Although Signature had an established contingency funding plan (“CFP”), the Department had previously cited Signature’s CFP for excessive weaknesses related to identifying, measuring, and monitoring uninsured deposits.²¹ While Signature had begun to remediate deficiencies in its CFP in response to the Department’s concerns, Signature was operationally unable to utilize various contingency funding sources during the brief, critical period following the failure of Silicon Valley Bank, when Signature customers’ withdrawals surged.²² Despite the bank’s efforts, as well as assistance from the Department and federal regulators, client-ordered outflows proved insurmountable, and the Department took possession of the bank and appointed the FDIC as receiver.²³ Notably, Signature did not have an operational stress testing program to evaluate its ability to execute its CFP in an actual crisis.²⁴ Such a program could have been an additional tool to help alert the bank’s management and regulators to potential issues and vulnerabilities of the nature that eventually caused its closure, before a crisis developed.

The Spring 2023 banking turmoil underscored that as banks face the faster-developing crises of the modern era, periodic operational stress testing can help banks to refine their planning for robust contingent alternatives,²⁵ and to confirm that they are prepared to meet those crises.²⁶ Market conditions will continue to evolve, sometimes in unpredictable ways, and as conditions change, it is paramount that banks maintain operability and ensure familiarity with their existing contingency options, including with respect to funding lines.

The day after the Department took possession of Signature and appointed the FDIC as receiver, the Superintendent of Financial Services, Adrienne A. Harris, directed the Department’s Office of General Counsel to review the collapse of Signature and produce a public report documenting the events that led to Signature’s failure and identifying opportunities to improve the Department’s supervisory process. One recommendation developed through that review was to conduct a tabletop preparedness exercise with a small sample of regulated institutions. The OST Pilot was designed both to assess the substantive preparedness of the

²⁰ N.Y. STATE DEP’T OF FIN. SERVS., *supra* note 1, at 6.

²¹ *Id.* at 18.

²² For example, Signature’s liquidity contingency planning assumed Discount Window pledgeability of \$18 billion in capital call loans that did not satisfy the Federal Reserve Bank of New York’s collateral criteria. Further, the bank represented immediate capacity to borrow against assets that realistically could not be assessed for valuation for weeks, and the bank reported an unverifiably high valuation for an unpledged securities portfolio, resulting in an 80% decline in potential borrowing capacity over the course of a few hours (from more than \$5 billion initially represented to \$900 million of actual borrowing capacity). *Id.* at 35–36.

²³ *Id.* at 37–39.

²⁴ *Id.* at 43.

²⁵ Remarks by Under Secretary for Domestic Finance Nellie Liang, *supra* note 19.

²⁶ OFF. OF THE COMPTROLLER OF THE CURRENCY, BD. OF GOVERNORS OF THE FED. RSRV. SYS., FED. DEPOSIT INS. CORP., OFF OF THRIFT SUPERVISION, NAT’L CREDIT UNION ADMIN., Interagency Policy Statement on Funding and Liquidity Risk Management, 75 Fed. Reg. 13656 (Mar. 22, 2010).

target institutions to execute on their own contingency funding arrangements and to gauge the utility of such exercises for future resilience planning and assessment.

IV. DESIGNING THE OST PILOT

In light of the challenges identified in the Spring 2023 banking turmoil, and as a way to test the efficacy of operational stress testing against an actual crisis for which the Department had data, the Department chose to focus its pilot program on institutions' readiness to implement liquidity contingency planning. This framework can be proactively adapted to help identify and plan for mitigation of other types of risks as well.

In order to test a representative group of regulated institutions, the Department screened and selected depository institutions for inclusion in the Pilot based on a range of criteria, including size, geography, entity type, examination ratings, and deposit mix. The three institutions that the Department selected reflected diversity across these metrics.

After selection, the Department sent the selected institutions an initial communication, informing them of their inclusion in the Pilot. The Department directed these institutions to provide the Department with certain information, including updated versions of their policies, procedures, and other documents related to contingency funding plans and liquidity stress testing. The Department further informed each institution that on an unspecified date, the institution would receive a hypothetical stress test scenario, with 72 hours to provide a set of detailed and actionable materials demonstrating the institution's ability to respond appropriately.

Following review of the institutions' initially submitted materials, the Department sent each institution specific instructions, including the following stress test scenario to which they were required to respond:

Utilizing your February 20, 2024 balance sheet, assume that your institution has suffered a severe exogenous shock that results in an immediate liquidity demand of 35% in deposit withdrawals [includes both interest-bearing and non-interest-bearing deposits] and assume that your institution loses access to all its unsecured funding lines. Further assume that at the time of these withdrawals, prevailing interest rates have increased by 75bps from today's rates. Please reflect those hypothetically increased rates in your mark-to-market calculations for all securities, loans, and other interest rate-sensitive instruments.

The Department instructed institutions to prepare and provide to the Department the materials that would be generated (and in the case of an actual stress scenario, would be actioned) to execute on planned responsive contingency actions to respond to the hypothetical conditions including, without limitation:

- draft, simulated communications required to implement funding actions (*e.g.*, communications to internal Treasury functions regarding the use of the Discount Window or a Federal Home Loan Bank);
- pro-forma financial statements reflecting the effects of proposed actions, taking into account the haircut applied; and

- screenshots of broker screens or similarly authoritative data sources for pricing of any securities or other instruments proposed to be liquidated.

The Department then reviewed and assessed the materials submitted and provided detailed feedback to the institutions. Given the nature of the Pilot, the results of this exercise were not formally incorporated into the banks' current CAMELS assessments, although context gained during the Pilot may be incorporated into the scoping of the next applicable exam(s) for subject institutions.

V. FINDINGS

The OST Pilot successfully demonstrated the utility of operational stress testing in assessing and improving institutions' liquidity readiness. The Pilot confirmed that each institution had at least satisfactory operational readiness and could at least adequately execute its contingency funding framework. The Pilot also demonstrated the types of specific actions each institution was prepared to take in response to the stress scenario. Critically, the Pilot assisted the institutions in identifying further enhancement opportunities in their operational readiness and contingency funding frameworks.

A. SUFFICIENCY OF OPERATIONAL READINESS AND CONTINGENCY FUNDING FRAMEWORKS

Each institution was able to complete the Pilot within the allotted time. The Department found that all three maintained at least satisfactory operational readiness. Moreover, each institution demonstrated that it could at least adequately execute its contingency funding framework and prevail under the liquidity stress scenario. One of the three institutions demonstrated strong operational readiness and was able to successfully execute its contingency funding framework.

The Department identified several key attributes of the institutions' operational readiness frameworks: effective communications frameworks, including with third parties; documented process flows and decision trees; and the ability to prepare pro-forma financials and other reports in real-time. Additionally, with respect to contingency funding frameworks specifically, the Department identified the following key attributes: the use of early warning indicators for withdrawals; a diversity of funding sources; and the use of reliable third parties for brokered deposits. All three institutions also reported either that they use funding from the Federal Home Loan Bank of New York ("FHLB-NY") and the Federal Reserve Bank of New York's Discount Window regularly, or that they test these mechanisms at least annually—thus making it more likely that they will be able to action these sources in the event of a time-sensitive need.²⁷

²⁷ The Department notes that this Pilot was intended to assess institutions' readiness to execute on contingency function options in the event of an exogenous *market* stress rather than an institution-specific stress, and the hypothetical scenario, while severe enough to require meaningful contingent response, was not intended to induce a

B. ACTIONS TO OBTAIN CONTINGENCY FUNDING

As noted above, all institutions demonstrated ability to execute their contingency funding frameworks at least adequately. Two of the institutions took conservative approaches to the Pilot by overlaying additional and more severe stress scenarios than the one provided by the Department, which they were nonetheless able to withstand.

The institutions took different hypothetical avenues to arrive at this result. One institution covered the liquidity shortfall solely with its cash and remaining borrowing potential at FHLB-NY. Another institution likewise first resorted to its cash, pledging investments, and borrowing potential at FHLB-NY. After deployment of these resources, the institution identified a residual liquidity shortfall that, under this scenario, it determined to satisfy with an increase in its brokered deposits base. A third institution also resorted to cash and FHLB-NY borrowing potential, followed by executing repo transactions and borrowing from the Federal Reserve Bank of New York's then-operational Bank Term Funding Program and from the Discount Window.

Depending on the size of the liquidity shortfall, depository institutions may need to rely on all of these various funding sources during a crisis, and so these varying approaches underscore the importance of diverse funding sources.

C. IDENTIFIED ENHANCEMENTS

Each of the participating institutions reported that they found the Pilot to be a useful exercise, including (in some cases) through the self-identification of enhancements to their operational readiness and contingency funding frameworks. One institution stated that the Pilot underscored the importance of diversification of funding lines, and consequently it submitted an application to the Federal Reserve Bank of New York to expand its eligible borrowing base. While the institution already maintained access to the discount window, including through borrower-in-custody arrangements and the now-defunct Bank Term Funding Program, it applied to add commercial and/or residential mixed use real estate loans as another form of collateral to bolster its borrowing capacity in times of need. Another institution identified areas that could be improved in the normal course of business, including its contingency funding plan policy, governance structure, and internal testing procedures.

Further operational enhancements that were highlighted by the Pilot include having draft or template communication memos developed and ready for use during a crisis, thus avoiding spending valuable time drafting the entirety of these documents after a crisis has hit.

troubled or distressed condition at any of the subject institutions. As a result, institutions' plans to borrow from Federal Home Loan Bank of New York ("FHLB-NY") as part of their contingency funding actions have, under the Pilot's hypothetical conditions, been assessed as an appropriate, business-as-usual use of the FHLB-NY lending program. Given each institution's current financial condition and capacity to respond to a significant market stress, the Department assessed that none of these institutions' deployment of FHLB-NY borrowing capacity in response to the hypothetical stress event positioned the FHLB-NY as a lender of last resort.

Additionally, one institution noted the utility of having the timing of internal tabletop exercises be a surprise to internal employees, to simulate the unexpected nature of actual crises.

VI. CONCLUSION

Operational stress testing is an important risk management tool that benefits the financial system in multiple ways and complements the regulatory reforms implemented in the wake of the 2008 financial crisis intended to strengthen firms' financial safety and soundness. Effective operational stress tests work to assess how exactly banks could persevere through various challenges, including by implementing their liquidity, business continuity, and disaster recovery plans, among others. By requiring banks to maintain credible and actionable plans to manage reasonably foreseen stress events, operational stress testing can reduce the impact of both rare-but-major crises and less-serious-but-regular challenges. Banks will inevitably encounter stress incidents of varying severity, but thorough and consistent operational stress testing that investigates the impact of a range of obstacles (*e.g.*, pandemic, cyberattack) on a variety of objectives (*e.g.*, liquidity, capital) can reduce the impact of such incidents.

While the Department's OST Pilot found that the participating institutions had at least satisfactory operational readiness and could at least adequately execute their contingency funding framework, participants also identified several enhancements to their institutions' operational readiness. The Pilot also underscored the importance of having a variety of funding sources to withstand a liquidity crisis, as well as having well-established communications and governance frameworks for such events. The Department believes that institutions of all sizes should consider operational stress testing a best practice for a robust controls environment.

The importance of operational resilience extends beyond financial stability, to encompass a broader range of potential disruptions, including cyberattacks, pandemics, natural disasters, and terrorist attacks.²⁸ Large-scale disruptions of this kind are becoming more frequent, making it more important for firms to prepare for the types of operational risks that could lead to systemic-level disruptions, particularly as risks may spread from a single entity to the broader financial system.²⁹ Third parties increasingly perform a wide array of services for banks, from back-end, regulatory, and infrastructural solutions to market-facing offerings interacting directly—sometimes exclusively—with end users.³⁰ Increasing the number of actors involved in providing services often increases the complexity of that service provision. Thus, an interruption of services from third-party provider firms can pose significant challenges to banks and their customers. This is especially true where the bank relies on a third party for key functions, such

²⁸ Englund & Sosa, *supra* note 14.

²⁹ *Id.*

³⁰ *Id.*

as an internal account ledger.³¹ Operational stress testing can be used to evaluate how the bank would respond to specific challenges arising from third-party partners.³²

Advances in technology, while often beneficial, also introduce more opportunity for sophisticated cyber threats.³³ Operational stress testing can aid firms in identifying specific cyber threats—whether internet/virtual threats, physical threats, or threats connected to outside organizations. Testing can also prepare firms to react to incidents and recover swiftly while maintaining critical operations³⁴—which in turn can prevent an issue at one firm from growing into systemic financial instability. And while many cyber threats arise from malicious actors, even an inadvertent systems disruption can demand immediate business continuity reactions, to avoid the disruption of critical services to consumers.

For example, the July 2024 IT crash caused by a CrowdStrike update had significant impacts across the economy, although on the whole the banking industry was less affected than some other industries, such as air travel.³⁵ Largely, banks’ operational contingency plans to address tech outages proved successful, especially after the initial few hours post-incident. Most institutions were able to reestablish their technological systems with minimal downtime and comparably minimized impact to consumers. The relatively minimal disruptions in the financial sector related to the CrowdStrike outage illustrate the importance of robust contingency planning; operational stress testing offers a useful tool to assess the value of contingency planning *before* real-world scenarios require contingency plan deployment.

Continued stress testing over a range of hypothetical scenarios remains imperative in order to equip regulated institutions to weather future challenges most effectively. By incorporating operational stress testing into their controls frameworks, banks can better prepare for disruptions, of whatever nature, by testing response plans for implementation and making

³¹ See, e.g., Ken Sweet, *Abrupt Shutdown of Synapse Has Frozen Thousands of Americans' Deposits*, AP NEWS, May 22, 2024, <https://apnews.com/article/synapse-evolve-bank-fintech-accounts-frozen-07ecb45f807a8114cac7438e7a66b512> (discussing consequences of the failure of a third-party fintech company that led to customers’ funds being frozen even when the banks themselves remained liquid and solvent).

³² BD. OF GOVERNORS OF THE FED. RSRV. SYS., FED. DEPOSIT INS. CORP., OFF. OF THE COMPTROLLER OF THE CURRENCY, *Interagency Paper on Sound Practices to Strengthen Operational Resilience – Explanatory Note* (Nov. 2, 2024), <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20201030a2.pdf> [<https://perma.cc/NB5P-LWEK>].

³³ BD. OF GOVERNORS OF THE FED. RSRV. SYS., FED. DEPOSIT INS. CORP., OFF. OF THE COMPTROLLER OF THE CURRENCY, *Interagency Paper on Sound Practices to Strengthen Operational Resilience 1* (Nov. 2, 2024), <https://www.federalreserve.gov/supervisionreg/srletters/SR2024a1.pdf> [<https://perma.cc/3PYY-V44D>].

³⁴ *Id.* at 2.

³⁵ *Compare CrowdStrike Aftermath: Five Things You Need to Know*, PYMNTS.COM, July 22, 2024, <https://www.pymnts.com/connectedeconomy/2024/crowdstrike-aftermath-five-things-you-need-to-know/> [<https://perma.cc/RQ83-NQ33>] (“several banks and other financial institutions were affected, but not as badly as the medical and airlines sectors”), and Lynne Marek, *Visa, Mastercard Say CrowdStrike Didn’t Impact Networks*, PAYMENTS DIVE, July 22, 2024 [<https://perma.cc/3HVV-VL9U>], with Christine Chung, *Stranded in the CrowdStrike Meltdown: ‘No Hotel, No Food, No Assistance’*, N.Y. TIMES, Sept. 13, 2024, <https://www.nytimes.com/2024/09/13/travel/crowdstrike-outage-delta-airlines.html>.

identified improvements before contingency plans are put to a real-world test. As a result, the Department encourages its banks and other regulated institutions to consider the role that operational stress testing might have in their risk management frameworks.