

# 2017 CCAR PPNR Planning: Eight Things to Worry About Right Now

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We welcome your feedback and are happy to continue the conversation about this article or other Treasury and Risk viewpoints.  
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*With 2016 CCAR submitted on Tuesday, that cycle is officially over and (if history guides) 31 of the 33 banks deserve congratulations for jobs well done. But no rest for the weary — we're off and running for CCAR 2017, with the cycle shortened from 15 to 12 months. In speaking with nearly all CCAR banks, the consensus is that this year will test banks to be even more diligent, comprehensive and thoughtful about their submissions. And timing will be tighter. So while everyone is clamoring for spring break, it's time to get back to work. Below we highlight the eight things we see as the most critical immediate steps toward a successful 2017 submission.*

## EXECUTIVE'S TO-DO LIST:

1. **Lock down your 2017 CCAR calendar now.** This year's timeline reverts back to 12 months, resulting in 30% less time for planning and model development.
2. **Kick out the consultants.** Use them if you must, but stop letting them run amok. Consultants should be innovating and teaching, helping to build a sustainable, affordable process — not just turning the crank year in and year out.
3. **Plan refinements to model development and model validation in lockstep.** Last year too many banks refined these processes independently. Last minute "true-ups" unnecessarily led to massive re-work and poorer results.
4. **Expect more weird (negative rate) scenarios.** This year's negative rate scenario was likely just the tip of the iceberg: expect more aggressively unusual scenarios with added attention paid to how the bank will handle the condition.
5. **Use PPNR models beyond CCAR.** More thoughtful design of stress testing models will not only generate more accurate results, but should be relevant in running the business. If you aren't using PPNR models outside of CCAR, what message does that send about your trust in the models?
6. **Devise a consistent approach to non-modeled estimations.** We expect the process of forecasting portfolios that lack full statistical models will be a major focus in 2017, requiring continued improvement in analytic justification, macroeconomic sensitivity and documentation.
7. **Create a robust benchmarking process.** All CCAR banks need to get better at quantitatively comparing themselves to the industry. This is mandatory for SR 15-18 institutions and is valuable for SR 15-19 institutions.
8. **Avoid getting bitten by non-regulatory variables.** The negative rate scenario highlighted that expanded variable sets (whether developed in-house or purchased from third parties) are based as much on qualitative belief versus quantitative science. Know who is making assumptions and how.

## **1. LOCK DOWN YOUR 2017 CCAR CALENDAR NOW.**

The pressure is on to develop and execute your CCAR timeline as soon as possible. It bears repeating that last year's 15-month cycle between submissions was the anomaly and this year reverts back to a 12-month turnaround. The extra 13 weeks last year allowed banks to "leisurely" await formal Fed feedback before finalizing the CCAR plan. After planning, the remaining weeks were distributed: implementation and testing got the most added time, followed by validation and model development.

Like other years, most models will be due to validation in late October or early November, which is less than 30 weeks away. That's 30% less time for planning and model development.

Chances are, you already know where your process is weak and what needs to improve. Many banks even write out their expected MRAs before hearing from the Fed — generally with few surprises. Any bank that is waiting to hear "officially" what needs to be fixed before beginning to execute a CCAR plan is "officially" behind.

## **2. KICK OUT THE CONSULTANTS.**

This seems like a harsh statement coming from consultants with a huge dedicated PPNR modeling practice, but hear us out. Far too many banks hire consultants to oversee, build, and validate CCAR models without ensuring the work can be brought in-house afterwards. While it may be easier in the short-run to outsource the solution, CCAR is not going away and hiring an expensive consulting firm every year is unsustainable.

Instead, focus consultants on what they are good at: innovating when innovation is called for, teaching your staff how to do the work, and developing tools that help your team succeed. Yes, they can be "surge horsepower" from time to time, but not every year. Consultants should leave — and in their wake, there needs to be a sustainable process.

An important facet of successful "consultant-lite" execution is calling a truce in the development vs. validation arms race. Numerous banks engage consultants to validate the models that the bank engaged other consultants to develop. As model development adds resources, model validation one-ups them. Banks must manage these groups in parallel, adding time series modeling experts who are well-versed in banking to both teams.

## **3. PLAN REFINEMENTS TO MODEL DEVELOPMENT AND MODEL VALIDATION IN LOCKSTEP.**

Model developers and model validators sometimes forget that the "other side" also received MRAs and MRIs. (Although in areas like sensitivity analysis, both sides may be receiving similar MRAs!) This can lead to the rather uncomfortable position where modeling teams are given new validation submission considerations (documentation standards, tests, acceptance criteria, et al.) during the last few weeks of model development. Especially given the shortened timeframe this year, banks cannot afford another disconnect of this magnitude.

We urge banks to plan their process refinements together across model development and validation: an ounce of prevention is worth a pound of cure. Validation standards and modeling approaches are being constantly refined, but there must be better knowledge sharing and coordination about which aspects are at greatest risk of change and which aspects have been locked down.

Keep in mind these changes put an added burden on the validation team. Since validation expectations influence how models will be developed, early finalization is imperative. Increasing coordination is further challenged by the need for validation to maintain independence and not to prescribe development approaches. Banks must find the right balance of cooperation and independence.

## **4. EXPECT MORE WEIRD (NEGATIVE RATE) SCENARIOS.**

This year's severely adverse scenario with negative short-term interest rates will not be the last time we see a negative rate scenario. Banks may be "graded on a curve" on how they approached forecasting the impact of negative rates this year given the unprecedented scenario (both in reality and in prior years' scenarios), but planning for leniency next year is not wise.

Note that we were surprised that the negative rate scenario was in the severely adverse case this year. In prior years the adverse scenario was the one to exhibit “weird” (out-of-sample) characteristics, e.g., “unusually strong” outflows of commercial deposits to MMMFs (2015) and unprecedented high unemployment (2013), among others. This year’s negative rate scenario was further complicated by the Fed’s instruction that negative rates would not result in “additional financial market disruptions.” This instruction created ambiguity regarding what actually would happen in the severely adverse case.

Banks need to bake into their planning how they will test models under a potentially more severe negative rate scenario. We recommend going even further to consider multiple “severe” cases: one where rates do not cross zero and one where they go even more aggressively negative than –50 bp.

## **5. USE PPNR MODELS BEYOND CCAR.**

Well-designed PPNR models can and should be used in business forecasting, strategic planning, interest rate risk measurement, etc. Segregating PPNR models for CCAR use only begs the question of why the models are good enough for stress testing but not trustworthy for other applications. Having tons of single-use models is also awfully expensive!

Leading banks have gone all-in, moving away from creating “total balance” PPNR models to developing systems of component equations (e.g., acquisition versus run-off) that can serve multiple purposes. This change has also required more careful consideration of key drivers (e.g., ensuring rate dynamics are appropriately captured) and making hard decisions about estimation and forecasting frameworks (e.g., if testing a +300 bp interest rate shock scenario, what are the concomitant GDP and unemployment shocks?).

Creating multi-purpose models can be more difficult, but the benefit of increased usefulness and business buy-in is frequently worth the cost. Further, multi-purpose models better reflect market dynamics: a “total balance” prediction lumps together dynamics in customer churn, average account size and promotions — masking important relationships underneath big historical movements. Breaking out these component pieces allows each influencer to be sized separately and accurately. This incremental complexity makes sense: model development is just too expensive to perpetually relegate the effort and its output to a regulatory box-checking exercise.

## **6. DEVISE A CONSISTENT APPROACH TO NON-MODELED ESTIMATIONS.**

This refers to the forecasting method used for any portfolio where a statistical regression is not developed. (It seems there are at least 40 different names across the 33 CCAR institutions for these estimates).

Based on our horizontal review of the CCAR banks, we expect that the non-modeled estimation process is one that will see significant refinement in this cycle. That includes materially increased expectations regarding representation of macroeconomic sensitivity, displays of analytic justification, thoroughness of documentation and application of “statistics-lite” analyses such as goodness-of-fit backtesting and reasonability of algorithmic forecasts.

## **7. CREATE A ROBUST BENCHMARKING PROCESS.**

Only a handful of the largest CCAR banks are prepared to meet the new regulatory requirement that SR 15-18 institutions should “use a variety of methods, including benchmarking, to assess model performance and gain comfort with model estimates.” This will require out-of-the-box thinking: the tools and approaches that work for developing a bank-specific model are insufficient for developing benchmark models. Interpreting results appropriately is also a puzzle — especially for banks with non-traditional strategies — complicating an otherwise apples-to-apples comparison.

This is a skillset that all CCAR banks — including SR 15-19 institutions — will need to have in their repertoires. The baseline expectation for PPNR modeling is constantly rising, and it is not a stretch to assume every CCAR bank will need some degree of benchmarking skills in the next few years.

## **8. AVOID GETTING BITTEN BY NON-REGULATORY VARIABLES.**

With the introduction of the negative rate scenario, we saw many banks scramble to determine the implications for variables not directly provided by the Fed. For example, there was no guidance for how LIBOR would react to negative treasury rates, even though most banks embed LIBOR in their risk, balance and spread models. Banks not only needed to develop their own internal expectation for LIBOR, they needed to provide a convincing rationale for why it would behave as forecasted. And the incoming views were wildly divergent.

Most banks without an internal economist team purchase their expanded variable set from third-party providers. These banks had the unenviable choice of either accepting the rationale provided by these third parties without complaint, or disagreeing with the logic and thus having to create a macroeconomic forecasting apparatus from scratch in a matter of weeks.

The acrobatics some banks performed to rectify this ambiguity points to the need for an improved process to manage the set of modeling variables. Many have taken steps to simplify their variable sets over the last year, but there is more work to do. Banks must be crystal clear on how variables not provided by regulators are forecasted and must firmly understand the quantitative and qualitative risks embedded in those forecasts.

## **CONCLUSION**

We all have a busy year ahead of us for CCAR modeling: a path to success will need to be charted between rising expectations and an abridged timeframe. The big challenges we outline here are not easy to solve — but they seem relatively clear. Time to get back to work!

**ABOUT NOVANTAS** Novantas is the industry leader in analytic advisory and solution services for financial institutions. Our Global Treasury & Risk unit partners with banks to advance their analytic capabilities — bringing to bear our thought leadership, advanced modeling techniques, and extensive experience. The Novantas PPNR Modeling and Forecasting team has worked with more than a third of CCAR banks on PPNR modeling engagements, and is routinely in contact with almost all CCAR banks, many DFAST banks, major international banks in 10+ countries, and U.S. and international regulators.

**CONTACT US** We welcome your feedback and are happy to continue the conversation about this article or other Treasury and Risk viewpoints. Please reach out to the head of Novantas Global Treasury and Risk, Pete Gilchrist at [pgilchrist@novantas.com](mailto:pgilchrist@novantas.com); or the head of Novantas PPNR Modeling and Forecasting, Jonathan "Wes" West at [jwest@novantas.com](mailto:jwest@novantas.com).