# EY regulatory reporting brief

The EY regulatory reporting briefs explore Federal Reserve regulatory reporting, highlighting report requirements, recent news and updates, and identifying common reporting challenges.

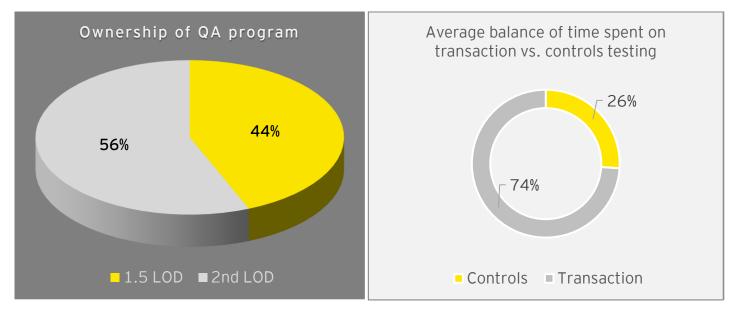
# **Spotlight on:** regulatory reporting quality assurance

Quality assurance (QA): Regulatory reporting testing function responsible for assessing the data quality and integrity of regulatory filings, detecting issues and

mitigating the risk of reporting errors

In 2018, the EY Financial Services Organization (FSO) Advisory practice gathered substantial industry information regarding QA capabilities through roundtables, symposiums and surveys conducted with regulatory reporting QA leads across domestic large institution supervision coordinating committee (LISCC) firms and foreign banking organizations (FBOs), inclusive of FBOs with US branch presence, as well as intermediate holding companies (IHCs). Broad industry themes are highlighted throughout this briefing. In addition, this briefing intends to define QA capabilities and leading practices, provide input on supervisory expectations and offer insight for the future of the regulatory reporting QA program.

#### Industry highlights and observations<sup>1</sup>



<sup>&</sup>lt;sup>1</sup>Industry observations are based on combined survey responses of 17 firms, including domestic LISCC firms, IHCs and FBOs with US branch presence.

#### Industry highlights and observations (continued)

- Firms primarily have been utilizing nearshore or offshore workforce models and manual processes to achieve efficiency in QA; some institutions are beginning to explore technology and automation solutions to meet QA requirements
- Firms have varying levels of maturity in their QA processes (e.g., scope and coverage models); however, all participating firms either have dedicated QA functions in place or plans in progress to establish QA functions
- Although QA programs in recent years have focused primarily on transaction testing, processes around conformance testing and standards enforcement are maturing in parallel
- The second line of defense (LOD) or a hybrid between the first and second line (1.5 LOD) typically owns QA responsibility
- A majority of QA testing is substantive-based (i.e., transaction testing from report back to source contract or other source documentation)
- > The level of coordination across LODs is generally limited, often with redundancy in testing efforts
- Institutions are primarily utilizing manual processes to facilitate testing and have strategic goals of automating the process in the future
- The QA functions' responsibilities generally expand beyond testing and may also include activities ranging from responding to on-site examinations to conducting regulatory reporting training

#### Regulatory reporting quality assurance overview

Regulator and business management expectations to improve regulatory reporting data have emphasized the need for clients to establish independent QA functions. QA functions have been evolving with varying levels of maturity across foreign and domestic financial institutions and are a critical component of the three lines of defense. The Federal Reserve has communicated clear expectations of independent validation groups including QA.<sup>2</sup> Regulatory reporting expectations for QA leading practices include:

#### Fed leading practices:

- Independent of regulatory reporting management and production responsibility
- Technically competent and knowledgeable staff
- **ces:** Standardized and tailored review procedures
  - Reporting mechanisms to enforce issue management

The key mandate of a QA program is transaction testing; the responsibility to conduct transaction testing is generally shared across the three lines of defense and is often relied upon by internal audit. Some QA functions also perform controls testing and testing for conformance to instructions.

- Transaction testing: Substantive-based data quality testing of reporting line items against source documentation, e.g., testing for inaccurate maturity dates; generally sample-based, product and riskweighted and report-driven
- > Controls testing: Evaluate design and operating effectiveness of controls

<sup>&</sup>lt;sup>2</sup> Federal Reserve Bank of New York. Regulatory Reporting Best Practices. September 3, 2015

#### Regulatory reporting quality assurance overview (continued)

Conformance testing: Analysis of regulatory filings for nonconformance with regulator instructions, generally seen through misinterpretation of instructions or data granularity constraints, e.g., testing for incorrect field mapping

QA programs can be further strengthened by establishing a framework and executing processes for issues management, which involves identifying issues (e.g., data, process and controls), anticipating risks and consequences and proactively resolving issues in a timely manner.

While the Federal Reserve has been prescriptive about the independence of QA functions, skill sets required by QA staff, standardized review procedures and issue management, they have not provided detailed guidance on scope and coverage, governance, resource models and tools to be leveraged by QA functions. The industry practices section below provides a snapshot of QA functions based on the roundtables and EY surveys with large and complex bank holding companies (BHCs), IHCs and FBOs with a US branch presence.

### Industry practices

#### Scope and coverage

- Most firms rely on a risk-based prioritization<sup>3</sup> of reports in scope for testing. This risk-based prioritization includes a focus on reports and attributes that the Federal Reserve is likely to examine, including attributes that are not necessarily reported values
- Some firms perform product-based prioritization of QA testing scope as opposed to schedule-based
- Reports that are often deemed high-risk, such as the Call Report, FR Y-9C, FFIEC 009 and FR Y-14Q/M are the main reports covered for testing, but QA programs can have broad coverage up to 50 reports,<sup>4</sup> and include global regulatory reports or liquidity reports as part of their scope
- All surveyed domestic LISCC firms include the FR Y-14Q/M as part of their testing scope; all surveyed FBO QA functions either include, or plan to include, the FR Y-14Q/M reports
- Transaction testing sample sizes range from ~20-100 line items; however, there is no "one-size-fits-all" approach, since sampling is dependent on the materiality and complexity of the report or schedule, as well as the frequency that testing is being performed, which varies by institution

QA functions have varying levels of maturity as it pertains to scope and coverage. Per the industry surveys conducted with domestic LISCC firms and FBOs (IHCs and FBOs with US branch presence):

- While all domestic LISCC firms have QA functions, varying levels of maturity were noted in their processes
- A majority of surveyed FBOs have established QA functions, with the remainder in the process of establishing

<sup>&</sup>lt;sup>3</sup>Risk-based prioritization is generally achieved through a criticality assessment, based on quantitative (e.g., number of data elements and reporting line items) and qualitative (e.g., area of focus for Fed exams/known data quality concerns) considerations <sup>4</sup>Coverage up to and over 50 reports is alluding particularly to domestic LISCC firms

#### Scope and coverage (continued)

All institutions with QA functions perform either control testing, transaction testing and/or conformance with FRB instructions reviews.

- QA functions generally focus on transaction testing, typically performed on a quarterly basis, with control testing and conformance review performed less frequently
- There are varying approaches to determining sample sizes for testing populations, including statistical and judgment-based
- In most cases control testing is performed by a separate function (e.g., Sarbanes-Oxley (SOX) team)
- Furthermore, QA teams oftentimes have responsibilities beyond testing, including responding to Federal Reserve examinations, participating in issue management processes and may also conduct regulatory reporting training

#### Governance

- > The QA function typically sits within finance and is independent from regulatory reporting function
- Coordination between QA functions and lines of defense should be considered for efficiency and coverage

In the EY QA survey, firms indicated that reporting lines vary with some QA functions reporting to the chief financial officer (CFO) and others to the controller or chief accounting officer (CAO). Furthermore, QA functions are generally overseen by targeted governance committees or bodies that approve the QA plans and serve as an oversight body to monitor remediation of testing findings.

The second line of defense, or a hybrid between the first and second line, typically owns responsibility for QA. However, the level of integration across LODs is generally limited (often with redundancy in testing efforts between lines of defense). Coordination across various QA and validation functions in the bank should be considered to achieve effective governance broadly.

#### **Resource models**

- ► For domestic LISCC firms, resource models range from 7 to 50+, and 75% of domestic LISCC firms have greater than 20 resources
- For surveyed IHCs and FBOs with US branch presence, resource models range from 3 to 9
- > As per results of survey, firms often leverage split near-shore/off-shore models

The size of respective QA teams is largely dependent on the size and complexity of the organization. About half of banks utilize split near-shore/off-shore models in order to cut costs and create efficiencies. QA functions generally target hiring individuals with audit (i.e., certified public accountants (CPAs)), regulatory reporting, SOX, controls, finance and compliance backgrounds. Consultants often supplement QA teams in early stages of program establishment and mobilization, as well as in the training of offshore resources.

### Outlook on QA testing

Financial institutions are primarily utilizing manual processes to facilitate testing and capture of QA results. Although various tools (e.g., workflow management tools) are being used to manage testing and perform activities related to scope determination, identification of test cases and logging issues, there is an opportunity to explore the use of new and emerging technologies in order to increase productivity and efficiency.

Financial institutions are primarily utilizing manual processes to facilitate testing and capture QA results.

A primary area of interest for future enhancements to QA functions is around process automation. Process automation refers to existing or emerging solutions which replace human-driven processes with technology, which may include applications, robotic process automation (RPA) and other cognitive solutions. Several different technologies exist across the process automation spectrum, including:

- Traditional application automation: Strategic vendor or proprietary system implementation to address a broad scale business need
- > **RPA**: A software that mimics a human's interaction with systems
- Business process management (BPM): A software to model and manage end-to-end business processes through workflow
- Artificial intelligence (AI): Automates more complex, statistical and machine learning activities. While it can provide additional cost savings beyond basic RPA, it is often focused more on accuracy and revenue enhancement. Specifically, artificial intelligence includes:
  - Machine learning A system that uses algorithms and large amounts of data to learn how to perform a task
  - Cognitive intelligence Systems and models designed to emulate human thought processes

Key enablers for process automation:

- Optical character recognition (OCR): A software that transforms documents or images into machineencoded text
- Natural language processing (NLP): A software designed to process and understand human speech as it is spoken
- > Accurate, complete and detailed process flow and related controls documentation

#### Regulatory reporting quality assurance: what's next?

QA functions for domestic LISCC firms, IHCs and FBOs with US branch presence will continue to mature to keep pace with the industry and regulatory expectations. As scope and coverage of reports become more consistent across financial institutions, emphasis turns to process optimization, through the use of emerging technologies. Overall, QA will remain a key area of scrutiny and importance, as expectations for data quality and integrity of regulatory filings heighten. This is evidenced particularly through evolving regulatory exams – an industry trend for QA programs, whereby a lower level of data granularity is being tested while the scope of reports and schedules being examined is expanding.

Looking further down the horizon of regulatory activity, topics outside of regulatory reporting should additionally be considered as part of QA program scope. Potential areas of consideration include:

#### Current expected credit loss (CECL)

• Model validation requirements to develop and test new models to calculate allowance for loan and lease losses (ALLL) and off-balance-sheet credit exposures

#### Interbank offered rates (IBORs)

- To transition to IBOR, firms will need to conduct a comprehensive impact assessment on products and instruments, legal contracts, risk profiles, models and end-user computing tools, and business processes and infrastructure
- Federal Deposit Insurance Corporation (FDIC) new recordkeeping rule 370
  - Various technology, data and compliance requirements for covered institutions (CI) to comply with requirements to compute insured and uninsured deposit sums

#### Recordkeeping requirements for qualified financial contracts (QFC) rule 371

• Expansion of information to be maintained and reported by insured depository institutions (IDIs) and applicable subsidiaries when in a "troubled condition"

## Who will be the first to skip the nearshore or offshore model and move straight to an automation solution?

For further information, please visit the EY Insights on regulatory reporting website

#### Key Ernst & Young LLP contacts

To learn more about how the changing regulatory reporting environment might affect your organization and how we can help, please contact one of our professionals:



Anita Bafna Partner +1 212 773 3938 anita.bafna@ey.com



Steven Thiakodemitris Partner +1 212 773 0903 steven.thiakodemitris@ey.com



Vadim Tovshteyn Principal +1 212 773 3801 vadim.tovshteyn@ey.com



Gagan Agarwala Principal +1 212 773 2646 gagan.agarwala@ey.com



Misha Rubin Principal +1 212 773 1863 misha.rubin@ey.com



Christine Burke Senior Manager +1 212 773 5607 christine.burke@ey.com



Jeffrey Curbo Senior Manager +1 212 773 0713 jeffrey.curbo@ey.com



Joe Zurenko Senior Manager +1 312 879 2554 joseph.zurenko@ey.com EY | Assurance | Tax | Transactions | Advisory

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Sarah Sy, John Daugherty and Josh Leon