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THE EASING OF DFAST, ITS IMPACT, AND AN OVERVIEW OF 2018 RESULTS

Ramesh Kumar, Kavita Sarma and Dikshita Baid 10-4-2018

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Introduction

Dodd-Frank Act Stress Testing (DFAST) is a regulatory designed stress testing mechanism that performs a check on the capital adequacy of US Banks under various forward-looking economic scenarios. It is a mandatory exercise for all the banking organizations with assets of \$10 Billion or above. This test came into existence in 2010 when the "Dodd-Frank Wall Street Reform and Consumer Protection Act" was signed by President Barack Obama in response to the financial meltdown of 2008. Now, 10 years since the economic crisis hit the global economy, sufficient evidence is available to indicate that the global economy has shown signs of recovery. As a result, there have been sentiments by banks to scale down the stringent regulations to evolve the DFAST regulatory framework with the changing economic dynamics. To address this concern raised by the banks, the US legislators in May 2018 passed the crucial "Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA)" to ease some of the provisions of the 2010 Dodd-Frank Act, which will be applicable starting from the DFAST 2019 cycle.

In June 2018, the Federal Reserve (Fed) disclosed a summary of supervisory stress test results submitted by the US Banks earlier in 2018 prior to the approval of changes in the DFAST regulations. It is critical to review the current DFAST results to understand the potential impact of the changes in the regulations.

In this article, we will first analyze the DFAST 2018 results, which will be followed by a discussion of the regulatory changes and its potential implications on the economy.

DFAST 2018 Results Summary

The Fed released the DFAST 2018 quantitative results on June 21, 2018.

The DFAST 2018 results depict that the 35 banks would undergo considerable losses under the adverse and severely adverse scenarios. However, these substantial losses would not hamper a bank's ability to lend to households, businesses, etc. owing to the capital the banks have accumulated since the 2008 subprime financial crisis.

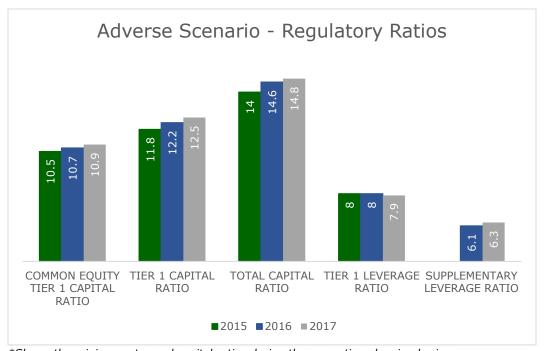
The projections of the adverse scenario indicate a moderate fall in the aggregate capital ratios for the 35 banks currently under the DFAST regulation. The aggregate Common Equity Tier 1 (CET1) Capital Ratio is projected to fall by 1.4 percentage points from 12.3 percent to a minimum of 10.9 percent over the planning period. In addition, the Tier 1 Capital Ratio, Total Capital Ratio, and Tier 1 Leverage Ratio at the end of the planning period (first quarter of 2020) are projected to be 1.1, 1.4, and 0.8 percentage points respectively lower than the actuals seen in the fourth quarter of 2017.

Table 1 and Figure 1 (below) illustrate the capital ratios for DFAST 2018, 2017, and 2016 under the adverse scenario.

REGULATORY RATIOS		STRESSE CAPITAL		ACTUAL 2016:Q4			ACTUAL 2015:Q4		
		Ending	Minimum	1	Ending	Minimum		Ending	Minimum
Common equity tier 1 capital ratio	12.3	11.2	10.9	12.5	11.2	10.7	12.3	10.5	10.5

REGULATORY RATIOS	ACTUAL 2017:Q4	STRESSE CAPITAL	D RATIOS	ACTUAL 2016:Q4	STRESSE CAPITAL		ACTUAL 2015:Q4	STRESS	ED L RATIOS
		Ending	Minimum	1	Ending	Minimum		Ending	Minimum
Tier 1 capital ratio	13.9	12.8	12.5	13.9	12.6	12.2	13.5	11.8	11.8
Total capital ratio	16.3	14.9	14.8	16.5	14.8	14.6	16.2	14.0	14.0
Tier 1 leverage ratio	8.8	8.0	7.9	9.2	8.2	8.0	9.2	8.0	8.0
Supplementary leverage ratio	N/A	6.4	6.3	N/A	6.3	6.1	N/A	N/A	N/A

Table 1: Regulatory Ratios under Adverse Scenario of DFAST 2018, 2017, and 2016



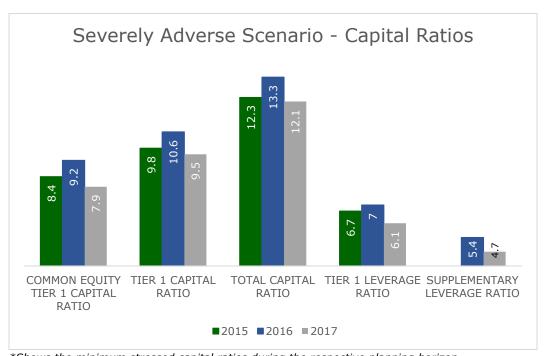
*Shows the minimum stressed capital ratios during the respective planning horizon
Figure 1: Regulatory Ratios under Adverse Scenario of DFAST 2018, 2017, and 2016

The projections of the severely adverse scenario indicate a decline in the capital ratios for the 35 banks currently under the DFAST regulation. The aggregate CET1 capital ratio is projected to fall by 4.4 percentage points from 12.3 percent to a minimum of 7.9 over the planning period. In addition, the Tier 1 Capital Ratio, Total Capital Ratio and Tier 1 Leverage Ratio at the end of the planning period (in the first quarter of 2020) are projected to be 3.6, 3.5, and 2.3 percentage points respectively lower than the actuals seen in the fourth quarter of 2017.

Table 2 and Figure 2 (below) illustrates the capital ratios for DFAST 2018, 2017 and 2016 under the severely adverse scenario.

REGULATORY RATIOS	ACTUAL 2017:Q4	STRESSE CAPITAL		ACTUAL 2016:Q4	STRESSI CAPITAL		ACTUAL 2015:Q4	STRESS CAPITAL	ED L RATIOS
		Ending	Minimum	- 1	Ending	Minimum	1	Ending	Minimum
Common equity tier 1 capital ratio	12.3	8.7	7.9	12.5	9.4	9.2	12.3	8.4	8.4
Tier 1 capital ratio	13.9	10.3	9.5	13.9	10.8	10.6	13.5	9.8	9.8
Total capital ratio	16.3	12.8	12.1	16.5	13.3	13.3	16.2	12.3	12.3
Tier 1 leverage ratio	8.8	6.5	6.1	9.2	7.0	7.0	9.2	6.7	6.7
Supplementary leverage ratio	N/A	5.1	4.7	N/A	5.5	5.4	N/A	N/A	N/A

Table 2: Regulatory Ratios under Severely Adverse Scenario of DFAST 2018, 2017, and 2016



*Shows the minimum stressed capital ratios during the respective planning horizon
Figure 2: Regulatory Ratios under Severely Adverse Scenario of DFAST 2018, 2017, and 2016

The table below compares the results for DFAST 2018, 2017 and 2016 across various parameters.

Particulars	DFAST 2018	DFAST 2017	DFAST 2016
No. of BHCs	35	34	33
Aggregate CET1 capital ratio over 9-Quarters under Adverse Scenario	Fall from an actual 12.3 percent in the fourth quarter of 2017 to its minimum of 10.9 percent	Fall from an actual 12.5 percent in the fourth quarter of 2016 to its minimum of 10.7 percent	Fall from an actual 12.3 percent in the fourth quarter of 2015 to its minimum of 10.5 percent

Particulars	DFAST 2018	DFAST 2017	DFAST 2016
	over the planning horizon of 9 quarters	over the planning horizon of 9 quarters	over the planning horizon of 9 quarters
	\$333 Billion	\$322 Billion	\$324 Billion
Aggregate Losses* over 9- Quarters under Adverse Scenario			The accrual loan losses account for \$252 Billion of \$324 Billion, making it the major contributor to the aggregate projected losses. The aggregate projected losses are 68.21% of the PPNR.
PPNR over 9-Quarters under Adverse Scenario	\$467 Billion	\$541 Billion	\$475 Billion
Net income before taxes over 9-Quarters under Adverse Scenario	\$125 Billion	\$214 Billion	\$142 Billion
Aggregate CET1 capital ratio over 9-Quarters under Severely Adverse Scenario		Fall from an actual 12.5 percent in the fourth quarter of 2016 to its minimum of 9.2 percent over the planning horizon of 9 quarters	Fall from an actual 12.3 percent in the fourth quarter of 2015 to its minimum of 8.4 percent over the planning horizon of 9 quarters
Aggregate Losses* over 9- Quarters under Severely	\$578 Billion	\$493 Billion	\$526 Billion
Adverse Scenario	The accrual loan portfolio losses account for \$429 Billion of \$578 Billion, making it the major contributor to the aggregate projected losses. The aggregate projected losses are 117.48% of the PPNR.	The accrual loan portfolio losses account for \$383 Billion of \$493 Billion, making it the major contributor to the aggregate projected losses. The aggregate projected losses are 117.94% of the PPNR.	The accrual loan portfolio losses account for \$385 Billion of \$526 Billion, making it the major contributor to the aggregate projected losses. The aggregate projected losses are 136.98% of the PPNR.
PPNR over 9-Quarters under Severely Adverse Scenario	\$492 Billion	\$418 Billion	\$384 Billion
Net income before taxes over 9-Quarters under Severely Adverse Scenario	-\$139 Billion	-\$111 Billion	-\$195 Billion

^{*}Aggregate Losses include losses across loan portfolios, losses from credit impairment on securities held in the banks' investment portfolios, trading and counterparty credit losses from a global market shock, and other losses.

Table 3: Comparison of DFAST 2018, 2017 and 2016 Results

All 35 banks exceeded minimum required capital under stress for the third year running despite the substantial losses under both adverse and severely adverse scenarios. This was due to the substantial accretion of capital since the financial crisis, which helped the banks to continue lending to businesses and households.

DFAST 2018 test had a higher stress impact (through the Fed's scenarios) than previous years resulting in lower post-stress minimum capital levels, reversing an improving trend. The increase in stress was evidenced by:

- Higher loss rates on loans (6.4 percent vs 5.8 percent)
- Higher global market shock losses (up 22 percent)
- Declines in Other Comprehensive Income (OCI) (30 BPS on Risk Weighted Assets (RWA) in aggregate)

Highlights of the Economic Growth, Regulatory Relief, and Consumer Protection Act

The EGRRCPA law alters the provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The following is the summary of the key changes made to the Dodd-Frank Act:

- i. The bill raises the threshold for banks marked as Systematically Important Financial Institutions (SIFIs) from the current level of \$50 Billion to \$250 Billion. The threshold would be raised to \$250 Billion after a period of 18 months, however, it would be raised to \$100 Billion immediately.
- ii. The bill has a limited impact on the Global Systematically Important Banks (G-SIBs). It marginally changes the calculation of Central Bank Reserves for Custody banks and going forward requires only two stress scenarios to be tested for instead of three stress scenarios which are currently tested for.
- iii. The banks with assets between \$100 Billion to \$250 Billion would have to perform regulatory stress tests periodically, that is, as and when it is requested by the regulators instead of the semi-annual stress tests that were required previously. The banks falling in this asset bracket would no longer have to run the stress tests for the "Adverse Scenario" and are free from performing any company-run stress tests as well. Additionally, the Enhanced Prudential Standards would come into effect from December 2019.
- iv. The banks with assets between \$50 Billion to \$100 Billion would no longer have to perform any stress tests and are also exempted from the Enhanced Prudential Standards. However, the risk committee requirement is still intact for the banks with assets greater than \$50 Billion.
- v. The banks with assets between \$10 Billion to \$50 Billion would no longer have to perform company-run stress tests and are further exempted from the risk committee requirement.
- vi. The banks with assets less than \$10 Billion would no longer be subjected to the Volcker Rule. Banks would be exempted from the leverage and risk-based capital requirements provided they maintain a leverage ratio between 8% to 10% capital to unweighted assets going forward along with a caveat that the regulators can ask the banks to meet the leverage requirements based on the risk profile that the banks hold. Additionally, banks would be free from the "ability-to-repay liability" for their portfolios, would be exempted from making qualified mortgages and they wouldn't have to hold/put an escrow account during the origination of a high-cost mortgage.
- vii. The bill also let go of the need to submit "living wills" for the banks, lowers the capital required to be held by custodian banks and allows these banks to immediately send the money that they have received from the clients and set aside to the Federal Bank or any other Central Bank for safety.

As described above, the recent changes have eased the DFAST regulations, especially the stress testing requirements for the small-scale banks. Thus, it becomes essential to understand the underlying factors that led to these changes and their potential impact on the global economy.

After the stress testing regulations came into existence, many argued that the Dodd-Frank financial overhaul was overly aggressive and harmed smaller banks in attempting to rein in the larger financial institutions that caused the 2008 financial crisis. The proponents of the reduction in the stringencies of the DFAST regulations have argued that the above-mentioned relaxations are required to unleash a new wave of lending which in turn would trigger growth in the economy. They also highlight that the DFAST regulations have severely burdened the community banking with its excessively stringent regulations as community banks lack scale; their risks are locally concentrated, and they face competition not only from big giants but also from online lenders. Hence, these regulatory pressures have weakened their competitiveness in the current scenario. In addition, many community banks have dropped out of the mortgage lending market as they need to comply with complex, onerous rules despite mortgage lending being a small proportion of their business.

As highlighted above, all the banks have passed the DFAST threshold criteria in the past three years and hence, this gives a measure of confidence in the ability of the banks to withstand an economic shock and further indicates a potential for relaxing the current norms in a phase-out manner. These factors led to the recent changes in the DFAST regulations.

Impact of changes in DFAST Regulations on Industry Dynamics

DFAST was believed to be a factor that led to lending constraints, and therefore, limited the growth for regional and small banks. The regulatory changes described above would relieve many regional banks, including BB&T, SunTrust Bank, Key Bank, and American Express, from the heightened regulatory scrutiny that they are subjected to currently. These changes are expected to have a positive impact on the regional and small banks by promoting credit creation. The bill passage would also lead to an increase in the number of Mergers & Acquisitions (M&A's) which was not possible earlier as the banks feared to reach the threshold levels that would increase the stringencies applied to them.

To understand the potential impact of changes in stress testing framework at a more granular level, we have analyzed the banking institution data provided by the Federal Deposit Insurance Corporation (FDIC). A quick glance at some of the industry trends can help understand the potential dynamics.

ASSET BASE	NUMBER OF BANKING INSTITUTIONS
> 250 BN	9
100- 250 BN	20
50- 100 BN	13

ASSET BASE	NUMBER OF BANKING INSTITUTIONS
10- 50BN	90
1-10 BN	629
< 1 BN	4845
Total	5606

Table 4: Asset base Distribution of US Banks in March 2018 (source FDIC)

The above Table 4 provides the asset base distribution of US Banks. It shows that the industry is concentrated at the bottom of the distribution, i.e., at "less than \$10 Billion" asset base. These institutions will be relieved from the tight scrutiny and stringent regulatory norms. With the new regulatory framework in place, by December 2019, the count of the SIFIs (excluding the Intermediate Holding Companies) would reduce to under 10 (threshold being \$100 Billion first, and then \$250 Billion in the next 18 months) as shown in the above table. Figure 3 represents the industry consolidation in the Banking industry over the past 10 years.

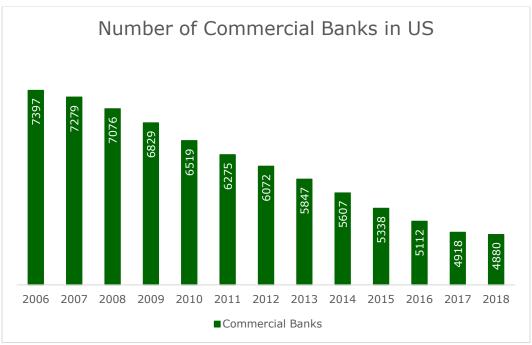


Figure 3: Number of Commercial Banks (excluding Savings Institutions)

ASSET BASE IN BILLION USD								
BUSINESS LINE	> 250 BN	100 - 250 BN	50 - 100 BN	10 - 50 BN	1 - 10 BN	< 1 BN		
Agriculture Lending Specialization				1	16	939		
C&I Lending Specialization	1	5	3	13	33	82		
Commercial Real Estate Lending Specialization				38	287	1097		

	ASSET BASE IN BILLION USD								
BUSINESS LINE	> 250 BN	100 – 250 BN	50 - 100 BN	10 - 50 BN	1 - 10 BN	< 1 BN			
Mortgage Lending Specialization		1	2	7	63	750			
Multi-Specialty Lender		2	2	7	125	709			
No Lending Specialty	7	9	2	18	89	1234			
Other Consumer Lending Specialization	1	3	4	6	16	34			

Table 5: Asset base and Business Line Distribution of US Banks in March 2018 (source FDIC)

As seen in Table 5 above, the banking institutes specializing in Agriculture Lending, Commercial Real Estate Lending, Mortgage Lending, and Multi-Specialty Lending would be relieved of excessive scrutiny under the new regulations.

Further, it is important to analyze these changes and their impact on the regulatory compliance cost, which includes the cost of efforts that are undertaken to perform the stress tests, track necessary data, develop models, and monitor the entire modeling ecosystem. There is no doubt that in the past 8 years, the financial institutions have put in enormous efforts in developing a certain amount of expertise with respect to stress testing approaches, establishing the entire process, and finding procedures to be compliant under the DFAST regulations. This had resulted in huge regulatory compliance cost for DFAST that was akin to sunk cost (a cost that has already been incurred and cannot be recovered).

With the advances in technology, skill set development and already established processes (for which the sunk cost has been already incurred) available to banks, the incremental cost of maintaining the processes and expertise should be economical. Hence, it would be easier to run many possible scenarios and analyze their potential impact on capital, liquidity, and profitability, economically even without the regulatory pressure. Therefore, the banks affected due to the change in DFAST regulations would continue conducting the supervisory stress tests and ensure that their business decisions account for risk without the supervision of regulatory bodies. Fostering a strong risk culture across organizations is crucial in this complex economic and financial setup; industry has understood this phenomenon and would continue to leverage the current established infrastructure even after the easing of regulations.

Conclusion

The DFAST 2018 results were analyzed and compared with past years. The results indicated that all the banks under supervision passed the hypothetical stress testing requirements and have sufficient capital to continue operating and lending to creditworthy households and businesses throughout times of most stressful economic scenario's. The capital trends under the supervisory scenarios were also observed and were found to be similar in the past three years.

With the changes in DFAST regulatory requirement, the small and community banks will be benefited. This should help in credit creation in the US economy and promote competition. In addition, regardless of the regulatory requirement changes, the affected banks should continue to perform stress testing as part of their risk management program as the operating cost for these testing requirements is minimal compared to the benefits.