OLIVER WYMAN

CAPITAL PLANNING AND CCAR DURING COVID-19

From “In Vitro” to “In Vivo”

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EXECUTIVE SUMMARY

COVID-19 represents an unprecedented event in our lifetime and brings major challenges for capital planning processes and CCAR[1]. Capital planning teams are wrestling with the pandemic's global scope, rapid onset, and the magnitude and speed of the macroeconomic impact, as well as the resulting government response and evolving customer behaviors. This is an opportunity for regulators to see a bank's capital planning and stress testing processes in action, following extensive investment in these processes after the global financial crisis. Capital planning has moved from "in vitro" to "in vivo."

This paper focuses on several key messages, recommendations and action steps that we believe are critical for successful capital planning throughout 2020 and the necessary preparation for 2021 CCAR.

To ensure effective capital planning during the remainder of 2020, banks need to:

- **Work towards an immediate "re-baselining" of capital planning projections** based on the bank's latest macroeconomic outlook, including an internal BHC scenario that represents significant downside against that already stressed baseline scenario.
- **Work to synchronize planning/budgeting and capital planning/stress testing assumptions where possible,** recognizing the distinct purposes, use cases, and turnaround times for these activities.

In order to prepare for a successful 2021 CCAR experience, banks also need to:

- **Anticipate and prepare for CCAR capabilities to be placed under significant stress due to COVID-19.** This will require significant work in core areas such as risk identification, scenario design, forecasting models/analytics, model risk management, overall governance, and supporting infrastructure.
- **Begin advanced planning now for CCAR 2021.** Triage will be necessary to ensure tractability; materiality will need to be more of a focus than ever before; and mindsets may need to change around what can reasonably be expected in terms of forecast accuracy.

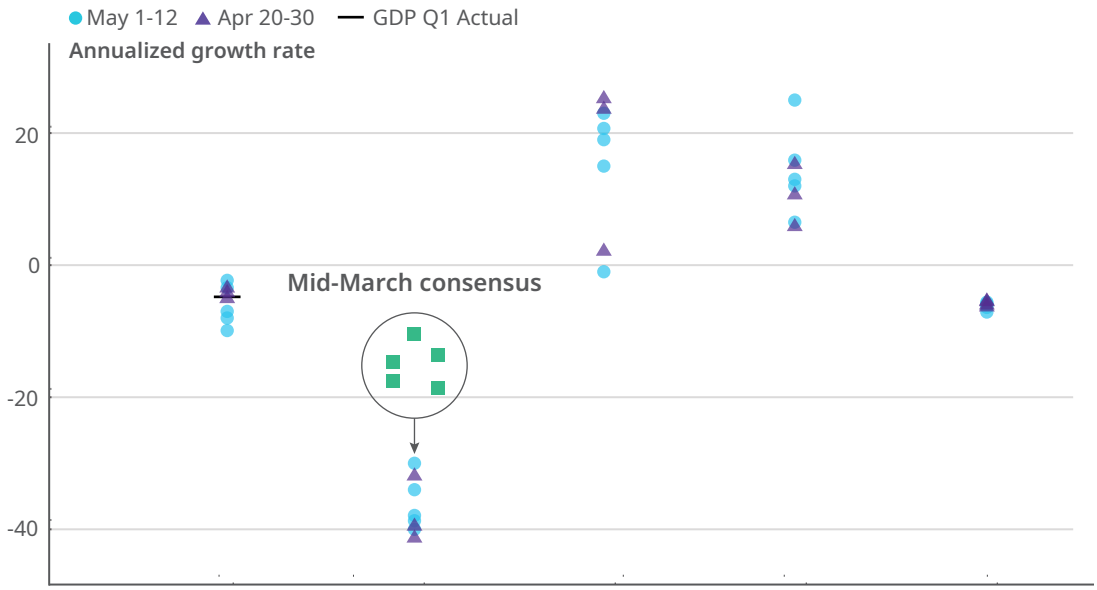
The original Supervisory Capital Assessment Program (SCAP) process, which evolved into CCAR, proved immensely valuable in shoring up capital levels and confidence in the US banking system after the global financial crisis, and is a key reason there is confidence around US banks heading into this current downturn. CCAR now has a chance to shine again. And this time, there's a chance that we'll be completing much of the work from home…in our pajamas.

1 The Federal Reserve's annual Comprehensive Capital Analysis and Review (CCAR).

CAPITAL PLANNING DURING 2020

The unprecedented speed of onset and the magnitude of projected macroeconomic decline for (at least the second quarter) 2020, has created enormous uncertainty around the macro-economic outlook for the rest of the year. In the period from mid-March to the end of April 2020, economists revised their second quarter gross domestic product (GDP) estimates down from around -10 percent to -37 percent (annualized rate). Moreover, the range of estimates has been remarkably wide from -30 percent to -40 percent — highlighting the depth of uncertainty about where the economy is headed. GDP forecast ranges are even wider for the third quarter and the fourth 2020.

Exhibit 1. US Real GDP Growth Forecasts — Q1, Q2, Q3, and Q4 and annual
Annualized growth rate, by select economic analysts*,**



	Q1 2020	Q2 2020	Q3 2020	Q4 2020	2020 (annual)
Median	-3.9%	-38.3%	19.9%	12.5%	-6.1%
Average	-5.2%	-36.7%	15.9%	13.0%	-6.2%
Max/Min	-2.3/-9.9%	-30.0/-41.4%	25.1%/-1.0%	25.0%/5.7%	-5.6%/-7.1%
Actuals	-4.8%				

* Sources: Bank of America (May 8, 2020), Moody's (April 28, 2020), UBS (April 29, 2020), Goldman Sachs (May 6, 2020), Morgan Stanley (May 8, 2020). TD (April 2020), JP Morgan (May 8, 2020), BEA (Apr 29, 2020), CBO (Apr 24, 2020), DB (May 12, 2020), FRBNY Nowcast (May 1, 2020, May 8, 2020, Nowcast not included in table calculations), Q1 estimates based on latest forecast before release of Q1 GDP Actual.

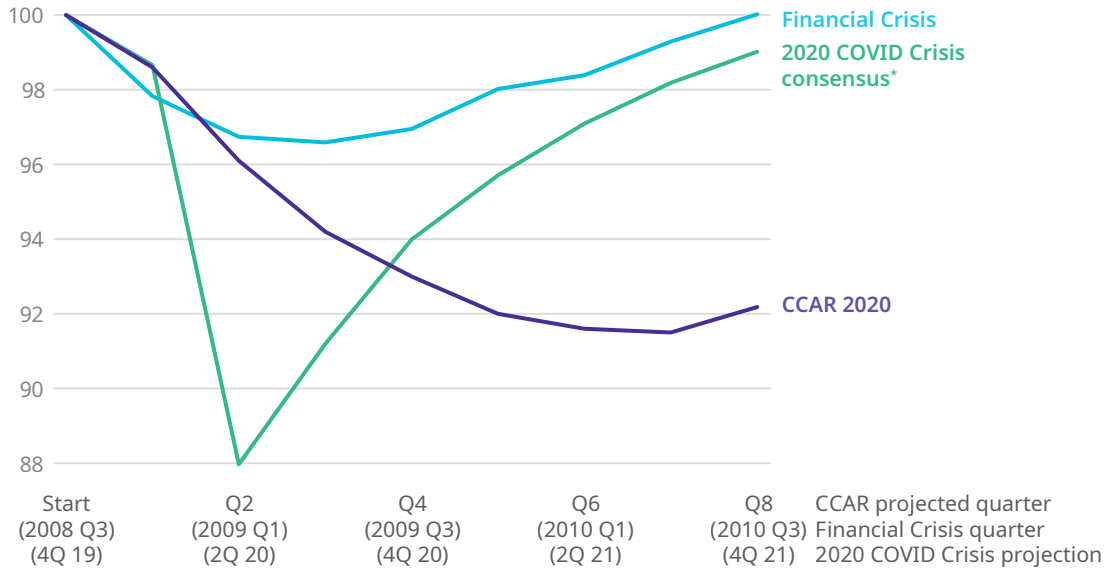
** Quarterly estimates in terms of quarter on quarter (QOQ) seasonally adjusted annual rate (SAAR).

While many US states (and countries) have now "bent the curve" and appear to be past their peak active case rate for the initial wave of the pandemic, enormous uncertainty remains around the likelihood and magnitude of future waves of infection, and thus around the economic fallout. The distinct possibility of a second or even third or fourth wave makes it unlikely that economic recovery will be smooth. Federal Reserve Chair Jerome H. Powell indicated on April 29, 2020 that even a "W-shaped" recovery may be optimistic.[2]

For the 2020 CCAR cycle, since results needed to be locked down by early to mid-March 2020, attempts to adjust internal severely adverse scenarios for the pandemic were unable, in most cases, to match the current economic outlook. Many banks did their best to run sensitivity analyses to supplement their submissions, while starting the process of re-baselining their results to the latest outlook during April 2020 (with work on re-baselining planned to be complete by the end of May 2020 for many institutions). Other banks made the decision to wait until macroeconomic forecasts settled down prior to any fulsome re-baselining to the current recessionary outlook.

As of April 2020, the CCAR scenario was more conservative than consensus estimates, but it seems quite plausible that overlaying an even moderately more adverse scenario than what is expected would likely be more severe than the CCAR severely adverse scenario.

Exhibit 2. US Real GDP relative to Q4 2019 and compared to CCAR scenario, 2008 Financial Crisis***
2020-2021 Forecast; CCAR 2020 Severely Adverse Scenario,** and Financial Crisis (Q3 2008 as 100)



* Consensus as the average of Goldman Sachs (May 6), JP Morgan (May 8), Morgan Stanley (May 8), CBO (Apr 24),TD (Apr 20), UBS (Apr 29), Deutsche (May 12) forecasts, Bank of America (May 8) Q1 forecasts based on latest estimates before release of Q1 GDP actual

** Source: "CCAR 2020 data release" — Federal Reserve

*** Source: Federal Reserve Economic Data

2 Federal Reserve, Transcript of Chair Jerome H. Powell's Press Conference. April 29, 2020.

Banks thus face a capital planning challenge for 2020. While the Federal Reserve's regulatory "Tailoring Rule"[3] grants relief from mid-cycle stress testing, the ongoing recession and banks' own capital planning policies should necessitate a reforecasting to model out the baseline recessionary scenario and at least one downside scenario against that baseline. Many CCAR banks expect that they may need to do this on a quarterly basis for the next several quarters. Financial planning has become stress testing.

WHAT'S NEEDED TO STEER THROUGH THE PANDEMIC

Because these revised forecasts need to be done quickly — and because they need to reflect best estimates given the current environment — we believe banks will need to triage and focus on their most critical models requiring adjustments or overlays, accepting that greater qualitative judgment will be necessary. Given the uncertainty around the pandemic trajectory, economic impacts, and the government's response, the higher precision implied from more thorough analyses will often be illusory. The ability to run more frequent, approximate forecasts, based on fully up-to-date information and experience, will prove to be much more valuable in most instances. While previous capital planning analyses have needed to cross every "t" and dot every "i," there is now a steep premium for quick answers that are approximately correct. By the time you're done refining, the economy will have moved on.

We therefore expect some bifurcation between the very rapid turnaround of financial forecasts and "what-if" analyses to feed finance and planning purposes, and more thorough capital planning forecasts subject to greater governance *(See Page 6, Rapid Reforecasting vs. Capital Planning).* Either way, any formal model governance or assumptions management processes will be stretched and need to be flexible to focus on the most material issues. **Increased model risk will have to be weighed against the risk of less informed or slower decision making.**

Banks faced fairly difficult regulatory questions during the 2020 CCAR exam period, including a focus on understanding when and how banks intended to update and re-baseline their capital planning forecasts; why that process takes so long at many banks; and how that process aligns (or does not align) with the regular budgeting and reforecasting process typically run by finance teams. Having opened the hood on forecasting processes during a crisis, regulators may be confused around how various planning and forecasting capabilities and use cases fit together and may seek better alignment between budgeting/planning and CCAR. We believe banks should get out ahead of such concerns by developing a clear narrative that explains the relationship between regular budgeting/planning and CCAR/stress testing, and articulates where, how, and why the same or different methods, processes, and governance are used depending on the use case. The development of such a narrative may unearth opportunities for greater alignment and efficiency. In addition, up-to-date reforecasts by finance teams — based on latest information and business experience — will yield important insights that can help improve CCAR forecasting models, assumptions, or overlays.

3 Source: Board of Governors of the Federal Reserve System: "Federal Reserve Board finalizes rules that tailor its regulations for domestic and foreign banks to more closely match their risk profiles," October 10, 2019.

RAPID REFORECASTING VS. CAPITAL PLANNING

Illustration: Forecasting commercial lending volumes given the impact of the pandemic and new government lending programs

DRIVERS OF CHANGE

- **Paycheck Protection Program**
- **Main Street Lending Program**
- **Borrower Behavior (for example, credit line drawdown)**
- **"Shelter in place" impacts**

	PLANNING/ BUDGETING REFORECASTING		CAPITAL PLANNING AND CCAR
Purpose	• Up-to-date forecasts to drive business planning, budgeting, and quarterly forecasts • Focus on near-term/rest of the year • Ability to analyze "what-ifs" and monitor key drivers		• Multi-year forecasts across both baseline and severely adverse scenarios • Ensure capital adequacy under the BHC severely adverse scenario
Starting point	• Detailed balance forecast by industry • Often linked to detailed drivers such as the number of bankers, expected client drawdowns and lending demand, credit risk outlook, etc.		• Balance forecasts across several aggregate industry segments • Driven by macroeconomic factors
Reforecasting	• Rapid reforecasting throughout year (for example, monthly) • Triggered by new lending programs and other market changes	**Learning and insights**	• Q2- apply overlays if conducting a capital planning forecast • Q3- likely same approach as Q2 • Q4- develop new qualitative model
	Rapid scenario analysis		**Structured overlays, and ultimately a new CCAR forecasting model**

PREPARING FOR 2021 CCAR

COVID-19 presents major challenges for all core components of the end-to-end CCAR process:

Exhibit 3. Key CCAR components, and summary of challenges presented by COVID-19 (non-exhaustive)

Governance

- Prioritization and oversight of capital planning changes to address COVID-19 impacts
- Review and challenge of the large number of revised models and assumptions, ensuring focus on material issues

Model Risk Management

- Dealing with the enormous volume of revised models and/or overlays
- Tailoring expectations and standards to the unique situation presented by COVID-19

Risk Identification	Scenario Design	Forecasting	Capital Planning
• Addressing "known unknowns" such as new operational and cyber threats • Ideation across potential longer-term impacts and risks	• Determining realistic epidemiological scenarios, and linking those to economic forecasts and downside scenarios • Ensuring appropriate sector and regional differentiation	• Creating robust and defensible forecasts • Adjusting models and assumptions to fit near/medium-term impacts of COVID-19 • Adapting aggregation approaches for new models/data	• Updating Capital Policies, if necessary, based on 2020 experience • Additional sensitivity analyses or more internal scenarios

Data and Infrastructure

- Accuracy of data inputs in relation to new customer treatments (deferrals, modifications) and product programs (for example, Paycheck Protection Program and Main Street Lending Program)
- Onboarding a large set of new forecasting tools, possibly later in the process than normal

Below, we discuss each of these CCAR components in turn.

RISK IDENTIFICATION

A pandemic is found in nearly every bank's risk inventory, but it failed to bubble to the top and become part of the internal bank holding company (BHC) scenario. Yet here we are, and banks face an array of new risks — including heightened operational risks due to extensive work-from-home arrangements, as well as increased frequency of cyber-attacks — all of which will need to be addressed and evaluated in risk identification processes. Pandemic-related risks (for example, a virus running through head office or key operations centers) are no longer theoretical, extreme cases, but real. Meanwhile, various levels of social unrest are becoming easier to envision as the pain of pandemic containment measures falls unevenly on different groups within society, and nationalist sentiment rises.

In addition, new bank or government-initiated lending interventions and forbearance programs alter risk profiles. And finally, the promulgation of economic shocks through the broader economy and financial system have not fully played out; we will experience more "known unknowns" and "unknown unknowns" as we work through this pandemic. Even for traditional risks like credit, increased sector differentiation will be important. Risk identification teams will need to work with their business counterparts to capture a wide range of new risks, with a focus on the most material risks.

SCENARIO DESIGN

Determining the expected macroeconomic outcome, let alone defining the BHC severely adverse scenario, is extremely difficult when a virus is the proximate cause of economic turmoil. Epidemiology and our response as a society are, and will be, difficult to forecast with any accuracy, though a range of now plausible scenarios can be defined. Coupled with the recognition that economic impacts are very unevenly distributed across sectors and regions (more so than in a typical recession), banks are faced with the challenge of having a set of coherent, sufficiently severe scenarios that matches their own business, risk profile, and regional concentrations. As we have seen, it is not unusual to expect that some regions may be close to "business as usual" while others are in some form of "lockdown," or that there will be some significant supply-chain disruptions that ripple through the economy.

OLIVER WYMAN'S PANDEMIC NAVIGATOR

Because epidemiological outcomes will drive economic outcomes until this pandemic is behind us, Oliver Wyman has invested heavily in developing a proprietary pandemic model, the Pandemic Navigator.[4] Its forecast performance, especially when it comes to predicting the peak (at least of the first wave), is superior to other models we are aware of. We have studied the relationship between various forms of societal lockdown and social distancing and the rates of virus transmission. Using this information, we have developed a range of structured scenarios for the pandemic which guide estimation of scenario impacts and can help businesses determine reopening plans.

Smartly designed scenarios can serve basic business and operational planning processes for the remainder of the pandemic (for example, various "return to office" scenarios) and be used to inform stress testing and capital planning. We will all learn a lot in the next several months, so that at least the "error bounds" around any forecast should tighten during the year. But scenario design teams should expect that they will have to make changes later than usual, and more quickly than usual, as compared to their current CCAR scenario timelines. In terms of the severity that should be targeted in each bank's internal CCAR scenario, we believe it should be more severe than what the bank reasonably expects they may experience over the next nine quarters, and thus should represent significant downside against consensus forecasts, even if those embed significant stress.

4 www.oliverwyman.com/pandemic-navigator

FORECASTING UNDER PRESSURE

COVID-19 will put massive pressure on forecasting models — both quantitative and qualitative models.[5] Many of these models may either "break" (producing unintuitive or non-sensical results given the size of macroeconomic shocks) or significantly mispredict 2020 outcomes and thus "fail" standard monitoring tests. In addition, the unprecedented government intervention (the US CARES Act and subsequent increases in support add up to more than 12 percent of GDP) as well as bank responses (through extension of forbearance across retail credit products) lead to a need for structural changes to some models to match current product sets and credit outcomes/pathways.

These challenges are compounded by the introduction of Current Expected Credit Losses (CECL) — an accounting standard for estimation loan loss reserves — in the first quarter of 2020, meaning the biggest swing factor in a bank's financials is now significantly driven by models and scenarios. The "forecast within a forecast" challenge of projecting CECL allowances under various CCAR scenarios is now more material, and more difficult.

Exhibit 4. Examples of anticipated modeling challenges for stress testing models

Model family	Degree of impact
Pre-provision net revenue (PPNR)	• Major changes in customer behavior, as well as changes in some underlying products (government support programs), will require a rebuild of models for impacted products and business lines • Many models will struggle to perform well in forecasting 2020 outcomes • Any revision or model overlays would ideally be based on experience from Q2 and Q3
Retail credit	• Open question of which models can handle massive macroeconomic variable shifts, and which may "break" • Significant work will be required to factor in new forbearance programs and new "categories" of outcomes (deferred/current, deferred/delinquent), which will then require some assumptions around forecasts for these categories
Corporate credit	• Open question of which models can handle massive macroeconomic variable shifts, and which may "break" • In addition, at a sector level, models may significantly underperform depending on their segmentation, whether they rely on overall or sector-specific macro factors, and the degree to which sectors are heavily impacted by COVID-19
Treasury	• Low rates may require reconsideration of some assumptions (deposit beta) needed for net interest margin (NIM) forecasting, even if they do not fundamentally challenge model structure • Pricing assumptions on both loans and deposits may need revision, and are likely to receive more regulatory focus going forward
Traded market and counterparty risk	• Models expected to generally perform well and can be updated based on latest market data — while every market shock is idiosyncratic in nature to some degree, financial markets have seen large dislocations before
Operational risk	• While the same scenario analysis based estimation process can be used, there will be significantly more work than usual for 2020 Capital Planning forecast updates and for the 2021 CCAR cycle due to the range of scenarios required to deal with the COVID-19 crisis

5 A "qualitative model" is a model that does not rely on a quantitative statistical or similarly complex approach and therefore at many banks is often subject to distinct requirements for documentation and/or validation. Qualitative models may include simple statistical approaches, but often rely significantly on structured assumptions and expert judgment.

It may not be possible to fully redevelop quantitative models in time for CCAR 2021. These models will necessarily require data from the second quarter and the third quarter in order to model outcomes representative of experience during the more serious phases of the pandemic and related recession. Even when such outcome data is available, it will not be sufficient to inform the reestimation of some models, depending on the type of model and underlying methodology (for example, credit models requiring full and final outcome data will have a large number of as-yet-indeterminate outcomes). **And finally, modelers will be forced to address how relevant the 2020 outcomes are for predicting the future: Is 2020 the exception, or the rule?**

Forecasting model developers will need to adjust by pursuing one or more of the following approaches:

- Rebuild or adjust quantitative models to ensure maximum reasonability and alignment with recent experience
- Scrap quantitative models and move to qualitative models
- Revise or redevelop existing qualitative models
- Develop overlays based on structured judgment, proxies derived from historical stress periods, etc. Usually overlays are in the conservative direction, but in this case they may not be given the significant government and bank support afforded to customers that will not be captured in models. The second quarter of 2020 may well end up looking like the Great Depression, but in the 1930s we did not have a fiscal and central bank stimulus in excess of 12 percent of GDP.

In all cases, the development of forecasting models/assumptions that match recent customer behavior and business experience will require even closer interaction than usual between business experts and model developers.

CAPITAL POLICY AND CAPITAL PLAN

The Capital Plan will need to reflect all changes to the Capital Policies and related processes in light of experience and learnings from 2020. In particular, Capital Policies may need to be updated to enhance the specificity of monitoring actions and/or certain contingency analyses or actions, to clarify the bank's comfort with temporarily lower capital ratios during stress, and to address any new/revised considerations that have driven bank dividend or buyback decisions during 2020. Banks may also need to make updates to address the official Stress Capital Buffers that will be produced as part of the Federal Reserve CCAR analyses.

Additionally, given the expectation for ongoing uncertainty around ultimate epidemiological and macroeconomic impacts, banks should expect to have more extensive sensitivity analyses than usual in their capital plan. Also, some banks may determine that it makes sense to have more than one BHC "severely adverse" scenario that they take all the way through the capital planning process,[6] in order to be confident that the internal scenario is sufficiently severe and has stressed all the key drivers of an individual bank's risk profile.

6 While it is common for firms to define two to three internal scenarios to guide their CCAR process, many banks work upfront to determine which they believe is the most relevant and severe and carry just a single BHC scenario through to the final results.

MODEL RISK MANAGEMENT

The large volume of new/revised models and assumptions — with many coming later in the cycle than in the past few years — will place enormous stress on second-line model risk functions. We expect that a very strict materiality lens will be necessary to determine where to focus efforts, and how to set the bar for "burden of proof" around the reasonability of forecasting approaches. For example, any or all of the following things may be reasonable and preferable choices for some models/forecasting tools (even though these are not the types of things most CCAR banks would have considered in past cycles):

- Relaxation of goodness-of-fit expectations for model performance on 2020 data
- Replacing quantitative models with qualitative models
- Placing greater reliance (than normal) on recent business experience (and lesser reliance on historical precedent) to justify key assumptions
- Easing the general burden of proof to back up modeling choices or assumptions because certain forward-looking assumptions may be inherently harder to prove in a pandemic environment

To be clear, it is possible to make changes to model risk management processes or expectations without sacrificing independence or process integrity; in fact, the goal of senior model risk stakeholders should be to focus the process on limiting model risk via a common understanding of where models may or may not perform as well, and what is a reasonable set of expectations for producing best estimate forecasts. This pandemic has made clear that robust but not necessarily highly accurate models are needed for stress testing. It is not helpful to have the models just memorize and mimic the last crisis.

SIX IMMEDIATE ACTIONS[7]

1. **Develop a set of guiding principles** to inform model management decisions during the pandemic.
2. **Apply a tiering framework** to the model inventory to concentrate on the most material areas of increased model risk.
3. **Leverage existing model monitoring standards** to allow for more nuanced interpretation of results.
4. **Develop decision trees** to identify potential pathways and guide decision making in a more consistent way between models.
5. **Update the existing model overlay process** to support the expected increase in overlays and better balance rigor and expediency.
6. **Convene a "Model SWAT team" of experienced stakeholders** to provide oversight and guide triage decisions.

7 These actions are covered in more detail in Oliver Wyman's paper, "Model Management In The New Era," to be released in May 2020.

We foresee an increasing need for quick, automated, approximated calculations of overall CCAR results.

GOVERNANCE

While the same general governance structure and process can and should continue to be used, we expect that senior governance groups will need to focus more time than usual and have greater involvement in allocating resources to items requiring adjustment from prior CCAR cycles. Senior management and governance groups are likely to have a much more prominent role in scenario setting, reviewing and challenging forecasts, and approving overlays and/or qualitative forecasts.

A corollary is that some aspects of a firm's capital planning process may not be deemed ideal but will be judged "good enough" and may be allocated less resource/focus than past cycles.

DATA AND INFRASTRUCTURE

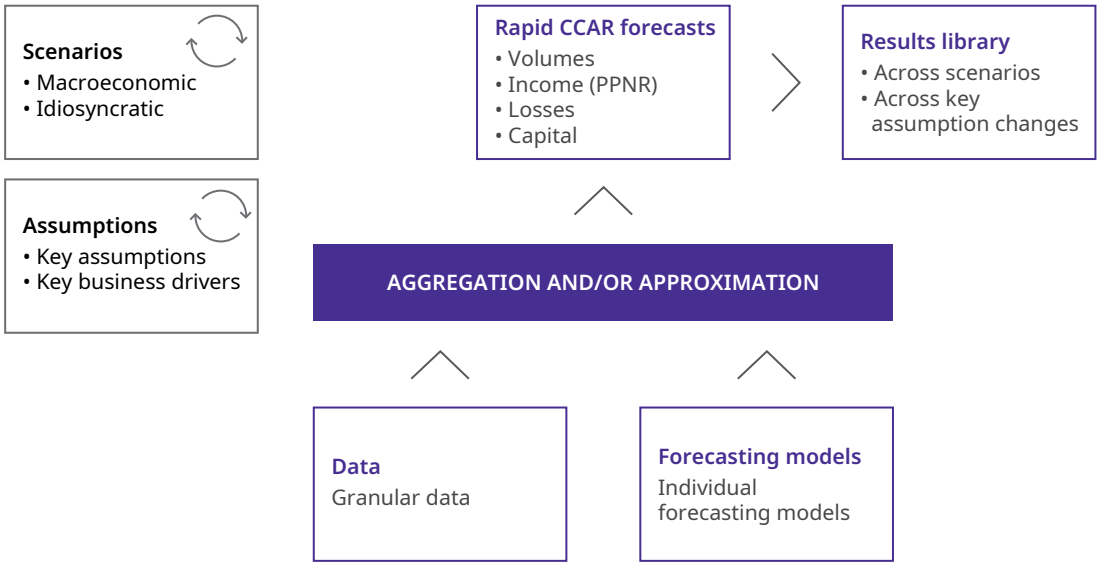
The stress placed on a bank's customer response and forecasting capabilities will lead to stress on data and infrastructure. Banks may be challenged to ensure complete and accurate sourcing of data related to new lending programs (for example, ensuring systems built "over the weekend" are populating exposure and risk databases comprehensively and accurately) as well as massively expanded customer deferral and modification programs (for example, ensuring that any new categories of customer situation or outcome, or data being used by updated models, are available for use in the CCAR projection engines). This is in addition to the stress placed on infrastructure teams driven by the large volume of new or revised models.

These stresses bring to the forefront capabilities that many banks have thought about and perhaps included in a long-term "target state" for CCAR infrastructure, but which will require further building out at most firms, including:

- The need for automation of end-to-end calculation processes, including core results, but also the automation of macro-sensitivities across the full model suite.
- The need for additional self-serve capabilities for modelers, including modelers being trained and capable of loading ready-to-go models, to change and update key assumptions without running through an infrastructure "middleman," etc.

In addition, we foresee an increasing need for quick, automated, approximate calculations of overall CCAR results, to allow for faster "what-if" and sensitivity analyses. Such "CCAR in a box" capabilities would help inform more holistic and rapid scenario and capital planning analyses, especially in situations of high macroeconomic uncertainty.

Exhibit 5. Illustration of rapid CCAR forecasting ("CCAR-in-a-box")



Now is as good a time as any to review and update target state objectives for infrastructure, and to determine what enhancements can be built out for 2021 CCAR.

PLANNING AHEAD IS CRITICAL

CCAR is already effectively a year-round process, with planning for the next cycle starting just after completion of regulatory "on-site" exams, and then development, validation (where relevant), and implementation of new capabilities occurring typically in a compressed timeframe in the third quarter and the fourth quarter, so that firms are ready to go in the following year when regulatory scenarios are released.

The CCAR annual calendar leaves little space for increased or unexpected workloads, and yet we now face an upcoming CCAR cycle where — at the very least — new and revised forecasting tools are likely to be delayed so they can benefit from second quarter and third quarter experience, pushing back validation, implementation, and testing processes. Meanwhile, many bank teams who normally spend much of the year on CCAR-related model development are also tied up with rapid iterations for business planning and, in the credit risk sphere, loss forecasting and CECL allowance purposes.

Compounding the problem is the impending end of LIBOR, with five quarters of the 2021 CCAR forecast extending past LIBOR's planned end date. The implications for CCAR timelines will not be pretty — how can you compress something that participants view as being largely uncompressible?

It is clear that advanced planning needs to start right away, coupled with proactive prioritization, planning for required resources (which will exceed whatever 2020 resourcing assumptions underlie pre-COVID-19 CCAR resource plans), and close coordination with regulators and boards to set priorities and expectations. CCAR resourcing will need to be rebaselined for 2021 CCAR at a minimum. And a sober look at timelines and workload will help force some difficult "triage" discussions to ensure the most critical work gets done.

The implications for CCAR timelines will not be pretty — how can you compress something that participants view as being largely uncompressible?

CONCLUSION

At the start of 2020, who thought that completing and polishing CCAR submissions would be done while working from home?

After forming a cornerstone of restoring confidence in the US banking system following the global financial crisis, it is time for stress testing to shine again. While CCAR has sometimes been viewed as a tedious compliance exercise, now, as we navigate through the pandemic, capital planning analyses will once again be at the center of every bank's near and medium-term decision making. Capital planning will help to inform important decisions around strategy and balance sheet management, and support banks with steering through the pandemic with confidence — with a sound hull and their compass pointed in the right direction. Doing this right requires an enormous effort, harkening back to the early days of CCAR when it felt like everything had to be redone every year.

And this time, capabilities will need to meet *today's* regulatory expectations. COVID-19 has thrown down the gauntlet...it is time to rise to the challenge!

Doing this right requires an enormous effort, harkening back to the early days of CCAR when it felt like everything had to be redone every year.

Oliver Wyman is a global leader in management consulting that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation.

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