The background of the entire page is a blurred image of a hand holding a yellow pen, pointing at a digital screen. The screen displays a financial chart with a pink line graph at the top and a green line graph at the bottom. The green line graph has numerical values along its axis, including +1.71, +3.29, +1.54, +5.57, +1.71, +0.44, and +5.57. The overall color palette is dominated by blue, yellow, and pink.

# Getting to grips with regulation: evolving approaches to regulation mapping

Industry insights and leading practices

**EY Regulatory Inventory Survey**  
**July 2020**



Building a better  
working world

---

# Contents

Introduction	4
Executive summary	5
Participants and key findings	6
Scope of inventory	9
Granularity of inventory	12
Maintaining and automating inventory	16
Conclusion	18
Contacts	19



# Introduction

## Approach to the Regulatory Inventory Survey

Welcome to the Regulatory Inventory Survey, an industry analysis of how financial service firms structure, manage and maintain inventories of the laws, rules and regulations (LRRs) that apply to their business. Clients continue to grapple with the challenge of how best to provide their organization with more insight on the regulations that apply to their activities, and how to do so in a way that will better inform the assessment and management of the risks associated with non compliance. We have seen a significant progression in the maturity of the approach taken – in particular, by largest clients – and increasingly see those standards migrating more broadly across the sector. An initial focus on “horizon scanning” for change has given way to maintaining standing inventories of regulation, added analysis of regulatory publications, and “mapping” of regulatory requirements to different dimensions of the business

and its risk management framework. As clients look to the future, they are hoping – but struggling – to use the growing capability of machine intelligence to take on more mechanical aspects of the task and add more insight to the data.

This survey covers the following:

- 1 Scope of the inventory: the coverage across geography, sector, issuers and publications
- 2 Granularity: the depth of analysis of inventory publications, as well as the scope and level of detail at which mapping is executed
- 3 Maintenance of the inventory and application of technology such as Artificial Intelligence (AI)



# Executive summary

## Market participants

Global systemic importance (G-SIB)

**90%** G-SIB      **10%** Non-G-SIB

Asset size

**90%** >US\$1,000b      **10%** US\$500b-US\$1,000b

Number of US employees

**50%** >100k      **20%** 50k-100k      **20%** 10k-50k      **10%** <10k

## Global footprint





## Key findings

### **Almost all banks maintain an inventory across all jurisdictions where they are present**

The majority of banks surveyed maintain a regulatory inventory that covers only the regulatory jurisdictions where the bank itself has a presence. However, certain banks indicated that they have identified priority jurisdictions. Unsurprisingly, all participants track financial services (FS) regulatory publications, although over half also track publications by regulators outside of FS. A small subset of participants only track publications where there is a significant or specific impact to the scope of services operated by their firm.

### **Inventory scope, structure and granularity is generally aligned to geography and risk**

The level of detail at which publications are included and analyzed in an inventory generally varies based on some measure of risk, with interpretation of risk differing by bank and, in particular, by its geographical footprint. US banks favour a granular approach, analysing rules in more detail in general across a broader proportion of the inventory. By contrast, APAC banks are more likely to take a summary approach, but EMEA banks are increasingly including more detail.

### **All banks surveyed map their regulatory inventory to business information**

The banks surveyed all map their regulatory inventory to specific business information; 90% map their inventory to policies and business units, 70% map to internal risks and 60% map to controls for at least some portion of their inventory. However, the level of detail at which this mapping occurs – as elsewhere – varies by assessment of risk and geography.

### **In general, banks take a risk-based approach to mapping their regulatory inventory**

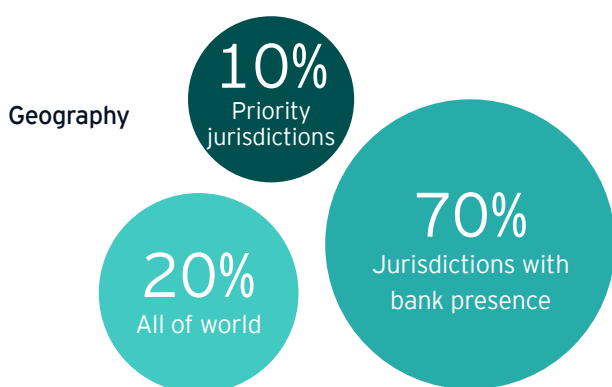
Most banks surveyed have taken a risk-based approach and mapped only to priority publications, regardless of where their HQ is domiciled; overall, they apply a combination of prioritization approaches for their inventory. Sixty percent of participants define priority based on the publishing regulator, while half prioritize more generally based on jurisdiction. Specific regulatory topics or impact ratings are less common prioritization approaches.



## Key findings

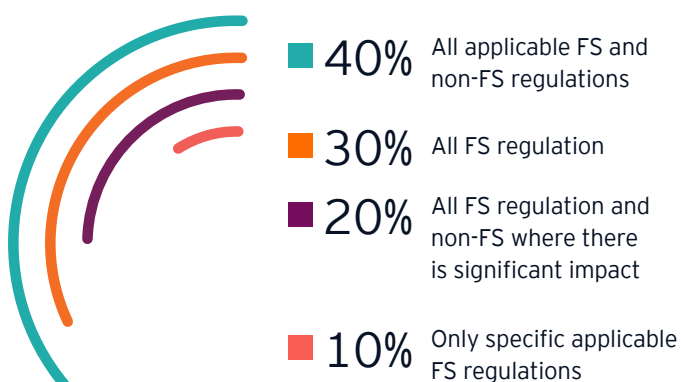
### Scope of regulatory inventory

Most banks focus only on jurisdictions where they have a presence. Twenty percent of those surveyed include LRRs published in countries where they do not currently have operations.



### Sector

All participating banks include all FS regulations that are applicable to them. Over half also include publications issued by non-FS regulators.



### Documentation

All participating banks document primary in-force LRRs with a direct impact on the bank. Over half also incorporate underlying or supporting publications.



- 100% Primary in-force LRRs that impose obligations
- 80% Other underlying/supporting publications that prescribe detail for obligations
- 50% Rules issued by other industry bodies that impose obligations
- 20% Supplemental publications that do not directly impose obligations

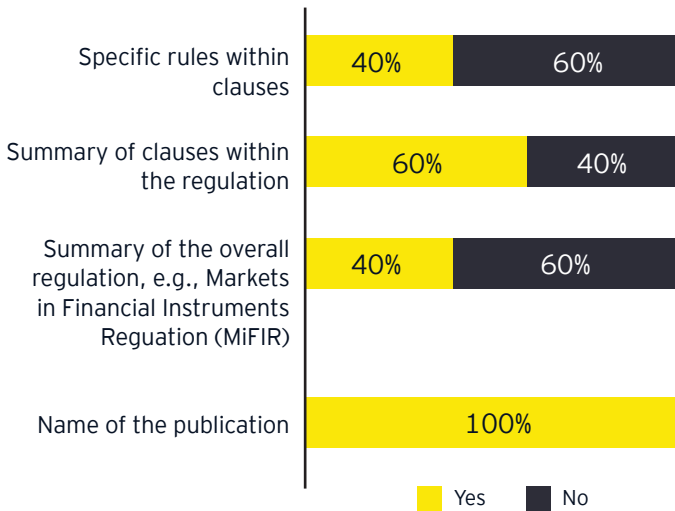


# Key findings

## Granularity of inventory

Over half of all participating banks summarize key obligations in the major sections of the regulations, while a third also summarize specific rules at a lower level – a similar proportion take the opposite approach, mapping only at the level of the requirement name rather than underlying sections thereof. When summarizing actions items, over half of respondents prepare plain English summaries.

**60%** of banks create plain English summaries.

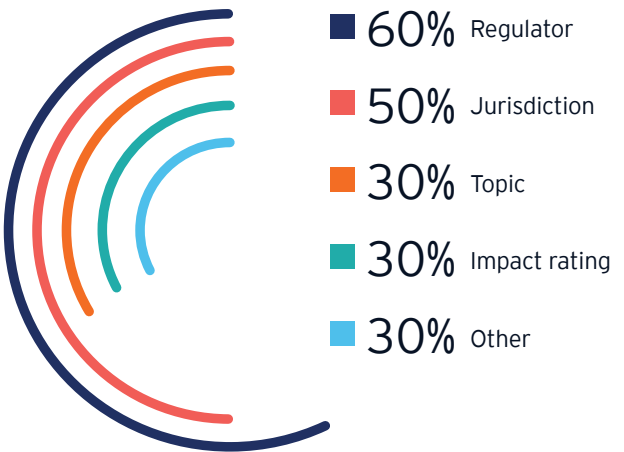


## Granularity of mapping

Most participating banks have taken a risk-based approach and mapped only to priority publications. Ninety percent of banks surveyed map publications to internal policies and business units, while only 60% map to controls.



## What factors are included when determining priority for publications?





A close-up photograph of a hand holding a silver pen, pointing at a financial chart displayed on a tablet screen. The chart features a white line graph with green and red bars, set against a dark background with blue and green highlights. The pen is positioned over the chart, and the hand is visible on the right side of the frame. The overall lighting is dim, with the screen providing the primary light source.

1

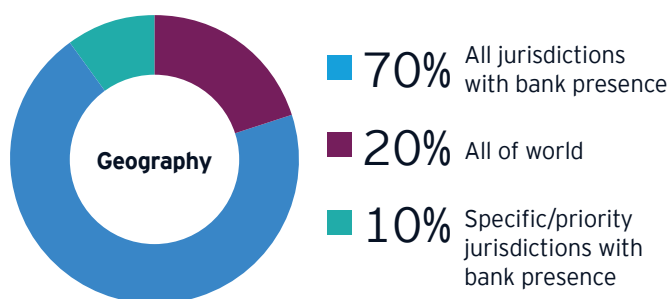
# Scope of inventory

## 1.1. Geographical scope

The majority of participants have inventories that cover all geographies in which their firm operates.

A smaller number of banks focus only on priority jurisdictions. Prioritization is based on factors including the scale of business undertaken and perceived intensity of regulatory activity.

A small number of banks focus only on specific FS regulations as well as priority jurisdictions.



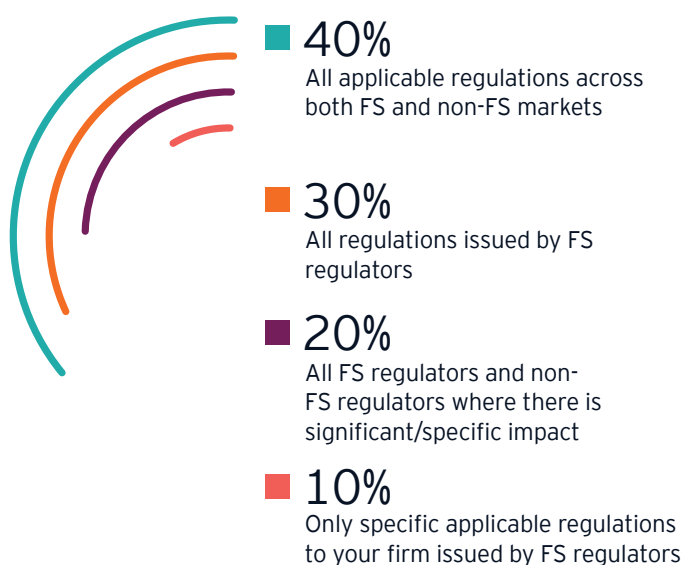
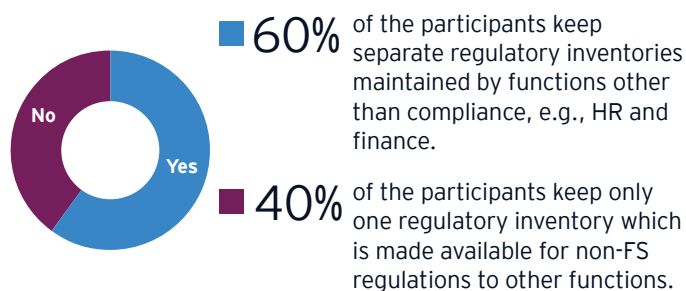
## 1.2. Sector scope

All banks focus on FS regulations that are applicable to them, though a small percentage focus only on specific regulations deemed high priority. Prioritization is largely based on factors such as impacted business scale, regulatory activity or perceived priority.

Over half of the banks surveyed also included regulatory publications issued by non-FS regulators in their inventory. Where they were included, accountability for their maintenance and assessment generally rested with functions outside compliance: for example, HR and finance.

**60%** of the participants focus on all regulations issued both in FS and non-FS markets.

### Functions other than compliance maintaining separate regulatory inventories



“

Certain functions maintain their own regulatory inventories, such as HR and finance.

Survey participant



## 1.3. Document scope

All participants include primary regulatory publications that directly set obligations on the bank.

All of the participants hold publications that drive direct regulatory obligations on in-scope firms. Half of the respondents also incorporated other underlying or supporting publications that set out specific directions for meeting regulatory obligations (definitions, templates, calculations, etc.). In particular, this applies to all US respondents. Only a small number included periodic regulatory updates and general guidance or guidelines, such as interagency memos and Q&As – these were generally viewed as “BAU reading” for agreed Subject-Matter Experts (SMEs) that would update impacted areas and/or policies and procedures as needed. One consistent challenge mentioned was the extent to which ad hoc publications such as “Dear CEO” Letters should be included within the inventory where they set out additional expectations beyond formal LRRs.

“

Where interpretation is helpful, we incorporate summaries. However, if this gives rise to a separate requirement, we are expected to map directly.

Survey participant



- **100%**  
Primary in-force LRRs that impose obligations on the firm, e.g., MiFIR
- **80%**  
Other underlying/supporting publications, including regulatory technical standards that prescribe detail for obligations, e.g., EU level 2 documents
- **50%**  
Rules issued by other industry bodies that impose obligations onto the firm, e.g., FX Global Code
- **20%**  
Information or supplemental publications that do not directly impose obligations on the firm, e.g., guidance or interpretative statements, interagency memos and Q&As/FAQs

A hand holding a pen points to a line graph on a grid background. The graph features three data series: a green line with points at 386, 312, and 300; a red line with points at 395, 250, and 228; and a blue line with points at 218, 223, and 228. The background is a dark blue grid with white lines.

2

## Granularity of inventory



## 2.1. Regulatory inventory structure

Most participants structure their regulatory inventory by regulatory risk type. Only a few structure by internal policy, risk and control framework or enterprise risk.

A small number of banks have developed a multidimensional structure to their regulatory inventory, where items are grouped by regulatory risk type as well as by enterprise and compliance risk.

US banks tended to structure their regulatory inventory around a combination of geography and one or more risk taxonomy elements.

### In which ways do you structure your regulatory inventory?



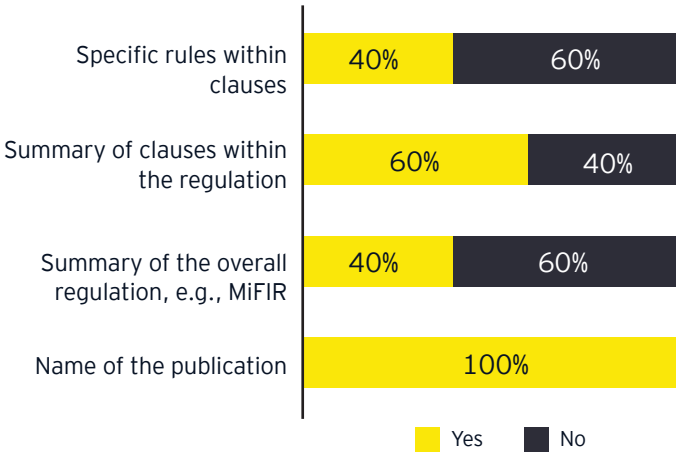
## 2.1. Regulatory inventory structure

When identifying actionable items within regulatory publications, i.e., obligations, banks tended to summarize these at varying levels of detail. The majority of banks opt for several differing layers of detail according to the priority of the publication. More than half of all participating banks

primarily summarize key clauses within the regulations. More than two-thirds of respondents require more detailed obligations for at least some jurisdictions, with a similar proportion requiring no more than a short overall summary of the requirement for at least some “lower-risk” population within their inventory. Many banks focus their most granular efforts on US regulations, and US banks favored more broad-based granularity. By contrast, APAC banks tended to summarize the overall regulation. EMEIA banks had combinations of both, following a risk-based approach.

Most banks take a risk-based approach in terms of which components of the publication to include within the inventory, i.e., regulation titles, summaries, plain English obligations or specific regulatory citations.

When summarizing regulatory publications, including actionable items, more than half of respondents prepare plain English summaries. Non-US banks tend to extract specific parts of the regulatory text in their low-level summaries, whereas US banks lean more toward creating of plain English summaries.



**60%** of the participants create summaries of actionable requirements in plain English.

## 2.3. Mapping to business information

When mapping the regulatory inventory to business information, banks have taken a predominantly risk-based approach. Almost all respondents map to some form of business unit and the same proportion also map to policy. Risks and controls remain the other two fundamental building blocks of the mapping data set, and a small number of participants also map to a process library.

Mapping appears to take place at a combination of “requirement” and “obligation” levels, with some banks maintaining smaller, more focused inventories mapped at a granular level, while banks with larger inventories focus on obligation-level mapping for priority regulations and jurisdictions. Banks with more detailed approaches map with a combination of key processes and controls.

When considering mapping inventory content to business information across different regions, non-US banks tended to map their regulatory inventories to other business information, namely risks, more frequently than their US counterparts. In APAC, mapping to controls is not common practice compared with mapping to risks and business units. EMEA respondents tended to map to risks, with 75% also mapping to business units and controls.



“We would look for rules that drove compliance obligations and build them up over time.

Survey participant

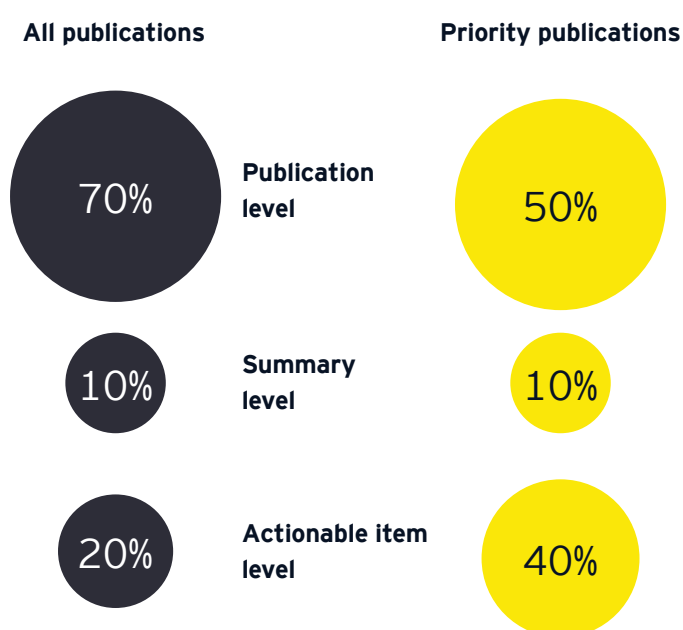
“We prioritized the mapping program by a combination of regulator, jurisdiction, and topic themes. Higher-risk regulators from larger jurisdictions were mapped first. This was our way to prioritize timing of completion.

Survey participant



## 2.4. Regulatory inventory structure

Participants were surveyed to understand the level of mapping for their regulatory inventory at different publication levels. The graph below shows the distribution of answers for the level of mapping, with a comparison of “all publications” and “priority”.

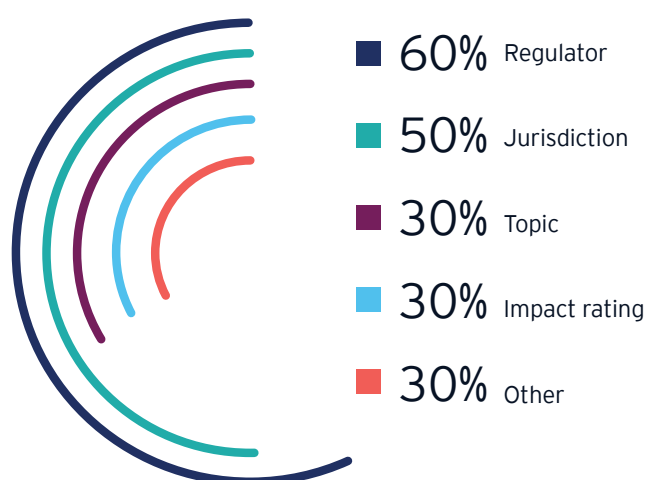


The majority of respondents indicated they largely complete mapping for regulatory publications at the overall publication level. However, among priority regulatory publications, respondents tended to map at a lower level of detail; notably, actionable items and obligations. This is particularly true for priority publications as determined by jurisdiction and issuing regulator. Some respondents indicated they plan to use a tiering approach to signal a need for additional granular mapping where necessary.

Nearly two-thirds of respondents indicated that they prioritize by regulator, while half also include jurisdiction as a factor.

In general, non US banks prioritize among regulatory publications per jurisdiction and regulator, while APAC banks tend to prioritize by impact rating. US banks primarily prioritize based upon jurisdiction and regulatory topic. The figure below illustrates the weighting firms give to different factors when determining prioritization among regulatory publication. Almost all of the respondents opted for multiple prioritization factors.

### What factors are included when determining priority for publications?



# 3

## Maintaining and automating inventory



Maintaining the regulatory inventory was seen as challenging by all respondents, given the velocity, volume and complexity of both regulatory and business change. Several banks have opted for external subscription services to support scanning for new regulatory changes.

However, all banks currently use in-house teams to maintain inventories while continuing to look for opportunities to reduce the effort needed through alliances and technology.

---

**90%** of participants maintain the inventory in-house, with several banks supplementing this with an external subscription for parts of the inventory.

---

External subscription services to support maintenance of the inventory was most popular among US banks.

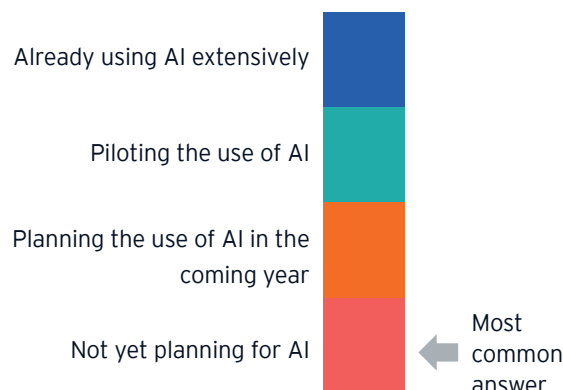
Third parties are mostly used for inventory maintenance and horizon scanning. This was particularly the case for maintaining sufficient coverage of new regulatory publications issued outside of the US.

There are still some banks using Microsoft Excel to manage their regulatory inventory; however, more than half of the participants (70%) use other platforms, both in-house and externally developed.

“

We listen to the vendor pitches, but are still basically manual. We know it is coming, but have no immediate plans. We are open minded to it, exploring internally as well as with vendors. If we could weed out noise in regulatory change feed, that would help (90% of the feed is noise). We're further off mapping to controls, etc. We spend huge amounts of time weeding out the noise.

Survey participant



Automation and AI is an increasing focus of banks in order to save time and cost, and add insight across multiple business processes. However, regulatory inventory is one area where the benefit of AI has yet to be realized.

No respondents are extensively using AI, and only a small number have active pilots looking to apply AI within the inventory technology environment. Most currently have no defined plans for using AI.

However, all participants see AI as could eventually ease the burden of maintaining complex inventories.

---

# Conclusion

Overall, the approach in the industry to managing, mapping and maintaining the regulatory inventory is maturing. Regulatory interest in regulation mapping started in the US but, in our experience, it is clear that the benefits are now being recognized by other regulators, and similar expectations are emerging in many other jurisdictions. However, it is not only regulators who stand to gain from the effort.

Effective mapping to the business opens up significant opportunities to enable more proactive risk assessment and risk identification, inform business decisions, and potentially rationalize ineffective or duplicative processes and controls used to meet regulatory obligations. Emerging technology and automation offer further opportunity for firms to enhance compliance management capabilities, breadth of coverage and depth of insight into the implications of regulation for their business.

Overall, we see effort here continuing to evolve. For now, business and regulatory knowledge remains critical to ensure expectations from both management and regulators are met. However, all of our respondents see a significant current and extensive future opportunity for firms to use both collaboration and technology to enable more efficient and effective collation of LRR - freeing scarce business resources to focus on the business opportunity richer regulatory insight can provide.



---

# Contacts



**Kara Cauter**

Partner - London  
Ernst & Young LLP  
Email: kara.cauter@uk.ey.com



**Rushabh Mehta**

Partner - Hong Kong  
Ernst & Young Advisory Services Limited  
Email: rushabh.mehta@hk.ey.com



**John R Liver**

Partner - London  
Ernst & Young LLP  
Email: jliver1@uk.ey.com



**Samuel Kaye**

Senior Manager - London  
Ernst & Young LLP  
Email: sam.kaye@uk.ey.com



**Marc Heon**

Partner - Boston, USA  
Ernst & Young LLP  
Email: marc.heon@ey.com



#### **About EY**

EY is a global leader in assurance, tax, transaction and consulting services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation is available via [ey.com/privacy](https://ey.com/privacy). For more information about our organization, please visit [ey.com](https://ey.com).

#### **EY is a leader in shaping the financial services industry**

Over 30,000 of our people are dedicated to financial services, serving the banking and capital markets, insurance, and wealth and asset management sectors. At EY Financial Services, we share a single focus – to build a better financial services industry, not just for now, but for the future.

© 2020 EYGM Limited.  
All Rights Reserved.

EYG no. 004903-20Gbl  
ED MMY



In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as legal, accounting, tax or other professional advice. Please refer to your advisors for specific advice.

[ey.com](https://ey.com)