

SURVEY GOAL

The IACPM surveyed its members to gather industry insights on developing, implementing, and enhancing Risk Appetite Frameworks as well as evolution and refinement over time.





Executive Summary

Risk Appetite Frameworks (RAFs), and their definition and use within the firm, are a continuing high priority among IACPM members and the industry generally. COVID-19 and the ensuing credit crisis in 2020, have resulted in a test of both the frameworks and risk management for financial institutions – causing industry participants to intensify monitoring and review of RAF definitions and governance.

Banks are also increasing their focus on the management of non-financial risks, including cyber and climate risk, due in part to the significant effects of the COVID crisis. Many are just starting to develop climate risk perspectives and financial implications have not yet been quantified.

Amid the onset of the credit crisis and the challenges in 2020, the IACPM conducted its second benchmarking study on RAFs. IACPM previously surveyed on this topic in 2014 in collaboration with PricewaterhouseCoopers (PwC), shortly after the Financial Stability Board's 2013 publication of the Principles for an Effective Risk Appetite Framework.

The 2020 study looks at industry practices in developing, implementing, and enhancing RAFs and their evolution and refinement over time. Additional information, especially relating to experiences during the COVID crisis, was gathered in interviews with survey participants.

Risk Appetite Framework aspects explored in the study included:

- Level of development
- Objectives
- · Ownership, Governance and Risk Culture
- Allocating Risk Appetite within the Firm, Metrics and Binding Constraints
- Role of Stress Testing
- Role of Credit Portfolio Management
- Challenges and development opportunities

Note on the survey demographics:

The 2020 IACPM Risk Appetite study collected responses from 57 financial institutions globally, including 50 Banks, six Development Banks, and one Insurance Company. In addition, IACPM staff conducted interviews with several participating firms to help inform observations. The survey results in this analysis reflect the aggregate responses for the 50 bank participants and one insurance company.



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Introduction

Risk Appetite Frameworks (RAFs) are a core component of risk assessment, risk measurement and risk management within financial institutions. As such, IACPM member firms have long been focused on adoption and implementation of frameworks that are both **actionable and able to be assessed** quantitatively and/or qualitatively depending on the risk. The 2020 IACPM Risk Appetite Frameworks Study shows that, in large part, the frameworks are meeting challenges and proving sound, including amid the current financial and credit stresses of the COVID crisis.

The Survey demonstrates the material progress that firms have made in defining Risk Appetite and metrics, integrating risk assessment across the firm and implementing the frameworks at key levels within the firm (line of business, product, geography, etc.) and across types of risks. Of course, all firms are continuously reviewing practices and there are a number of areas identified for further development – especially in the area of non-financial risks (certain operational risks, ESG, etc.).

The data continue to show that RAFs are not "one size fits all" as the appropriate framework ties to the nature of the firm, its lines of business, its portfolio and geography and its culture. Nonetheless, we do see focus on areas of common/sound practice although implementation approaches of necessity differ to meet the risk management needs of the specific firm.

"It is the responsibility of the board of directors and senior management to define the institution's risk appetite and to ensure that the bank's risk management framework includes detailed policies that set specific firm-wide prudential limits on the bank's activities, which are consistent with its risk taking appetite and capacity."

"... As the banking industry has moved increasingly towards market-based intermediation, there is a greater probability that many areas of a bank may be exposed to a common set of products, risk factors or counterparties. Senior management should establish a risk management process that is not limited to credit, market, liquidity and operational risks, but incorporates all material risks. This includes reputational, legal and strategic risks, as well as risks that do not appear to be significant in isolation, but when combined with other risks could lead to material losses."

Basel Committee on Banking Supervision, Supervisory review process, SRP30, Risk Management, Version Effective as of 15 Dec 2019

"The coronavirus pandemic had the potential to push climate risk cleanly off the global regulatory agenda, much as the financial crisis had done more than a decade earlier. Instead, central bankers have doubled down on multilateral plans since March, treating the economic wreckage of the virus as a warning of the kind of shocks that will occur with alarming frequency due to climate change."

Q&A: New York Fed's Stiroh on climate change and Covid Risk.net, July 20, 2020



Level of Development

Enterprise RAFs are well developed and in a mature state.

Most survey participants perceive their enterprise level RAF to be at least adequate. Among risk types, Risk Appetite for Credit, Market and Liquidity Risks all are viewed at a slightly higher level of development compared with non-financial risk types. This includes **Operational Risk which** only 30% of the larger banks and 17% of the smaller banks are viewing as "highly developed". (Figures 1 & 2)

"Risks are rapidly evolving; taxonomy required to quantify, and processes needed to manage the changing risk events remain challenging in application."

Survey Respondent

Figure 1
Risk Appetite Frameworks' Level of Development

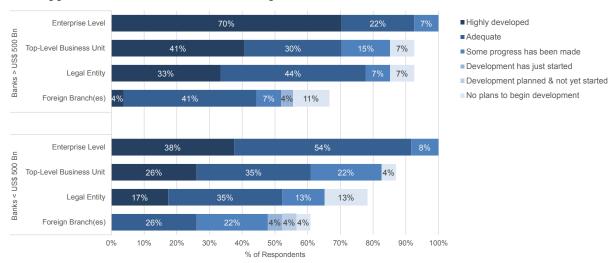
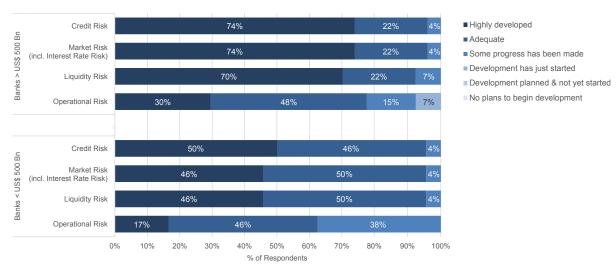


Figure 2
Risk Appetite Frameworks' Level of Development for Financial Risk Types

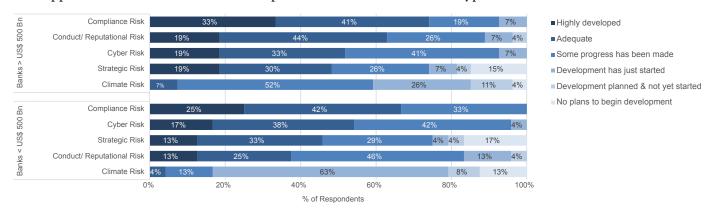




More work is also required for other nonfinancial risks for which Risk Appetite is mainly defined from a **qualitative** perspective by identifying key risk indicators with associated thresholds to monitor risk profiles. Notably, participants' subjective assessment of their institutions' Risk Appetite

for climate risk lags other non-financial risks even at larger and/or more advanced institutions while anecdotal indications point to ongoing development to include this risk at least on the Enterprise Level. (Figure 3)

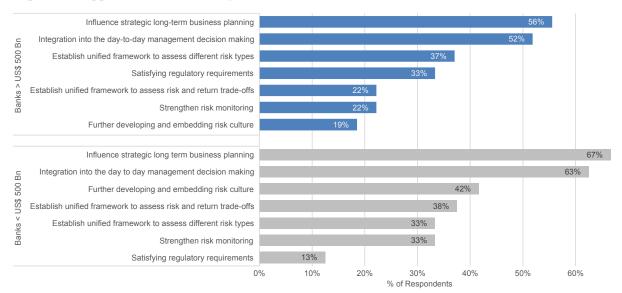
Figure 3
Risk Appetite Frameworks' Level of Development for Non-Financial Risk Types



Objectives

RAF top objectives are integration into strategic long term business planning and day-to-day business decision-making, regardless of institution size. However, differences can be observed for some of the remaining objectives. The results show a shift from observations in the 2014 survey, when almost twothirds of all participants cited the strengthening of their risk governance/ monitoring as one of the top three RAF objectives: a clear indication that progress has been made. (Figure 4)

Figure 4
Top 3 Risk Appetite Framework Objectives





Ownership, Governance and Risk Culture

Ownership and Governance of RAF are primarily a responsibility of the Board, the CRO and Risk Management.

Responsibility for RAF implementation is shared by CROs and Risk Management functions, often with the involvement of Enterprise Risk Management and Credit Portfolio Management (CPM), but also Finance and Treasury. The results clearly demonstrate a highly integrated approach to risk assessment and risk management across the firm. (Figures 5 & 6)

These findings are not surprising as setting the tone from the top and defining the risk a bank is expected to operate within while conducting business is a crucial role for the board and CRO. Once RAF has been implemented, monitoring is a key task and reinforces positive behavior by ensuring accountability while at the same time also providing deep insights into the portfolio.

Figure 5
Risk Appetite Framework Governance Responsibilities

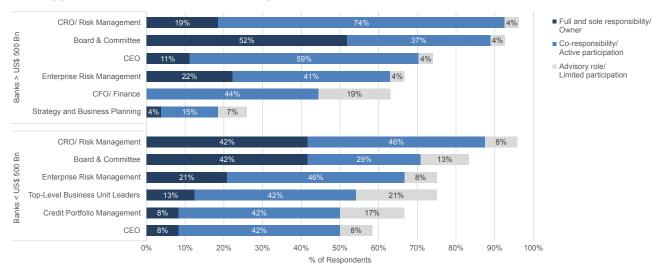
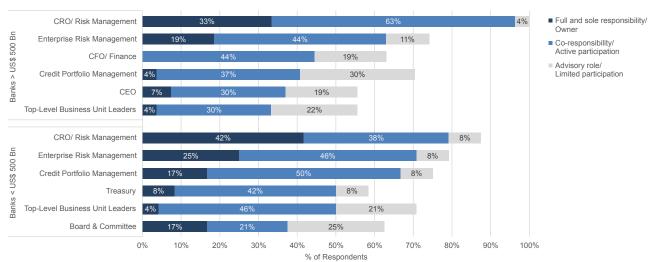


Figure 6
Risk Appetite Framework Implementation Responsibilities





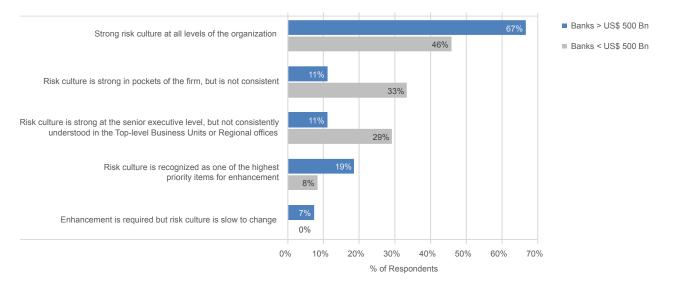
RISK CULTURE IS STRONG

More than half of all participating institutions report a strong risk culture at all levels of the organization. For smaller banks, there is a clear movement toward embedding risk culture across the firm since 2014. Current results show that risk culture is often strong in pockets of the smaller banks as well as at the senior executive level, but not as consistently understood across all organizational levels. The smaller banks are focused on increasing Risk Appetite consideration in the line of business planning process and other daily decision making to continue development of culture.

Regionally, a larger percentage of banks in Asia recognize risk culture as one of the highest priority items for enhancement which is possibly the result of increased regulatory focus on the topic over the past years. (Figure 7)

"We have established a risk culture intranet site to promote and create enterprise-wide awareness for risk culture." Survey Respondent

Figure 7
Risk Culture Assessment





Allocating Risk Appetite within the Firm, Metrics and Binding Constraints

The vast majority of survey participants allocates the RAF first to the Enterprise Level, and in the time period since 2014, there has also been additional focus on the next tiers of these "cascading approaches" - moving from the

Enterprise Level to Business Line, Risk Type and Legal Entity. Importantly, however, there remains a range of practice reflecting type of firm, lines of business, geographies etc. visible even among G-SIBs. (Figures 8 & 9)

Figure 8
Primary Risk Appetite Cascading Approaches

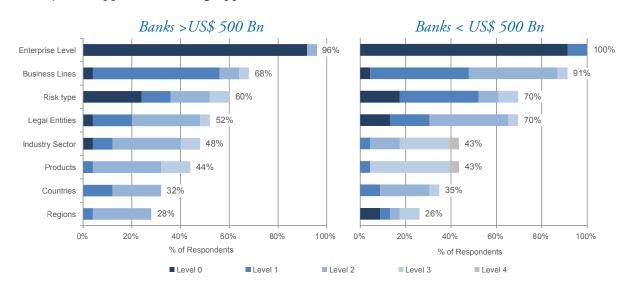
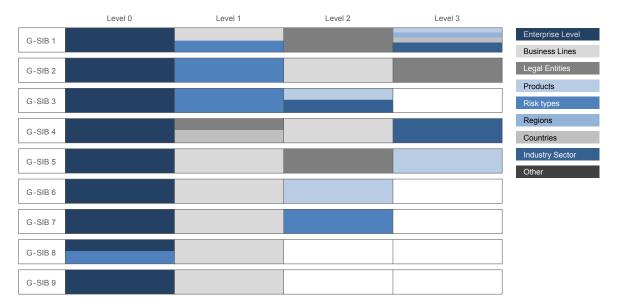


Figure 9
Illustrative Sample of Primary Risk Appetite Cascading Approaches for Nine Participating G-SIBs





While financial risks are generally articulated through detailed quantitative measures and forward-looking risk statements, for non-financial risks banks globally revert to high-level qualitative measures and only about one-third of institutions have advanced their processes to include forward looking statements. In particular for strategic and climate risk, many are still investigating the best approach to follow.

It is worth noting that there are substantial regional differences, with EMEA more advanced in capturing nonfinancial risks. For example, for compliance risk, 48% in EMEA include forward looking risk statements, compared to 7% each for North America and Asia Australia. For cyber risk 38% in EMEA include forward looking risk statements vs 15% in North American and 14% in Asia/Australia.

Given the increased regulatory, rating agency, and investor focus on climate risks, intensive work is currently being done in all geographies to develop and enhance approaches for this risk type. (Figures 10 & 11)

Figure 10
Mix of Risk Measures Used to Articulate Risk Appetite

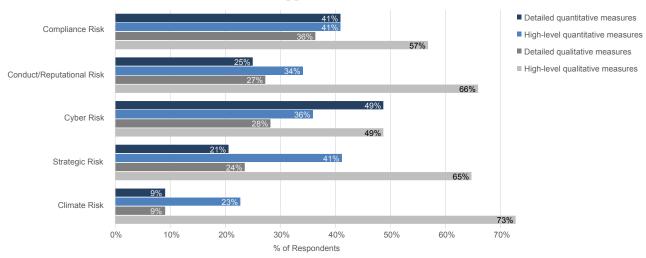
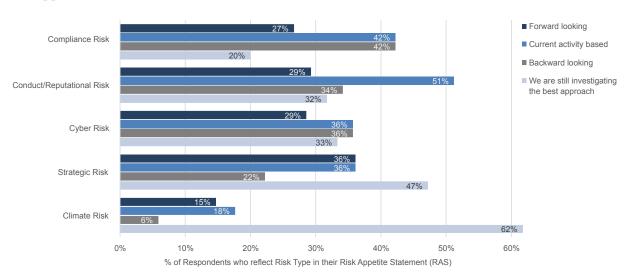


Figure 11
Risk Appetite Statements' View





Regulatory Capital ranks as the top binding constraint at the enterprise level, with some focus also on Liquidity. For most, concentration limits are the top binding constraint at the business unit level. It is worth noting that liquidity was not seen as binding in the IACPM 2014 study, but now ranks second at the Enterprise Level, possibly reflecting the challenging period and enormous liquidity requirements which confronted financial services at the outset of the COVID crisis

when the 2020 Survey was conducted (i.e., full drawdown of liquidity facilities by many borrowers at the beginning of the crisis and market dislocations which occurred early in the COVID time period). Additionally, the data shows some differences between larger and smaller firms in the other top binding constraints with larger firms citing VaR and Stress Testing and smaller firms noting ROE and Economic Capital as one of their top constraints. (Figures 12 & 13)

Figure 12
Top Binding Constraints for Risk Appetite Monitoring at Enterprise Level (Banks > US\$ 500 Billion Asset Size)

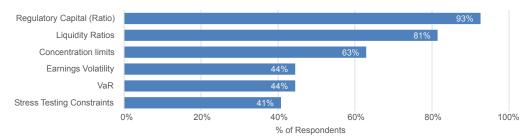
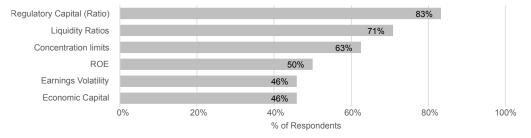


Figure 13
Top Binding Constraints for Risk Appetite Monitoring at Enterprise Level (Banks < US\$ 500 Billion Asset Size)



The Role of Stress Testing in Risk Appetite Calibration

All responding banks in North American, 90% in EMEA, and 80% in Asia consider some form of stress scenarios a key metric when determining their Risk Appetite. Stress testing results influence mostly limit setting at various levels throughout the organization and are considered critical to set the Risk Appetite for required and available capital as well as liquidity positions.

Some banks indicate that they employ stress testing scenarios specific to different business units when determining Risk Appetite, but they are typically variations of the same

scenarios (i.e., mild, severe, extreme). One participant commented that credit and trading are well served by enterprise level stress scenarios, but business units like wealth management are exposed to different kinds of stresses. And while most banks set up extensive infrastructure to accommodate enterprise level stress testing required by regulators, business unit level stress testing is hard to design and does not fit well in this infrastructure.



Role of Credit Portfolio Management

Credit Portfolio Management's (CPM's) role in carrying out firms' Risk Appetite mandates has continued to develop and expanded during the COVID Credit

Crisis. To actively manage concentration and capital limits, participating banks utilize a combination of tools, including origination-based strategies and stress testing as well as market-based risk mitigation tools such as CDS, securitizations and credit risk insurance.

The COVID credit crisis increased the urgency of having real-time portfolio analytics and quick actions on risk and exposure. In particular, there is heightened focus on data, analytics and action related to limits and correlations for industry sectors which were experiencing unprecedented stress levels. (Figures 14 & 15)

Figure 14
CPM Functions' Tools to Manage, Calibrate & Monitor Risk Limits

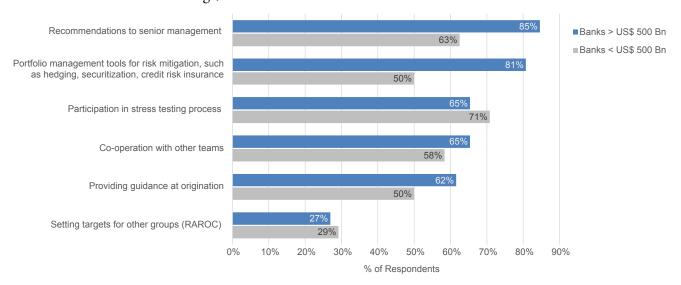
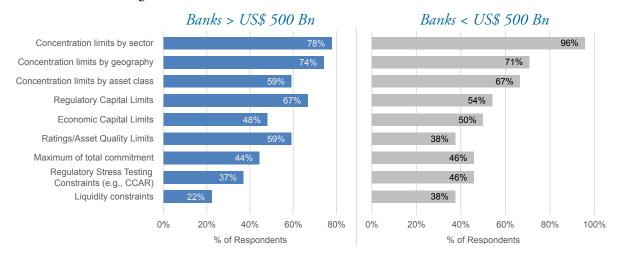


Figure 15
Credit Portfolio Management Focus



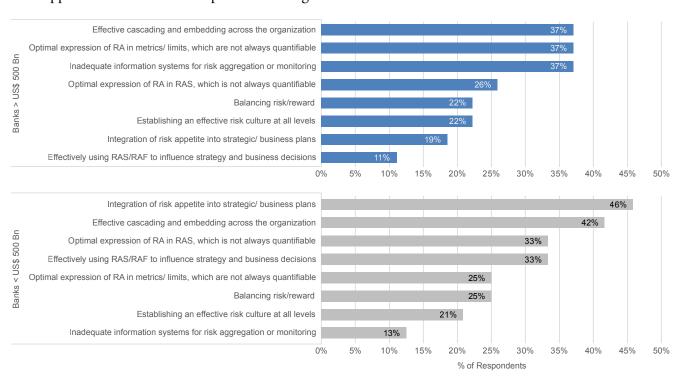


Challenges and the Path Forward

Top RAF development challenges are diverse and seemingly dependent on institutions complexity. The effective allocation of RAFs across an institution as well as the optimal expression through metrics and limits remain top challenges at many institutions. The integration of RAF into strategic and business decision making, which previously two-thirds of institutions overall cited as a challenge, has been mostly accomplished at larger banks; still almost half of smaller, regional banks report difficulties. (Figure 16)

"The issue is timely, accurate and comparable data, maintained in systems and managed by different teams. This creates challenges when articulating an enterprise risk appetite and then allocating out." Survey Respondent

Figure 16
Risk Appetite Framework Development Challenges





EMERGING CHALLENGES FOR RAF DEVELOPMENT INCLUDE:

- COVID Impacts and Data: Over the course of the COVID crisis, banks faced the challenge of a throughthe-cycle mindset during an extreme stress scenario. While most firms provide for ad hoc review of RAF under stress, anecdotal comments suggested that additional review of the framework overall, and potential refinements, will happen as circumstances ease from the initial crisis period. Data, which had received increased focus even before the COVID crisis, is now cited as a key challenge given the need for "real-time" reporting and analysis. Data challenges in general are noted as more substantial by the larger firms, given organizational size and complexity of portfolios and geographies.
- IFRS 9/CECL: Many banks also expect to revisit their plans for future RAF development and enhancement given the effects of new accounting standards on RAS/RAF and experiences during the COVID Crisis.
- Cyber, Fraud, and IT: Going forward, investments will be more significant for Risk Appetite data and IT systems regardless of geography and bank size. Cyber risk ranks highest among concerns for many survey participants and received additional emphasis through the new work from home reality for a large portion of banks' workforce, at least for the time being. Investments in credit risk, as well as fraud detection systems, also rank highly regardless of geography or bank size.

"During COVID-19 outbreak, review of risk appetite had changed to on an 'ad-hoc' basis to allow for swifter changes to appetite as required."

Survey Respondent

Conclusions and Next Steps

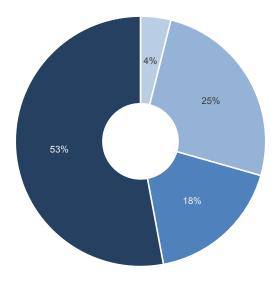
The Survey demonstrated that financial institutions have made substantial progress toward highly developed RAFs and the integration of Risk Appetite and Risk Culture across the firms since IACPM's 2014 survey on the topic. While a number of risk considerations and priorities are consistent across the industry, firms' approaches and their RAFs differ along a number

of important dimensions reflecting the specific culture, size of the firm, the nature of its assets, its lines of business, and the liquidity of the portfolio. Newer risk areas such as cyber, climate and other non-financial risk are areas of focus for further work, as are the effects of the current COVID Credit Crisis.



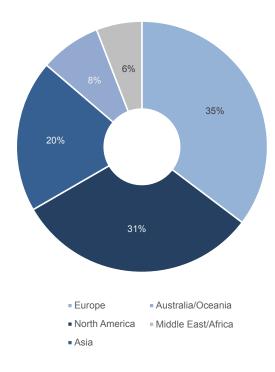
Full Demographics

Figure 17
Survey Respondents by Total Balance Sheet Assets



- < US\$ 50 Billion</p>
- US\$ 50 Billion to US\$ 250 Billion
- US\$ 250 Billion to US\$ 500 Billion
- > US\$ 500 Billion

Figure 18
Survey Respondents by Region of Domicile



About the IACPM

The Association represents its members before regulators around the world, holds bi-annual conferences and regional meetings, conducts research on the credit portfolio management field, and works with other organizations on issues of mutual interest relating to the measurement and management of portfolio risk.

There are 121 financial institutions worldwide that are members of the IACPM. These institutions are based in 26 countries and include many of the world's largest commercial wholesale banks, investment banks and insurance companies, as well as a number of asset managers.

Today credit market conditions, and new regulations, are shaping the financial services industry. The discipline of credit portfolio management is evolving within firms to include the measurement and management of credit risk at the enterprise level, in addition to execution of risk mitigation strategies in credit markets.

CPM has increasing linkages with: front-end credit originators; the setting of risk appetite and limit structures; funding and liquidity for the firm; and management of counterparty risk. CPM is also expanding coverage of credit assets beyond investment grade and leveraged to include middle market and retail, as well as in some cases bonds and other credit-sensitive instruments.

The IACPM recognizes the unique and evolving role of credit portfolio managers in today's financial environment, and offers an excellent forum through which these issues can be identified, understood and addressed.

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