

ARTICLE

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CECL Benchmark Q3 2020

A framework to understand the extent of your allowance build (updated for Q2)

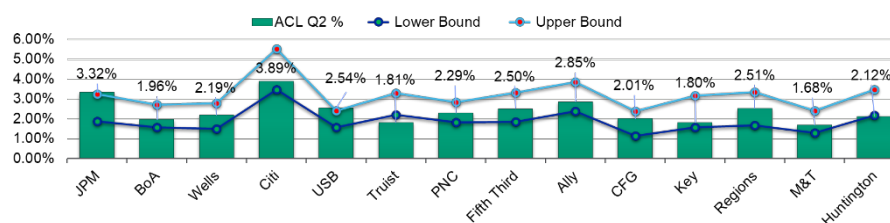
In this paper, we continue the research analysis started in our initial paper to confirm that the methodology used can be a stable triangulation indicator on the allowance for a peer group of banks. In the analysis, we look at Q2 actual results to update the triangulation ranges for each bank and the peer group. This lets us establish a point of view on whether banks will keep building, maintain, or start releasing allowance into Q3 and where they stand on the range of preparedness compared to peers in the context of an evolving economic outlook.

We also give updates on some specific methodologies to provide background based on questions from readers. Additionally, we add a new metric to help non-Dodd-Frank Act Stress Test (DFAST) banks think through another riskiness indicator metric.

We observed that the peer group weighted average allowance for credit loss (ACL) for Q2 2020 is 2.58%. Going into Q3 2020, we establish that our new upper- and lower-bound indexes for the peer group are respectively 3.26% and 1.92%. As expected, the lower bound moved up significantly (20%) but the upper bound stayed relatively stable. Figure 1 presents each bank's own upper and lower bound, as well as the Q2 actual reserve ratios.

Given what we know about economic forecasts between Q2 2020 and Q3 2020, where forecasts have improved but remain fairly stressed we expect most banks to continue building at a lesser rate, or maintain a stable allowance as net charge-offs (NCOs) begin to materialize. We do not expect any ACL release. The most difficult aspect of knowing whether reserves are sufficient will depend on the timing of charge-offs, government stimulus, and forbearance actions that may likely delay the typical onset of losses—so expectations will be that maintaining reserves until charge-offs occur and within the expected range will be prudent. Per the previous study, we provide peer group and bank-specific commentary within.

Figure 1 Banks' own upper- and lower-bound indexes



Source: Moody's Analytics and FDIC Call Report data

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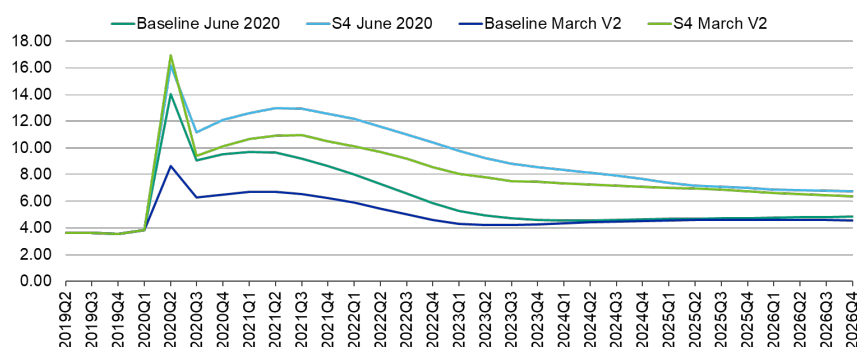
Introduction

Our initial research¹ from March 31, 2020 led us to conclude that most banks would continue to build their allowance for Q2 2020. We have now moved on to updating the analysis for the latest Q2 actuals and the new Q2 economic forecast to update the range for our Q3 predictions.

The research results will help update our triangulation index upper- and lower-bound range based on a few different metrics outlined in the initial paper in detail and summarized below. The peer group average for the lower bound was 1.64% and the upper-bound average was 3.24% during our initial analysis. The new range for the peer group now stands at 1.92% and 3.26% for the lower and upper bound respectively, accounting for the evolution of the economic outlook as shown in Figure 2.

Based on the scenario changes, we observe that the lower bound increased more than the upper bound, which was already quite stressed based on unprecedented economic conditions. That said, we expect the upper bound to remain fairly stable given the breadth of measures we used, some of which would remain unaffected by the change in scenario forecasts because they were conditioned on the Great Recession. However, the lower bound would be more affected by the change in current economic conditions.

Figure 2 March versus June scenarios – unemployment rates



Source: Moody's Analytics

We will review each methodology summary, recall the values for the peer bank set, and add commentary based on feedback from our readers. Then, we will review each bank's Q2 results and where those stand compared to our triangulation index. Based on the economic condition assumptions for Q3 (which have improved somewhat since June), we will give commentary on what we expect of the banks in the peer group—who will build, maintain, and possibly release allowance.

Methodology refresher²

The five different approaches used for the construction of the benchmark triangulation metric are computed at a bank level and weighted to produce the peer group averages. We present the updated numbers for each approach only when updates were needed. We also offer commentary and alternatives for banks that perhaps do not have readily accessible metrics such as DFAST stress test results. We emphasize that this methodology should be useful to tackle any bank's triangulation exercise.³

- 1) **DFAST results:** we use the total loss ratio and the DFAST/expected credit loss (ECL) coverage ratio to understand how well-reserved banks are. The DFAST losses are based on the nine-quarter cumulative losses under the Severely Adverse scenarios. We also created a DFAST scaler for added differentiation across DFAST banks. This approach helps get a sense of relative peer riskiness but cannot be used by banks outside of the DFAST world; thus, we added risk weighted assets (RWAs) riskiness indicators as another way to gauge riskiness for those institutions.

Although RWAs do not rank order with stress test results for the DFAST banks, they do provide an overall riskiness indicator for the bank. The RWA riskiness indicator is derived by taking the RWA divided by total loans and leases. We note that the RWA used

¹ "CECL Build – Is it Enough?" <https://www.moodyanalytics.com/-/media/article/2020/cecl%20build%20-%20is%20it%20enough.pdf>

² For more details on each methodology, see our original paper "CECL Build – Is it Enough?"

³ Moody's Analytics offers a service to derive this triangulation index at a product level for any set of peer banks. Contact the authors if you are interested.

represents more than the relative credit risk but it is generally still a good relative risk indicator for an institution's overall activities. Figure 3 shows that Citigroup has the largest build and tops the list of our institutions in term of RWA riskiness, with JP Morgan Chase not far behind.

Figure 3 Bank DFAST-based and RWA-based riskiness indicators

Bank name	First-lien mortgages, domestic	Junior liens and HELOCs, domestic	Commercial and industrial	Commercial real estate, domestic	Credit cards	Other consumer	Other loans	Total Scaler	RWA
JPM	1.00	0.65	1.57	0.51	0.94	0.60	1.31	1.07	143%
BoA	0.80	0.77	0.74	1.05	0.94	0.31	0.83	0.78	122%
Wells	0.80	0.81	0.93	1.27	1.09	0.86	1.14	0.98	121%
Citi	1.27	2.13	0.65	0.90	0.96	1.57	0.64	0.86	148%
USB	1.00	1.35	0.96	1.13	1.06	0.57	1.33	0.99	127%
Truist	1.20	0.90	0.83	0.92	1.06	1.09	0.97	0.99	120%
PNC	0.87	0.52	0.89	1.00	1.16	0.63	0.75	0.84	129%
Fifth Third	1.40	1.26	1.04	1.71	1.37	0.80	1.19	1.18	123%
Ally	0.87	1.32	0.89	0.59	0.00	1.18	3.08	1.05	111%
CFG	1.13	1.32	0.86	1.29	0.96	1.00	1.11	1.06	116%
Key	1.60	1.00	0.90	1.08	1.09	0.78	0.83	0.98	124%
Regions	1.60	1.42	1.08	1.48	1.09	1.82	0.83	1.29	121%
M&T	1.87	1.10	0.86	0.98	1.09	1.02	1.28	1.12	108%
Huntington	1.80	1.00	0.85	1.22	1.09	0.71	1.06	1.04	109%
DFAST averages	1.50	3.10	7.20	6.30	17.10	6.50	3.60		

Source: Moody's Analytics, FDIC Call Report data, and Federal Reserve DFAST Results 2020

- 2) **NCO averages for 2007-2010:** using NCOs observed during the Great Recession, we will estimate—based on quarterly maximum and average NCO during the Great Recession—how many quarters of coverage are provided for in the bank's current estimates (Figure 4).

We note that using these figures generated the most comments with respect to the study. We want to clarify that the intent in using the 2007-2010 period representative data was to reflect in our metric set the impact of an unforeseen event rather than the pure depiction of what could happen if the same crisis happened again—as we acknowledge that the portfolio and processes at each institution have evolved in such a way that an identical crisis would not yield the same results. These numbers do not change over time, and until another similar crisis can be embedded, we will use this indicator. We do note that given the increased reserves as of Q2, coverage ratios have gotten better since the first study.

Figure 4 Quarterly NCO experience metrics

Bank name	ACL Q2 %	NCO % max	NCO % average	Quarters of coverage based on max stress NCO	Quarters of coverage based on average stress NCO
JPM	3.32%	0.90%	0.46%	3.70	7.15
BoA	1.96%	0.81%	0.39%	2.42	5.07
Wells	2.19%	1.15%	0.52%	1.91	4.19
Citi	3.89%	1.16%	0.67%	3.35	5.80
USB	2.54%	0.66%	0.39%	3.85	6.50
Truist	1.81%	0.71%	0.41%	2.54	4.40
PNC	2.29%	2.10%	0.44%	1.09	5.19
Fifth Third	2.50%	3.18%	0.73%	0.79	3.42
Ally	2.85%	6.67%	0.67%	0.43	4.25
CFG	2.01%	2.70%	0.44%	0.74	4.57
Key	1.80%	1.18%	0.56%	1.53	3.21
Regions	2.51%	0.91%	0.48%	2.77	5.28
M&T	1.68%	0.30%	0.17%	5.52	9.73
Huntington	2.12%	1.21%	0.46%	1.76	4.59

Source: Moody's Analytics and FDIC Call Report data

- 3) **NCO under economic conditions:** using NCOs observed at different levels of economic conditions based on unemployment rates (UERs), we estimate potential reserves based on a weighted average life assumption given the forecast UER levels as of June 30, 2020.

Under this approach, we have a heuristic method that uses a simple approximation but that can be quite intuitive. Our goal with this method is to compute an ECL estimate based on the projected level of unemployment over the weighted-average life of the bank's loan book, with a reversion to the long-term average in a cliff fashion at 18 months for the remainder of the loan book's life.

Our assumptions under this method are as follows, and can be adjusted as necessary:

- » Weighted-average life⁴ of total loan book is 2.5 years.
- » Book runoff: N/A.
- » The long-term loss rate is computed based on the average loss rate when unemployment was in the 4-5% range between 2016 and 2018.
- » The average loss rate is computed for each 100 basis points (bps) bands from 2008-2018.
- » For unemployment rates not seen previously, we used a scaler:
 - If the rate is between 10-11%, we scale the 9-10% loss rate by using a multiplier of 1.25.
 - If the rate is above 11%, we scale the 10-11% loss rate by using a multiplier of 1.5.

For each bank, we compute the average loss rate, apply the appropriate loss rate for the first 18 months of the forecast, and then revert immediately to the loss rate at the 4-5% range for the next four quarters. Figure 5 provides the forecast results based on Moody's Analytics Baseline, S3, and S4 scenarios⁵ as of June 30, 2020.

Figure 5 Top 14 banks – macro unemployment rate assumptions

	ACL Q2 %	Macro UER Baseline June	Macro UER S3 June	Macro UER S4 June
JPM	3.32%	3.42%	5.14%	5.28%
BoA	1.96%	3.42%	4.95%	5.08%
Wells	2.19%	3.66%	5.51%	5.66%
Citi	3.89%	7.62%	10.88%	11.15%
USB	2.54%	3.34%	4.92%	5.05%
Truist	1.81%	3.58%	5.34%	5.48%
PNC	2.29%	3.14%	4.90%	5.03%
Fifth Third	2.50%	4.86%	7.70%	7.91%
Ally	2.85%	4.82%	7.79%	8.00%
CFG	2.01%	1.84%	2.17%	2.24%
Key	1.80%	4.29%	6.69%	6.87%
Regions	2.51%	4.53%	6.90%	7.08%
M&T	1.68%	1.17%	1.73%	1.78%
Huntington	2.12%	3.57%	5.62%	5.78%

Source: Moody's Analytics and FDIC Call Report data

- 4) **Historical CECL—full foresight:** using historical full foresight analysis, we compute the maximum, minimum, and average observed lifetime loss through the Great Recession (Figure 6). Again, we reiterate that the purpose of using this metric is to reflect an unexpected event within our benchmark metric set. We realize that most institutions' portfolios have evolved and institutions' practices have evolved such that the same crisis would probably not yield these kinds of results.

In this approach, we use the Moody's Analytics ImpairmentStudio™ Historical Loss Analyzer,⁶ which constructs a time series of historical lifetime loss rates based on quarterly data from FDIC Call Reports and balance runoff assumptions.⁷ Historical Loss Analyzer calculates the historical quarterly loss rates by dividing the NCOs by the outstanding balance for each period. Historical Loss Analyzer then calculates the lifetime loss rate of each period by summing the product of the quarterly loss rate and balance percentage.⁸

⁴ We assume a 2.5-year average life with no runoff assumptions, which puts the equivalent portfolio weighted average life on an amortizing basis at around 4.5-5 years.

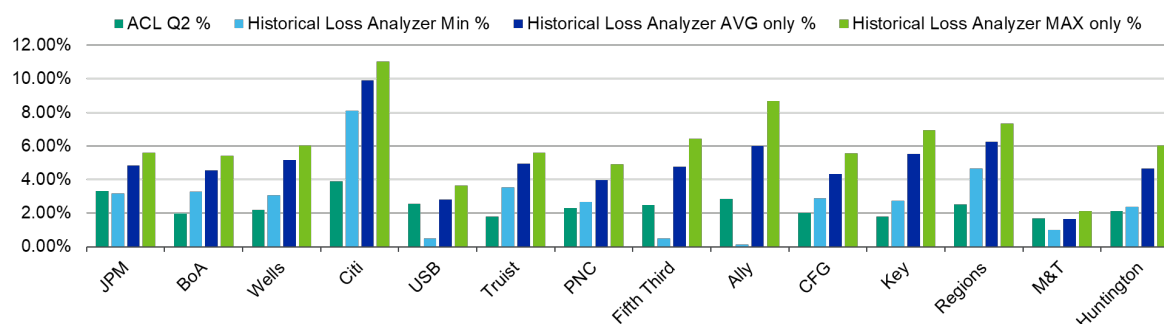
⁵ Moody's Analytics scenarios were obtained from the Moody's Analytics Data Buffet® platform: <https://www.economy.com/products/tools/data-buffet>

⁶ Historical Loss Analyzer is a tool available as part of an ImpairmentStudio subscription.

⁷ Balance runoff assumptions are based on industry defaults for CRE (5 years), C&I (8 years), and Retail (7 years); altering these assumptions would have a large impact on the estimates.

⁸ The reader can find a detailed methodology in "Leveraging Historical Loss Data for CECL": <https://www.moodyanalytics.com/articles/2019/leveraging-historical-loss-data-for-cecl>

Figure 6 Full foresight Historical Loss Analyzer – 2007-2010



Source: Moody's Analytics and FDIC Call Report data

Given the period selected for the Historical Loss Analyzer metrics of 2007-2010 and the longer-than-average amortization assumptions chosen in the configuration, our Historical Loss Analyzer estimates provide a conservative view. We observe that some banks with aggressive build in Q2 are now very close to the minimum observed during the Great Recession. A point to consider is that three institutions had very low minimum during the Great Recession, which could reduce their upper bound. However, given the small weight applied to each upper-bound metric, we feel comfortable that it will not lead to material distortion in the triangulation index.

The metrics fit well as an upper-bound estimate based on our sample set of banks. Note that these metrics do not change over time.

- 5) **CECL forecaster:** using Moody's Analytics CECL forecaster,⁹ we compute the product-level NCOs, and based on a set of CECL assumptions, compute the lifetime loss estimate as of March 31, 2020.

Moody's Analytics CECL forecaster model¹⁰ computes a reporting date ECL under different macroeconomic scenarios based on user assumptions. The tool can also be used to forecast ECL at different projected points in time (stress testing). The methodology is detailed in our original paper, but we want to remind readers that we used two different sets of assumptions: we use a reporting date CECL estimate as well as a metric that averages CECL over the next three years.

We provide two different versions of CECL assumptions to ground ourselves in the impact of those assumptions.

Expected life and reversion period

In version 1, the expected loan life and reversion period are borrowed from the industry-level assumptions in the paper by Covas and Nelson.¹¹ We apply the assumptions laid out in Figure 7 and revert immediately to the long-term net charge-off rate.

⁹ The CECL forecaster is based on Moody's Analytics Call Report Forecast: <https://www.economy.com/products/data/forecast-bank-call-reports>

¹⁰ In-depth detail about Moody's Analytics Call Report Forecast can be found here: <https://www.economy.com/products/data/forecast-bank-call-reports>

¹¹ Covas, F. and Nelson, W., "Current Expected Credit Loss: Lessons from 2007-2009," BPI, July 2018. <https://bpi.com/wp-content/uploads/2018/07/CECL-Lessons-2007-2009-WP-July-12-2018.pdf>

Figure 7 Expected loan life and length of reversion period

Loan Portfolio	Life of loan (in quarters)*	Reversion period (in quarters)
Commercial and industrial	15	8
Construction	11	13
Nonfarm nonresidential	14	7
Multifamily	30	10
First-lien mortgages	34	15
Junior-lien mortgages	30	18
HELOCs	30	18
Other real estate	19	7
Credit cards	7	9
Other consumer loans	16	6
Leases	28	6
Foreign governments	10	1
Agriculture	8	3
Depository institutions	8	1
Other loans	10	8

Source: BPI – Staff working paper 2018-1

In version 2, for the expected life and reversion period:

- » Expected life remains the same as version 1
- » Reversion starts at Year 1 and ends at end of Year 3

Long-term NCO rate

We applied the NCO weighted average from 2000 to 2020. The NCO rate is the same for both versions.

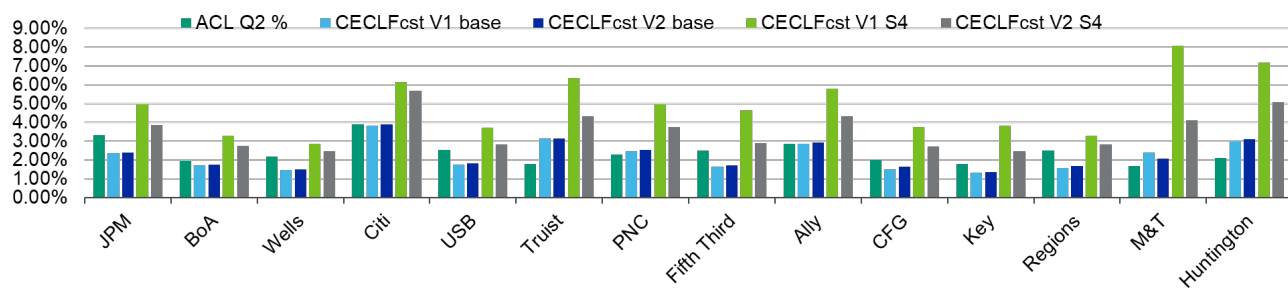
Results aggregation

All portfolio-level results are aggregated for each bank after applying the assumptions above for each call report asset category.

For Version 1 and Version 2 assumptions:

- » We generate four sets of metrics representing the estimate for each scenario and version (CECLFcast, V1, V2, base [S4]).
- » We generate four sets of metrics representing the next three-year average estimate for each scenario and version (CECLFcast, V1, V2, base [S4]).
- » Results are shown in Figures 8 and 9 as compared to the Q2 2020 ACL reported by the banks in our sample.

Figure 8 Top-down CECL forecaster scenarios



Source: Moody's Analytics and FDIC Call Report data

Figure 9 Top 14 banks – top-down CECL forecaster estimates

Bank name	ACL Q2 %	CECLFcast V1 base	CECLFcast V2 base	CECLFcast V1 S4	CECLFcast V2 S4	CECLFcast Avg 3y V1 base	CECLFcast Avg 3y V2 base	CECLFcast Avg 3y V1 S4	CECLFcast Avg 3y V2 S4
JPM	3.32%	2.35%	2.41%	4.95%	3.85%	2.12%	2.23%	4.13%	3.18%
BoA	1.96%	1.72%	1.77%	3.29%	2.78%	1.51%	1.58%	2.71%	1.94%
Wells	2.19%	1.48%	1.52%	2.87%	2.46%	1.26%	1.36%	2.24%	2.06%
Citi	3.89%	3.82%	3.89%	6.15%	5.69%	3.59%	3.68%	5.09%	5.35%
USB	2.54%	1.78%	1.83%	3.74%	2.84%	1.63%	1.72%	3.13%	2.54%
Truist	1.81%	3.15%	3.15%	6.38%	4.33%	1.75%	1.75%	4.32%	1.73%
PNC	2.29%	2.49%	2.53%	4.96%	3.75%	1.56%	1.60%	3.14%	1.80%
Fifth Third	2.50%	1.67%	1.74%	4.65%	2.92%	1.51%	1.62%	3.85%	4.09%
Ally	2.85%	2.85%	2.92%	5.80%	4.33%	2.29%	2.36%	4.65%	4.07%
CFG	2.01%	1.50%	1.66%	3.75%	2.72%	1.27%	1.43%	2.79%	3.73%
Key	1.80%	1.35%	1.38%	3.84%	2.47%	1.19%	1.23%	3.01%	2.34%
Regions	2.51%	1.60%	1.69%	3.31%	2.82%	0.73%	0.28%	1.96%	2.52%
M&T	1.68%	2.39%	2.09%	8.08%	4.10%	1.67%	1.34%	6.44%	1.30%
Huntington	2.12%	3.00%	3.11%	7.16%	5.09%	1.93%	2.02%	5.06%	3.00%

Source: Moody's Analytics and FDIC Call Report data

The CECL forecaster methodology provides another good benchmark to understand a range of values for the CECL estimates at the June 30, 2020 reporting date. In our initial study, we found that on average, the model overestimated the Baseline scenario when compared to the group average. After some discussion with the research team, the model was adjusted to ensure that for residential mortgages (and home equity lines of credit), the loss forecasts conditioned on the Great Recession were adjusted to take the new reality into account. The impact of the adjustment produced results that were not as severe as Q1 in March, but were in line with realistic expectations. Most banks' estimates for June fell between the Baseline and S4 scenarios except for Truist and M&T.

Triangulation index¹²

The five sets of metrics described above are the foundation for the triangulation index. Some are used as quantitative measures and some as qualitative measures within the framework per the triangulation indicators in Figure 10.

Figure 10 Triangulation indicators

Metric Type	Metrics		
Riskiness indicators	DFAST Coverage DFAST Loss rate	NCO % Max (2007-2010) NCO % Average (2007-2010)	DFAST based riskiness scaler RWA riskiness indicator
ECL range indicators	Historical Loss Analyzer: Average Maximum Minimum	Macro UER Forecast Base Macro UER Forecast S4	CECLFcast V1 base, S4 CECLFcast V2 base, S4 CECLFcast 3Y Avg V1 Base, S4 CECLFcast 3Y Avg V2 Base, S4

Source: Moody's Analytics

The riskiness indicators were used to tweak our judgment based on how well historical performance fits the current portfolio loss profile. The main riskiness indicator was based on the latest DFAST results (a DFAST riskiness scaler) and RWAs to establish the notion of relative riskiness across banks. The riskiness indicator table in Figure 11 is meant as a refresher (a green highlighted cell means the bank was below the peer group average). Note some divergence between the DFAST indicators and the RWA riskiness indicators, which gives us more context to analyze some of these institutions.

¹² Methodology details can be found in the original paper; we recap the important aspects here for brevity.

Figure 11 Riskiness indicators

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
JPM	3.32%	0.90%	0.46%	6.51%	51.00%	1.07	143%
BoA	1.96%	0.81%	0.39%	5.13%	38.21%	0.78	122%
Wells	2.19%	1.15%	0.52%	5.71%	38.35%	0.98	121%
Citi	3.89%	1.16%	0.67%	7.34%	53.00%	0.86	148%
USB	2.54%	0.66%	0.39%	6.12%	41.50%	0.99	127%
Truist	1.81%	0.71%	0.41%	5.65%	32.04%	0.99	120%
PNC	2.29%	2.10%	0.44%	4.84%	47.31%	0.84	129%
Fifth Third	2.50%	3.18%	0.73%	5.59%	44.72%	1.18	123%
Ally	2.85%	6.67%	0.67%	6.02%	47.34%	1.05	111%
CFG	2.01%	2.70%	0.44%	6.16%	32.63%	1.06	116%
Key	1.80%	1.18%	0.56%	6.15%	29.27%	0.98	124%
Regions	2.51%	0.91%	0.48%	6.90%	36.43%	1.29	121%
M&T	1.68%	0.30%	0.17%	7.26%	23.14%	1.12	108%
Huntington	2.12%	1.21%	0.46%	5.43%	39.04%	1.04	109%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Source: Moody's Analytics, Federal Reserve Board, and FDIC Call Report data

The quantitative indicators were used to construct our index's lower and upper bound for the peer group.¹³ First, we computed the weighted-average ECL for the sample banks in our dataset (2.58%) shown in Figure 12. Then, we computed the weighted average for every ECL metric used in the indexes in Figure 13. Our lower- and upper-bound index constructed from our set of metrics gives us a lower bound of 1.92% (up from 1.64%) and an upper bound of 3.26% (up from 3.24%), which is intuitively commensurate with the change in economic outlook where our Baseline scenario boundaries move up by almost 20% but our upper bound based on a series of worst-case metrics stays relatively stable.¹⁴ Three banks (compared to four in the earlier study) fall below the lower bound based on the peer group averages: Truist, Key, and M&T as shown in the red boxes of Figure 12.

Figure 12 Top 14 banks – allowance for credit loss disclosures

Bank name (\$MM)	Assets size	Amortized cost	ACL Q2 %	ACL Q2 \$
JPM	2,820,922	969,295	3.32%	32,071
BoA	2,161,656	981,815	1.96%	19,362
Wells	1,799,940	901,381	2.19%	18,587
Citi	1,633,678	646,812	3.89%	23,642
USB	536,291	310,335	2.54%	7,383
Truist	493,999	310,218	1.81%	4,812
PNC	455,306	257,226	2.29%	5,928
Fifth Third	201,287	114,827	2.50%	2,695
Ally	172,910	115,366	2.85%	3,320
CFG	179,841	126,444	2.01%	2,448
Key	169,805	106,933	1.80%	1,751
Regions	143,443	90,548	2.51%	2,276
M&T	139,153	96,945	1.68%	1,636
Huntington	118,284	79,979	2.12%	1,702
Weighted Average ECL			2.58%	

Source: Moody's Analytics, and FDIC Call Report data

In the creation of the index, expert judgment plays a role in both the selection of the metrics as well as the weights assigned to each metric. In the case of CECL estimates, there are limited (read two) historical CECL estimate benchmarks, so all we can do is use our best judgment, ensure results are intuitive and directionally correct, and repeat the analysis over the coming quarters to solidify our approximations.

The lower- and upper-bound index includes only one riskiness indicator and all of the ECL range indicator metrics. We left out most of the riskiness indicators to make bank-level adjustments in the comparison of the results section for individual banks. Figure 13 outlines the metrics used for the lower and upper bound as well as the weights derived based on expert judgment.

¹³ Note that we also compute the bank-specific upper- and lower-bound index to provide additional insights.

¹⁴ The upper bound would have been approximately 20% higher if the CECL forecaster model had not been recalibrated.

Figure 13 Lower- and upper-bound index weighting

ECL Range Indicators	Sample Set Weighted Averages	Weights	Upper Bound	Weights	Lower Bound
Macro UER Baseline March V2	4.01%			30.00%	1.20%
CECLFctst V1 base	2.23%			30.00%	0.67%
CECLFctst V2 base	2.28%			30.00%	0.68%
CECLFctst Avg 3y V1 base	1.87%			5.00%	0.09%
CECLFctst Avg 3y V2 base	1.94%			5.00%	0.10%
Macro UER S3 March V2	5.93%	10.00%	0.59%		
Macro UER S4 March V2	6.09%	10.00%	0.61%		
CECLFctst V1 S4	4.46%	10.00%	0.45%		
CECLFctst V2 S4	3.53%	10.00%	0.35%		
CECLFctst Avg 3y V2 S4	3.51%	10.00%	0.35%		
CECLFctst Avg 3y V1 S4	2.36%	10.00%	0.24%		
HLLA AVG only %	5.31%	10.00%	0.53%		
HLLA Min %	3.46%	10.00%	0.35%		
HLLA MAX only %	6.26%	10.00%	0.63%		
DFAST % Loss	5.63%	10.00%	0.56%		
		Upper Bound*	3.26%	Lower Bound*	1.92%

Source: Moody's Analytics

For the lower bound, our logic was to assign equal weights to the first three estimates given their similar level of precision and directionality, whereas the last two—which were based on a three-year average—would tend to drive the actual rate lower based on the June 30, 2020 economic environment. **We kept the equal weighting of 30% to the first three and a weight of 5% to the 3-year averages as per our initial analysis.** The lower-bound estimate now gave us a baseline estimate. To truly make it a lower-bound estimate, we then took 70% of the final value. The 70% is based on ensuring that our lower and upper bound are grounded in credit risk observed behavior (asymmetry of credit risk).

For the upper bound, we focused on 10 stressed metrics that gave us a view of worsening economic conditions as of June 30, 2020. All 10 metrics provided a similar range of worst-case scenarios ranging from a low of 2.36% to a high of 6.26% for the entire peer group. **We kept equal weights of 10% to each metric as we did in our Q1 analysis,** which were all based on Moody's Analytics S4, the Great Recession period, or the DFAST scenario. Just as with the lower bound, to make the metric a realistic upper bound and not a worst-case upper bound, we applied a 70% factor to the index.

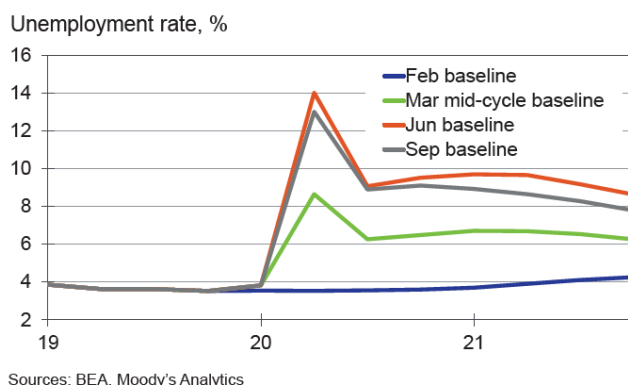
We found that playing with our scaler for the upper- or lower-bound metric gives us the ability to adjust the range based on current and future conditions. As such, if we use this benchmark to help predict the direction of the allowance for the peer group in Q3 2020, we could adjust our scaler down given the economic condition changes from Q2 to Q3.

Comparison of results – averages

The intent of the updated study is to help gauge what the Q3 reserves level will be and whether some banks are still behind while some seem much better reserved than others. We first compare the economic condition's Baseline scenario forecast as of Q2 versus those forecasted for Q3—Moody's Analytics published a thorough narrative¹⁵ of the changes between the Q2 and Q3 forecast. We present the shape of the UER forecast. The key narrative on unemployment is that although the forecast for all future periods is expected to be lower, the impact on lifetime loss estimates between June and September will be relatively small. Figure 14 shows the UER forecast being milder but also shows that the peak UER of 13.3% for Q2 is now behind us. We also note that the Moody's Analytics Baseline scenario includes the impact of a \$1.5 trillion stimulus package, which has not been enacted by the end of Q3.

¹⁵ CECL 2020 Q3: Moody's Analytics economic scenarios provide a synthesis of the scenario evolution between the two quarters. The article is available in the Data Buffet articles section: <https://www.economy.com/products/tools/data-buffet>

Figure 14 Employment recovers more quickly

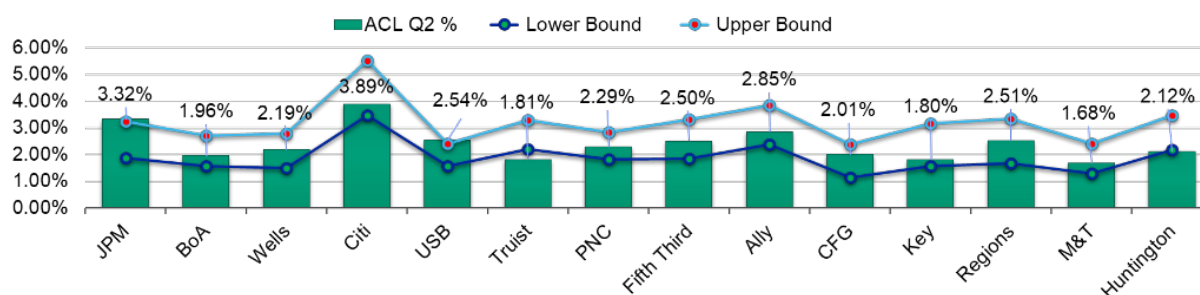


At first glance (Figure 15), we can see that most banks' Q2 2020 estimates fall directly within the established range for each bank as opposed to Q1, when our analysis showed several banks seemed to be under-reserved. The only outlier is Truist, which still has the merger benefit for its credit markdown at acquisition. Although this will erode over time, it does provide an additional cushion for which Truist does not need to reserve.

Based on the peer group lower bound being 1.92%, up from 1.64%, we observed only three institutions below that mark (down from four in our Q1 study). On weighted average (including banks below the lower bound) banks held, per Figure 16, 20.43% more reserves than the lower bound, up from 0.34% above the lower bound (1.64%) in the Q1 study. This indicates a large reserve build cushion is available. Given the uncertainty around the impact of COVID-19 this fall and the impact of delayed NCOs, it is probably too early to see reserves released.

We believe our triangulation index is performing accurately and can help validate its use as a tool to address internal management challenges and peer comparison analysis, which can be very difficult based on disclosures to date.

Figure 15 Triangulation of ACL estimates



Source: Moody's Analytics and FDIC Call Report data

Figure 16 presents the details of our analysis, as well as the percentage increase above the peer group lower bound. We will base most of our commentary on this data and investors' conference commentary provided by each bank. The negative numbers in Figure 16 represent banks that were further away from the peer lower bound in our Q1 study than in the current Q2 study. This would indicate that a more aggressive build is coming from these banks except for Truist, which is benefiting from its credit mark upon its merger. On average, we expect the peer group to continue to build its reserves but at a much slower rate than we observed in Q1 and Q2. We discuss each bank in the next section.

Figure 16 Top 14 banks – upper- and lower-bound bank-specific range¹⁶ estimates Q1 2020 versus Q2 2020

Bank name	ACL Q1 %	ACL Q2 %	Q1 to Q2% Change	Upper bound	Mid-Point	Lower bound	% Lower bound
JPM	2.50%	3.32%	32.80%	3.23%	2.55%	1.87%	42.17%
BoA	1.63%	1.96%	20.25%	2.71%	2.13%	1.56%	2.04%
Wells	1.19%	2.19%	84.03%	2.77%	2.13%	1.49%	12.33%
Citi	3.14%	3.89%	23.89%	5.52%	4.50%	3.47%	50.64%
USB	2.07%	2.54%	22.71%	2.41%	2.00%	1.58%	24.41%
Truist	1.78%	1.81%	1.69%	3.30%	2.75%	2.20%	-6.08%
PNC	1.66%	2.29%	37.95%	2.82%	2.32%	1.82%	16.16%
Fifth Third	2.02%	2.50%	23.76%	3.33%	2.59%	1.85%	23.20%
Ally	2.54%	2.85%	12.20%	3.84%	3.11%	2.39%	32.63%
CFG	1.73%	2.01%	16.18%	2.37%	1.76%	1.14%	4.48%
Key	1.28%	1.80%	40.63%	3.15%	2.36%	1.56%	-6.67%
Regions	1.89%	2.51%	32.99%	3.33%	2.51%	1.68%	23.62%
M&T	1.47%	1.68%	14.29%	2.42%	1.85%	1.29%	-14.29%
Huntington	2.05%	2.12%	3.41%	3.48%	2.82%	2.17%	9.43%
Weighted Averages		2.58%		3.26%		1.92%	20.43%

Source: Moody's Analytics and FDIC call report data

The big question is, will banks release reserves? Based on our triangulation index, the economic forecast, the lack of a stimulus program, and the delayed onset of losses by early government support actions, we do not find that any of the banks in our peer group would be in a position to release reserves. Even if we look at JP Morgan Chase and Citigroup—which sit well above the lower bound of the peer group—both have much higher-than-average RWA, making it imprudent to release at this time in our opinion. It is plausible that within certain banks' portfolios, we see releases (for example, mortgages) and increases (commercial real estate [CRE] and commercial and industrial [C&I]) that on average increase or maintain the current level of allowances. The current economic forecast seems to paint a brighter picture, but with so much uncertainty around the impact of COVID-19 going into the fall, reserve releases do not seem to factor in our opinion.

Bank-specific commentary

JP Morgan Chase built up its reserves quite substantially in Q2. It is one of the few banks that sits above its own and the peer group's upper-bound threshold. We mentioned that JPM was very aggressive in Q2, ramping up reserves for the CRE portfolio and continuing to bulk up its card portfolio. We do see a case where there is continuing build on the CRE side to a much lesser extent but limited release, if any, on the retail side. Early comments from JPM are in line with no expectation of releases this quarter. In times of turbulence, given the bank's risk profile as shown by its RWA percent, we believe JPM may simply maintain its current level of reserves (Figures 17 and 18).

Figure 17 JP Morgan Chase – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
JPM	3.32%	3.23%	2.55%	1.87%	42.17%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 18 JP Morgan Chase – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
JPM	3.32%	0.90%	0.46%	6.51%	51.00%	1.07	143%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Bank of America's Q2 2020 allowance build from 1.63% to 1.96% means it now sits just below the midpoint of our triangulation index but is still very close to the new peer group lower bound. Going into Q3, we expect some slight build from BoFA to stay ahead of the potential for things to get worse. The impacts of deferral programs are still unknown and the delayed onset of NCO could materialize eventually to a larger extent than expected. BoFA does have a better-than-average set of riskiness indicators,

¹⁶ Note: the upper and lower bound were estimated based on Q2 call report data.

which tells us that any build will be of much less amplitude than the 20% build we saw in Q2. Expectations are that BofA overall increases its reserves slightly and more than likely rebalances its portfolio to increase its commercial book versus the retail book. A slight build would mean that it is above the midpoint of the triangulation index and well positioned given the still uncertain macroenvironment (Figures 19 and 20).

Figure 19 Bank of America – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
BoA	1.96%	2.71%	2.13%	1.56%	2.04%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 20 Bank of America – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
BoA	1.96%	0.81%	0.39%	5.13%	38.21%	0.78	122%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Wells Fargo had the largest build of all in Q2 2020. The increase in its Q2 allowance is largely driven by economic conditions that have worsened significantly compared to the prior quarter's outlook. Does that mean that we expect releases? No. The outlook has gotten relatively better but not good enough to drive the recovery forecast up to a level where it impacts the allowance as first thought. Wells Fargo sits at the midpoint of its triangulation index, which means that going into Q3 it is well reserved. However, it is likely to see a mix of releases and builds within its portfolio where mortgages may get better given the home price index (HPI) outlook but CRE and C&I portfolios will see greater credit deterioration, leading to higher reserving. On average, we see a small build from Wells Fargo given the still-uncertain outlook going into the fall (Figures 21 and 22).

Figure 21 Wells Fargo – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
Wells	2.19%	2.77%	2.13%	1.49%	12.33%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 22 Wells Fargo – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
Wells	2.19%	1.15%	0.52%	5.71%	38.35%	0.98	121%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Citigroup's actual Q2 2020 allowance puts it well above the peer group upper bound of 3.26% but a little below its midpoint of 4.50%. Citi has restructured its business to be much simpler than it was in 2009, so the 2007-2010 metrics are pushing its upper bound to be very high. Its riskiness indicator based on RWA percent is still among the highest in the peer group—and heavy exposures to CRE and credit cards could lead to higher-than-expected NCOs depending on how the COVID-19 pandemic progresses this fall. We believe Citi may add a little to its reserves based on CRE observed deterioration, but overall, maintain or slightly increase reserves from where they are based on our triangulation index and its relative position. Although it is the bank with the largest reserve percentage, we do not anticipate any release until well after Q4 when the economic and pandemic environmental uncertainty declines or abates (Figures 23 and 24).

Figure 23 Citigroup – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
Citi	3.89%	5.52%	4.50%	3.47%	50.64%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 24 Citigroup – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
Citi	3.89%	1.16%	0.67%	7.34%	53.00%	0.86	148%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

US Bank's actual Q2 2020 allowance sits just above the bank's own upper bound and well above the peer group lower bound (24% above as shown in Figure 25). USB said at the Barclays investors conference that it expects NCOs to rise to 55 bps, driven by higher-risk industries in the hotel and retail mall segments. We would expect a small build from USB depending on the expected continuing deterioration going forward, and based on its acquisition of a credit card portfolio that is now reserved at approximately 10% (or \$120 million) from its discussion during the investor call—but which could deteriorate faster than expected in the future. USB is already well reserved but not so much that given the uncertain outlook of COVID-19 through the fall, we would see them releasing reserves. We expect USB to maintain or build slightly on its current reserve levels. USB does have a slightly-above-average RWA profile, but performed better than the peer group in the last DFAST exercise, but not the current Comprehensive Capital Analysis and Review (CCAR) 2.0 (Figures 25 and 26).

Figure 25 US Bank – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
USB	2.54%	2.41%	2.00%	1.58%	24.41%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 26 US Bank – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
USB	2.54%	0.66%	0.39%	6.12%	41.50%	0.99	127%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Truist's actual Q2 2020 allowance finds itself below the peer group lower bound and well below its own lower bound. The latent factor is the 2% credit mark that BB&T took on SunTrust's book, which provides an added cushion in the event of higher-than-expected losses. We still believe that given exposures to sectors that are still deteriorating, Truist will want to beef up its reserves more than others. We expect Truist to have a modest¹⁷ build, yet one of the larger ones in the peer group, along with the laggards we identified in our initial analysis. Because the COVID-19 environment remains uncertain and customers are exiting deferral agreements as expected, the second round of deferrals for hotel properties may not yield the expected results. Truist is a conservative bank as reflected by its RWA percent riskiness indicator, so we expect it to remain on the low end of the peer group (Figures 27 and 28).

Figure 27 Truist – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
Truist	1.81%	3.30%	2.75%	2.20%	-6.08%
Peer group averages	2.58%	3.26%		1.92%	20.43%

¹⁷ Truist disclosed as such during the Barclays investor conference.

Figure 28 Truist – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
Truist	1.81%	0.71%	0.41%	5.65%	32.04%	0.99	120%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

PNC Bank's actual Q2 2020 allowance build was larger than its peers, and positions it at the midpoint of the triangulation range for the bank. Its DFAST riskiness indicator was much more favorable than its RWA percent riskiness indicator, which gives us pause. The timing of NCOs will play a major role in determining when the impact will be felt, which could be well into 2021. Although the bank mentioned that it expects to release more build, we expect it to maintain its ACL ratio where it is today, perhaps with a mix of increases and decreases within particular portfolios. We believe that given the current outlook for Q3 2020 and the uncertainty around the pandemic's impact during the fall, PNC will remain at current levels (Figures 29 and 30).

Figure 29 PNC Bank – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
PNC	2.29%	2.82%	2.32%	1.82%	16.16%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 30 PNC Bank – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
PNC	2.29%	2.10%	0.44%	4.84%	47.31%	0.84	129%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Fifth Third Bank's actual Q2 2020 allowance positions it at the midrange of the updated triangulation range and positions it well for Q3 given the relatively improving outlook. It is well above the lower bound for the peer group and also gets help from the previously discussed unamortized discount for the MB Financial acquisition. Its credit quality is performing better than expected but this could be affected by the delayed timing of the impact from stimulus programs. Fifth Third gave guidance of NCOs in the 50 bps range for 2020 and below 100 bps for 2021, which are much lower than the Great Recession, as shown in Figure 31. Fifth Third's riskiness indicator RWA percent is right on the peer group average—and given its current position, we expect it to maintain the current level of reserves with perhaps adjustments within certain portfolios that look to perform better or worse (Figures 31 and 32).

Figure 31 Fifth Third Bank – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
Fifth Third	2.50%	3.33%	2.59%	1.85%	23.20%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 32 Fifth Third Bank – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
Fifth Third	2.50%	3.18%	0.73%	5.59%	44.72%	1.18	123%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Ally Bank's actual Q2 2020 allowance build puts it just below its midpoint triangulation index range at 3.11% and above the peer group lower bound. The auto financing lender has taken a more conservative loss forecasting approach as it excludes any stimulus-related benefits or assumptions within its modeling, which could have substantial benefits given US government measures. Its currently observed NCO levels are much better than anticipated guidance but the delayed timing of NCOs due to the stimulus remains to be seen. The temporary slump in auto values is helping with increased demand now fueling new origination. Its riskiness indicator RWA percent is better than its peers, showing a less risky mix of assets overall. However, given the lack of clarity of the impact of COVID-19 going into the fall and increased originations, we anticipate Ally to remain at this reserve level for Q3 2020, although the economic forecast has improved since Q2 (Figures 33 and 34).

Figure 33 Ally Bank – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
Ally	2.85%	3.84%	3.11%	2.39%	32.63%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 34 Ally Bank – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
Ally	2.85%	6.67%	0.67%	6.02%	47.34%	1.05	111%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Citizens Financial Group's actual Q2 2020 allowance build places it above our updated peer group lower-bound average and well above the midpoint of its own triangulation range. Citizen's Bank mentioned last quarter that it took some measures to de-risk its portfolios. The combination of higher reserves and portfolio de-risking going into Q3 2020 makes Citizen's Bank well reserved for the economic conditions ahead. However, due to a lack of clarity on the potential impact of COVID-19 this fall, we do not expect it to release any reserves for its portfolios but maintain its current levels until there is a clear sign that the worst is past. Citizen's Bank does expect reserves to go back to a level tied to origination once the macroenvironment has turned the corner (Figures 35 and 36).

Figure 35 Citizens Financial Group – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
CFG	2.01%	2.37%	1.76%	1.14%	4.48%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 36 Citizens Financial Group – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
CFG	2.01%	2.70%	0.44%	6.16%	32.63%	1.06	116%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Key Bank's actual Q2 2020 allowance of 1.80% still leaves Key as one of two banks below the lower bound of the peer group. In our last update, Key management cited a strengthened portfolio, underlying credit quality, and Paycheck Protection Program (PPP) loans included in its C&I category with minimal future loss assumptions as drivers for lower allowance rates. Its own triangulation index shows that it has lower boundaries than the peer group, but we still believe it is too low even with relatively improving

economic conditions for Q3 over Q2. Its asset mix riskiness indicator is above average with RWA percent at 124%, which gives us pause. We believe Key will take the opportunity to build more reserves this quarter to leave it better prepared for the NCOs to come. Again, we believe timing of losses plays a major role in most banks not seeing NCOs degrading as fast as economic indicators would suggest due to stimulus support. We expect a larger-than-the-peer-group average build for Q3 from Key (Figures 37 and 38).

Figure 37 Key Bank – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
Key	1.80%	3.15%	2.36%	1.56%	-6.67%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 38 Key Bank – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
Key	1.80%	1.18%	0.56%	6.15%	29.27%	0.98	124%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Regions Bank's actual Q2 2020 allowance build was very aggressive. The bank took measures to de-risk its overall portfolio by aggressively charging off more than \$182 million and applying downgrades to loan portfolios significantly affected by COVID-19, driving reserves higher (\$382 million). Regions sits right at the midpoint of its triangulation index and well above the lower bound for the peer group. It had a portfolio that performed poorly during the last stress test, but its RWA percent riskiness indicator profile puts it below that of the peer group. Regions did not comment on its reserve levels during the Barclays investors conference but we believe it will keep working through its portfolio aggressively. This could lead to a small build in Q3; although most portfolio deferrals have come way down, some uptick in criticized and classified loans may negate this trend. We believe Regions will probably have a small ACL build due to continuing aggressive actions in getting ahead of credit deterioration, as well as above-average refinancing and new originations (Figures 39 and 40).

Figure 39 Regions Bank – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
Regions	2.51%	3.33%	2.51%	1.68%	23.62%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 40 Regions Bank – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
Regions	2.51%	0.91%	0.48%	6.90%	36.43%	1.29	121%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

M&T Bank's Q2 2020 actual allowance build of 1.68% still leaves it far below the peer group average. We expected M&T to be below the peer group lower bound once we updated our analysis with Q2 data, but we still expected M&T to be near its upper-bound estimates based on our triangulation methodology. The new bank-specific upper bound based on the Q2 scenario jumped to 2.42%, which leaves M&T much further away than we expected. M&T is seeing early deterioration of parts of its portfolio but believes that its historically low loss given default (LGD) should help it weather the storm. The bank did mention that it expects to see higher nonperforming assets (NPAs) over time, which concerns us given CECL is a lifetime measure and should already include these considerations. We expect M&T to have one of the largest builds percentage-wise to bring it more in line with the macro outlook. We will point out that we expected larger reserving last quarter that did not happen, so it may be a case where M&T remains a laggard in terms of reserving. On a positive note, M&T's RWA percent riskiness indicator puts it far below the peer group average (Figures 41 and 42).

Figure 41 M&T Bank – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
M&T	1.68%	2.42%	1.85%	1.29%	-14.29%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 42 M&T Bank – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
M&T	1.68%	0.30%	0.17%	7.26%	23.14%	1.12	108%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Huntington Bank's actual Q2 2020 allowance build places it approximately 10% over the peer group's lower bound, but given the update to the bank's triangulation index, it is just below its lower bound, which jumped from 1.41% to 2.17%. The bank has one of the lowest RWA percent riskiness indicators in the peer group along with M&T. It expects NCOs to be in the 60-70 bps range, which is a little higher than the average during the Great Recession, but the bank says that it had already fully reserved for its most affected portfolios. It is probably affected by the stimulus impact in the current environment, which is clouding the materialization of credit deterioration. Given the improving economic outlook, in spite of the remaining uncertainty surrounding that outlook, we expect Huntington to maintain current levels or have a small allowance build to get it above its own lower bound of the triangulation index (Figures 43 and 44).

Figure 43 Huntington Bank – triangulation metric summary

Bank name	ACL Q2 %	Upper bound	Mid-Point	Lower bound	% Lower bound
Huntington	2.12%	3.48%	2.82%	2.17%	9.43%
Peer group averages	2.58%	3.26%		1.92%	20.43%

Figure 44 Huntington Bank – riskiness indicator summary

Bank name	ACL Q2 %	NCO % max	NCO % average	DFAST % loss	DFAST coverage	DFAST riskiness scaler	RWA
Huntington	2.12%	1.21%	0.46%	5.43%	39.04%	1.04	109%
Peer group averages	2.58%	1.23%	0.49%	5.63%	45.83%	1.02	123%

Summary and takeaways

The main reason for undertaking this research was to understand whether there was a practical way to produce an upper- and lower-bound index that could provide a reasonable indicator of the level of reserves across a set of peer banks. This third paper in the benchmark series shows that a triangulation index built on different heuristic measures for both a peer group and a bank can give management the necessary guardrails to understand where they are relative to peers in their reserve practices. We found evidence that by combining top-down methodologies and riskiness indicators, we can better grasp the position in which each individual bank finds itself among its peer group for the current and following quarters.¹⁸

Comparing ACLs from different call reports and historical experiences during the Great Recession is almost impossible given the underlying assumptions that remain undisclosed (that is, weighted average portfolio life) and the difference in portfolio composition. Furthermore, economic environmental uncertainty, lack of clarity on the timing of NCOs, and the impact of government support will affect different banks in different ways. Thus, it is vital to understand the guardrails of your allowance and

¹⁸ We expect that once the economic environment stabilizes, the benchmark range can be valid for more than one to two quarters, making it a lasting benchmark.

know where you stand with respect to your peer group, whether you are above the upper bound or below the lower bound. Such knowledge is crucial for management teams.

We have now automated the process of building the triangulation index based on the outlined measures. We can now conduct this analysis on any peer group and do it at a portfolio level within a matter of days. If you have been struggling to find a reliable benchmark range for you and your peers, feel free to contact us. We offer executive management a point of view on the array of possible results, especially when internal model reliance is brought into question.

Additional resources from Moody's and Moody's Analytics

- » [Moody's Topic Page on COVID-19](#)
- » [CECL Build – Is it Enough?](#)
- » [CECL Benchmark Q2](#)
- » [CECL Adoption and Q1 Results Amid COVID-19](#)
- » [Pre-COVID-19 Health of Small Businesses](#)
- » [EDF Report June 2020 for North American Corporate Firms](#)

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