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Cambridge
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UNIVERSITY OF
CAMBRIDGE
Judge Business School

REGULATING ALTERNATIVE FINANCE:
RESULTS FROM A GLOBAL REGULATOR SURVEY

with the support of

WORLD BANK GROUP
Global Knowledge & Research Hub
in Malaysia

Suruhanjaya Sekuriti
Securities Commission
Malaysia

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Global Knowledge and Research Hub in Malaysia

1818 H Street NW
Washington DC 20433
Telephone: +1-202-473-1000
Internet: www.worldbank.org

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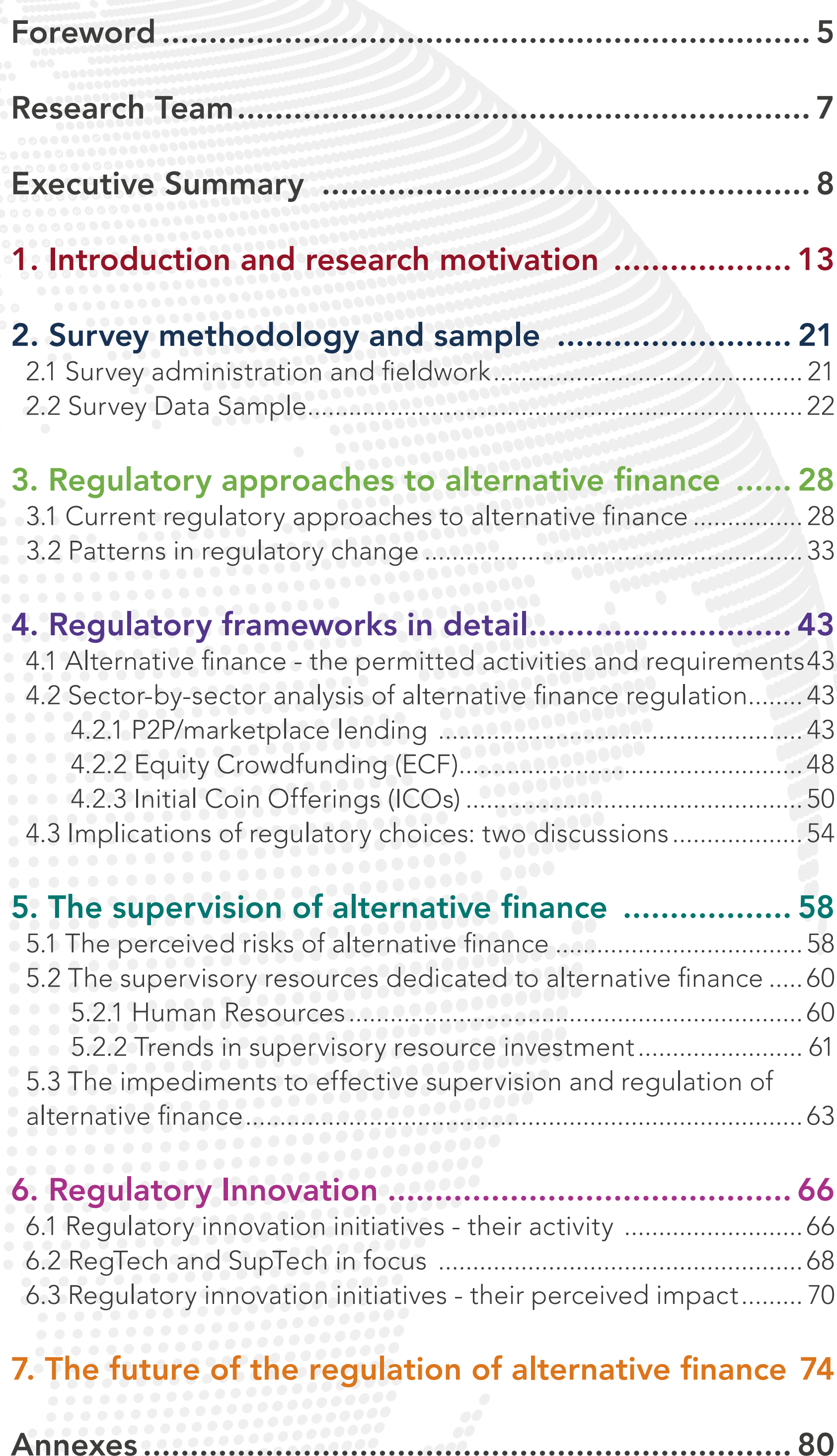

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Foreword

Access to finance for small and medium size enterprises (SMEs) is at the top of the policy agenda in most countries noting their significant contribution to employment creation, innovation and inclusive economic growth. The current gap is enormous between the demand for finance by SMEs and existing matching supply; with IFC estimates at approximately $5 trillion worldwide. Consumers, especially in emerging markets, have also traditionally lacked the financial services they need. Whether firms or individuals, both share some common challenges including high transaction costs, information inconsistencies and distance between financial providers and clients; making it hard to serve many markets.

Fortunately, over the past few years, we have seen incredible progress in providing expanded access to formal financial services. According to Global Findex data, approximately 1.2 billion new consumers gained access to formal financial services between 2011 and 2017. Fintech solutions, such as those introduced by mobile money providers, have been behind these gains. Not only have they increased financial inclusion, they have also increased competition, driving prices lower and improving the quality of services offered. This momentum -driving access to transaction accounts and electronic payments- is crucial for financial inclusion, but firms and individuals also need access to credit, insurance, long-term savings and pension products and investment capital.

This report, *Regulating Alternative Finance: Results from a global regulator survey* focuses on peer-to-peer lending, equity crowdfunding and initial coin offerings, which constitute a rapidly growing segment of fintech for meeting credit, savings and investment needs. Technology platforms increase the efficiency of transactions, frequently making use of alternative data for customers who lack formal credit histories. They also provide new investment opportunities for consumers and investors, expand access to credit, and promote competition in many developed and developing markets. At the same time, there is justifiable concern about risks, including those related to integrity, sustainability of operations and consumer protections.

Survey findings informing this report are based on responses from regulators in more than one hundred and ten jurisdictions across the world. The survey identified expanded access to finance for firms and individuals and strengthened competition as primary triggers for advancing the development of alternative finance. When asked about obstacles they faced in regulating alternative finance, regulators emphasized limited technical expertise, limited funding and resources, difficulties in coordinating multiple supervisory bodies, and often a lack of reliable empirical data.

Data on global trends as well as on the specific policy approach taken by authorities in other jurisdictions, is a critical input to the alternative finance agenda. When reviewing alternative finance regulation, 90% of regulators included in the survey mentioned benchmarking and lessons learned from other jurisdictions as key triggers prompting changes in regulation more frequently than any other trigger.

Malaysia is recognized among the top jurisdictions for benchmarking regulations for alternative finance at a global level. Malaysia issued the first regulations for equity crowdfunding in the ASEAN region and its alternative finance industry has steadily grown, providing opportunity for small businesses who might, otherwise, have lacked funding. Malaysia's leadership in alternative finance is best expressed in its support of the research backing this report, which was co-funded by the World Bank Global Research and Knowledge Hub. The World Bank and Securities Commission Malaysia partnership also included the Cambridge Centre for

Alternative Finance which implemented the survey and jointly produced the report. Last, but not least, we relied on the support from the International Organization of Securities Commissions (IOSCO) to share the survey amongst its members.

We hope that the valuable insights contained in this report will encourage further knowledge sharing and peer learning amongst the global community of financial sector regulators.

Alfonso Garcia Mora
Global Director
Finance, Competitiveness and Innovation Global Practice
The World Bank Group

Chin Wei Min
Executive Director
Digital Strategy and Innovation
Securities Commission Malaysia

Research Team

The joint World Bank and Cambridge Centre for Alternative Finance research team consists of the following individuals: **Philip Rowan, Margaret Miller, Emmanuel Schizas, Bryan Zheng Zhang, Ana Carvajal, Apolline Blandin, Kieran Garvey, Tania Ziegler, Raghu Rau, Douglas Randall, Alicia Hu, Zain Umer, Katherine Cloud, Leyla Mammadova, Jaesik Kim and Nikos Yerolemou.**

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Executive Summary

Regulating Alternative Finance – Results from a Global Regulator Survey is a report that details the key findings from a global regulatory survey that was jointly conducted by the World Bank and the Cambridge Centre for Alternative Finance (CCAF) at the University of Cambridge Judge Business School. This study intends to understand the global regulatory landscape for alternative finance through the collation of empirical data from regulators, including securities regulators, capital markets authorities and central banks. Focusing on peer-to-peer/marketplace lending (P2P), equity crowdfunding (ECF) and initial coin offerings (ICOs),[1] the survey aims to comprehensively and comparatively analyze how regulators from both developing and developed economies are regulating and supervising these online alternative finance activities. Regulators from 111 jurisdictions around the world participated in the survey with 40% of the respondents from high-income jurisdictions and 30% of the respondents from lower middle or low income jurisdictions.

The key findings from the global regulator survey are as follows:

The potential of alternative finance speaks to a new set of regulatory objectives

Policymakers globally are keen to explore the promise of alternative finance. A clear majority are optimistic about its potential to improve MSMEs' and consumers' access to finance (79% and 65% respectively) and stimulate competition in financial services (68%). Such expectations chime with regulators' emerging priorities, as many now have statutory objectives to support financial inclusion, economic policies or competition.

Alternative finance is still typically unregulated – but bespoke regulation is catching on

Despite a boom in alternative finance regulation since 2015, the relevant activities are still not formally regulated in most jurisdictions – only 22% of jurisdictions formally regulate P2P lending, as opposed to 39% for ECF and 22% in the case of ICOs. Where these activities are regulated, some jurisdictions apply to them pre-existing regulatory frameworks (e.g for securities). More often, they are subject to bespoke regulatory frameworks, particularly in the case of P2P lending (12% of jurisdictions) and ECF (22% of jurisdictions). These might be brand new or adapted from those of other jurisdictions.

While regulation is not the norm today, by mid-2021 most jurisdictions will be regulating ECF and more than a third intend to regulate P2P lending and ICOs; bespoke frameworks will likely become even more common. Regulatory change, however, is not limited to unregulated sectors becoming regulated; it also includes revisions of pre-existing frameworks, often in favour of bespoke ones. In the case of ECF, taking all of these types of change into account means that half of all jurisdictions are likely to see changes to their legal or regulatory frameworks over the next two years.

Benchmarking drives global regulatory change

Regulatory benchmarking is used by more than 90% of regulators when reviewing alternative finance regulation, and lessons learned from other jurisdictions have prompted changes in regulation more frequently than any other trigger (56% to 66% of regulators, across the three activities). Historical ties, legal traditions and language certainly influence who learns from

1 With regards to ICOs, applicable regulations depend on the legal nature of the underlying token. To date, several jurisdictions have adopted a token classification dividing cryptoassets into three broad categories, i.e. payment tokens, utility tokens, and security tokens. The study did not incorporate a classification, and therefore encompasses all types of ICOs, unless explicitly stated otherwise. For the inaugural CCAF review of the regulation of cryptoassets, see Blandin et al (2019) *Global Cryptoasset Regulatory Landscape Study*, April 2019: https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/cryptoasset-regulation/

whom, but there are also global and regional leaders that others tend to look to. The most benchmarked-against jurisdiction is the UK, followed by the USA and Singapore, but emerging markets such as Malaysia, the UAE and Mexico also rank among the top 10.

Alternative finance regulation is about making the sector safe at scale.

Alternative finance regulation seeks to make the sector fit for the mass market, including both individual investors and MSMEs. Ensuring liquidity or minimizing the potential for capital losses do not appear to be prioritized over those goals. This may be an indication of how regulators interpret their consumer protection mandates in relation to alternative finance.

Alongside AML/KYC requirements, regulators' top priorities are protections against misleading promotions or the misuse of client money. Depending on the activity in question, between 93% and 100% of regulatory frameworks impose requirements in relation to the clarity and fairness of promotions; between 100% and 88% impose sector-specific AML/KYC requirements, and over 80% impose the segregation of client assets, where applicable.[2]

ICO regulation, where it applies, appear to be less prescriptive than regulation of P2P lending or ECF. There seems to be a greater acceptance among supervisors that investors in this sector should take responsibility for losses and conducting their own due diligence, and regulation is largely built on the assumption that such offerings are largely disintermediated.

Alternative finance regulation isn't 'light touch'

There is little evidence yet of regulators purposefully creating light-touch regulatory frameworks for alternative finance. If anything, purpose-built regulatory frameworks tend to have more obligations in place than pre-existing ones – out of 20 potential obligations examined in the survey, the average bespoke frameworks for P2P lending or ECF featured 9, against 5 for pre-existing ones. For ICOs, the balance was 5 vs 3. Bespoke frameworks tend to prioritize checks on investor exposure, rigorous due diligence on fundraisers, client money protection and appropriate online marketing standards.

That said, regulators clearly respond to feedback from the alternative finance sector, which have often proactively called for formal regulation of their activities. Those regulators that treat promoting competition as a statutory or strategic objective are particularly likely to report that they have taken such calls into consideration when developing their approach.

As supervision stretches their resources, regulators are turning to innovation

Alternative finance supervisors see fraud, capital loss and money laundering as significant risks. Enforcement cases are also common, particularly in unregulated ECF and ICO sectors. Thus, the supervisory resource dedicated to these activities globally has grown fast since 2017: by over a third in the case of ICOs and unregulated ECF sectors, about one sixth in the case of P2P lending, and nearly one tenth.

Despite this, it is often more difficult for regulators to supervise alternative finance than traditional sectors. Reasons for this include limited technical expertise, limited funding and resources, difficulties in coordinating multiple supervisory bodies, and often a lack of reliable and empirical data.

Regulators are thus looking to more innovative solutions to overcome these limitations in regulation and supervision. Among respondent regulators, 22% have created regulatory sandboxes, 26% have innovation offices and 14% have active RegTech/SupTech programs. Based on regulators' responses, the number of sandbox and RegTech/SupTech programs could double and triple respectively in the coming years. In terms of sheer numbers, it seems that innovation offices that have the most quantifiable impact to date, having assisted

2 This does not include the equivalent figures for ICOs; although some regulators indicated that they have client money rules in place for ICOs, in most cases participation in an ICO is not intermediated, and therefore such protections could not apply.

twelve times as many firms as sandboxes – over 2,100 in total, against just 180 for sandboxes. However, proponents of the sandbox might argue that for particular 'policy-testing' orientated sandboxes, the purpose is not to increase the number of innovative firms supported but to facilitate policy learning, design and review.

Alternative finance regulation needs better support and a stronger global evidence base
To design regulations for alternative finance, regulators have thus received support from a wide range of sources. Most common is for regulators to be supported by multilateral institutions such as various development banks (23%), followed by their peers, for instance, through associations of financial regulators (17%).

Nevertheless, 77% of regulators would like more support. Comparing how often sources of support are currently available and desired, there are sizeable gaps. The gap appears larger in the case of support from academics: 13% have received this, but 61% would like to. A common concern shared by regulators is the lack of a rigorous evidence base on the impact of alternative finance on key policy outcomes such as female empowerment, financial literacy or job creation. Between one third and one half of all regulators claim that they lack high quality evidence on these matters; over one third claim that knowledge gaps make it harder to supervise the sector. All of this points to an evidence gap that could have a negative impact on the ability to regulate and supervise these activities.

The challenge for regulators in lower-income jurisdictions

The high level of response to the global regulator survey makes it possible to compare the experiences of regulators in high-income jurisdictions with those of regulators in medium- and low-income (here referred to collectively as 'lower-income') jurisdictions. Here are some key findings in this particular regard:

Emerging-market regulators highlighting new regulatory objectives in regional clusters
Most regulators in Sub-Saharan Africa, Latin America and the Caribbean now have statutory inclusion objectives, while regulators in Latin America are more likely than their peers elsewhere to have competition objectives. Regulators in lower- income jurisdictions are twice as likely as those in high-income jurisdictions to be tasked with supporting governments' economic policies (42% vs 20%), and those in Sub-Saharan Africa are about three times as likely (64%).

After a slow start, most regulatory changes in alternative finance are now taking place in lower-income jurisdictions and emerging markets.
Lower-income jurisdictions are between three and four times less likely than high income ones to already regulate alternative finance activities (13% vs 36% for P2P; 19% vs 67% for ECF; 10% vs 42% for ICOs). However, lower-income jurisdictions are catching up in some areas: they are almost three times as likely as high-income ones to review their regulatory frameworks for P2P lending (43% vs 16%). Most jurisdictions in Latin America and the Caribbean are planning changes to their ECF or ICO regulations, and most jurisdictions in Sub-Saharan Africa are reviewing their ECF or P2P regulatory frameworks.

Aligning multiple regulators might be challenging for regulators in lower-income jurisdictions
The regulators that we surveyed in lower-income jurisdictions normally do not have explicit statutory mandates for regulating online alternative finance activities (35% vs 64% for regulators in high-income jurisdictions). Therefore, their views of the sectors' risk profiles and supervisory challenges are still evolving. They also reported a particular challenge in coordinating regulatory and supervisory work in 'multi-peak' jurisdictions with multiple regulators responsible for same activities. This may prove particularly relevant to P2P lending activities in lower-income jurisdictions and in emerging markets, which tends to involve multiple regulatory and supervisory bodies.

Higher and lower income jurisdictions tap into different expert networks

There are significant differences in how regulators in higher- and lower-income markets access external support. Regulators in lower-income markets are slightly less likely to benefit from advice and input from their peers than those in higher jurisdictions (19% vs 26%). The similar pattern can be seen in relation to support from academics (12% v 23%). Regulators from lower-income markets are, however, more likely to obtain support from multilateral organizations (34% vs 16%).

Lower-income jurisdictions need more appropriate regulatory innovation options

Lower-income jurisdictions are generally less likely to have active regulatory innovation initiatives in place than high-income ones. At the global level, the difference is substantial (14% v 53% for innovation offices, 28% vs 35% for Sandboxes and 9% v 28% for RegTech/SupTech programs). At the regional level, however, the competing influences of legal institutions and policy trends have produced a more mixed picture. For example, regulatory innovation initiatives are rare in Latin America and the Caribbean, while, in Sub-Saharan Africa, a regulatory sandbox is in place or in development in nearly one in three jurisdictions (32%). In some of the resource-constraint jurisdictions, regulatory innovation initiatives such as the establishment of an innovation offices could prove to be a cost-effective option.

1. Introduction and research motivation

1. Introduction and research motivation

The term "alternative finance" refers to financial products and services that are developing outside the traditional, regulated banking and capital market sectors via innovative and predominately online channels, instruments and systems. In the context of this report, three types of online alternative finance activities are studied: peer-to-peer lending; equity crowdfunding; and initial coin offerings (ICOs). Alternative finance may help to address some of the most important priorities for financial sector development - reducing barriers to micro, small and medium size enterprises' (MSMEs) access to finance, expanding opportunities for consumer finance and increasing competition in financial services. This is because alternative finance providers have some advantages over traditional financial institutions, including streamlined, fully online procedures for loan approvals or equity decisions which should result in a lower cost of funds (risk being equal). Depending on the business model, they also include incorporating insights from non-traditional sources such as social media, payment histories (such as from e-commerce platforms), and insights from existing customers who are familiar with the borrowing firms – reducing information asymmetries and promoting access.

Here we briefly explore the existing gaps in access to finance for both MSMEs and consumers in developing economies to understand the magnitude of the financing opportunity which is motivating interest in technology enabled solutions, as well as how alternative finance may impact the competitive environment for finance.

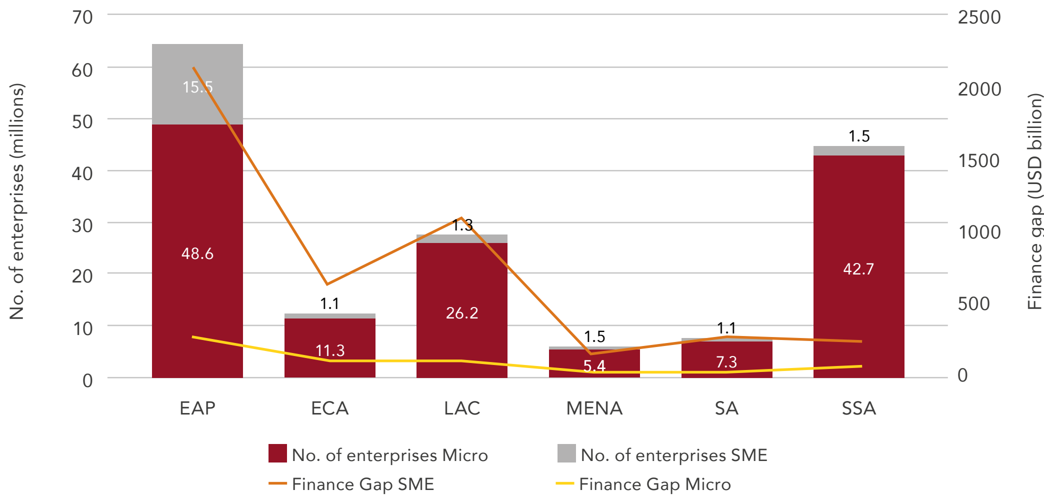
MSME Access to Finance

According to estimates from the International Finance Corporation (IFC),[3] there are more than 160 million micro, small and medium size enterprises (MSMEs) in emerging markets. Most of these are located in middle-income jurisdictions such as Brazil, China and Nigeria. East Asia and the Pacific (EAP) has the largest number of MSMEs (64 million), followed by Sub-Saharan Africa (44) and Latin America (28), as shown in Figure 1.1 below. As discussed in more detail in Chapter 3, these regions are not only major drivers of demand for MSME finance; perhaps relatedly, they are also hotspots for regulatory change in relation to alternative finance.

MSMEs are critically important to economic development. MSMEs at the larger end of the size distribution (small and medium sizes) are important generators of employment, contributing to growth and dynamism, including entrepreneurial activities as they reach scale. Micro and small enterprises help to alleviate poverty, providing a way to generate income for people who might otherwise face unemployment or rely solely on subsistence agriculture. There is a persistent financing gap, however, for MSMEs which is not easily solved.

3 Bruhn et al (2017) *MSME Finance Gap: assessment of the shortfalls and opportunities in financing micro, small, and medium enterprises in emerging markets (English).* Washington, D.C : World Bank Group., https://www.ifc.org/wps/wcm/connect/03522e90-a13d-4a02-87cd-9ee9a297b311/121264-WP-PUBLIC-MSMEReportFINAL.pdf?MOD=AJPERES&CVID=m5SwAQA

Figure 1.1 Number of Micro, Small and Medium Enterprises and Finance Gaps by Region



Source: Bruhn et al (2017), op. cit

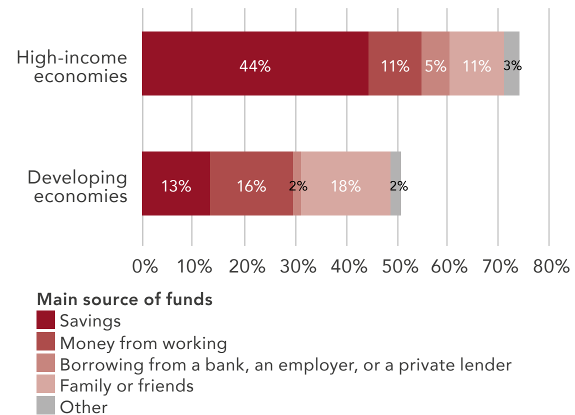
The IFC's 2017 report, "The MSME Finance Gap," estimates that the shortfall is $US 5.2 trillion, indicating that nearly 60% of the needed finance is missing for micro, small and medium size firms in emerging markets. Again, looking at Figure 1.1, it is possible to see the estimated finance gap for both microenterprises and MSMEs, represented by lines superimposed on the bar chart (legend on the right-hand side). Nearly half the estimated finance gap is in East Asia and the Pacific ($2.4 trillion) followed by Latin America with a gap of approximately $1.2 trillion. Noticeably, the finance gap in Sub-Saharan Africa is relatively low but this is due to a lack of capital intensity in firms, more than half of which remain financially constrained.

Financial inclusion for consumers

Between 2011 and 2017, an estimated 1.2 billion consumers globally opened their first formal financial account. This incredible progress was made possible through a combination of technology, private sector investments and public policy. In spite of these advances, an estimated 1.7 billion adults remained outside the formal financial system in 2017, with low-income consumers, rural populations and women most likely to be excluded.

Lack of access to formal finance for consumers has implications for MSMEs since owners will often leverage their personal credit to support their business, especially when the enterprise is new and lacks a track record. Access to savings and investment products are also important for potential entrepreneurs. According to Global Findex, twice as many consumers reported saving for a business as reported having borrowed.

Figure 1.2 - Access to and sources of emergency funds



Source: Global Findex Database

Limited financial inclusion impacts consumers beyond possible MSME linkages. When consumers lack access to formal finance there are a range of consequences which affect welfare and economic opportunities. For example, consumers in developing economies are less likely to be able to raise necessary funds in an emergency and more likely to have

to borrow from family or friends. They are also more likely to have to increase their work – which could be especially problematic if the emergency involves their health or that of a family member requiring care.

Research indicates that when individuals are financially included – such as having access to mobile money - financial resilience is improved. In one study in Kenya, users of the mobile money product M-PESA were able to weather adverse shocks with no disruption in consumption due to their ability to activate their social network and receive remittances during their time of need. In contrast, consumers who did not have M-PESA experienced a 7% decline in consumption[4].

The ability to effectively reach out to one's social network (essentially a kind of informal crowdfunding) is even more important due to the lack of formal credit options. In most developing economies, less than 10% of consumers report borrowing from formal financial institutions.

Barriers to financial inclusion cited by consumers in developing countries include lack of sufficient funds to justify opening an account, the cost of formal finance and distance to providers.

Traditional financial institutions have struggled to find cost-effective, profitable approaches to serving both the MSME market and low-income consumers. Small transaction sizes make it difficult to cover costs and asymmetric information results in moral hazard and adverse selection, increasing risk and the cost of credit (Cortina and Schmukler, 2018). Further exacerbating this situation in many emerging markets is a lack of robust competition in financial services, due to relatively high levels of bank concentration which may also result in higher cost of credit.[5]

Competition in the financial system

Literature on competition and financial inclusion in financial markets suggests that it is important to look at contestability, together with measures of bank concentration. For example, Owen and Pereira (2018) use panel data from 83 jurisdictions over a span of ten years and find that more competitive systems result in higher levels of financial inclusion. However, competitive systems don't necessarily mean less concentrated – rather the critical issue is the extent of market power and thus contestability[6]. This insight aligns with earlier work on bank concentration and contestability by Claessens (2009). Further, Gropp and Kok (2017) use data from Europe to study the impact of internet banking on competition and find it has been positive due to the contestability of markets. The effect they find is stronger for retail deposits but also present for consumer loans, which they attribute to FinTechs / alternative finance.

A global agenda in support of innovation in finance

The World Bank and IMF are committed to supporting the responsible development of FinTech in a way that benefits jurisdictions, balancing the opportunities offered by the industry with stability and integrity concerns. These opportunities include, in particular, the potential for increased competition and lower cost for financial services, in addition to its potential to provide access to finance to previously excluded customers and MSMEs.

In the fall of 2018, the World Bank and IMF jointly committed to the Bali Fintech Agenda (BFA), which has twelve principles that guide the development of responsible products and services in FinTech – including alternative finance. This report, and the survey data it is based upon, directly contribute to several of the BFA goals (see Box 1 below).

4 Jack, W. & Suri, T. (2014) 'Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution.' American Economic Review, 2014, 104(1); 183-223.

5 Calice, P. & Leonida, L. (2018) 'Concentration in the Banking Sector and Financial Stability : New Evidence' (English). Policy Research working paper no. WPS 8615. Washington, D.C. : World Bank Group. http://documents.worldbank.org/curated/en/953311539698216215/Concentration-in-the-Banking-Sector-and-Financial-Stability-New-Evidence

6 Owen, A. & Pereira, J. (2018) 'Bank Concentration, Competition and Financial Inclusion.' Review of Development Finance 8(2018); pp. 1-17.

Box 1

This report and the global survey data from national financial regulators that it is based upon, directly contribute to the following goals of the World Bank – IMF Bali Fintech Agenda:

Embrace the Promise of FinTech with its far-reaching social and economic impact, particularly in low-income jurisdictions, small states, and for the underserved.

Monitor Developments Closely to Deepen Understanding of Evolving Financial Systems, maintain an ongoing dialogue with industry players (new and incumbents) to support the formulation of policies that foster the benefits of FinTech and mitigate potential risks.

Adapt Regulatory Framework and Supervisory Practices for Orderly Development and Stability of the Financial System and facilitate the safe entry of new products, activities, and intermediaries; sustain trust and confidence; and respond to risks. Regulation should remain proportionate to the risks.

Encourage International Cooperation and Information-Sharing across the global regulatory community to share knowledge, experience, and best practices to support an effective regulatory framework.

The Financial Stability Board has also recognized the potential for FinTech, including alternative finance, and the need to balance the opportunities it presents with attention to new risks, writing:

"Relative to traditional banks, FinTech credit platforms' heavy digitalisation of processes and specialised focus may lower transaction costs and entail convenience for end users. It may also increase access to credit and investments for underserved segments of the population or the business sector. Notwithstanding these benefits, there are a number of potential vulnerabilities that might impede the future growth of the industry. The financial performance of platforms could be substantially buffeted by swings in investor confidence, given their agency lending models. Moreover, financial risk in platforms may be higher than that at banks due to greater credit risk appetite, untested risk processes and relatively greater exposure to cyber-risks."

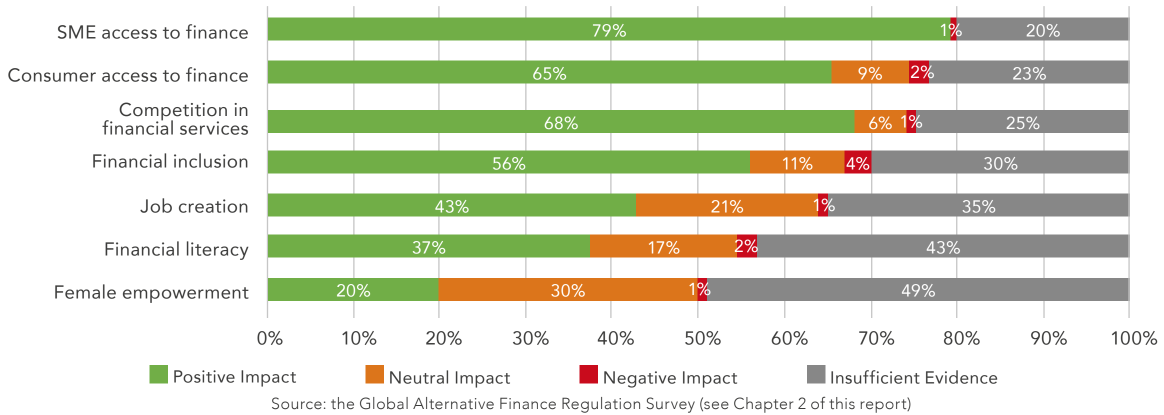
The potential for alternative finance to positively impact competition in financial markets, as well as introduce risk, especially if these markets grow, is also highlighted by the FSB:

"Among potential benefits are access to alternative funding sources in the economy. A lower concentration of credit in the traditional banking system could be helpful in the event there are idiosyncratic problems at banks. FinTech platforms may also pressure incumbent banks to be more efficient in their credit provision. At the same time, if FinTech credit achieves a significant share of credit markets, it may give rise to systemic risk concerns."

This report, based upon survey responses from regulators in 111 jurisdictions, shows that there is alignment between the perspectives of global bodies and jurisdiction-level authorities, regarding the potential benefits of alternative finance.

Figure 1.3 outlines respondents' views on the potential impact of alternative finance.

Figure 1.3 - Potential impact of Alternative Finance



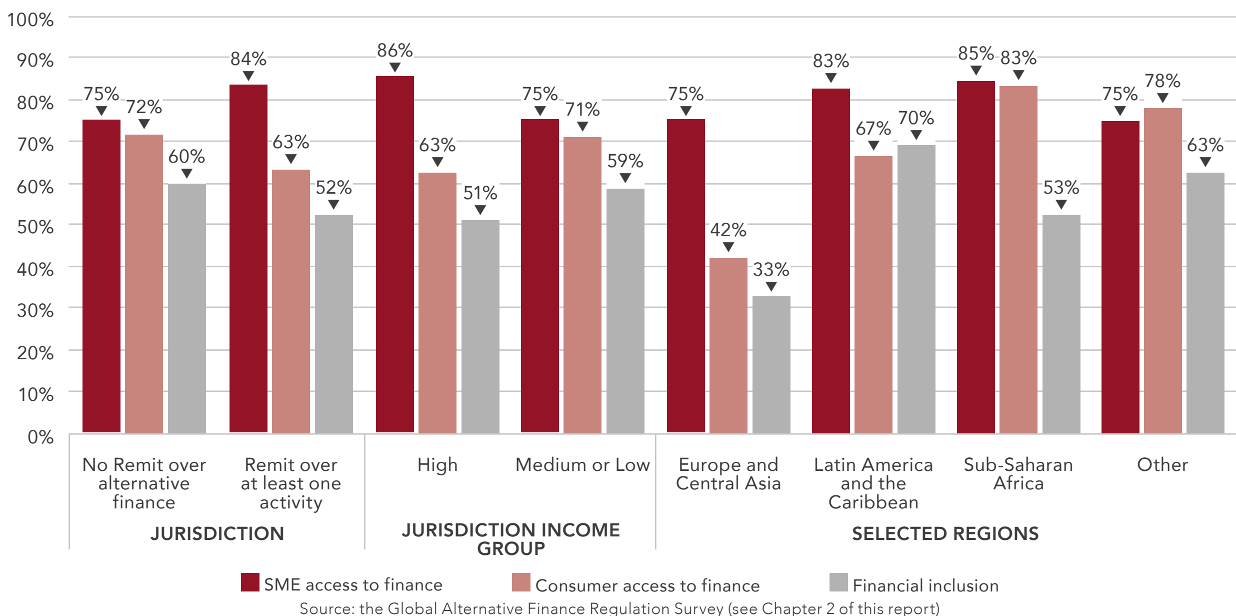
Source: the Global Alternative Finance Regulation Survey (see Chapter 2 of this report)

The survey data show that access to finance for small firms, followed by competition in financial services and access to consumer finance, are believed to benefit from alternative finance; in the case of MSME finance by just under 80% of respondents. The broader measure of access – financial inclusion – is also seen by more than half of the sample as benefiting from alternative finance.

It is particularly interesting to note how such evaluations vary among regulators. Regulators who actively supervise at least one of the alternative finance activities are more likely than others to stress their importance to job creation, financial literacy, and access to finance for MSMEs (though not for consumers).

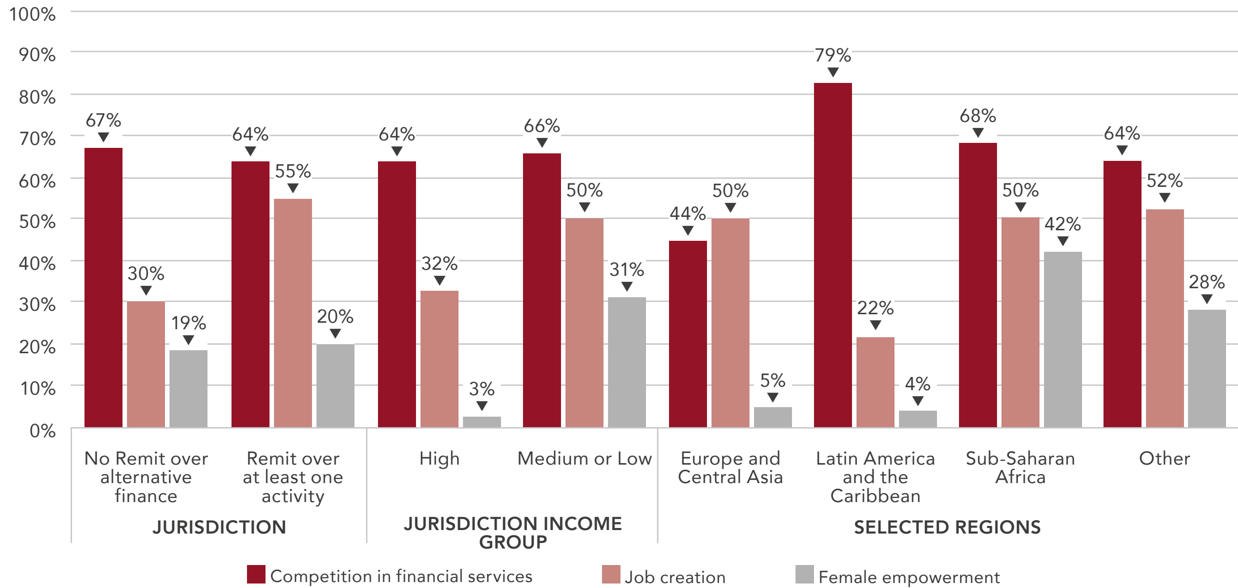
In lower income jurisdictions, regulators are more likely to cite positive impacts on financial literacy and female empowerment than colleagues in high-income jurisdictions - importantly in the case of female empowerment the difference is almost entirely due to positive perceptions among African regulators. Reported benefits to competition and job creation are also skewed in the same direction, with lower income jurisdictions reporting greater benefits. But when it comes to consumer access to finance and financial inclusion, expected benefits are just as frequently cited in high-income jurisdictions as in lower-income ones.

Figure 1.4a: Regulators with positive views of the impact of alternative finance, by remit, jurisdiction's income level and region (access to finance).



Source: the Global Alternative Finance Regulation Survey (see Chapter 2 of this report)

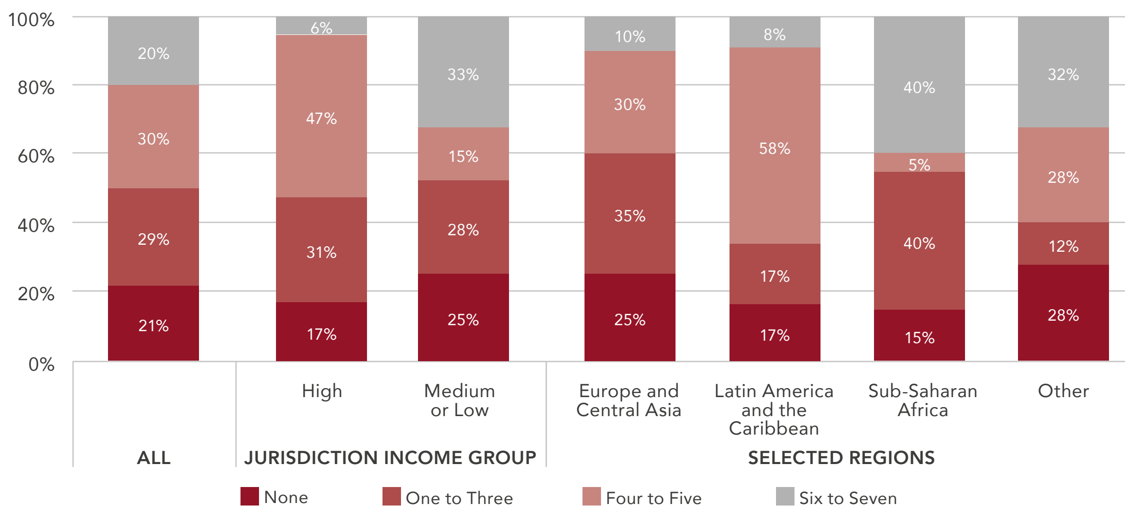
Figure 1.4b: Regulators with positive views of the impact of alternative finance, by remit, jurisdiction's income level and region (citizen empowerment).



Source: the Global Alternative Finance Regulation Survey (see Chapter 2 of this report)

Looking at perceived impacts overall, it is striking that nearly one in five regulators see a positive impact from alternative finance across all or all but one of the dimensions suggested by the survey. As might be expected, those tend to be concentrated among lower-income jurisdictions, and particularly in Sub-Saharan Africa. Indicatively, the core of this group of 'high potential' jurisdictions are medium-sized emerging economies such as Malaysia, Colombia and South Africa; financial inclusion success stories such as Kenya and Tanzania; and small island nations such as the Comoros, Fiji, Nauru, or the Marshall Islands.

Figure 1.4c: Number of dimensions (out of seven)[7] in which alternative finance is reported as having a positive impact, by jurisdiction's income level and region.



Source: the Global Alternative Finance Regulation Survey (see Chapter 2 of this report)

7 Regulators were also asked to describe the expected impact of Alternative Finance on financial literacy; while this is not charted in Figures 1.4a and 1.4b, it was taken into account in calculating the overall scores reported in Figure 1.4c.

Meeting the need for more data and analysis on alternative finance

A lack of available data and analytics on the development of alternative finance activities, including policy approaches and how they relate to industry outcomes, makes it difficult to learn from what is working and share insights effectively across jurisdictions.

This report is one contribution to this task. It presents the results of the first Global Alternative Finance Regulation Survey, providing valuable insights on the status of regulations facing alternative finance providers and trends in regulatory reforms. The report is organized as follows. Section 2 presents the survey methodology and information about the sample of 111 jurisdictions which responded to the survey. Section 3 focuses on regulatory approaches to alternative finance and Section 4 goes into depth on specifics of the legal and regulatory framework for the three types of finance which are the focus of this report: peer-to-peer lending, equity crowdfunding and initial coin offerings. Section 5 looks at the supervision of alternative finance, Section 6 addresses innovation in regulation of the sector and Section 7 concludes with issues for future consideration including how the global community can support responsible development of alternative finance, balancing the opportunities and risks.

2. Survey methodology and sample

2. Survey methodology and sample

2.1 Survey administration and fieldwork

The Global Alternative Finance Regulation Survey was administered between April and June 2019 via a secure web-based questionnaire. The primary target were those regulators who were thought most likely to have jurisdiction over three main alternative finance activities - peer-to-peer/marketplace lending (P2P), equity crowdfunding (ECF), and initial coin offerings (ICOs) - in their geographic market.[8] Unless otherwise stated, all estimates mentioned in this report, whether in tables, in figures or in narrative, are sourced from the Global Alternative Finance Regulation Survey.

A number of channels were utilized to disseminate the survey in order to achieve a geographically representative sample, and intensive follow-up activities were conducted over a two-month period to encourage a high response rate. Overall, CCAF and World Bank researchers targeted 209 regulators representing a total of 221 jurisdictions.[9] The International Organization of Securities Commissions (IOSCO) distributed the survey among its members and conducted follow-up activities, reaching out to 144 jurisdictions in total, with World Bank researchers following up with contacts in 89 of those and CCAF researchers following up with contacts in the remaining 55 jurisdictions via email or telephone.

This first stage of outreach was complemented by contacting individual regulators through the World Bank and CCAF's network, in particular where a market did not have a regulator which is a member of IOSCO. Seventy-two regulators were directly invited to participate by CCAF via mass emails or ad-hoc invites, and another five were approached by the World Bank.

Survey responses were ultimately received from 99 participants, representing 111 jurisdictions across six continents. This corresponds to a response rate of 47% among individual invitees and 50% among target jurisdictions. This includes a small number (seven) of jurisdictions which completed a shortened version of the survey due to capacity constraints. This version captured only the current and planned regulatory approach to alternative finance, together with the factors that motivated its development. Because of this, and because many questions were non-compulsory, the results reported here reflect varying levels of question non-response across the survey instrument. Annex 2 records the actual unweighted case sizes for the Figures utilized throughout the report.

Alternative finance activities are not yet regulated in many jurisdictions, and only a minority have given additional powers to regulators in respect to these activities. Nevertheless, almost half of the regulators surveyed (48%) are directly responsible for supervising at least one of the alternative finance activities in focus. In all cases, CCAF researchers sought out the most relevant contacts within target organizations and additionally asked that the survey invite be forwarded to more appropriate contacts where necessary. On completion of survey fieldwork, the research team accommodated several requests to revise responses that respondents, on reflection, felt were not technically correct. However, all other complete responses have been treated as definitive and were not independently corroborated or updated between the end of fieldwork and the date of publication.

8 **P2P / Marketplace Lending** includes a) P2P Business Lending, ie debt–based transactions between individuals and existing businesses which are mostly SMEs with many individual lenders contributing to any one loan or b) P2P Consumer Lending, ie individuals using an online platform to borrow from a number of individual lenders each lending a small amount; most P2P consumer loans are unsecured personal loans. **Equity Crowdfunding** includes the sale of stakes in a business via an online platform to a number of investors in return for investment, predominantly used by early–stage firms. An **Initial Coin Offering**, Token Sale or Coin Sale is a digital way of raising funds from the public using a virtual token, also known as a cryptocurrency. ICOs vary widely in design. The digital token issued may represent a share in a firm, a prepayment voucher for future services or in some cases offer no discernible value at all. Often ICO projects are in a very early stage of development.

9 Two respondents - the Eastern Caribbean Securities Regulatory Commission, and the Central African Financial Market Supervisory Commission - cover multiple markets under their jurisdiction.

2.2 Survey Data Sample

Sample by geography

The final sample is geographically diverse. Figure 2.1 provides a map of participating jurisdictions, with the full list available in Annex 1. One quarter of the jurisdictions represented were in Sub-Saharan Africa; and marginally higher shares of the sample were based in Latin America and the Caribbean (26%) or Europe and Central Asia (27%). Figure 2.2 provides a breakdown of regulator participation by world regions, based on the World Bank's geographic groupings.[10]

Figure 2.1: Geographic map of survey respondents

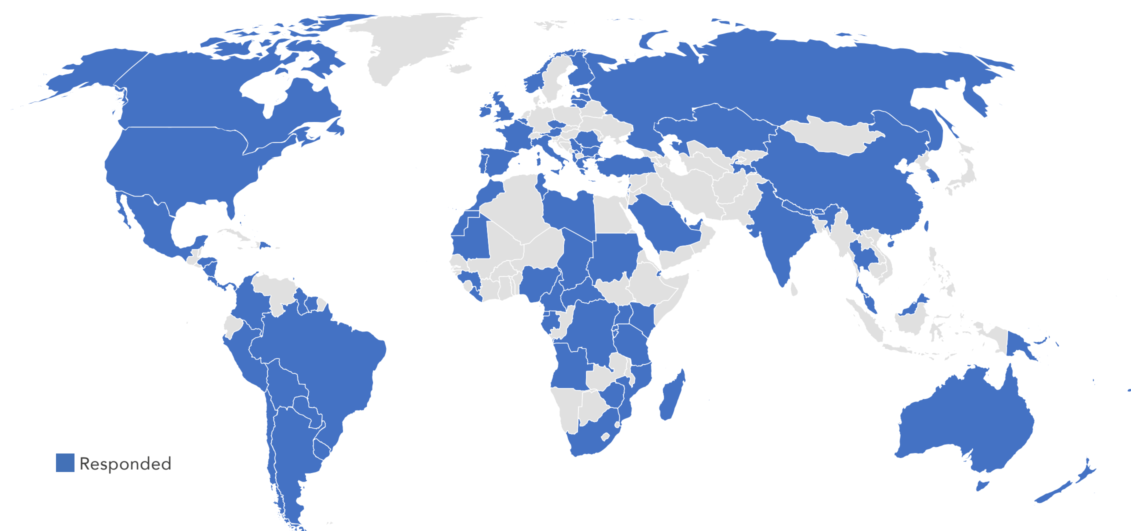


Figure 2.2: Geographic distribution of respondents

REGIONS	NUMBER OF JURISDICTIONS BY REGION	% OF REGION'S JURISDICTIONS ACCOUNTED FOR	% OF REGION'S GDP ACCOUNTED FOR	% OF REGION'S POPULATION ACCOUNTED FOR
East Asia and Pacific	14	37	70	69
Europe and Central Asia	27	45	65	66
Latin America and the Caribbean	26	57	85	84
Middle East and North Africa	13	57	51	26
North America	2	67	100	100
South Asia	4	50	80	77
Sub-Saharan Africa	25	52	80	68

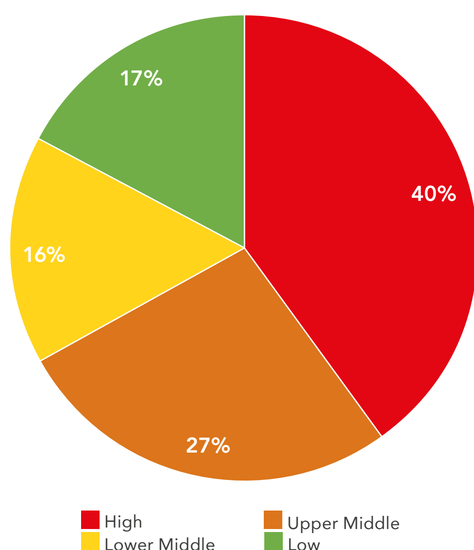
Sample by income group

Figure 2.3 shows the distribution of survey responses according to the World Bank's classification of jurisdictions by income.[11] By the nature of its focus, the study was primarily relevant to jurisdictions with sufficiently developed capital markets. While high-income jurisdictions are over-represented (40%) in the sample, most respondents were from emerging and developing markets.

10 For further information about the World Bank's classification, see: World Bank Country and Lending Groups https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups. [Accessed: 31 May 2019].

11 Ibid.

Figure 2.3: Breakdown of respondents by World Bank income groups in %



Sample by remit and objectives

Almost half of respondents (48%) are directly responsible for supervising at least one alternative finance activity. This partly reflects the fact that supervisory powers over many alternative finance activities have yet to be assigned in many jurisdictions, and this is particularly common in emerging and frontier markets In medium- and low- income jurisdictions, only 35% of regulators had an explicit mandate to regulate at least one of the three activities examined. This contrasts with 64% of regulators in high-income jurisdictions.

This report acknowledges that regulators may have very different perspectives on the risks and prospects of alternative finance depending on how close they are to regulating the sector. Therefore, where possible, the views of active supervisors and non-supervisors of alternative finance are contrasted. This should not be read as implying that one set of views are mistaken; jurisdictions without a named supervisor for these sectors are very likely to be ones where both the risks and opportunities presented by the sector are less pronounced.

Figure 2.4 sets out the statutory and non-statutory objectives of regulators in the 104 jurisdiction for which details were provided.[12] Unsurprisingly, consumer protection (81% of respondents), market integrity (81%), and financial stability (75%) feature most prominently among regulators' statutory objectives. Promoting the growth/ development of financial markets also ranks particularly high (67%), with 40% of regulators indicating that fostering financial inclusion is one of their statutory objectives. Figure 2.5, further below, highlights that the prominence of financial inclusion as a regulatory objective is due to government support for this in Sub-Saharan Africa and Latin America - 60% of regulators have a financial inclusion mandate set out in legislation. In other regions, fewer than a quarter of regulators report having such a mandate, even though nearly all consider it a significant goal.

Figure 2.4: Statutory and non-statutory objectives of respondents

	STATUTORY OBJECTIVE	NON-STATUTORY OBJECTIVE
Consumer Protection	81%	12%
Market Integrity	81%	13%
Financial Stability	75%	16%
Growth / development of financial markets	67%	20%
Financial Inclusion	40%	51%
Supporting government initiatives (ie economic or industrial policies)	34%	40%
Promoting Competiton	25%	51%
Other	17%	0%

12 The 7 missing respondents include regulators who took a shortened version of the survey as well as some who provided paper copy responses. The latter had the option of not responding to this question, whereas online respondents could not proceed without doing so.

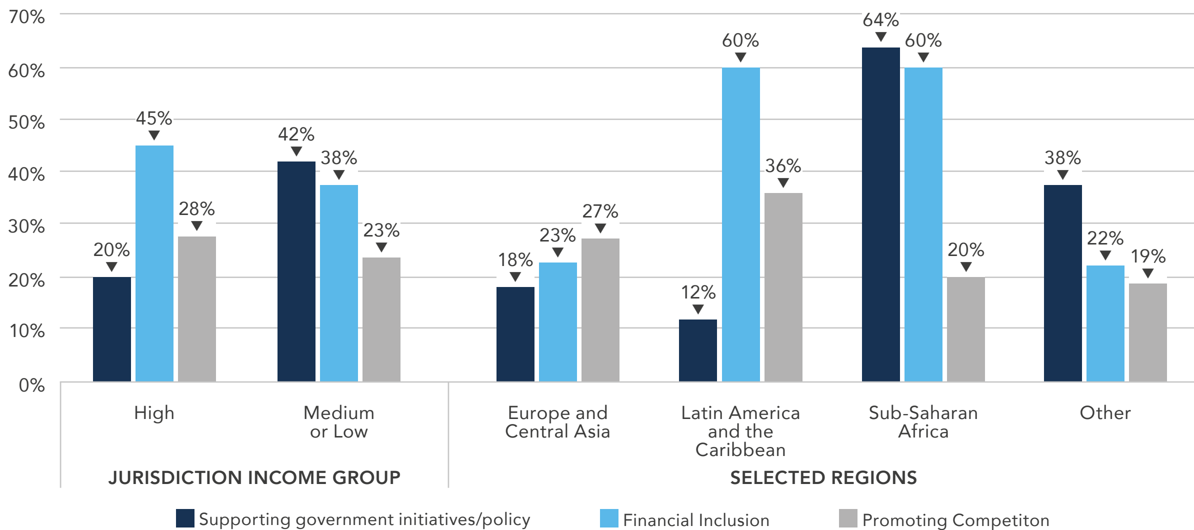
The promotion of competition is less commonly listed as a statutory objective (25%) among respondents. However just over 50% of respondents consider this to be a non-statutory objective, and this has implications for their work in relation to alternative finance. As one regulator in the Americas pointed out: *"The main challenge when elaborating the* [domestic alternative finance legislation] *was to set legal and regulatory frameworks that will not create barriers to the entry of new institutions but, at the same time, protects the interests of consumers."*

This is important in the context of alternative finance, since those regulators with even a non-statutory objective to promote competition may be more inclined to support or put in place a regulatory framework for alternative finance activities. Section 3.2 discusses the implications of such incentives for policy design in more detail.

There is no clear pattern at the geographic or income level for the promotion of competition among regulators. It is most common among regulators in the Latin America and the Caribbean in the sample, with 36% having a statutory objective to promote competition.

Finally, the incidence of regulatory objectives to support government initiatives, i.e. industrial or economic policies, varies widely across jurisdictions based on their income group. As Figure 2.5 demonstrates, it is more common for regulators from lower-income jurisdictions to be tasked with supporting government economic policy. This is particularly notable in Sub-Saharan Africa, where 64% of respondents report such a statutory objective.

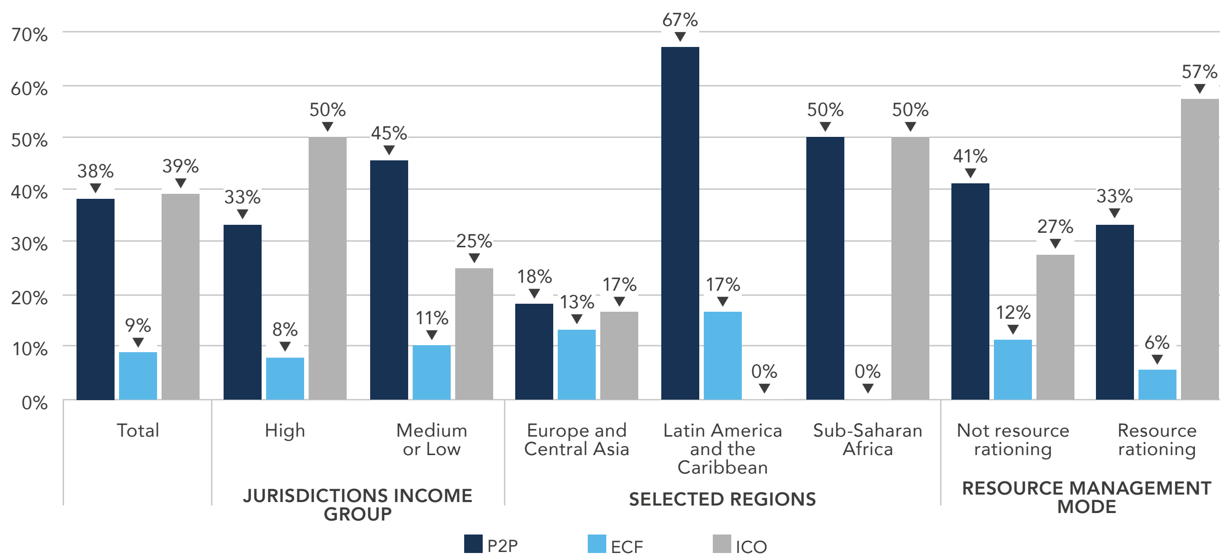
Figure 2.5: Differences in regulators' statutory objectives, by jurisdiction's income level group, region and resource management mode



2.3 Understanding the remit of alternative finance regulators

A number of respondents have shared regulatory jurisdiction of alternative finance activities in their market, as illustrated by Figure 2.6. For example, for P2P lending, shared jurisdiction was reported by 10% of regulators, rising to 29% in markets where P2P lending is regulated. However, for equity crowdfunding, just 4% of regulators share jurisdiction for this activity, rising to 9% in markets where it is regulated. This may be because a securities regulator is more likely to have clear jurisdiction for an activity such as equity crowdfunding, while the natural 'home' for P2P lending may be more open to debate. Regulators shared responsibility for ICOs in 17% of the markets where the activity is regulated.

Figure 2.6: Regulators who share supervisory responsibilities, as % of those with remit over any alternative finance activity



As Figure 2.6 demonstrates, the incidence of shared remits varies by income group, and even more so by region. Overall, less developed markets are more likely to have multiple authorities overseeing P2P lending, but less likely to do so in relation to ICOs. Shared regulatory jurisdiction for alternative finance activities is less common in Europe and Central Asia, but more common in the case of P2P lending in Latin America and the Caribbean.

For ICOs, regulators that are rationing their resources are more likely to share responsibility. However this appears to be driven by the fact that ICOs are unregulated in much of the world. As discussed further in Chapter 3, more resource constrained regulators may be choosing to allow small and/or nascent alternative finance sectors to operate without regulation. The number of regulatory bodies involved in regulating this activity decreases as it becomes more formally regulated.

From traditional to alternative finance: transferability of supervisory expertise

Different alternative finance sectors are typically supervised by different types of regulators. Often supervisors have no choice but to assume responsibility for new financing activities because they interact with their pre-existing regulatory perimeter. But in many cases, policymakers actively choose which regulator is the better fit for what they see as the core activities and risks in each sector.

To explore these two patterns, simple "sector bias" scores were calculated for 24 pairs of (alternative finance activity) x (traditional finance activity). For example, the score for the 'P2P lending x consumer credit' pair is the difference between the percentage of P2P supervisory bodies that have responsibility for consumer credit and the percentage of non-P2P-supervisors that have responsibility for consumer credit. In this example, a positive score could, if large enough, suggest a degree of overlap between credit supervision and P2P lending supervision – for example in terms of the skills required of supervisors, the underlying activities and risks, or the applicable legal and regulatory framework.

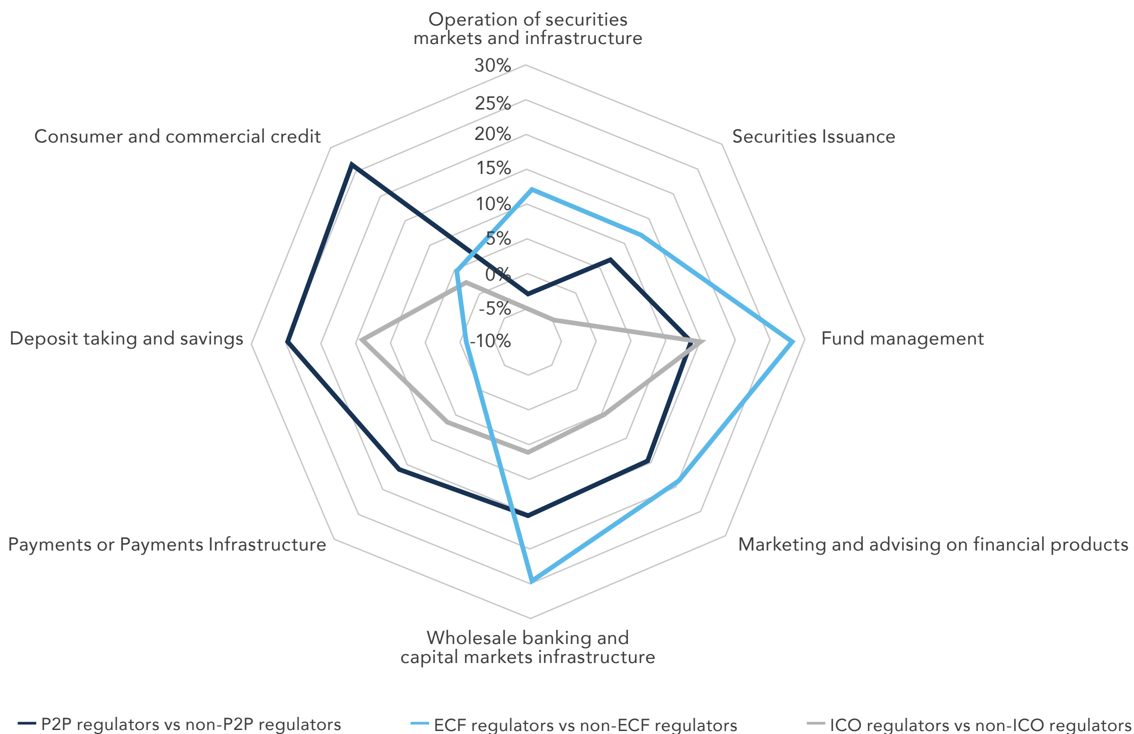
This analysis, summarized in Figure 2.7, suggests that regulators with responsibility for supervising P2P lenders are substantially more likely to also have responsibility for deposit taking, consumer and commercial credit, and payments. In other words, these regulators are more likely to be central banks or supervise retail banking. One implication of this might be that P2P lending regulation is

more likely, on balance, to focus on borrower protections and responsible lending than on investor protection. Where this is the case, a pre-existing regulatory framework for consumer credit or microfinance might be seen as the point of departure for regulating the sector; individual borrowing caps, creditworthiness and affordability standards and other protections might be adapted from that framework for use in regulating P2P.

This pattern contrasts sharply with the profile of equity crowdfunding supervisors. Supervisors of this sector are much more likely to oversee capital markets and funds regulation, and to supervise the distribution of financial instruments. Almost all (95%) are responsible for regulating securities issuance. Where pre-existing regulatory frameworks are used to regulate the sector, they might be those related to collective investment or alternative fund management, or adaptations of existing rules on the distribution of securities. This might mean, for example, that regulators adapt marketing restrictions and client categorizations, prospectus and other disclosure requirements from the world of collective investment to this sector.

The allocation of regulatory responsibility is far less clear when it comes to ICOs. No clear distinction can be drawn between those with and without direct supervisory powers over ICOs. That it is not possible to identify a 'typical ICO supervisor' profile in this sample should not be surprising. First, while ICOs subject to bespoke regulation might be supervised by a well-defined group of regulators, those subject to pre-existing regulations might find themselves within the perimeter of different regulatory bodies depending on the details of the offering. Second, as discussed earlier in this section, regulators are more likely to share responsibility for supervising ICOs than for ECF or P2P lending. Alternatively, it is possible that a 'typical ICO supervisor' profile does exist, but is close to the average profile of regulators that responded to this survey.

Figure. 2.7 Sectoral 'bias' in the remit of regulators responsible for alternative finance



Bias scores explained: A positive score means that a regulator responsible for alternative finance activity X is more likely to regulate the traditional activity Y than a regulator that is not responsible for alternative finance activity X

3. Regulatory approaches to alternative finance

3. Regulatory approaches to alternative finance

3.1 Current regulatory approaches to alternative finance

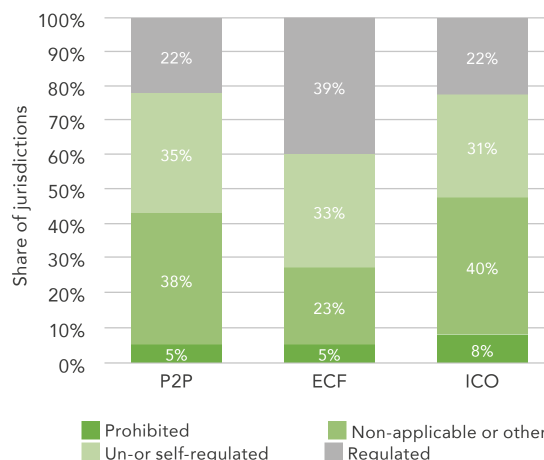
Survey respondents were asked whether, and how, the three online alternative finance activities were regulated in their jurisdictions as of early 2019. Innovative sectors may often be allowed to evolve without regulation, or under a self-regulatory regime, while their size and potential to cause consumer detriment remains small. Where such an approach is not considered sufficient to balance the opportunities and risks presented by the sector, the sector might instead become regulated, or be banned outright.

Figure 3.1 summarizes the high-level approach among the jurisdictions participating in the survey. For each of the three activities, about one third of jurisdictions surveyed allow the sectors to grow without regulation, although P2P lending is marginally more likely to be treated in this way and ICOs marginally less likely. Outright prohibition is rare, however, with only 8% of jurisdictions banning ICOs – the highest rate among the three activities.

A significant share of regulators could not identify their approach as non-regulation, regulation *or* prohibition. This is typically the case for respondents in jurisdictions where the sector is absent or not developed. Such responses are also common among jurisdictions where the relevant activities have not yet been not officially defined, and local regulators do not have formal responsibility for them.

In the case of ICOs in particular, a pre-existing regulatory framework is more likely to be employed given that in several instances the underlying token would qualify as a security. In fact this is the likeliest regulatory treatment even in jurisdictions where regulators describe their regulatory stance towards the sector as 'Other' or 'Not regulated but not prohibited.' If the application of pre-existing regulatory frameworks is assessed in this way, then the 62% of jurisdictions where the activity is not explicitly prohibited or was not explicitly described as unregulated by respondents could be said to regulate parts of the sector. While regional and cross-section comparisons in this Chapter are based on the strict definition of a regulated sector (as in Figure 3.1), the implications of a broader definition are also examined at the end of the Chapter. (see Figure 3.5).

Figure 3.1 - Summary of regulatory approach by activity



Regulators' resource allocation decisions are likely to have an important influence over the decision on whether, when, and how to regulate an emerging sector. Across all three activities studied in this report, resource-rationing regulators are significantly more likely to leave firms unregulated compared to their peers who do not ration their resources as strictly (see Figure 3.3).[13] Furthermore,

13 Respondents were asked to indicate whether resource constraints made it comparatively more difficult for them to supervise alternative finance activities than more traditional financial services (see Figure 5.5). Because of the comparative element of the question, a positive response does not necessarily indicate that a regulator has very limited resources in absolute terms. A better interpretation might be that the regulator finds it necessary to ration the amount of supervisory resource allocated to these activities, e.g. because higher-impact traditional sectors are making more urgent demands on their resources.

authorities in more developed and higher income economies were more likely to regulate alternative finance (in one way or another) and less likely to leave the regulatory remit of the sector as undefined. This can be seen in Figures 3.2 and 3.3. This is particularly true of equity crowdfunding, where some aspects of securities regulation will likely apply in high income jurisdictions.

Figure 3.2 Share of jurisdictions that actively regulate alternative finance activities

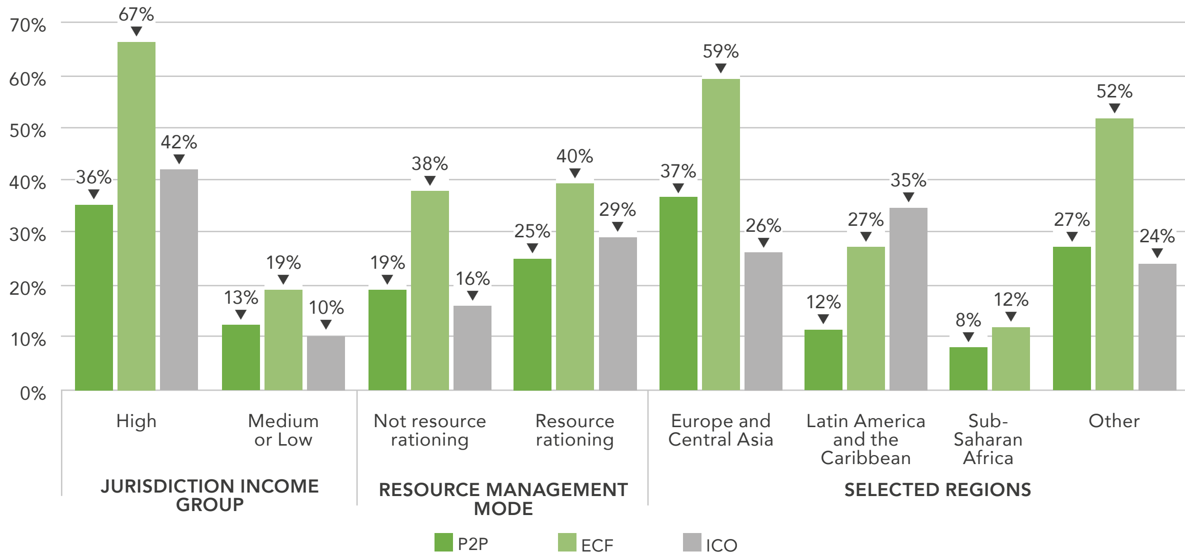
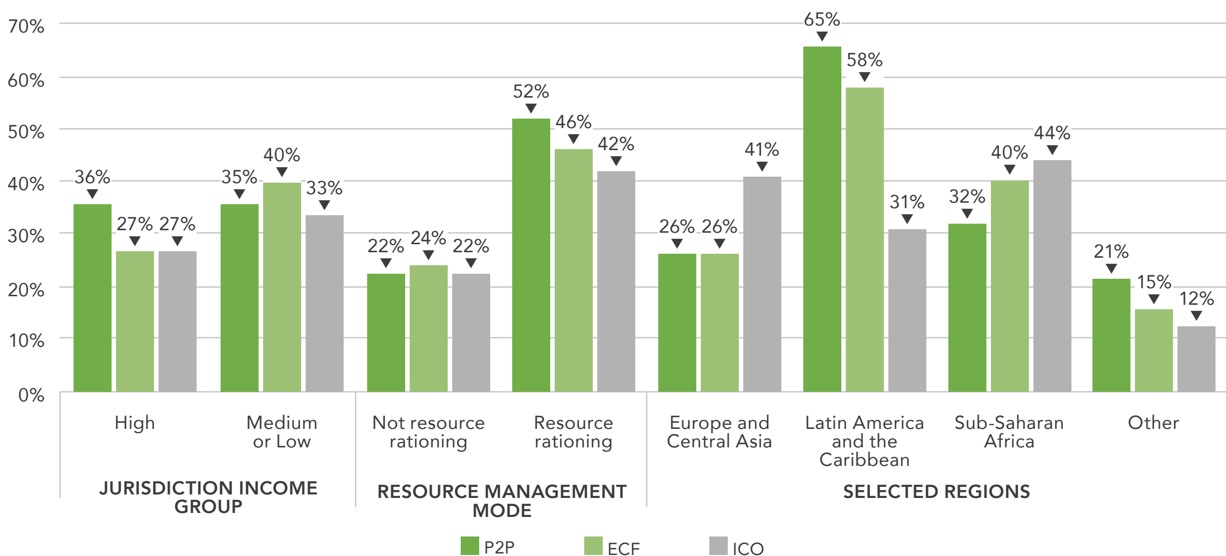


Figure 3.3 Share of jurisdictions that allow alternative finance sectors to operate without statutory regulation

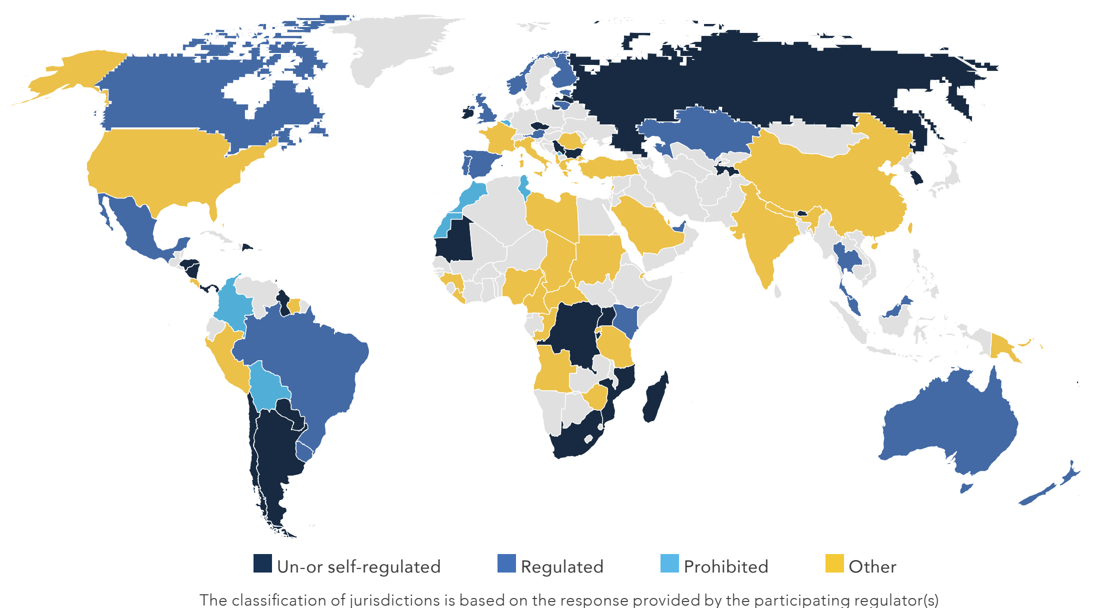


Regulators in Sub-Saharan Africa are particularly unlikely to regulate alternative finance activities. Equity crowdfunding, the most likely of the three activities to be regulated in the region, is reported as regulated in only 12% of jurisdictions. However, this low percentage is likely explained by the absence of activity in the region. Regulators willing to tolerate an unregulated but active sector are in fact more common in Latin America and the Caribbean.

Finally, benchmarking against peers may also be a factor in deciding who regulates alternative finance. OECD jurisdictions in the sample were considerably more likely to regulate across all three activities, beyond what is implied by their higher income levels and market size. This suggests a possible peer group effect, whereby jurisdictions accustomed to coordinated policy efforts may benchmark against one another and thereafter converge on some elements of good practice. The impact of benchmarking on regulatory change is discussed in more detail in Section 3.2 of this Chapter.

Figures 3.4a and 3.4b provide a more comprehensive visualization of the regulatory frameworks for alternative finance around the world. Taken together they point to a handful of jurisdictions with a strong preference for providing legal certainty. This first group, including Canada, Australia and Finland, have largely sought to regulate alternative finance activities. A second group, which includes Bolivia, Colombia, China and Morocco, has implemented an outright ban on one or more alternative finance activities. A third group, which includes Russia and a number of African markets such as Uganda, South Africa, Mauritania and Mozambique, have largely left alternative finance unregulated.

Figure 3.4a: Map of Regulatory Approaches to P2P / Marketplace lending

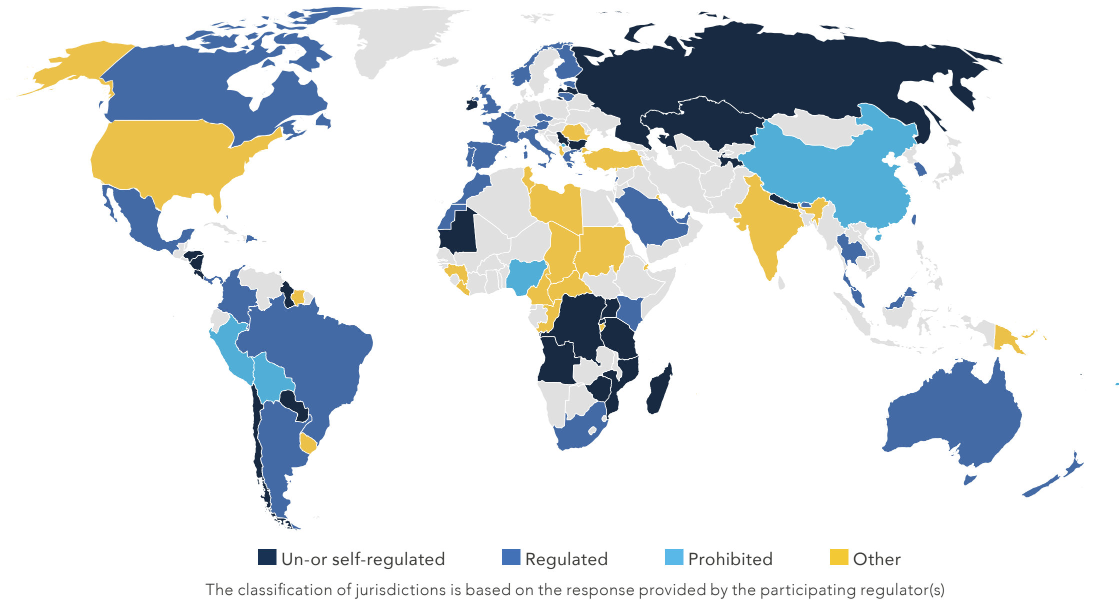


The classification of jurisdictions is based on the response provided by the participating regulator(s)

Mapping approaches to the regulation of ICOs is more complex, since this typically depends on the legal definition of the token being offered. One jurisdiction may, for example, regulate ICOs under securities law when the respective tokens qualify as securities. However, this will not be the case for all ICOs. Therefore Figure 3.4c, which summarizes the approaches taken by different jurisdictions to ICOs, differs from Figures 3.4a and 3.4b in that it distinguishes between different models of regulation.

Only a small minority of survey participants have adopted a categorization of tokens, with the most common distinction drawn being between tokens that were securities and those that were not. Some jurisdictions explicitly allow for a category of 'security tokens', which provide rights and obligations akin to traditional financial instruments. For example, they may indicate an ownership position in an entity, a creditor relationship with an entity, or other rights to ownership or profit. 'Security tokens' may be similar in this regard to shares, debentures or units in a collective investment scheme.

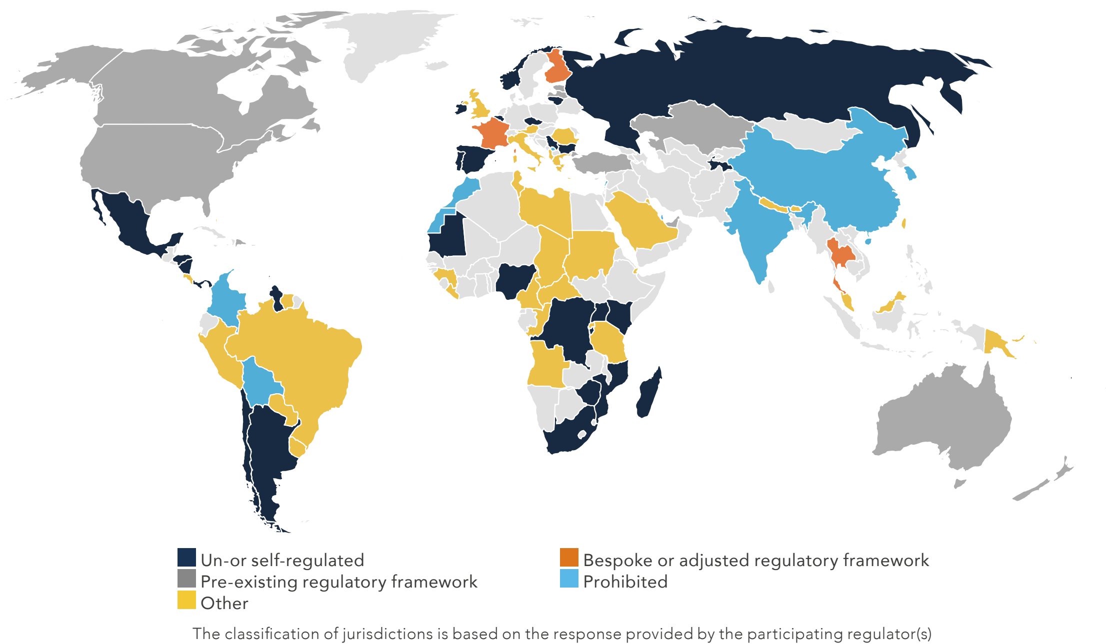
Figure 3.4b: Map of Regulatory Approaches to Equity Crowdfunding



The classification of jurisdictions is based on the response provided by the participating regulator(s)

Distinctions between transferable and non-transferable tokens, or tokens that are commodities versus those that are not, were much less common. No jurisdiction classified tokens depending on their function in a DLT-based ecosystem - for instance, whether they had a role in incentivizing the validation of transactions. Respondents were not asked whether they treat pre-token sales or sales of pre-mined tokens[14] differently from other issuances (e.g. via an ICO), or whether pre-mined tokens are themselves treated differently from other tokens.

Figure 3.4c: Map of Regulatory Approaches to Initial Coin Offerings



The classification of jurisdictions is based on the response provided by the participating regulator(s)

14 Pre-token sales are defined in CCAF's *Global Cryptoasset Regulation Regulatory Landscape Study* (Blandin et al, 2019) as private round offerings of token units, often at prices presented as discounted, and typically while the relevant network or application is not yet operational. These tokens, referred to as 'pre-mined' tokens, are often limited to accredited investors and subject to lock-up periods, and may not be fully or at all transferable.

Focusing on regulated markets, a number of different models of regulation are employed in the oversight of alternative finance activity, as set out in Figure 3.5.

In the case of P2P lending and equity-based crowdfunding, these activities are predominantly, and increasingly, subject to newly created, bespoke regulatory frameworks. A bespoke regulatory framework might be a radical departure from past regulatory practice domestically, however it need not be new from an international perspective. As discussed in Section 3.2, bespoke regulatory frameworks are often the result of the domestic application of lessons learned when benchmarking against other markets.

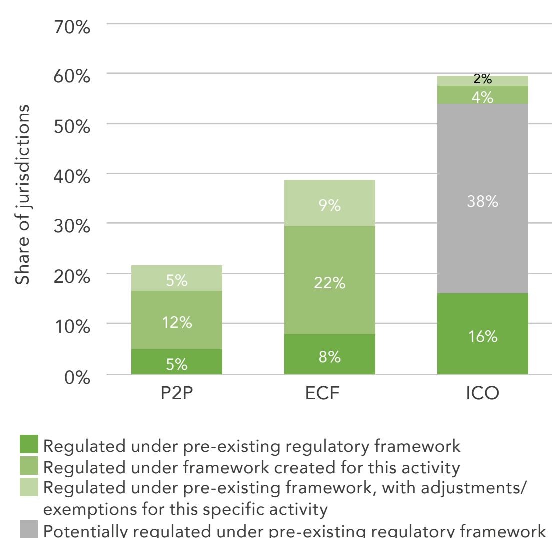
As discussed earlier in the Chapter, most jurisdictions that regulate ICOs do so under a pre-existing legal and regulatory framework. For example, all of the jurisdictions surveyed have securities laws in place. Thus, if an ICO issuer should opt into, or stray into, the regulatory perimeter for securities issuance, the relevant regulatory framework will apply by default and local regulators will enforce the law and their own rules.

To reflect this, Figure 3.5 recombines regulators' responses in a slightly different way than the one employed for Figure 3.4. Where respondents indicated that ICOs are 'unregulated or self-regulated' in their jurisdictions, or stated they are subject to an 'other' legal or regulatory framework, it was assumed for the purposes of Figure 3.5 that they *might, under certain circumstances*, be subject to pre-existing regulation. This helps to better illustrate the impact of pre-existing legislation and rules.

As Figure 3.5 shows, such regulation-by-default accounts for most of the jurisdictions in which ICOs might be subject to pre-existing regulatory frameworks. Even ignoring those cases, however, the reliance on a pre-existing regulatory framework for regulating ICOs is much more common than the creation of bespoke or exemption-based frameworks. The latter would, in almost all cases, require legislative change.

Not all jurisdictions that opt for a sector-specific regulatory framework create bespoke ones from the ground up. A minority of regulators reported that their jurisdictions rely on pre-existing regulation with sector-specific amendments and exemptions. The boundary between these two approaches can be difficult to draw. However, as a general rule, exemption-based and adjusted frameworks are narrower in scope, with most aspects of the activity in question governed by pre-existing regulation. For example, a particular class of alternative investments might be exempt from particular aspects of the pre-existing financial promotions regime or required to provide tailored disclosures and risk warnings to investors.

Figure 3.5: Regulated jurisdictions by type of regulation

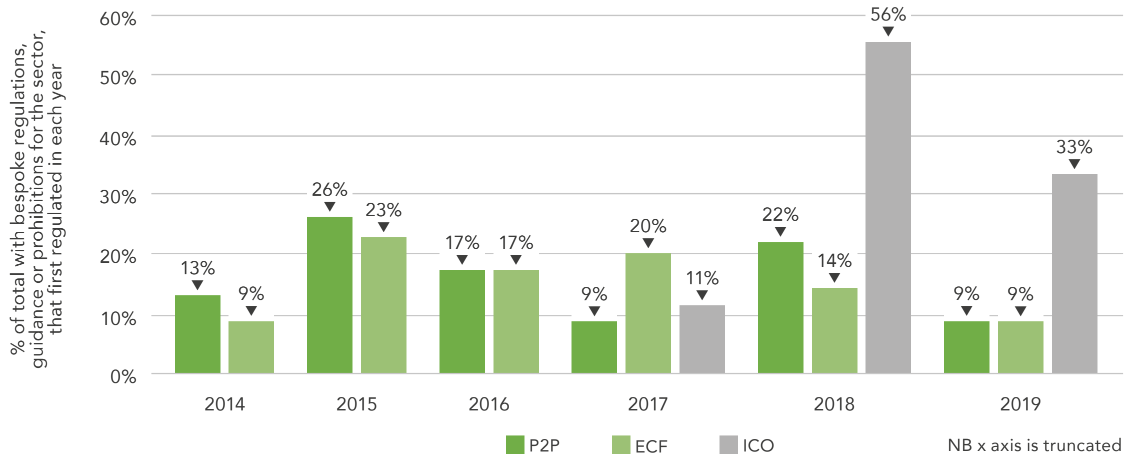


Sector-specific regulatory frameworks for alternative finance activities, including both bespoke and adjusted ones, are still fairly new.[15] While the earliest example of substantive alternative finance regulation

15 CCAF researchers undertook a manual data collection exercise in order to build a library of relevant regulations in the respondents' jurisdictions. Dates were recorded for the introduction of bespoke regulatory frameworks, sector-specific exemptions, bans, or highly significant guidance. Therefore, any jurisdictions that did not regulate or explicitly ban the sectors in question, or relied on pre-existing regulatory frameworks without extensive guidance, were omitted from this analysis.

in the sample dated back to 2008,[16] 83% of jurisdictions with bespoke or exemption-based rules created their original P2P lending and equity crowdfunding regulations in 2015 or later. No jurisdictions are still operating regulatory frameworks that are unchanged since before 2014, and, as expected, no ICO regimes existed prior to 2017. As Figure 3.6 shows, 2015 was the busiest year for new alternative finance regulation frameworks to date. However, 2018 saw a boom in the regulation of ICOs, which has continued into 2019.

Figure 3.6: Timing of the first sector-specific regulations or guidance for alternative finance activities.

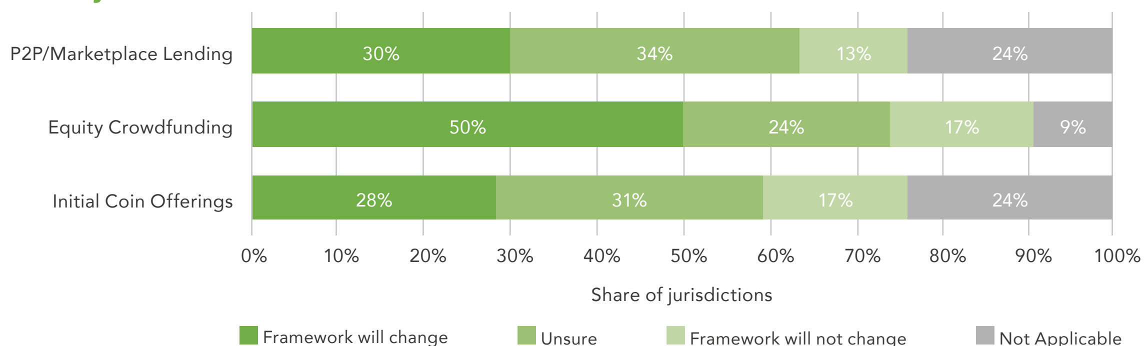


3.2 Patterns in regulatory change

As the industry matures, many policymakers are considering changes to their regulatory frameworks for alternative finance sectors.

Half of the regulators surveyed are planning to review their regulatory frameworks for equity crowdfunding within the next two years (i.e. by early 2021), while about three in ten are considering changes to their regulatory frameworks for ICOs and P2P lending within the same timeframe. This is illustrated in Figure 3.7. Importantly, regulators do not always have clarity on whether their regulatory frameworks would need to adapt to the development of alternative finance activities. Around one third of those surveyed are unsure of how the regimes for P2P lending and ICOs might change even in the near-term. Almost one quarter said the same about their approach to equity crowdfunding.

Figure 3.7: Regulatory change trajectory in the next two years, by alternative finance activity

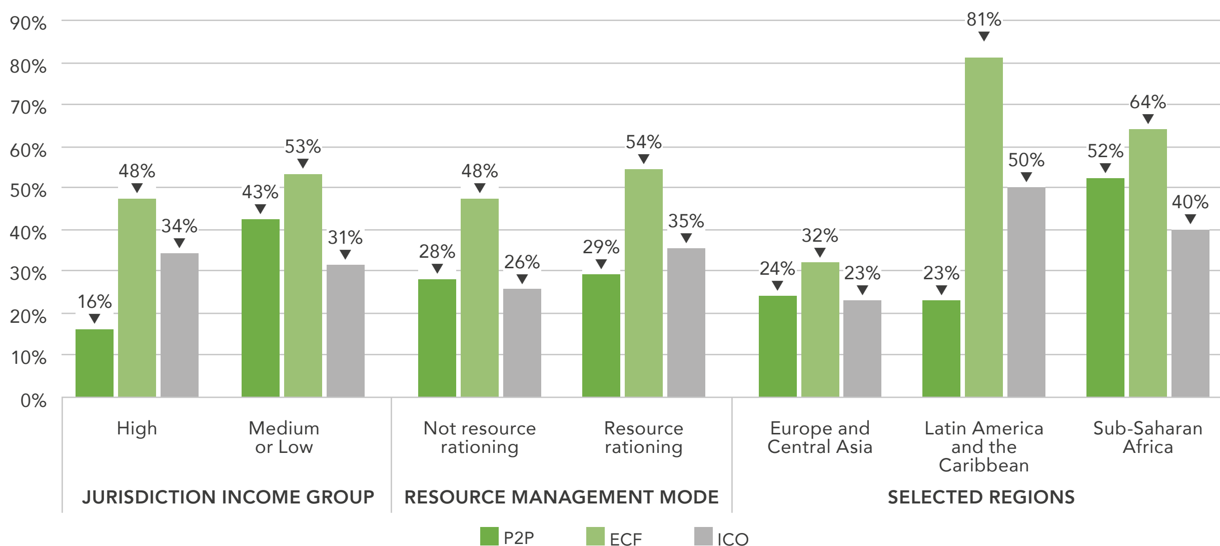


16 AMF (2008), 'Avis relatif à l'exploitation des plates-formes de prêts de personnes-à-personnes (peer-to-peer lending)' December https://lautorite.qc.ca/fileadmin/lautorite/reglementation/valeurs-mobilieres/0-avis-amf/2008/2008dec19-avis-peer-to-peer-fr.pdf Although this publication, from the financial markets authority of Quebec (AMF), is strictly speaking guidance, it stands out for setting out the AMF approach in detail and inviting firms to submit their business models for review.

The expectation of regulatory change is greatest in Latin America and the Caribbean, and in Sub-Saharan Africa. Most regulators in these two regions expect to make changes to their equity crowdfunding frameworks, with nearly half expecting to review the regulation of ICOs (see Figure 3.8). The appetite for regulatory change in these regions is perhaps related to the level of untapped demand for finance. As discussed in Chapter 1, these are host to some of the biggest markets for MSME finance, in which substantial finance gaps still persist.

However, the overall differences between the trajectory of regulation in high, medium and low income jurisdictions, or between resource-rationing and non-rationing regulators, are not statistically significant given the small base sizes. The exception is the future regulation of P2P lending, where regulatory change is substantially more likely in medium and low income markets than in high income ones.

Figure 3.8: Expectations of future regulatory change by region and income groups.



While it is important to understand the pattern and timing of regulatory change, it is even more important to understand how this comes about and why. Survey respondents were asked which factors had helped shape their existing regulatory frameworks.

Additionally, those regulators preparing changes to their regulatory frameworks were asked about the steps taken to both review the existing framework and develop the emerging, new one. Figure 3.9 summarizes the regulators' responses to these questions.

Figure 3.9: Triggers and elements of the regulatory change process

		P2P	ECF	ICO
Triggers of regulatory change - past two years	Reviewing another jurisdiction's approach to regulating alternative finance activities	56%	66%	65%
	Industry-driven requests for regulation or guidance	54%	67%	54%
	Alternative finance activity becoming larger	46%	49%	43%
	Government policy or strategy	41%	51%	35%
	New emerging evidence from supervisory work	22%	28%	35%
	New powers or objectives given to organization by lawmakers	22%	25%	16%
	Other	20%	7%	8%
Elements of the regulatory change process	Analyzed the regulatory frameworks of other jurisdiction(s)	94%	91%	94%
	Carried out informal consultation with firms, industry bodies, consumers or other stakeholders	60%	51%	44%
	Used supervisory powers and external evidence to carry out a diagnostic or thematic review	34%	30%	15%
	Observed new business models through temporary licensing, including in a 'test-and learn' or regulatory sandbox environment	34%	26%	6%
	Published a call for evidence or consultation paper	20%	21%	15%
	Firm failure exposing fraud and/or leading to damages to consumers	6%	6%	32%
	Other	11%	11%	3%

The survey findings provide empirical evidence for the importance of benchmarking in driving regulatory change. Of those regulators who expect to make changes to their regulatory frameworks over the next two years in at least one activity, more than 90% have benchmarked their existing regulatory framework against their regulatory peers in other jurisdictions. More than half of all regulators suggest that the development of their existing frameworks has been prompted in part by a benchmarking exercise.

This was reflected in commentary provided by one Central American regulator: "[We have] been researching and analyzing information about the experience in other jurisdictions regarding alternative finance services and products…". Between half and two thirds of the sample reported that benchmarking had been an influence in the development of their existing regulatory frameworks.

The dominance of benchmarking as a source of knowledge is partly related to the relative scarcity of market and supervisory data in markets where activities are less developed. Regulators must instead look for information where it is most readily available. This dearth of data might also explain the substantial percentage of regulators who used informal consultations (between 44% and 60% across the three activities) in developing their frameworks. This is in contrast with the much smaller share of regulators who carried out thematic reviews and diagnostics (15-34%) or consulted formally (15-21%). As per Figure 3.9, where these more formal exercises do occur, they are likely to have been preceded by much more extensive, if informal, engagement with stakeholders (44 – 60%).

Relatively little alternative finance regulation appears to be purely reactive. Even the regulation of ICOs, of which around 20% have characteristics suggesting a high risk of fraud,[17] has been triggered by high-profile failures in only about one in three cases. P2P and ECF regulation, on the other hand, has only been influenced by high profile firm failures in 6% of cases.

17 The share of ICOs that fail, or never deliver a product to the market, is much higher; however systematic reviews of fraud indicators in ICO activity converge on roughly this figure. See Shifflett & Jones (2018) 'Buyer Beware: Hundreds of Bitcoin Wannabes Show Hallmarks of Fraud' *The Wall Street Journal*, 17 May 2018. https://www.wsj.com/articles/buyer-beware-hundreds-of-bitcoin-wannabes-show-hallmarks-of-fraud-1526573115 and Florysiak & Schandlbauer (2018) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3265007

Regulation is often proactively welcomed by industry, with between 54% and 67% of regulators reporting such requests as an influence in their policymaking. Firms might seek legal certainty through guidance or new rules. However, regulation might also be used by incumbent firms to create barriers to entry. One way of testing which of the two motivations is more prevalent is to check whether having a mandate to promote competition makes regulators more or less likely to respond to calls for regulation from industry.

As Figure 3.10a shows, regulators with a competition mandate are more likely to respond to industry calls for regulation.

Moreover, those regulators with an operational regulatory innovation initiative, such as an Innovation Office or Regulatory Sandbox (see Chapter 5), are particularly likely to receive and consider industry requests for regulation.

These findings are based on small base sizes and should be treated with caution. Further research into this point might consider, for example, whether having more touchpoints with innovative firms makes regulators more aware of competitive dynamics in the sector and whether industry calls for regulation might under certain conditions be anti-competitive.

Figure 3.10a: Competition mandates and the effectiveness of industry calls for regulation

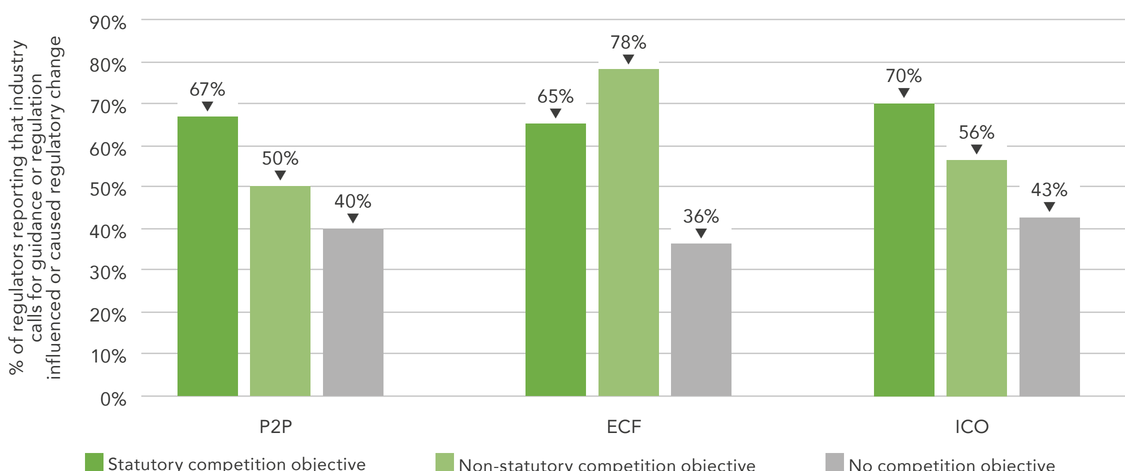
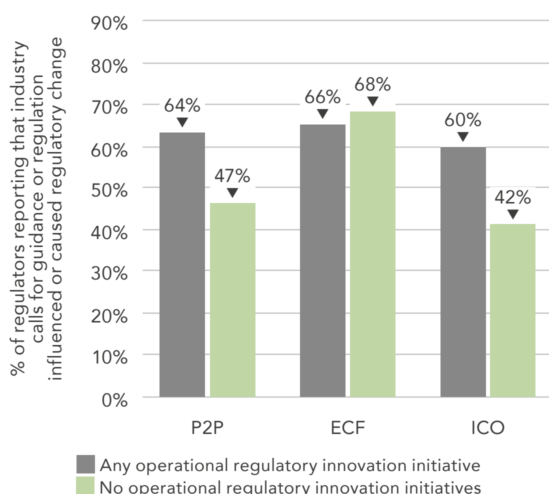


Figure 3.10b: Regulatory innovation and the effectiveness of industry calls for regulation



Chapter 2 discussed the possibility that, given limited information, policymakers make high-level strategic decisions as to the desirability of new business models or technologies, from which all actual interventions proceed. An analysis of the regulatory change process as described by respondents to the survey further supports this view. Across all three alternative finance activities, between 35% and 51% of regulators report that their regulatory approach has been influenced by the need to align with government policy or strategy. This is more pronounced among regulators with a statutory obligation to grow their domestic financial markets, and particularly so in the case of ICOs. Almost half (46%) of all regulators with a

statutory objective to grow the domestic financial market cited government policy as an influence on their approach to ICOs, compared with just 9% of all regulators without market growth objectives.

Box 2 - In depth: Who is learning from whom?

Given the extent to which regulatory benchmarking drives and informs regulatory change, it is useful to examine which jurisdictions have tended to influence others and who the net exporters of inspiration are. 42 respondents who reported that benchmarking was an influence on their policymaking were willing to name the jurisdictions they had studied, resulting in 205 benchmarking pairs. These have provided deep insights into the benchmarking process.

Across the sample, only 38% of the average regulator's benchmarking partners are intra-regional, while 62% were inter-regional. In other words, regulators are willing to cast their nets wide in the search for new ideas. European regulators are an exception to this rule, and strongly prefer to learn from other European jurisdictions. This may be due to significant areas of financial regulatory harmonization within the European Union.

Historical and linguistic ties undoubtedly influence many of the benchmarking pairs, as benchmarking can be frustrated by incompatible legal systems or language barriers. Thus, for example, Tunisia has looked to France in reviewing alternative finance regulation, Angola to Portugal, Colombia and Costa Rica to Spain, and Bahrain and Brunei to the UK. Finally, the rise of alternative Islamic finance solutions might explain some cross-regional benchmarking pairs, such as regulators in Saudi Arabia and Brunei benchmarking against the regulatory framework in Malaysia.

Overall, the UK is the most frequently benchmarked-against market by a significant margin - cited by 76% of all regulators who have benchmarked against at least one market. The USA was cited by 62%, followed by Singapore with 38%. Spain, France, Malaysia, Australia, the UAE, New Zealand, Mexico, Hong Kong, Kenya, Italy and Switzerland (in descending order of frequency) are all cited by at least 10% of respondents. It is also possible to highlight each region's top exporters of regulatory thinking in the area of alternative finance, as set out in **Figure 3.11**. Further details of the history of regulatory innovation in Malaysia are available in **Box 3**.

Figure 3.11: Regulatory benchmarking by region

REGION	% OF BENCHMARKING THAT IS INTRA-REGIONAL	% OF BENCHMARKING THAT IS CROSS-REGIONAL	MOST BENCHMARKED JURISDICTIONS WITHIN REGION
Europe and Central Asia	68	33	United Kingdom, Spain
East Asia and Pacific	35	65	Singapore, Malaysia
Latin America and the Caribbean	34	66	Mexico
Middle East and North Africa	26	74	UAE
North America	25	75	USA
South Asia	60	40	India
Sub-saharan Africa	24	76	Kenya

It is possible that benchmarking has marginally favored the adoption of bespoke regulatory frameworks. 67% of regulators working with a bespoke framework cited benchmarking as an input into the development of existing P2P regulations, 74% in relation to ECF and 100% in relation to ICOs. In all cases, these percentages are higher than the comparable percentages for jurisdictions without bespoke frameworks.

Among the top ten most-benchmarked against jurisdictions, only eight regulators provided complete responses regarding their regulatory approach to key sectors. Of those eight, four said P2P lending is subject to a bespoke framework in their jurisdictions, and six said the same regarding ECF. It is therefore possible, that benchmarking is one of the factors driving the gradual shift towards the adoption of bespoke regulatory frameworks for alternative finance activities.

Box 3: Alternative Finance Regulation: the experience of Malaysia

Closing the MSME Financing Gap with Alternative Finance

As Malaysia continues its transition into a high-income country, policymakers have identified small to medium enterprises (MSMEs) as a key driver of economic growth. In 2017, MSMEs produced 37.1% of the country's GDP and employed around two thirds of its labor force.[18] However poor access to capital hinders their growth; the financing gap for Malaysian MSMEs is estimated at around USD21.5bn., or 7% of GDP.[19]

Therefore, a primary motivation for expanding Malaysia's alternative finance market is the potential to introduce innovative financing options for MSMEs. The CCAF estimates that, in the past several years, the alternative finance market in Malaysia has experienced strong growth - an average of 127% per annum between 2013 and 2017.[20] This growth has been facilitated by a regulatory environment that has sought to encourage innovation while protecting consumers and investors.

Equity Crowdfunding (ECF) Regulation in Malaysia

Malaysia was the first ASEAN country to create a regulatory framework for equity crowdfunding. SC Malaysia released the Guidelines on Recognized Markets in December 2015, outlining regulations for ECF platforms.[21] Parties interested in becoming recognized market operators were invited to submit applications to SC Malaysia, and six platforms were approved in 2015. As of May 2019, a total of ten ECF platforms have been registered with the regulator.

ECF investments present a high risk of capital loss to investors, and are highly illiquid. ECF platforms also present a target for fraudulent operators. In light of these risks, SC Malaysia's guidelines were designed to protect investors without placing insurmountable burdens on fund seekers. First, ECF platforms must be registered as recognized market operators (RMOs), a designation that imposes responsibilities on the operator to maintain a fair and transparent market, manage risks, and comply with all other relevant regulations. ECF platforms must also conduct due diligence on issuers, conduct investor education programs, require acknowledgements of risk from investors, and ensure that issuers and investors are following their respective regulations.[22]

For issuers, eligibility is restricted to locally incorporated, private limited companies and limited liability partnerships. They must provide information on business plans, the intended purpose for the raised capital, and financial

18 Mahidin (2018) "Small and Medium Enterprises (MSMEs) Performance 2017" Department of Statistics Malaysia. Accessed April 22, 2019. https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=159&bul_id=cEI0bklpZHJaTlhRNDB3d2ozbnFIUT09&menu_id=TE5CRUZCblh4ZTZMODZIbmk2aWRRQT09

19 MSME Finance Forum, 'MSME Funding Gap Database Updated Oct 2018' https://www.smefinanceforum.org/sites/default/files/MSME%20Finance%20Gap%202018-19%20Update%20(public)%20.xlsx Accessed 25 September 2019

20 Ziegler et al. (2018) *3rd Asia Pacific Region Alternative Finance Industry Report*. CCAF https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/3rd-asia-pacific-region-alternative-finance-industry-report/.

21 Securities Commission Malaysia (2019a) 'Guidelines on Recognized Markets.' Accessed April 22, 2019. https://www.sc.com.my/api/documentms/download.ashx?id=eb8f1b04-d744-4f9a-a6b6-ff8f6fee8701

22 Ibid.

statements where available. Once approved by the platform, issuers may raise up to RM 3 million in any 12-month period, and up to RM 5 million in total. Finally, investors are divided into three types and face different restrictions based on their classification: retail, angel, and sophisticated. Retail investors are limited to investing RM 5,000 per issuer and RM 50,000 in a 12-month period. Angel investors can invest up to RM 500,000 in a 12-month period, whereas sophisticated investors face no restrictions on investment amounts.

Since the regulatory framework was introduced, capital raised on ECF platforms has steadily grown. By June 2019, RM 54.91 million had been raised by 63 issuers.[23] CCAF findings suggest that ECF has demonstrated a positive effect on financial inclusion, given that 70% of beneficiaries are businesses led by women or people under the age of 35.[24]

Peer-to-Peer Financing (P2P) Regulation in Malaysia

In May 2016, the SC added P2P regulation to its alternative finance regulatory framework. As of May 2019, 11 platforms have been registered as P2P operators.

P2P platform operators must be registered by the SC as recognized market operators (RMOs); they are required to be locally incorporated and have at least RM 5 million in paid-up capital. P2P operators must conduct due diligence on potential issuers, assess their creditworthiness, and communicate such information about issuers to investors. The maximum interest rate that may be charged over a year is 18%. They must also have processes in place to recover what is owed to investors in the event of borrower default. There is no limit on the amount of capital borrowers can raise. However, they may only access the amount raised if it exceeds 80% of the funding goal and may not receive any amount above that goal. Retail investors are encouraged to keep investments below RM 50,000, but unlike in ECF, there are no strict limits on investments.[25]

Malaysia's regulatory framework for P2P stands out in two respects. First, unlike other jurisdictions, in Malaysia the regulator only allows businesses to seek funding through such platforms, in line with the overall goal of increasing financing for MSMEs and start-ups. Moreover, unlike other jurisdictions that have largely relied on platforms to self-regulate, the SC mandates that platform operators conduct risk assessments on potential issuers. Each operator may design its own risk rating system, but the processes used must be available to investors to increase transparency.[26]

By December 2018, 643 MSMEs had raised capital through P2P platforms, with funds totaling RM 212.65 million and transaction volume rising fourfold since 2017.[27] Investors are generally younger members of the population, with a majority under the age of 35, and most invest in multiple issuers.[28]

23 Securities Commission Malaysia (2019b) 'Crowdfunding Statistics as at June 2019' https://www.sc.com.my/api/documentms/download.ashx?id=7a5f8b07-bfe4-4e34-8ac9-e013ea2c217c

24 Ziegler et al (2018) op. cit.

25 Securities Commission Malaysia (2019a) op. cit.

26 ibid.

27 Securities Commission Malaysia (2018) *Annual Report 2018* https://www.sc.com.my/api/documentms/download.ashx?id=69b9ad2a-13c7-40bf-b0d3-341951a62278

28 Kourabas & Ramsay (2018) "Equity Crowdfunding in Malaysia." Company Lawyer, Vol. 39, No. 6, pp. 187-196, 2018 op. cit.

Insights from the Survey

The data collected from this survey gives further insight into the Malaysian framework and allows for comparisons to be drawn between Malaysia and other jurisdictions. First, the range of permitted activities within Malaysia's P2P and ECF regulation is broader than that of any other respondent market in the region except New Zealand. For example, only Malaysia and New Zealand permit access to relevant credit/transaction data on P2P borrowers from a public registry or as mandated open data. Malaysia is also the only market besides New Zealand that explicitly permits the operation of secondary markets for equity crowdfunding and peer-to-peer financing.

When considering requirements concerning communication, advertising, and promotion, Malaysia's regulation is broadly similar to that of other countries in the region, with a general requirement that communications with customers are accurate and complete, and that platforms provide standardized information to investors (e.g. risk warnings, costs, or incentive structures).

With regard to requirements applicable to client on-boarding, it is useful to focus on those requirements of the Malaysian regulatory framework that are not universally applied by regulators throughout the region. In particular, the SC caps the absolute amount that individuals can invest both at the level of the individual bid and platform-wide over a 12-month period. Moreover, while platforms are allowed to establish their own eligibility criteria, there are high-level prohibitions on certain types of issuers. These include foreign issuers, publicly-listed or highly capitalized issuers, issuers with complex group or financial structures; those with an unclear (or no) business plan; and those aiming to fund acquisitions or investments in other companies.

In terms of financial inclusion, Malaysia stands out as the only respondent in the East Asia and Pacific region that has required recognized market operators to report gender-based data on users or transactions for the purposes of supervision or to track impact for both P2P and ECF.

Conclusion

The Malaysian regulatory framework provides a valuable example of regulation that seeks to balance the development of alternative finance with attention to investor protections. As of 2018, 80% of alternative finance platforms in Malaysia reported satisfaction with the regulatory framework in CCAF's annual survey of alternative finance platforms; this was the highest percentage of any Asia-Pacific jurisdiction,[29] and, as discussed earlier in this Chapter, Malaysia is one of the most benchmarked-against jurisdictions globally.

While it isn't possible yet to prove a connection between the quality of regulation and the rapid growth of alternative finance in the country, it is worth noting that Malaysia stands out as a regional leader in equity crowdfunding in particular. In 2017, the latest year for which comparable CCAF data are available, CCAF estimated that the Malaysian ECF market arranged USD7.96 million of funding, a total larger than those of countries such as Indonesia (USD3.78 million) and Japan (USD3.55 million).

29 Ziegler et al. (2018), op cit. CCAF statistics are collected in local currency; for comparability, they are converted into USD using the annual average bid rate. In addition to activity covered in official statistics, CCAF estimates for Malaysia include funding of local issuers by platforms that are unregulated or registered and regulated outside Malaysia.

4. Regulatory frameworks in detail

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4.1 Alternative finance - the permitted activities and requirements

This study distinguishes between two dimensions of regulation. The first are the functions which firms are (and are not) allowed to carry out. In regulated sectors this will usually be conditional upon holding the relevant license.

The second dimension is that of the obligations which are imposed on firms by regulation. This includes requirements with respect to communications, advertising or promotions; operations, management and systems and controls, and to client onboarding.

In relation to permitted activities, respondents were asked to comment on a functional basis. In other words, whether a particular function could be performed within each of the three activities, regardless of the type of entity or firm. In relation to requirements, respondents were asked to comment on an entity basis. In other words whether a particular requirement applied to a particular type of regulated entity, i.e. a peer-to-peer lending platform, equity crowdfunding platform or an ICO issuer.

This differing approach was determined mainly by the need to isolate a specific aspect of the activity of issuing a token via an ICO. This allowed an exclusive focus on the token issuer as the object of regulation, rather than any other intermediated activities, such as the exchange or storage of tokens. To ensure consistency, the two other alternative finance activities - P2P lending and equity crowdfunding – were also presented on an entity basis.

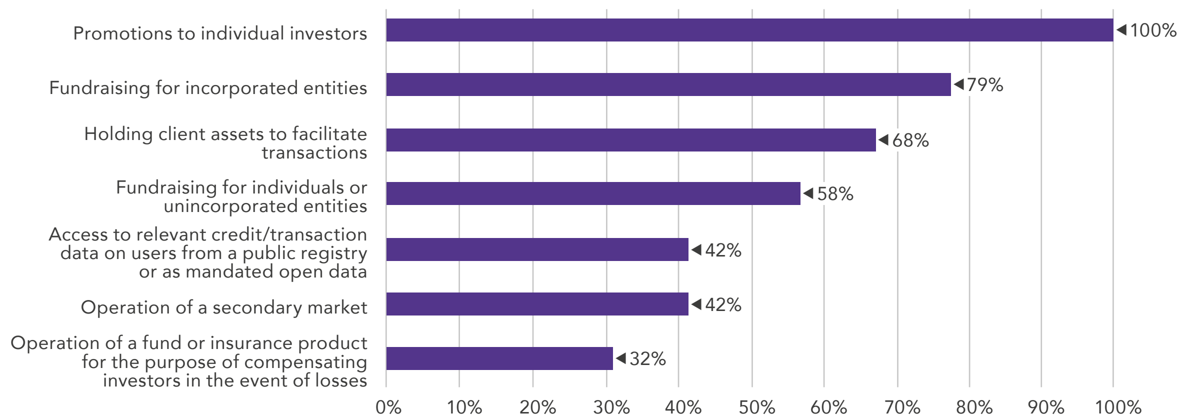
For all three activities, the most commonly permitted functions in a regulated market are promotions to individual investors, fundraising for incorporated entities and holding client assets to facilitate transactions. The breadth of permissions varied across the three activities, with regulated P2P/Marketplace lending firms allowed the broadest range of activities, and issuers of ICOs the narrowest.

4.2 Sector-by-sector analysis of alternative finance regulation

4.2.1 P2P/marketplace lending

The ability to promote to individual investors (as opposed to professional and institutional investors) is the most common permission to regulated P2P lending firms, as set out in Figure 4.1. This is consistent with policymakers taking action in order to ensure that these activities become or remain a retail proposition. In the case of P2P/marketplace lending, most of the lending that occurs on such platforms is still through individual investors, though institutional investors' share of total funding is on the rise.

Figure 4.1: Permissible activities for regulated P2P/marketplace lending firms



Within jurisdictions where P2P/Marketplace Lending activities are regulated, 79% of regulators indicate that firms are allowed to raise funds for and on the behalf of limited companies, while only 58% provide such permission for lending to individuals. While these findings are in line with the sector's perceived role as an increasingly important source of funding for MSMEs and even larger corporate borrowers (see Box 1), it is perhaps surprising that more jurisdictions do not allow regulated firms licensed as P2P lenders to lend to individuals, sole-traders and other unincorporated businesses. This may have ramifications for financial inclusion and economic growth more generally.

Holding client assets to facilitate transactions is another common permitted activity, cited by 68% of respondents. This involves regulated firms temporarily holding investors' funds ahead of allocating them to investments, or holding income from investments ahead of distributing it to investors. As both institutional and individual lender activities become more prevalent, this permission becomes particularly important, but comes with obligations to keep funds segregated and retain custodianship of such funds.

Finally, the operation of a secondary market and the operation of a fund or insurance product for the purpose of compensating investors in the event of losses are less commonly permitted – in 42% and 32% of jurisdictions respectively. Secondary markets are fairly common in the P2P lending sector; however there are two ways of reconciling the relatively small number of jurisdictions that permit them with observed industry trends.[30] First, it may be platforms in the largest P2P lending markets (e.g. the UK, continental Europe and North America) which are responsible for the bulk of secondary market activity. Survey responses are not weighted by market volume, so trends in market practice will not always match trends in regulatory activity. Second, some jurisdictions may treat loans (and constituent parts of loans) traded on P2P lending platforms as securities, which would in turn require an additional license to operate a secondary market. In a European context, for example, some platforms might be licensed to operate Multilateral Trading Facilities (MTFs) for this purpose. Consequently, an entity with a license to operate as a P2P/marketplace lender might not automatically be permitted to operate secondary markets as a result, but may be able to obtain additional licenses for this purpose.

30 CCAF's global alternative finance research (Ziegler et al. (2018), op. cit.). suggests that the introduction of secondary markets to P2P lending platforms has accelerated in recent years and secondary market activity is of substantial volume internationally.

Box 4: Innovative Finance and the Regulatory Perimeter: the case of Uganda

In early 2019, CCAF researchers undertook a focused, desk-based review of Uganda's regulatory framework for the capital markets and collective investment, with a view to uncovering regulatory barriers to the development of alternative finance. CCAF categorized potential barriers into:

- Regulatory perimeter issues precluding innovative financing
- Potentially disproportionate regulations
- Technology biases in regulation
- Ecosystem biases in regulation
- Unclear application or objective of regulations

The review found that the obstacles to building thriving regulated alternative finance sectors were rarely technological biases. In fact, Ugandan law contains good examples of technology-agnostic reporting and record-keeping requirements which could be used in other parts of the regulatory framework.

Rather, the regulatory perimeter was identified as the most significant regulatory barrier to the development of the sector. P2P lending and securities crowdfunding were found to be challenging to regulate in Uganda without at least some legislative change. Both activities intersected with the definitions of collective investment schemes.[31] Furthermore, P2P lending intersected with the definitions of deposit-taking and corporate bonds, while equity crowdfunding platforms might overlap with the definition of a stock market. Less problematic, though noteworthy, was the interaction between equity crowdfunding and securities brokerage and dealing.

There are at least three options available to addressing these types of regulatory perimeter issue:

1. Regulate platform operators as intermediaries (e.g. equities brokers), while using exemptions to sidestep the definition of a public offering of securities or of deposit-taking. For example, Uganda's CMA has wide discretion to switch off parts of the Prospectus Regime for eligible equity listings as a class. Practically this might subject platforms to rules about the promotion of investments, the protection of client money, disclosure and management of conflicts of interest and incentives, and potentially mandatory qualification and training requirements for operators. Because of the use of an exemption, strict eligibility conditions for issuers would also be a de facto part of the sector's conduct regime, meaning that the types of eligible business would be tightly defined.

31 The relevant legislation defines collective investment schemes as arrangements "with respect to property of any description […] the purpose or effect of which is to enable [participants], whether by becoming owners of the property or any part of it or otherwise, to participate in or receive profits or income arising from the acquisition, holding, management, or disposal of the property or sums paid out of such profits of income. […] such that [participants] do not have day to day control of the management of the property […] whether or not they have the right to be consulted or to give directions"; and have either or both of the following characteristics: a) "that the contributions of the participants and the profits or income out of which payments are to be made to them are pooled" and b) "that the property is managed as a whole by or on behalf of the operator of the scheme."

2. Regulate platforms, particularly in the P2P sector, as collective investment schemes or other funds, but allow more explicitly through legislation for off-balance sheet investments. This might mean holding platforms to the same standards as fund managers on asset quality, standardization and diversification; on risk management; and on governance, particularly in regards to their relationships with investors. In such a scenario, platforms might be required to be linked to repositories, which would directly hold the clients' investments.

3. Regulate platforms as markets or trading venues. Under one option considered by researchers, the Interim Trading Facility provisions in secondary legislation could be repurposed to allow ECF platforms to function as a flexibly regulated stock market for a pre-determined period of time before becoming licensed either as a full stock market or some other kind of entity; effectively, creating a sector-wide Sandbox. Bespoke venues analogous to the EU's Multilateral Trading Facilities might also be defined in legislation. The Interim Trading Facility approach would have strong implications for platforms, as market participants would need to be represented in their governing bodies, they would need to establish a physical trading venue, and they would need to take responsibility for market infrastructure.

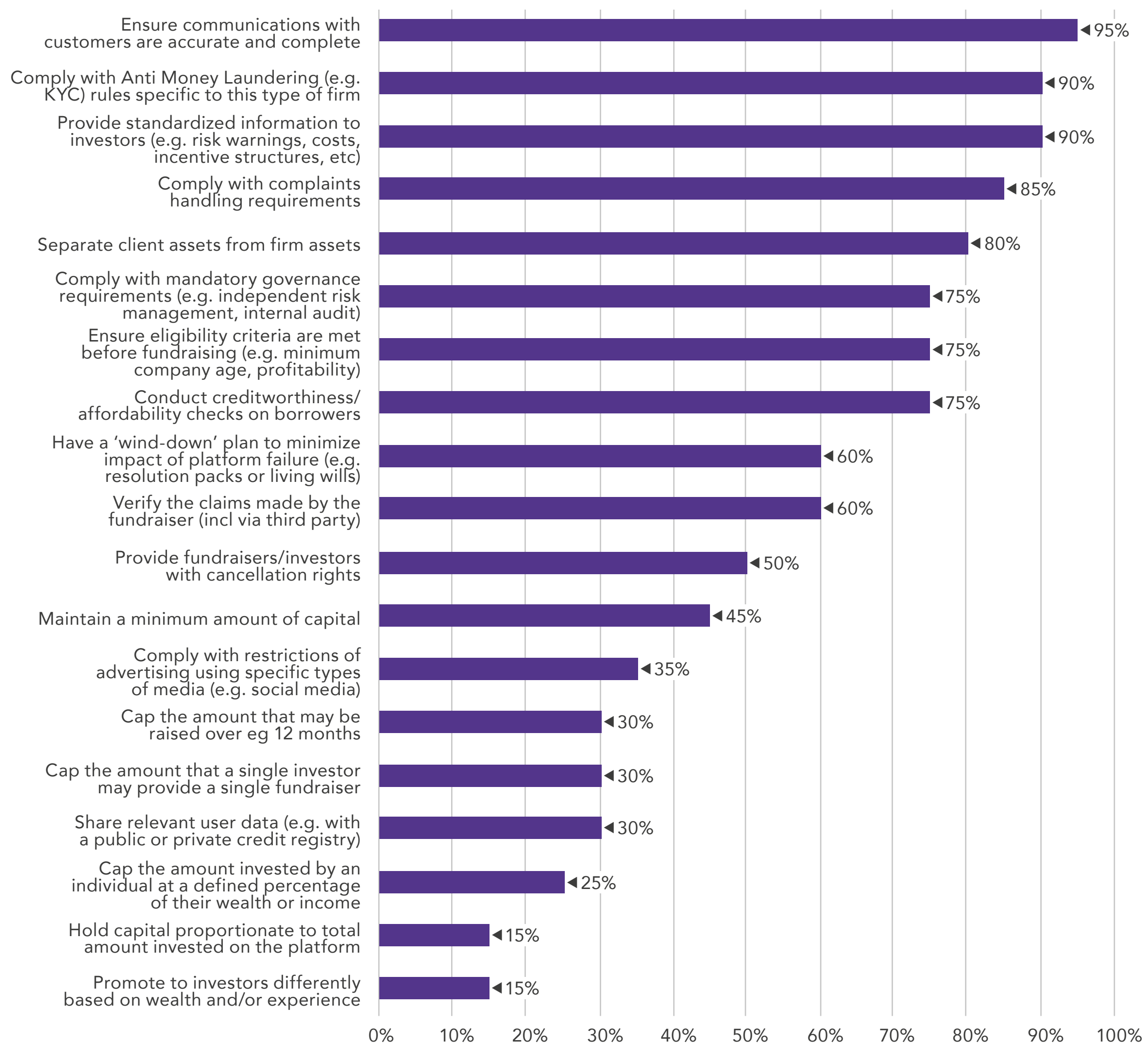
Which of the three options are taken depends on the degree to which investors are expected to take responsibility for outcomes and the extent to which alternative financing is to be a viable proposition for retail investors. Regulation as a collective investment scheme provides a fairly rigid and costly framework for operation, limiting the platform's freedom to adjust its offerings, but providing individual investors with greater transparency and continuity. Regulation as an intermediary emphasises responsible marketing of investments and can allow for additional protections for less sophisticated investors; but it also means regulators have less control of customer outcomes later in the process, such as the level and quality of diversification. Regulation as a market venue emphasises the integrity and execution of transactions but relies on highly-engaged intermediaries with a stake in the success of the market, and on regulatory requirements and protections elsewhere in legislation to enable transparent and fair valuations.

None of the above are entirely possible without legislative change but adjustments to collective investment legislation might be less complex. Importantly, these are political decisions; they can be supported through empirical evidence but not decided outright by the evidence.

Regulatory requirements related to communications, advertising or promotions

The most significant emphasis was on the requirement to ensure communications with customers were accurate and did not omit important information, with 95% of respondents noting this as a requirement. Figure 4.2 below sets out some of the regulatory requirements for regulated P2P/marketplace lending firms. Requirements to provide standardized information to potential lenders, including on risks or costs, were also prominent. Given that P2P/Marketplace Lending primarily targets retail investors, this is not altogether surprising, especially from regulators with a strong consumer protection mandate.

Figure 4.2: Selected regulatory obligations for regulated P2P/Marketplace lending firms



Because P2P investors are not expected to take as much risk as investors in the ECF and ICO sectors, regulators typically allow them to take significant exposure at their own discretion. It is relatively rare for regulators to restrict marketing to less sophisticated or less wealthy investors, or insist on greater protections for them - only 15% of jurisdictions in which P2P is regulated impose client categorizations of this type.

It is more common, however, for regulators to cap the share of wealth or income that an investor can allocate to this sector - just under a third of regulatory frameworks (30%) were doing so at the time of the survey. This

percentage is reasonably high, but it still points to a less stringent treatment than in the case of equity-based crowdfunding.

A similar share of regulators (30%) capped the amount a borrower might raise over a given period (typically 12 months). This restriction might share a two-fold purpose. It might protect lenders from exposure to failing businesses or prevent excess borrowing. It might also help police those areas where marketplace lending risks overlapping with deposit-taking activity, by limiting the extent to which businesses fund their ongoing operation by borrowing from the public.

Regulatory requirements related to client-onboarding (Borrower and Lender)

Anti-money Laundering (AML) requirements were a priority for regulators, ranking as the second most common regulatory theme in this sector (90%). Requirements to conduct due diligence, especially as related to eligibility criteria of borrowers (75%) and creditworthiness / affordability (75%) were obligations commonly imposed upon firms.

Nearly half of the regulatory frameworks for P2P/Marketplace lending included capital requirements. However, the amount required was rarely linked to the size of firms' loan books. Only 15% of regulators had such a requirement in place. Mid-to-high income jurisdictions tend to impose the highest minimum capital requirements (in USD), while low income jurisdictions tend to impose the lowest.

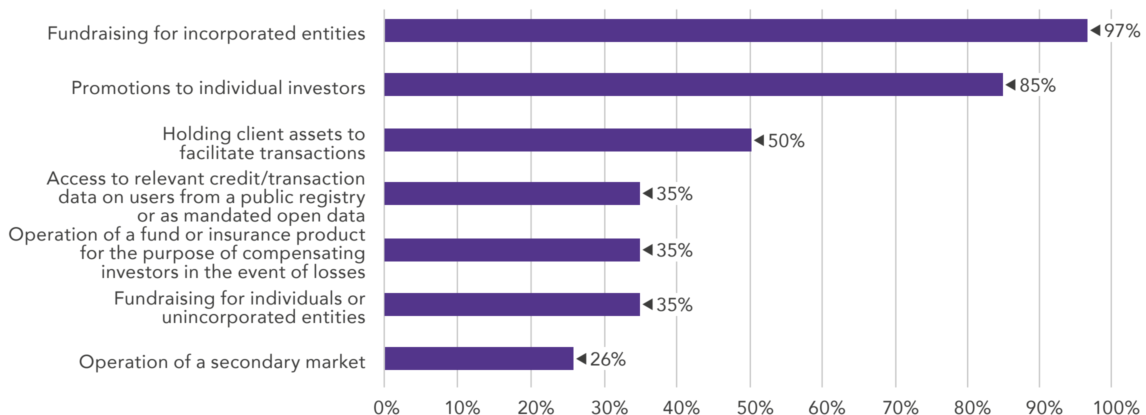
Regulatory requirements related to operations, management, systems and controls

Requirements in relation to systems and controls were very common in regulatory frameworks applying to P2P and marketplace lending. Rules related to complaint handling processes (85%), segregation of client assets (80%), and governance (75%) ranked highest. This is consistent with the risks perceived to be highest by regulators.

4.2.2 Equity Crowdfunding (ECF)

Where equity crowdfunding is regulated, funding for incorporated entities is permitted by nearly all regulators, allowing the sector to act as a funding venue for startups and early stage companies. It is possible that certain equity-like funding models (e.g. profit or royalty sharing) are also allowed to cater to individuals and partnerships – which was reportedly allowed in 35% of jurisdictions with regulated equity crowdfunding sectors. Figure 4.3 below summarizes the most common permissible activities for regulated equity crowdfunding firms.

Figure 4.3: Permissible activities for regulated equity crowdfunding firms

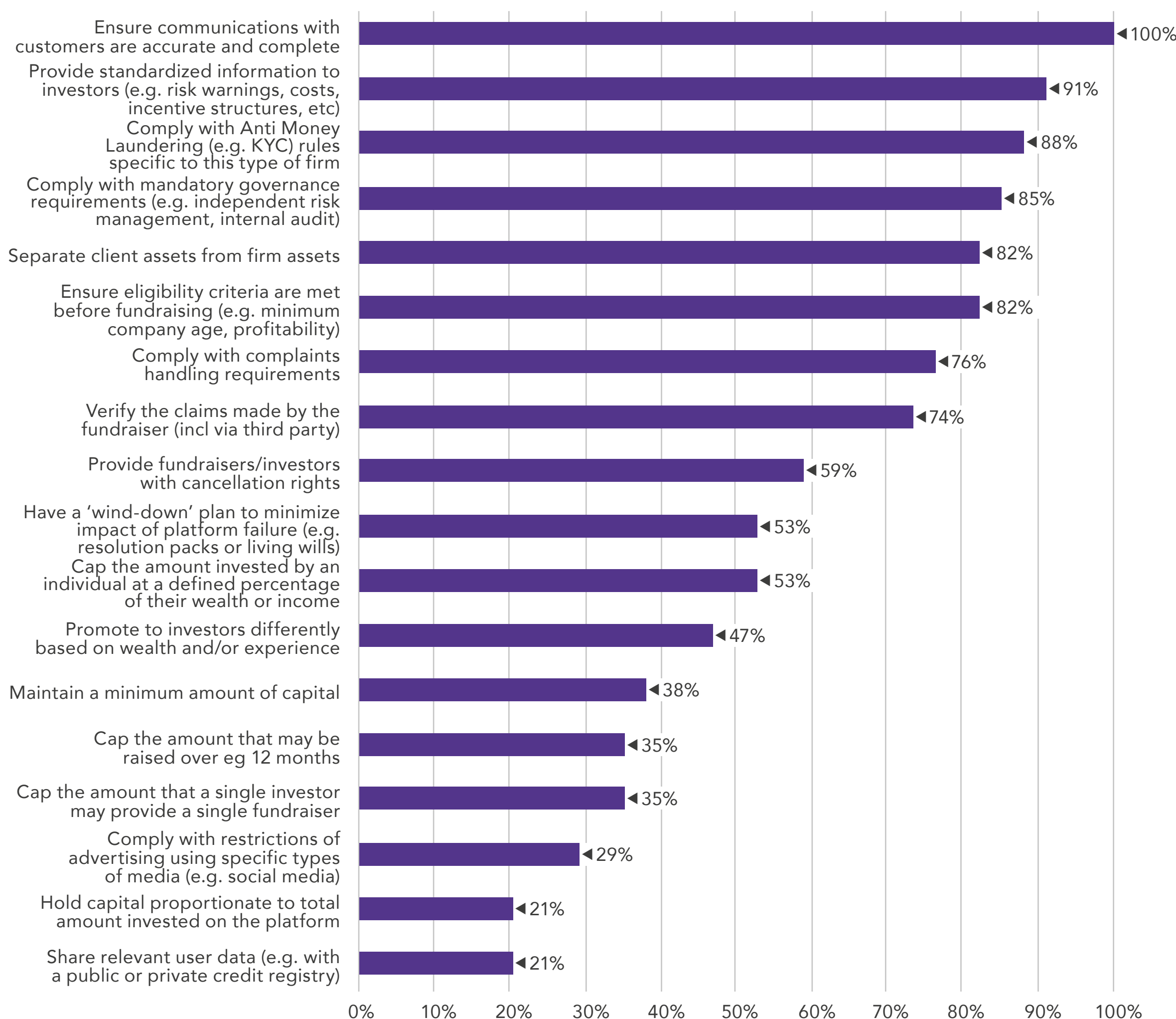


At the heart of equity crowdfunding is the ability to raise funds from individual retail investors via online platforms and invest them into incorporated entities. To enable this, equity crowdfunding platforms typically need to promote offers to individual investors.

Among the surveyed regulators, close to 85% of respondents stated that promotions to investors are permitted. The remainder very likely restrict access to such platforms to professional investors.

Just over a quarter of regulators state that the operation of a secondary market is a permitted activity for equity crowdfunding platforms in their jurisdictions. This low proportion may be due to the operation of a secondary market for securities being captured under different regulation and thereby requiring other licenses outside of the scope of equity crowdfunding specifically[32].

Figure 4.4: Selected regulatory obligations for regulated equity crowdfunding firms



Every jurisdiction within the sample that actively regulates equity crowdfunding requires platforms to ensure communications are accurate and complete, as set out in Figure 4.4. Aligned with this is the requirement for firms to provide standardized information to investors, with over 90% of jurisdictions mandating this as a part of regulating this activity. Aside from marketing and promotions stipulations, the clear majority of jurisdictions (88%) also require firms to adhere to Anti-Money Laundering regulations including Know Your Customer requirements.

A common operational requirement for equity crowdfunding platforms (82% of surveyed regulators) is that the money that investors place on these platforms is held separately from the platform, to ensure funds

32 As observed regarding Multilateral Trading Facilities in Section 4.1.1.

are not co-mingled. Another requirement that is often applied to equity crowdfunding platforms is to ensure fundraising entities meet an eligibility requirement before they can solicit funds from potential investors via the platform, with over 82% of surveyed regulators stipulating this requirement.

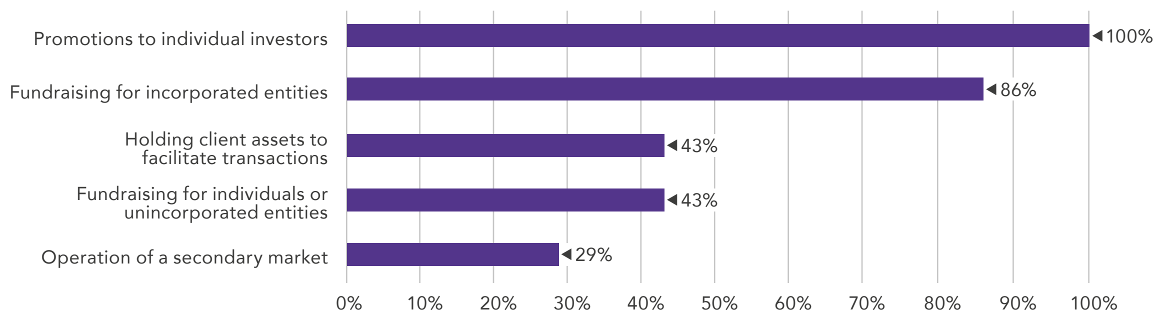
Less commonplace were requirements relating to the type of media which can be used to promote investment offers via equity crowdfunding, whether via social media or offline. Fewer than one third of respondents stipulated such a requirement.

One point of divergence amongst regulators in their requirements for equity crowdfunding is that around half of all regulators require different approaches to marketing and promotion based on the level of wealth and experience of investors. For example, 47% of respondents impose added restrictions or requirements to firms marketing to less knowledgeable investors. Most respondents (53%) cap the share of an investor's wealth or income that can be invested in crowdfunded equity. Just over a third cap the amount that a single fundraiser can raise within a given time period (typically 12 months), and a significant share also cap the amount a single investor may provide to a single fundraiser. There is, therefore, an important divide between more and less prescriptive approaches to investor participation in the sector.

4.2.3 Initial Coin Offerings (ICOs)[33]

As shown by Figure 4.5, all of the surveyed regulatory authorities that regulate ICOs allow for the promotion to individual investors. Despite the significant incidence of fraud in the ICO market[34], this fundraising mechanism was initially designed with individuals and retail investors in mind and conceived as a market where participants took complete responsibility for their decisions. Hence, regulators may have sought to regulate ICOs to ensure their suitability for mass retail investment, while preserving their original value proposition.

Figure 4.5: Permissible activities for regulated ICOs



The vast majority of respondents allow fundraising for incorporated entities (86%), whereas 43% also allow for fundraising by certain types of unincorporated entities. While ICOs have primarily been a vehicle for startups from the crypto asset and blockchain ecosystem to raise funds quickly to develop their product, a number of ICOs were also conducted through not-for-profit foundations.

None of the surveyed regulators have permitted the operation of a fund or insurance product for the purpose of compensating investors in the event of losses. While this is true of the regulators' approach to capital losses from ICOs themselves, CCAF's 2nd Global Cryptoasst Benchmarking Study shows that mandatory refund procedures are becoming a norm amongst cryptoasset-related intermediated activities (e.g. exchange, or storage).[35]

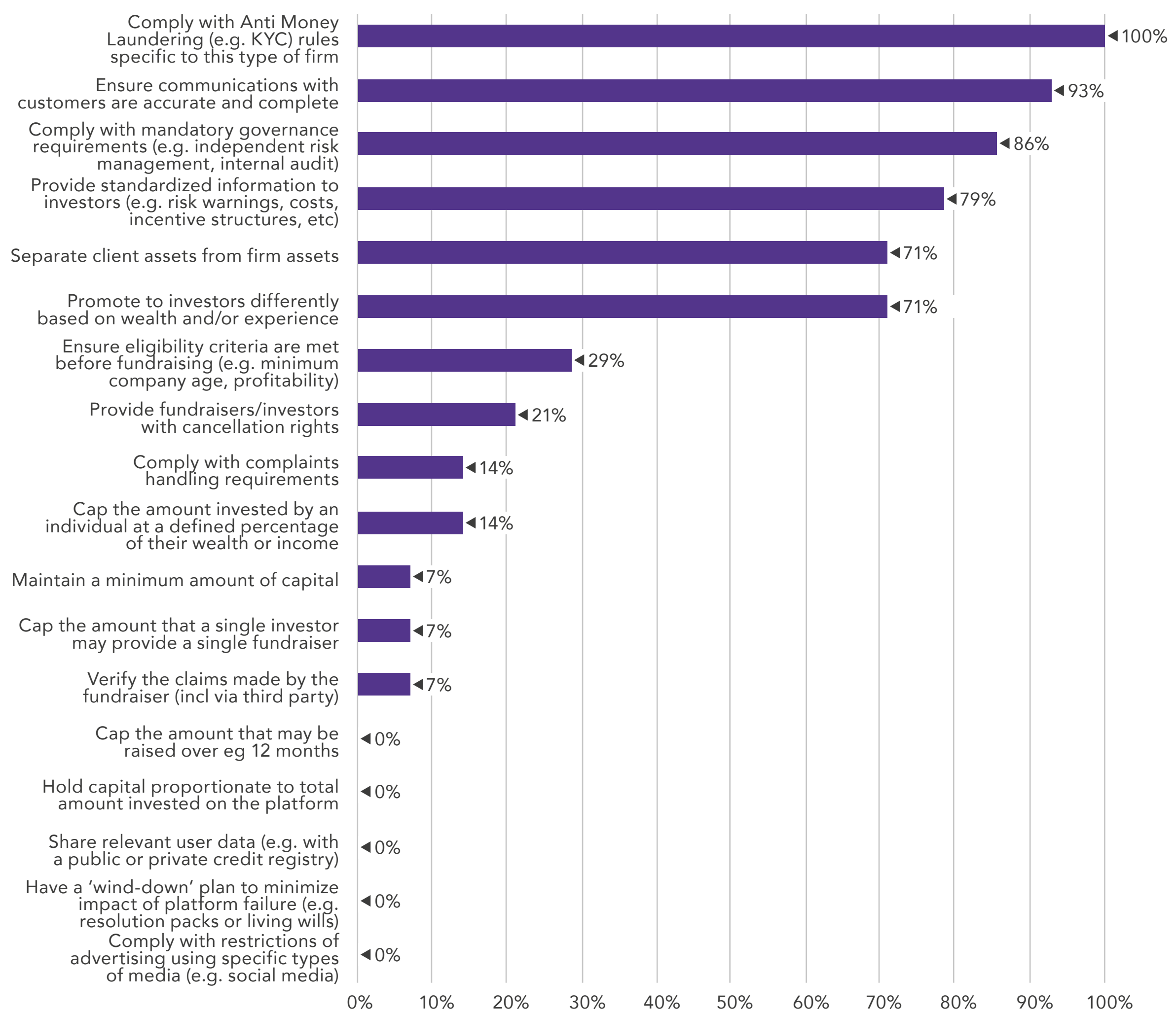
33 The reader should be aware that permissible activities and requirements discussed in this section only apply to ICOs whose underlying token does not qualify as a security or is not otherwise subject to a pre-existing regulatory framework. Where an issued token has been deemed to be a security, the regulatory framework for issuance and distribution will tend to be much more restrictive and/or prescriptive than what is described in this section.

34 Shifflett & Jones (2018) and Florysiak & Schandlbauer (2018) , op cit.

35 Rauchs et al (2018) '*2nd Global Cryptoasset Benchmarking Study*.' CCAF, December https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2018-12-ccaf-2nd-global-cryptoasset-benchmarking.pdf

It is possible that some of the responses provided by regulators in relation to ICO issuers' permissions in fact refer to permissions granted to intermediaries. For example, 43% of regulators in jurisdictions with a regulatory framework for ICOs referred to firms being allowed to hold client assets in order to facilitate transactions, which an ICO issuer is highly unlikely to do. This finding should be approached with caution and may reflect the presence of mandated intermediaries such as ICO platforms, or the local jurisdictions' approach to custody of digital assets. Similarly, other regulators reported that they permit the operation of secondary markets, which ICO issuers do not typically seek to do on a centralized basis. However, ICO issuers may envisage participants in an issuer's ecosystem ultimately being able to trade tokens on a secondary market. Regulators who do not prohibit this may have chosen to indicate that this is permitted.

Figure 4.6: Selected regulatory obligations for regulated ICOs



The main applicable requirements contained in existing regulatory framework highlight regulators' primary aim is to prevent fraudulent activities and address the risk of capital losses with respect to ICOs. This is illustrated in Figure 4.6.

All existing regulatory frameworks for ICOs require that issuers comply with AML provisions. As presented in CCAF's inaugural *Global Cryptoasset Regulatory Landscape Study*,[36] regulators' first response to the emergence of cryptoassets and related

36 Blandin et al. *op cit.*

activities has been to ensure compliance with AML obligations. This has been led by the Financial Action Task Force (FATF), which published its first AML/CFT guidelines for cryptoassets as early as 2015 to prevent the circulation of laundered cryptocurrency;[37] more recently the FATF provided an updated interpretation of FATF Recommendation 15 in relation to New Technologies, which further clarifies the treatment of tokens and crypto-asset service providers and will no doubt accelerate the development of local policies in this area.[38]

Regulatory requirements are primarily concerned with communication and information disclosure to potential investors and protecting them from abuse by better informed ICO insiders. Nearly all applicable regulatory frameworks (93%) contain a general requirement that communications with customers are accurate and complete, 86% apply mandatory governance requirements (e.g. independent risk management, internal audit) on issuers, and 79% require the provision of standardized information to investors (e.g. risk warnings, costs and incentive structures). These figures could be interpreted in particular as regulators addressing the irregularity and inconsistency of whitepapers used by fundraisers to advertise their product online.[39]

In the absence of regulation, whitepapers greatly differ in terms of quality, transparency, and the disclosure of risks, which may result in misleading communication, given the information asymmetries between issuers and investors. In fact most existing regulatory frameworks require that issuers treat investors differently based on their wealth and/or experience (71%) – this can range from banning promotions to most non-professionals to requiring that individual investors demonstrate their knowledge and understanding of the asset class before being allowed to invest.

Despite this, the regulatory frameworks currently governing ICOs are markedly less prescriptive than those for the crowdfunding sectors in many other ways. This is partly due to the disintermediated nature of token offerings but an expectation also exists among many regulators that investors should take responsibility for what are clearly high-risk investments. For example, only one of the regulatory frameworks examined mandates independent due diligence over the issuer. Few frameworks mandate cancellation rights or complaints handling arrangements for ICO investors. Other types of restrictions typically absent in the regulation of this activity include caps on the amount an issuer can raise, or the amount a single investor may provide to an issuer. Only one of the regulators that regulate ICOs has imposed an investment limit per round of offering.

Even these rare examples are likely to involve jurisdictions that impose the presence of intermediaries in the ICO process – for example mandating the use of a regulator-approved platform for all ICO issuers.

Importantly, none of the existing regulatory frameworks restrict promotion via specific media. This recognizes the fact that much of the communication and advertising in the cryptoasset industry occurs on social media (e.g. via Twitter and Reddit).

37 FATF (2015) 'Guidance for a risk-based approach to virtual currencies', FATF, Paris https://www.fatf-gafi.org/media/fatf/documents/reports/Guidance-RBA-Virtual-Currencies.pdf

38 FATF (2019a) '*The FATF Recommendation: International standards on combating money laundering and the financing of terrorism & proliferation*' Paris: FATF https://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/FATF%20Recommendations%202012.pdf and FATF (2019b) 'Guidance for a risk-based approach to virtual currencies and Virtual Asset Service Providers' FATF, Paris http://www.fatf-gafi.org/media/fatf/documents/recommendations/RBA-VA-VASPs.pdf

39 'Whitepaper' is the commonly used term for a key document accompanying an ICO, which among other things details the issuer's business plan and application roadmap, as well as the function, origination and mode of distribution of their tokens. Where an ICO is treated as a public offering of securities, regulators will want to be assured that a Whitepaper meets their expectations of a Prospectus.

Box 5: Mexico's FinTech Law and its approach to consumer protection

In March 2018, Mexico adopted an umbrella law on FinTech ("FinTech Law" - Ley para Regular las Instituciones de Tecnología Financiera, in Spanish), aiming to enable a fair and transparent environment for innovation, as well as promote the development and adoption of new technologies and business models in the country.

The Mexican FinTech Law positioned the country as a pioneer in establishing a comprehensive legal framework to foster the development of FinTech companies in a safe and sound way, based on the principles of (i) financial inclusion and innovation, (ii) financial consumer protection, (iii) financial stability, (iv) competition, and (v) anti-money laundering and combating the financing of terrorism.

The Mexican Fintech Law aims to regulate activities of several types of "disruptive" financial service providers, focusing on non-bank e-money issuers and operators of peer-to-peer lending (i.e. crowdfunding) platforms. In particular, the Law introduces:

i. a comprehensive legal framework for licensing and supervising FinTech companies
ii. legal underpinnings for a regulatory sandbox environment for innovative companies;
iii. concepts of open data, covering non-confidential/aggregate and transactional data, accessed through Application Programming Interfaces (APIs)
iv. provisions for virtual assets and their operations in Mexico.

The FinTech Law outlines at a high-level certain consumer protection requirements, and provides for further detail to be determined through secondary regulation. Thus in September 2018 and March 2019, secondary regulations were issued by the Mexican authorities, establishing provisions on the information to be disclosed on projects by crowdfunding platforms, as well as on cybersecurity and client's authentication. Additionally, in July 2019, secondary regulation introduced further transparency and disclosure requirements for FinTech companies[40], together with dispute resolution mechanisms.

The FinTech Law contains consumer protection provisions mainly with regard to disclosure and transparency, and safeguard of consumers' funds. For example, it establishes that transparency and disclosure provisions which apply to existing firms in Mexico also apply to FinTech companies. FinTech companies must disclose all the information needed to ensure consumers identify the relevant features and risks associated with the new products and services. In this context, crowdfunding platforms must provide adequate information to consumers, related to the selection criteria for fundraisers, according to rules established by the CNBV[41]

40 '*Disposiciones de carácter general de la CONDUSEF en materia de transparencia y sanas prácticas aplicables a las instituciones de tecnología financiera*', of July 9, 2019.

41 The following authorities play a relevant role in regulating and supervising FinTech companies in Mexico: *Secretaria de Hacienda y Credito Publico* – SHCP (Ministry of Finance), *Comision Nacional Bancaria y de Valores* – CNBV (National Banking and Securities Supervisor), *Banco de México* (Central Bank of Mexico), and *Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios Financieros* – Condusef (National Commission for the Protection and Defense of Users of Financial Services).

At the same time, a number of potential asymmetries are yet to be addressed in the context of the Law. This includes defining deposit insurance schemes, and data protection requirements. While FinTech companies are subject to the general Personal Data Protection Law in Mexico, specific requirements on personal data protection for FinTech companies are yet be issued, and are due in 2020.

4.3 Implications of regulatory choices: two discussions

It is difficult to quantify the impact of regulation on industries and their users, or to highlight through empirical methods the most important differences between two or more regulatory frameworks.

For this purpose two simple metrics were constructed that consisted of a simple count of the number of permitted activities (out of the range cited in Chapter 4.1) and a simple count of the number of obligations (including implied obligations such as a cap on exposures). While these measures are crude, they provide a simple and useful quantification of the complexity and restrictiveness of regulation.

Discussion 1: Are bespoke regulatory frameworks 'light-touch' regimes?

While it is generally accepted that proportionate and flexible regulation can support innovation, different regulators may reach different conclusions as to how much technology-enabled financial services providers can be accommodated without compromising other objectives. Evidence to date on the performance of major technology companies ('BigTechs') in the digital lending market suggests that they are much quicker to take market share from incumbents in more lightly regulated markets.[42] If regulators look to those jurisdictions with the largest or fastest-growing markets for good practices, and regulation is inversely related to growth in the medium-term, then overly light-touch regulation could come to be seen as good practice for some time before its limitations become evident.

On average, bespoke regulatory frameworks for alternative finance provide for a wider range of permitted activities than pre-existing frameworks, but also create more explicit obligations. In the case of equity crowdfunding and ICOs, bespoke frameworks do not differ significantly from exemption-based regulatory frameworks. However in the case of P2P lending, bespoke frameworks are indeed more demanding and provide for a greater range of permitted activities.

To illustrate this at a high-level, it is possible to compare the number of obligations reported for bespoke and unmodified,[43] pre-existing frameworks. Out of a maximum of 20 types of requirements that respondents were prompted with, the average bespoke framework for P2P lending or ECF featured 9, against 5 for pre-existing ones that had not been adjusted in some way. For ICOs, the balance was 5 to 3.

Compared to pre-existing regulation, bespoke and exemption-based regimes for P2P regulation tend to emphasize creditworthiness checks for borrowers and exposure caps for investors (see Figure 4.7). Bespoke and exemption-based regimes also tend to emphasize online marketing requirements, client money protection and wind-down planning, as well as data protection and cancellation rights.

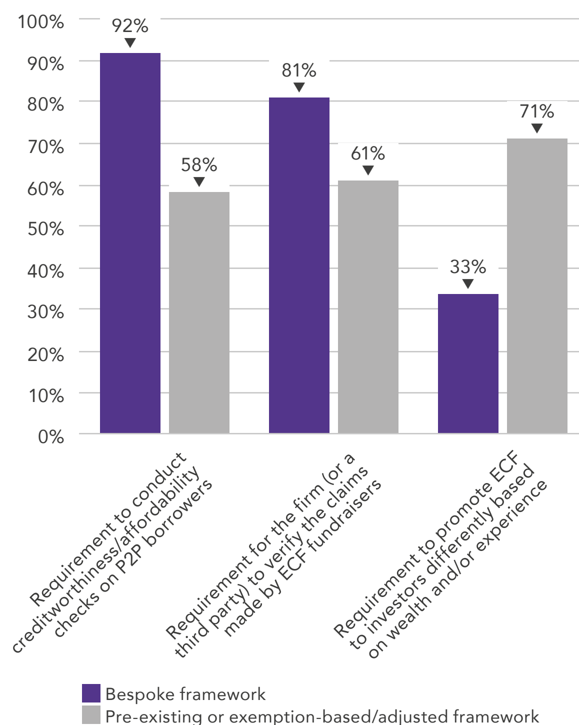
In the equity crowdfunding space, bespoke and exemption-based regimes tend to emphasize investor exposure and fundraising caps, due diligence requirements and social media advertising rules. Counterintuitively, bespoke ECF regimes are less likely than pre-existing frameworks to classify

42 Bank of International Settlements (2019) '*Big Tech in Finance: Opportunities and Risks*' in BIS Annual Economic Report 2019 https://www.bis.org/publ/arpdf/ar2019e3.pdf

43 This does not include responses from regulators who claimed that a pre-existing framework applies in their jurisdiction, but 'with exemptions or amendments' specific to the sector.

investors into groups based on their relative sophistication or wealth. The effect of this is that less sophisticated investors are less likely, in bespoke regimes, to be prohibited from investing in ECF, to be restricted in the amount they can invest relative to professional investors, or to enjoy additional protections (such as, for example, access to an alternative dispute resolution mechanism) that are not available to professional or highly experienced investors.

Figure 4.7: Differences between bespoke and other regulatory frameworks: selected obligation types for P2P lending and equity crowdfunding



Discussion 2: Does government policy bias the development of alternative finance regulation?

A similar approach can be taken to analyzing regulatory frameworks that are influenced by broader government economic and industrial policies. Where alternative finance activities are regulated, regulators that facilitate government policy either due to statutory requirements or due to strategic considerations tend to allow a broader range of activities to take place on ECF platforms, and allow ICO issuers to undertake a broader range of activities than regulators that operate completely independently of government policy (Figure 4.8a). Regulators aligned to government policies, however, also tend to place more stringent obligations on ECF platforms (Figure 4.8b).

Figure 4.8a: Average number of permitted activities in regulated markets, by activity and presence of government policy mandates

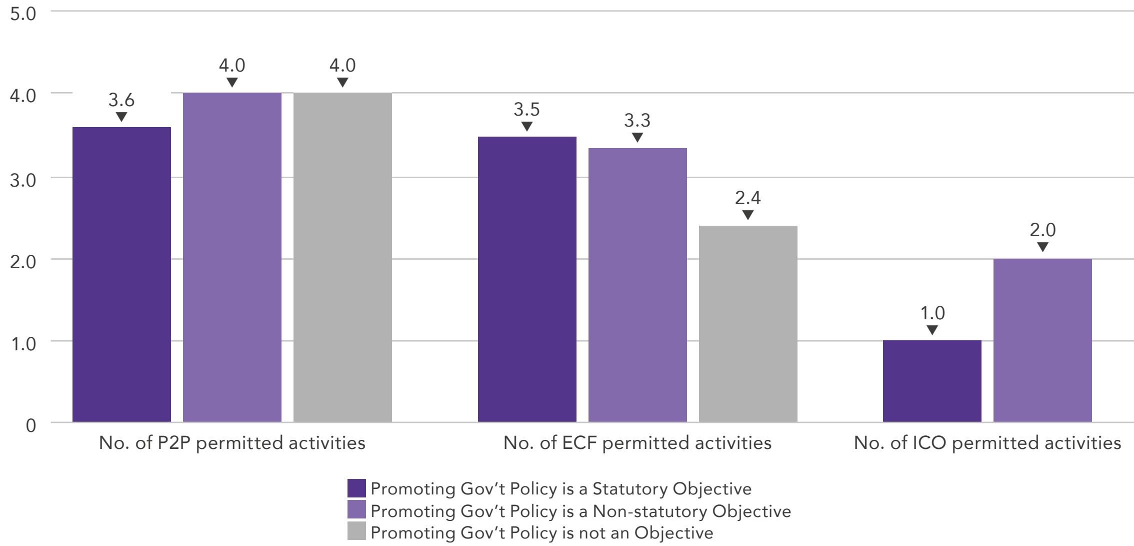
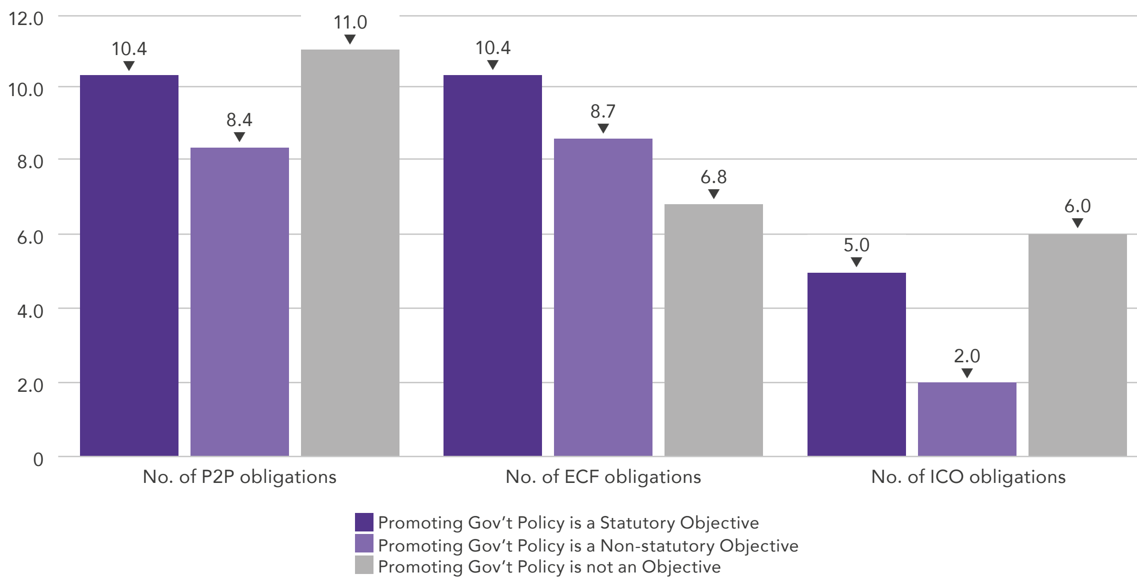


Figure 4.8b: Average number of regulatory requirements in regulated markets, by activity and presence of government policy mandates



These findings are essentially qualitative and need to be interpreted with caution, as sample sizes are small and many potential confounding variables have not been controlled for. If they could be replicated, however, they would suggest that a mandate to promote government policy does not necessarily lead to a 'light touch' regulatory framework.

5. The supervision of alternative finance

5. The supervision of alternative finance

5.1 The perceived risks of alternative finance

Survey respondents were asked to identify up to five risks which they see as the most important for their organization with respect to peer-to-peer/marketplace lending, equity crowdfunding, and initial coin offerings (ICOs). This allowed the research team to gauge whether there are common risks, whether between activities or even between jurisdictions. Figure 5.1 below demonstrates how regulators rank these risks, broken down by whether they have remit over the relevant alternative finance activity.

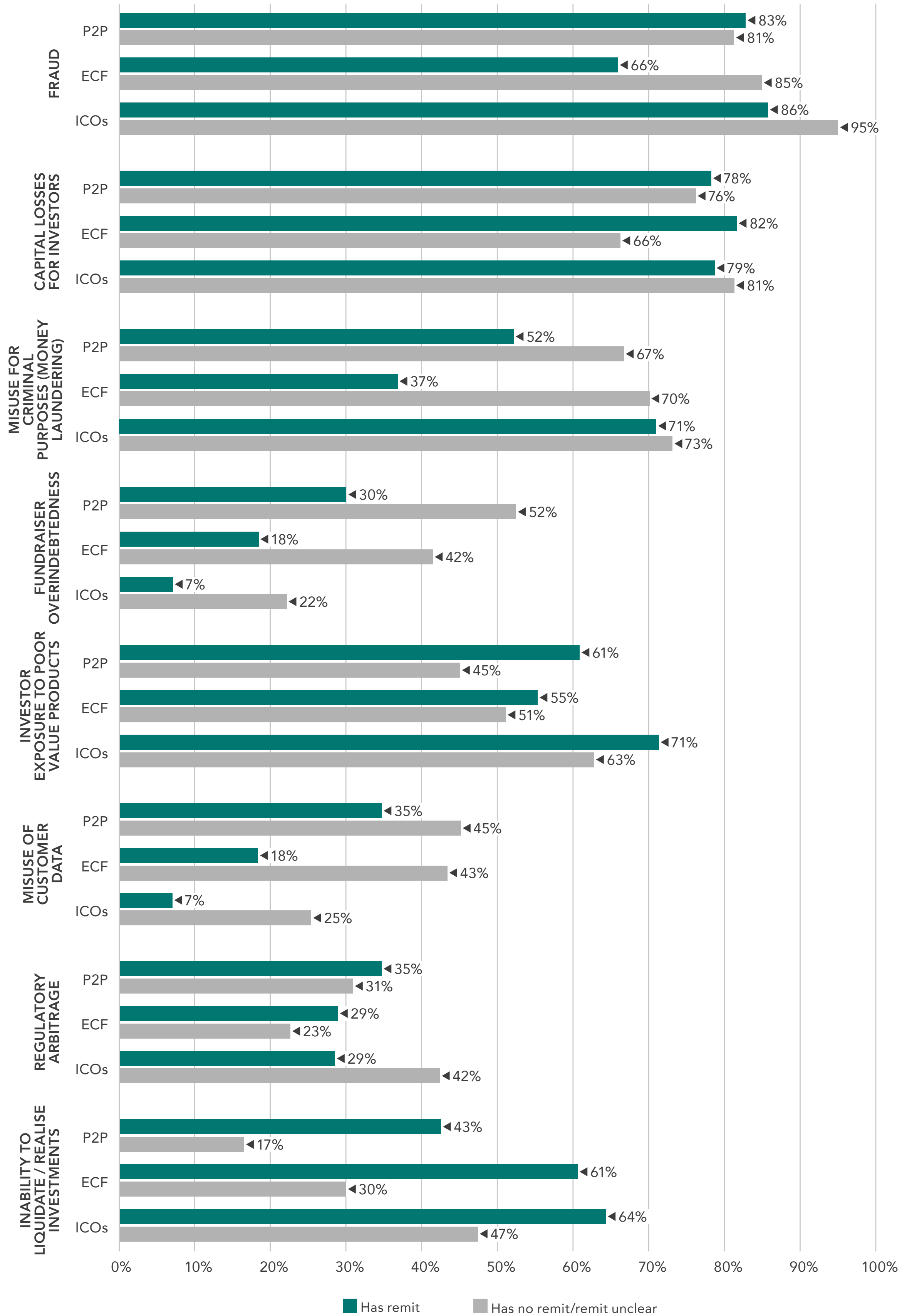
Figure 5.1 shows that the same three risks are identified as most important across all three alternative finance activities. For regulators without an explicit remit over the three activities, these are fraud, capital losses and money laundering. Among those regulators with powers over the relevant activities, the third most common risk is instead exposure to poor value products. ICOs were generally seen by respondents as having a much higher risk profile, with strong concentrations of fraud, money laundering and liquidity risks.

Typically, those regulators without direct responsibility for supervising the activities in question devote greater attention to the risk of abuse for the purposes of fraud or money laundering, as well as the risk of data loss. Their regulatory peers who do have supervisory responsibilities are comparatively more concerned about the impact of exposing retail investors to highly illiquid assets. This contrast is particularly strong in the case of equity crowdfunding.

Given the nascent status of these alternative finance activities in many jurisdictions, it is perhaps surprising that the risk of regulatory arbitrage is ranked as quite low. This includes the case of ICOs, which, as documented in CCAF's 2019 cryptoasset regulatory landscape study, regulators tend to see as posing a risk of regulatory arbitrage.[44] It may be that those regulators most confident in determining the level of this risk are also the most likely to have adequate measures in place against it.

44 Blandin et al (2019) op cit

Figure 5.1: Regulators' ranking of alternative finance risks



5.2 The supervisory resources dedicated to alternative finance

5.2.1 Human Resources

It was not possible, due to item non-response in certain major markets, to provide a robust global estimate of the supervisory workforce. Overall, and as of 2019, those regulators that did respond reported a ratio of six P2P firms per supervisor (down from twelve in 2017), but only about two ECF platforms and ICOs per supervisor. Figure 5.2 illustrates this in further detail.

Figure 5.2: Evolution of firm-to-supervisor ratio by activity
(all jurisdictions where data were available)

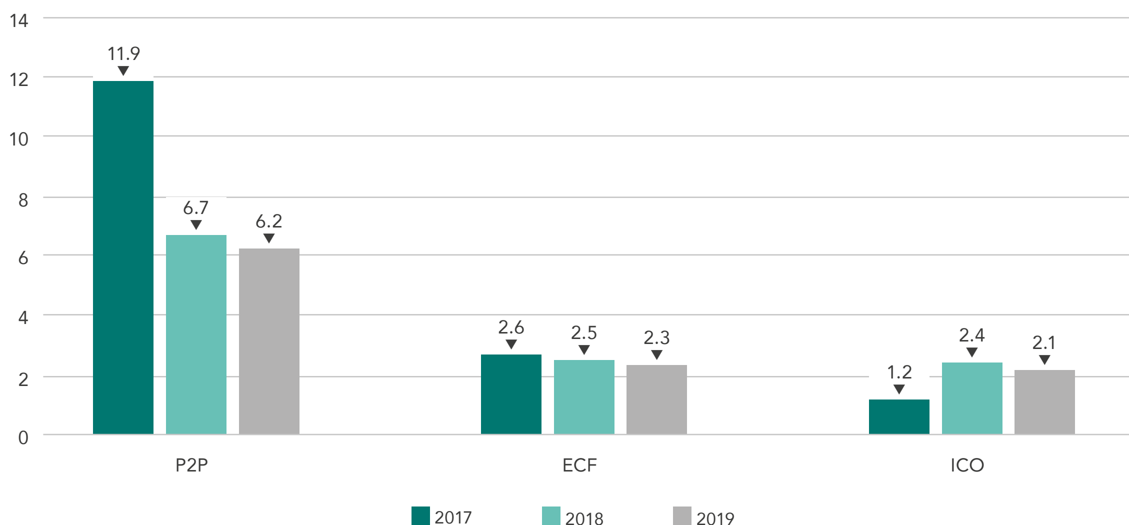
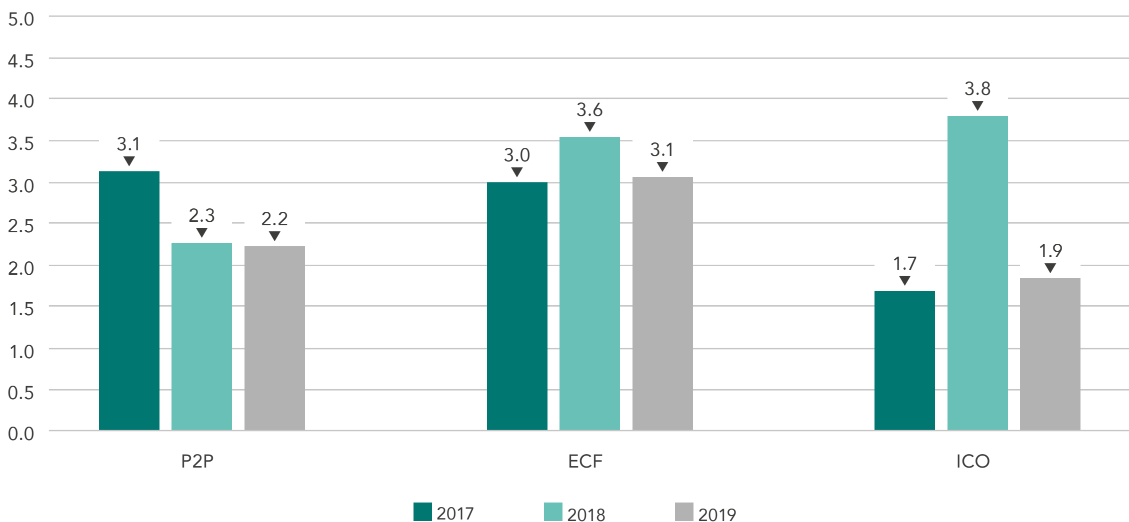


Figure 5.3: Evolution of firm-to-supervisor ratio by activity (all jurisdictions where the activities were regulated, and data were available)

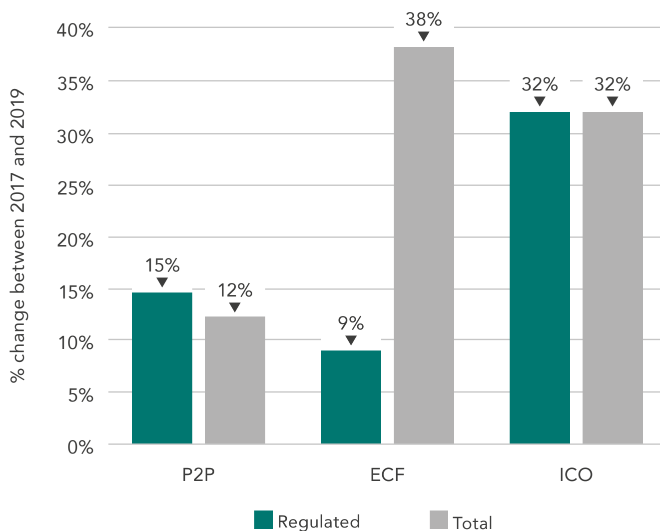


Jurisdictions that formally regulate each of the three activities account for most of this human resource. The demand on supervisory resource is greater where activities are regulated (see Figure 5.3), with each supervisor typically covering just two to four firms.[45] Where alternative finance activities are unregulated or banned, regulators' resources are likely to be primarily targeted at enforcement, resulting in a disproportionately low number of firms per supervisor. It is this pattern that accounts for the relatively large number of ICO 'supervisors' in markets where the latter are unregulated.

In markets where an activity is not regulated, it is still possible for activities to be enforced against if they are considered to be fraudulent, or if they inadvertently cross into the perimeter for a very different regulated activity. For example, a P2P lending platform might fall afoul of rules regulating collective investment schemes or deposit-taking, depending on its structure.

5.2.2 Trends in supervisory resource investment

Figure 5.4: Trends in supervisory staff dedicated to each activity type (in those jurisdictions that provided data)



As Figure 5.4 shows, the absolute number of supervisors of peer-to-peer/marketplace lending platforms has grown by around 15% in regulated markets and 12% overall between 2017 and 2019 – where data were available. This is a slower pace of change than for the other two alternative finance activities. The ratio of P2P platforms per supervisor is also decreasing, as seen in Figure 5.2 and 5.3. These findings may be explained partly by the greater maturity of this sector and partly by the fact that some jurisdictions have only just begun regulating these platforms and may begin with higher levels of supervisory resource.

The firm to supervisor ratio might not necessarily rise quickly as a sector matures due to consolidation. Underfunded or poorly run firms can survive for years in unregulated sectors; most, however, will not persist if they are required to be licensed and observe higher standards of conduct or increased capital requirements. One example of this is the UK FCA's experience of licensing firms operating in the marketplace lending sector. Between mid-2014 and mid-2018, the regulator had licensed 63 firms,[46] while 310 had withdrawn their licensing applications.[47] This was despite firms already in the market in 2014 being allowed to operate for some time under temporary licenses ("interim permissions").

The rate of enforcement action (per 100 firms) taken in the peer-to-peer/marketplace lending sector differs based on regulatory approach. Although more than 75% of all enforcement against P2P platforms appears to be taking place in markets where the sector is not

45 The ratios reported here are averages of jurisdiction ratios, sourced from the subset of regulators who provided estimates of both firms and supervisors for each year. Large, non-reporting jurisdictions are likely to have much higher firm-to-supervisor ratios in 2019, but not necessarily in 2017.

46 FCA (2018a) 'Loan-based ('peer-to-peer') and investment-based crowdfunding platforms: Feedback on our post-implementation review and proposed changes to the regulatory framework' CP18/20 https://www.fca.org.uk/publication/consultation/cp18-20.pdf

47 FCA (2018b) 'Freedom of Information / Right to Know Request FOI5783,' 13 June https://www.fca.org.uk/publication/foi/foi5783-response.pdf

explicitly regulated,[48] this reflects the fact that most firms are concentrated in such markets. When standardized against the size of the firm population, the rate of enforcement against this activity is around 50% higher where a regulatory framework is in place – regulators reported roughly one historical enforcement case (since 2017) for every 10 currently active firms.

Equity crowdfunding

Total human supervisory resources devoted to equity crowdfunding are rising fast, growing by about 38% between 2017 and 2019 in those jurisdictions that provided data. This was justified by the increasing attention the sector received from policymakers over the period and the greater likelihood of the activity being regulated in the first place. The ratio of platforms to supervisors is also higher, in this subset of jurisdictions, for equity crowdfunding than for P2P lending, at over 3:1 in regulated markets.

In proportion to the total firm population, ECF enforcement cases are common – across both regulated and unregulated markets their number was equal to 18% of the population of active firms. As with P2P lenders, however, it is the number of enforcement cases in unregulated ECF markets that makes up most of the global total, and enforcement in regulated markets was relatively rare, at 7% of the total ECF population. The very high incidence of ECF enforcement in unregulated markets may in part be explained by the fact that equity crowdfunding involves the marketing of securities; it is easy for at least some part of the ECF value chain to stray into more traditional regulated activities, and regulators have many more avenues for addressing misconduct than they might for other sectors.

Initial Coin Offerings

There has been a sharp increase in the number of Initial Coin Offerings (ICOs) taking place over the last three years. The total number of new ICOs in the jurisdictions that provided data more than tripled from 2017 (103) to 2018 (360), and will likely exceed the 2017 total in 2019 (83 as of June). Although this estimate is based on a subset of comparatively smaller markets, it reflects the trends observed through CCAF's direct monitoring of ICO activity.[49]

In those jurisdictions for which data were available, the total number of supervisory staff dedicated to ICOs has increased significantly, growing by about a third between 2017 and 2019. This reflects the increasing attention regulators are paying to the sector, particularly given the complexity of the underlying technology and the specificity of each offering. However it might also reflect a strong emphasis on enforcement over supervision. The mean reported ratio of 2.1 ICOs per supervisor[50] almost certainly takes into account person-hours dedicated to enforcement.

The number of enforcement cases related to ICOs is significant, but not disproportionately high. In the handful of regulated markets covered by survey responses, the total number of historical enforcement cases reported is equal to around 8% of the total number of ICOs since 2017. By contrast the equivalent ratios for P2P/marketplace lending and equity crowdfunding are approximately 10% and 7% respectively. In unregulated markets, the total number of ICO enforcement cases comes up to 20% of the historical number of ICOs, but, as an appropriate comparison, the equivalent ratio for P2P lenders in unregulated markets is around 15%.[51]

48 Even where a sector is unregulated, the authorities may still take action if a firm's activity is considered to be fraudulent, or strays into the perimeter of another regulated activity (e.g. deposit-taking). Hence enforcement action is common in jurisdictions that do not formally regulate a sector.

49 Rauchs et al 2018, op cit.

50 Note that regulators representing the largest ICO markets typically did not provide supervisor numbers, so this ratio is very likely an underestimate.

51 These ratios must not be interpreted as percentages of current operators who have been subject to enforcement action. The total population of active firms is used in order to standardize enforcement figures only. If firms subject to enforcement action are more likely to exit the market, then the ratios quoted here should be overestimates of the share of operators who have ever been subject to enforcement action, and even higher overestimates of the share of existing firms who have been subject to enforcement. These distortions will be higher for P2P lending and equity crowdfunding, as the denominator of the ratio is net of all failed firms, whereas that for ICOs it is gross of failed issuers.

5.3 The impediments to effective supervision and regulation of alternative finance

Regulators responding to the survey were given a list of specific impediments to the effective supervision and regulation of alternative finance activities, as set out in Figure 5.5 below, and asked to select the ones affecting their own work.

Foremost among these is limited technical expertise; over three quarters of regulators with responsibility for at least one alternative finance activity see this as an obstacle. As one regulator says:

"We realize the fact that technology is changing financial markets and there is urgent need for us as a financial market regulator to acquire tools and capabilities to match the trend of technological innovations."

Figure 5.5: Impediments to regulation or supervision specific to alternative finance, as compared to "traditional" financial services activities

IMPEDIMENTS TO EFFECTIVE SUPERVISION	
Limited technical expertise within the regulator(s)	65%
Need to co-ordinate the activities of multiple regulators	38%
Limited funding / resources for the regulator(s)	48%
Small size of firms/industry; can't justify intense supervision	29%
Regulators' jurisdiction over this activity is unclear or limited	41%
Not applicable – we are not actively supervising	25%
Lack of usable / reliable data on firm activities	34%
Other, please specify	7%

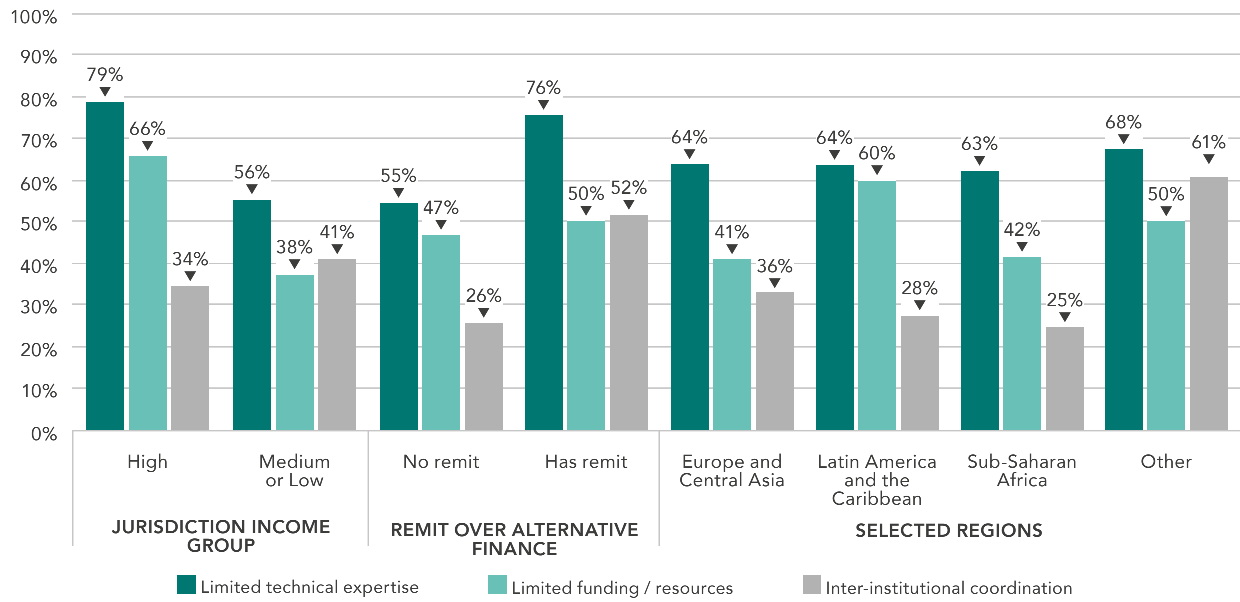
Limited funding and resources were also frequently cited as constraints and, notably, were more likely to be cited by regulators in higher-income jurisdictions. One regulator stated:

"We have been facing limited human resource and capacity building issues for a while. The pool of resources is very thin in this jurisdiction".

Regulators in high income jurisdictions are also more likely to worry about the adequacy of technical expertise (79%), or question whether they have the resources to regulate or supervise appropriately (66%). This could be explained by the fact that these regulators preside over large and varied financial ecosystems and are consequently dealing with more sophisticated alternative finance models. Furthermore, these regulators are more likely to be responsible for regionally or globally significant financial institutions and markets, which may render it more difficult to prioritize the supervision of alternative finance activities.

Comparing those regulators with remit over alternative finance with their peers that do not have direct responsibility for these sectors also points to practical obstacles to effective regulation. For example, those with a remit are more than twice as likely to point to coordination with fellow regulators as a challenge.

Fig 5.6: Selected obstacles to alternative finance supervision, by jurisdiction's income level, region and regulators' remit.



6. Regulatory Innovation

6. Regulatory Innovation

Chapter 5 discussed in some detail the constraints that regulators must operate under, and how these make supervision of alternative finance activities more challenging. Only a small part of this challenge can be overcome by increasing regulators' budget and headcount.

Many regulators around the world have instead responded to the challenge of balancing the benefits and risks of technology-enabled financial innovation by innovating themselves. These regulatory innovation initiatives include innovation offices, regulatory sandboxes, and RegTech/SupTech programs, which make use of advanced technologies to improve financial supervision.[52]

6.1 Regulatory innovation initiatives - their activity

Regulatory innovation initiatives are still relatively rare. Among the sample of 111 jurisdictions, 73 did not have any operational regulatory innovation initiatives. However, a significant number expected such initiatives to be operational in the next 12 months or were actively considering initiatives. Figure 6.1 below illustrates the prevalence of these regulatory innovation initiatives among respondents.

Figure 6.1: Prevalence of regulatory innovation initiatives among respondents

	INNOVATION OFFICE	REGULATORY SANDBOX	REGTECH/SUPTECH
Yes - Currently Operational	26%	22%	14%
Yes - Forthcoming (within the next 12 months)	3%	9%	2%
Currently Under Consideration	13%	14%	27%
Not in Place	48%	46%	42%
Not applicable	11%	9%	14%

An innovation office is a dedicated function within a regulator which engages with - and provides regulatory clarification to- innovative financial services providers. This can help to reduce regulatory uncertainty through providing a channel for innovators to engage with regulators to better understand regulatory frameworks and their requirements. Innovation offices might also be used by regulators to inform policymaking.

Innovation offices are the most common regulatory innovation initiatives, with just over a quarter of respondents highlighting that such were in place. High-income jurisdictions are the most likely to report having an innovation office (more than 40% of the survey sample). It is possible that there is a perception that they are resource intensive, and that this accounts for the lower incidence among medium and low-income jurisdictions, however this is not necessarily the case when compared to other regulatory innovation initiatives (see Box 6). Innovation offices also appear to be more common where regulators have a specific remit for at least one alternative finance activity, suggesting a deliberate skew towards assisting challengers and new market entrants.

Regulatory sandboxes are formal regulatory programs that allow market participants to test new financial services or models with live customers, subject to certain safeguards

52 See UNSGSA FinTech Working Group and CCAF. (2019). Early Lessons on Regulatory Innovations to Enable Inclusive FinTech: Innovation Offices, Regulatory Sandboxes, and RegTech. Office of the UNSGSA and CCAF: New York, NY and Cambridge, UK. Available at: https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/early-lessons-on-regulatory-innovation-to-enable-inclusive-fintech/#.XPEhHYhKhPY

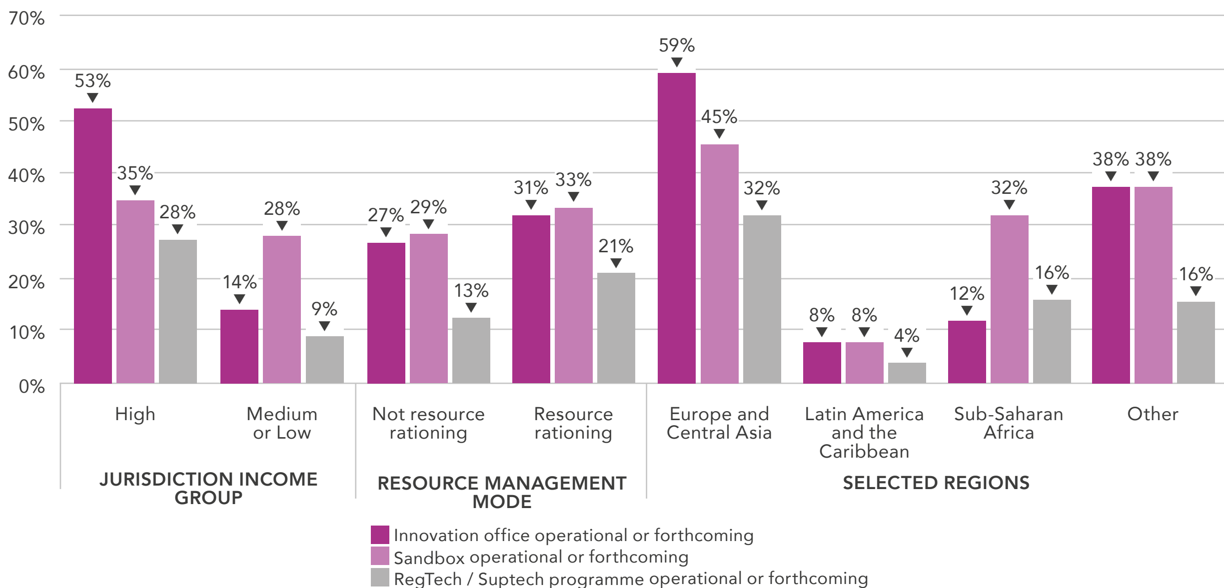
and oversight. Regulatory sandboxes have become increasingly popular with policymakers around the world, with just under a quarter of respondents highlighting that they have one in place. Furthermore, one in ten regulators are planning to launch a sandbox in the next 12 months, with a further 14% currently considering whether to do the same.

This is likely to be driven by a degree of herding; the survey findings demonstrate how regulatory benchmarking drives change and convergence among jurisdictions in terms of the types of rules applied to alternative finance. The same could be argued in relation to regulatory innovation – regulators look to a small number of regional and global leaders for good practices.

As a result, and despite capacity constraints, regulators in lower-income jurisdictions, particularly in Sub-Saharan Africa, are more likely to have a regulatory sandbox than an innovation office. However, these sandboxes may be being used to develop regulatory frameworks and/or understand alternative finance – a rebranding of 'test-and-learn' environments which already have a long history of successful operation in these regions.

Similarly, regulators might be reluctant to commit to a particular type of innovation until it has been tested by a peer regulator they benchmark against. The relative absence of regulatory innovation programs in Latin America and the Caribbean might be one example of this dynamic.

Figure 6.2: Incidence of regulatory innovation by jurisdiction's income level, resource management mode and region.

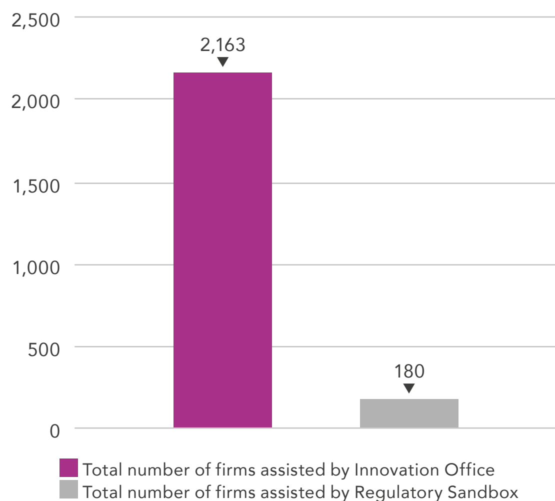


As Figure 6.3 shows, innovation offices support a much higher number of firms than regulatory sandboxes. Respondents had collectively supported over 2,000 firms through innovation offices but less than a tenth of that (180) total through sandboxes. This ratio holds even for those jurisdictions that have both types of initiatives in place – the median regulator reported ten times as many Innovation office alumni as Sandbox tests.

Since sandboxes are a more recent addition to the regulatory toolkit than innovation offices, this margin might become narrower with time. However, even the longest-running sandbox programs are highly selective and resource intensive compared to the typical innovation office and cannot reach the same number of firms. For example, the UK Financial Conduct Authority's "Direct Support" function within the regulator's

innovation office has supported 686 firms, compared to a total of 110 regulatory sandbox tests completed or ongoing to date.[53]

Figure 6.3 - Number of firms supported by innovation offices and regulatory sandboxes



Clearly each type of initiative provides a different function and benefits, but such a finding is instructive for those regulators considering how best to use their limited resources to most efficiently achieve impact. Proponents of the sandbox might reasonably argue that 'policy-testing' orientated sandboxes are not necessarily intended to increase the number of innovative firms supported but to facilitate policy learning, design and review.

6.2 RegTech and SupTech in focus

SupTech is the use of innovative technologies by regulators to tackle regulatory or supervisory challenges; it is a subset of RegTech, which includes any use of technology to match structured and unstructured data to information taxonomies or decision rules that are meaningful to both regulators and the firms they regulate, in order to automate compliance or oversight processes.

RegTech and SupTech programs were the least common regulatory innovation initiatives. About one in seven (14%) of the regulators surveyed had such a program in operation, and a review of the key SupTech technologies suggests that between 8% and 18% of jurisdictions surveyed employed each of them (see Figure 6.4). The lower uptake of SupTech by regulators, compared to other types of regulatory innovation, does not appear to be driven by lower income jurisdictions. Indeed, one European regulator confessed that:

"Our main deficiency in the process have been the lack of capacity both in the terms of staff available, but also the funds to develop our IT systems in order to keep up with the markets.[…] we would require some form of support in order to increase [capacity] both in the sense of staff education and IT infrastructure development."

Nevertheless, RegTech and SupTech programs are the most likely form of regulatory innovation initiative to be considered by respondents for future development, with regulators in more than a quarter of all jurisdictions (27%) considering launching such a program. The securities regulator in one African jurisdiction summarized their interest in a prospective RegTech / SupTech initiative thus:

"We are interested in developing RegTech solutions to enable us to monitor our regulated institutions, better protect investors and foster financial inclusion."

Such enthusiasm is reflected among respondents who already have programs in place, of whom none expressed doubts about the impact to date. This compares favorably with innovation offices and regulatory sandboxes where 8% and 5% of respondents with such an initiative in place cited only limited impact to date.

What is clear is that those regulators which have established RegTech or SupTech programs are particularly enthusiastic about using particular technologies to help them do

53 FCA (2019): *The Impact and Effectiveness of Innovate* April https://www.fca.org.uk/publication/research/the-impact-and-effectiveness-of-innovate.pdf

their job. Figure 6.4 shows that 60% of such regulators are employing machine learning, with almost half exploring blockchain/ Distributed Ledger Technology.

Figure 6.4: Technologies employed by regulators with an operational RegTech/SupTech program

TECHNOLOGY	% OF JURISDICTIONS EMPLOYING (CONDITIONAL UPON HAVING OPERATIONAL REGTECH/SUPTECH PROGRAM)	% OF ALL JURISDICTIONS
Machine Learning (Supervised & Unsupervised)	60%	18%
Blockchain/Distributed Ledger Technology	47%	14%
Natural Language Processing	40%	8%
Data transfer protocols (e.g. APIs)	40%	18%
Direct data pull or push systems	33%	15%
Machine-readable or executable regulation	33%	12%
Cloud Computing	33%	12%
Robotic Process Automation	20%	8%
Bio-metrics (e.g. Digital ID)	13%	10%
Other	13%	15%

It is possible to compare these findings with recent evidence on the prevalence of technologies in the offerings of RegTech vendors, as presented in CCAF's inaugural *Global RegTech Industry Benchmark Report.*[54] Applications of DLT are much more prevalent in the applications tested by supervisors than in the overall product offering of the industry. Nearly half of those regulators which have an operational RegTech/SupTech Program (47%) employ DLT, versus just 14% of RegTech vendors in the CCAF Benchmark Report.[55] Regulators might additionally have a more pronounced preference for on-premises deployment of RegTech / SupTech solutions, as opposed to utilizing Cloud Computing, than the broader population of RegTech users do. One third of those regulators which have an operational RegTech/SupTech Program (33%) claimed to employ Cloud Computing, in contrast to two thirds (66%) of RegTech vendors.[56] Otherwise, the broad technology mix in SupTech solutions seems to be comparable to that for the broader RegTech industry.

Those regulators who opted to provide more details in relation to their RegTech or SupTech programs cited in particular the development of automated and standardized data collection systems, including web scraping for unstructured public data; document and casework management systems; and risk-based supervision and surveillance systems, including some utilizing Big Data.

The CCAF's first benchmark report into the RegTech sector also discusses in more detail how the 20% of RegTech firms that have an offering aimed at supervisors' use cases differ from their peers that do not target the SupTech market.[57] SupTech solutions were more likely than RegTech products aimed at the private sector to employ deep learning, graph analysis, NLP and data transfer protocols. From a functional perspective, SupTech offerings were more likely to incorporate management information tools, automated control audits and documentation, and to be aimed at building an end-to-end, fully automated compliance process. Finally, from a thematic perspective, SupTech use cases were particularly likely to be focused on regulatory reporting, governance and accountability.

54 Schizas et al (2019) *The Global RegTech Industry Benchmark Report*, September https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2019-ccaf-global-regtech-benchmarking-report.pdf

55 Ibid.

56 ibid.

57 Ibid.

6.3 Regulatory innovation initiatives - their perceived impact

Among those regulators who have developed regulatory innovation initiatives, most have seen at least some benefits. However, the type and magnitude of the impact perceived varies widely between the different initiatives, as illustrated by Figure 6.5 below.

Figure 6.5: Perceived impact of regulatory innovation initiatives

	REGULATORY INNOVATION STATUS			
	HAS OPERATIONAL INNOVATION OFFICE	HAS OPERATIONAL SANDBOX	HAS OPERATIONAL REGTECH/ SUPTECH INITIATIVE	HAS NO OPERATIONAL REGULATORY INNOVATION INITIATIVES
Improved our understanding of key technologies.	92%	76%	93%	0%
Built stronger relationships / a stronger network with this sector.	77%	62%	71%	0%
Issued industry guidance to clarify our expectations	77%	57%	64%	0%
Improved regulatory requirements or framework	54%	57%	57%	0%
Developed an improved risk diagnostic framework	27%	24%	29%	0%
Too Early to tell	23%	38%	21%	0%
Improved reporting framework	19%	24%	21%	0%
Limited impact to date	8%	5%	0%	0%
Other, please specify	4%	5%	7%	0%
None	0%	0%	0%	0%

The strongest impact across all three initiatives is that they have strongly supported regulators improving their understanding of key technologies. However, this effect is felt more strongly among regulators who operate innovation offices and RegTech/SupTech initiatives compared to those regulators who operate regulatory sandboxes. This is an interesting finding given that many regulators' professed desire for a regulatory sandbox is to help them understand the technologies which financial innovators are seeking to employ.

The next most strongly felt impact is that of building stronger relationships or a network with the sector. This was most keenly felt by those regulators with innovation offices, narrowly followed by those with a RegTech/ SupTech initiative and a regulatory sandbox. The benefits of clarifying the regulator's expectations of industry are also most keenly felt by those with an innovation office. Improved relationships and communications with industry may not seem like very tangible benefits, but as one African regulator explained, they are instrumental to driving change within firms, including incumbents:

"Stringent regulatory and compliance requirements have previously been more of an obstacle than a facilitator for potential innovators […]. Many institutions are now rethinking their business models due to regulatory pressures and this has also affected their technology infrastructures. Faced with tighter budgets, firms are now more willing to turn to innovative technology to improve efficiency and reduce costs. The [regulatory] sandbox would offer a home to these new innovations that will translate to ameliorated business."

Among those regulators with sandboxes, it is notable that 38% feel that it is too early to assess the impact of their sandbox initiatives, while another 5% report limited impact to date. This is not a surprising result, with regulatory sandboxes requiring considerable periods of design and implementation, combined with their relatively recent emergence.

Box 6: Innovation offices and regulatory sandboxes in perspective

This study has highlighted that policymakers in many jurisdictions are seeking to change their regulatory framework for alternative finance. As noted above, fully half of respondents were planning to do so in the next two years for equity crowdfunding *alone*, and this is just one area of alternative finance.

The next step is then deciding what to do and how to do it. Limited technical expertise within a regulator was cited as the largest challenge or obstacle to regulatory innovation, with over 75% of regulators with a remit for FinTech citing this. Limited funding or resources is also a significant issue, with 50% of respondents citing this as a challenge or obstacle.

Many regulators therefore face a conundrum. They understand that there is a need to take action, but have limited technical expertise and resources to do so – and cannot risk building a regulatory framework that they can't subsequently adequately supervise.

With this in mind, regulators have been turning to each other for input, guidance and inspiration. Figure 3.9 illustrates that the primary trigger of regulatory change is reviewing another jurisdiction's approach to regulating alternative finance activities. The analysis of other jurisdictions is also the most common element of the regulatory change process. Regulators who undertook this process analyzed the regulatory frameworks of other jurisdictions in fully 90% of cases across all three types of alternative finance.

It is therefore perhaps unsurprising that regulatory sandboxes have begun to proliferate around the world. Sandboxes have captured the imagination of regulators and have to some extent become the 'default' regulatory response to FinTech. There are now at least 50 regulatory sandboxes in operation or under development around the world.[58] It is also notable that the most benchmarked jurisdictions within a region (as per **Figure 3.11**) all either have a regulatory sandbox or are planning to implement one.

However, the results of this survey provide evidence for caution against this trend. Regulatory sandboxes are more likely to live up to their potential when they fit well with both their hosts' innovation support objectives and the resources available to them.

For example, while 76% of jurisdictions with a regulatory sandbox highlighted that it had improved their understanding of key technologies, this was higher still for jurisdictions with an operational innovation office (92%) or RegTech/SupTech initiative (93%). Innovation offices also appear to be more conducive to building stronger relationships or networks with the FinTech sector, with 77% of jurisdictions with an operational innovation office citing this, compared to 62% for those with a regulatory sandbox.

58 UNSGSA FinTech Working Group and CCAF. (2019). Early Lessons on Regulatory Innovations to Enable Inclusive FinTech: Innovation Offices, Regulatory Sandboxes, and RegTech. Office of the UNSGSA and CCAF: New York, NY and Cambridge, UK. **https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/early-lessons-on-regulatory-innovation-to-enable-inclusive-fintech/#.XXDs3ChKj-g**

It is also clear that innovation offices have assisted many more firms on average than regulatory sandboxes, even allowing for the latter being more recent additions to the regulators' toolkit. Innovation offices have supported over 10 times as many firms as regulatory sandboxes, as illustrated in **Figure 6.3**. Some of this gap is to be expected. Many sandboxes are very new; other, 'policy-testing' orientated, sandboxes are not intended to increase the number of innovative firms supported but to

facilitate policy learning, design and review. It is still, however, worth considering how efficient a proposed sandbox is given the host's circumstances and objectives.

Recent research from the World Bank and CGAP[59] highlights the potentially high costs of operating a regulatory sandbox. The largest regulatory sandboxes have been known to require as many as 25 full-time employees, and the operational costs of running a regulatory sandbox can be over one million US dollars.

The financial, and opportunity, costs of regulatory sandboxes are real. If regulators wish to put in place regulatory innovation initiatives to improve their understanding of technologies, build stronger relationships with the alternative finance sector, and/or improve their regulatory framework, they may wish to consider a wider range of options. This is particularly important for regulators in emerging markets and developing markets, where resources (financial, human and attention) are scarce.

59 CGAP Blog (2019): "Running a Sandbox May Cost Over $1M, Survey Shows". **https://www.cgap.org/blog/running-sandbox-may-cost-over-1m-survey-shows**

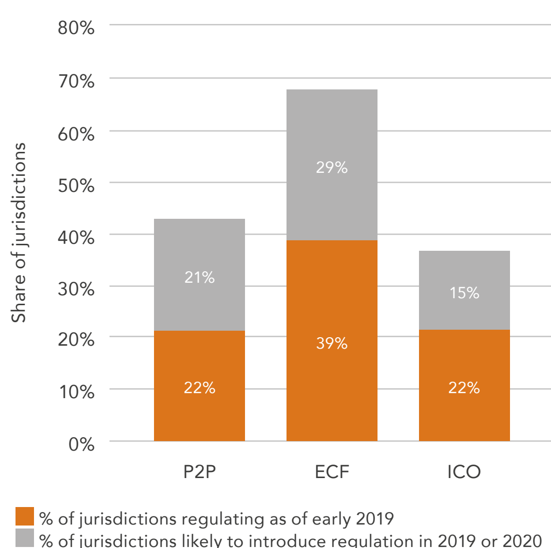
7. The future of the regulation of alternative finance

7. The future of the regulation of alternative finance

Chapter 3 highlighted that policymakers in a significant number of jurisdictions are planning to change their regulatory approach to alternative finance in the next two years.

As seen in Figure 3.7, half of regulators report plans to change their regulatory approach for equity crowdfunding alone, with a further quarter unsure. Taken together, at least 60% of respondents are definitely or possibly planning for changes to their regulatory framework in *any one* area of alternative finance in the next two years. Overall, the direction of travel across activities is most commonly from unregulated-but-not-prohibited activities to formally regulated ones, and particularly towards bespoke regulatory frameworks. As a result, the share of jurisdictions that actively regulate alternative finance is set to grow. This can be seen in Figure 7.1 below.

Figure 7.1: Regulation of alternative finance - current and future state



Examining each activity in further detail, 90% of all markets where P2P is unregulated are open to the possibility of regulatory change over the next two years, and 36% are clear that regulation will change during that period. More than half (52%) of those markets where P2P is regulated are open to change and 35% expect change to occur.
However, those jurisdictions which prohibit ECF are mostly planning (67% of respondents) to change their approach, or are at least open to the possibility of doing so (83% of respondents, including those who were unsure). These findings are also similar among jurisdictions which do not regulate ECF, where 64% of respondents are planning to change their approach. For ICOs, the markets which are most likely to see a change in the regulatory framework are those where the activity is regulated under existing securities regulations.

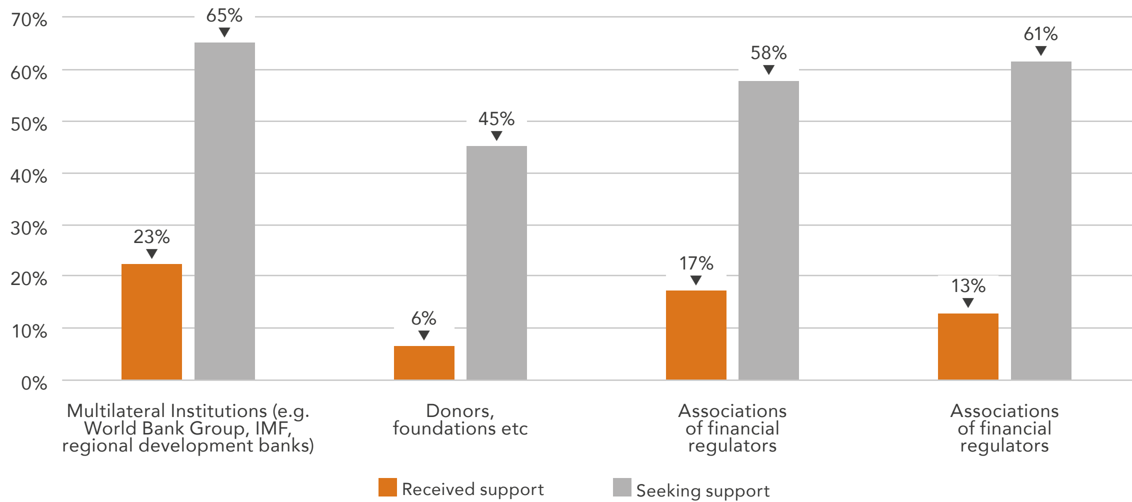
One might expect policymakers with the most longstanding regulatory frameworks to be the most keen to make changes. However, the relationship between the age of regulatory frameworks and the likelihood of further revision[60] is rarely significant. The only case where it is significant - in the case of regulatory frameworks for P2P lending – a negative correlation is found.

The survey findings point to a rapid rate of regulatory change, and it is unsurprising that regulators are seeking support in order to manage this efficiently and impactfully. Over three quarters (76%) of the regulators surveyed were interested in receiving further support in developing their approach to regulatory innovation. However, only about one third (32%) of respondents stated that they had receive support in this domain.

60 To test this, a simple probability variable was created for the purposes of this analysis. Any respondent who claimed they were planning to change the regulatory framework was assigned a value of 1. Any respondent claiming to be unsure was assigned a value of 0.5, and any respondent claiming they did not plan changes was assigned a value of 0. The correlation between change probability and age was then tested for statistical significance.

Figure 7.2 below sets out the levels of support regulators have received from various types of institutions, together with the demand for support. Note that respondents were able to state that they were seeking support, even if they had received support in the past

Figure 7.2. Regulators' demand for and use of support on regulatory innovation



Multilateral institutions such as the World Bank Group are providing significant support to regulators on alternative finance activities, with approximately one in four respondents indicating they have received technical assistance . As might be expected, multilateral institutions tend to focus on medium and low income jurisdictions. Jurisdictions in the upper middle income bracket were proportionately over-weighted amongst respondents.

Examining the demand-side, 65% of respondents wish to receive support, or further support, from multilateral institutions. This is closely followed by a desire for further support from academic research institutions and think tanks. As one respondent shared:

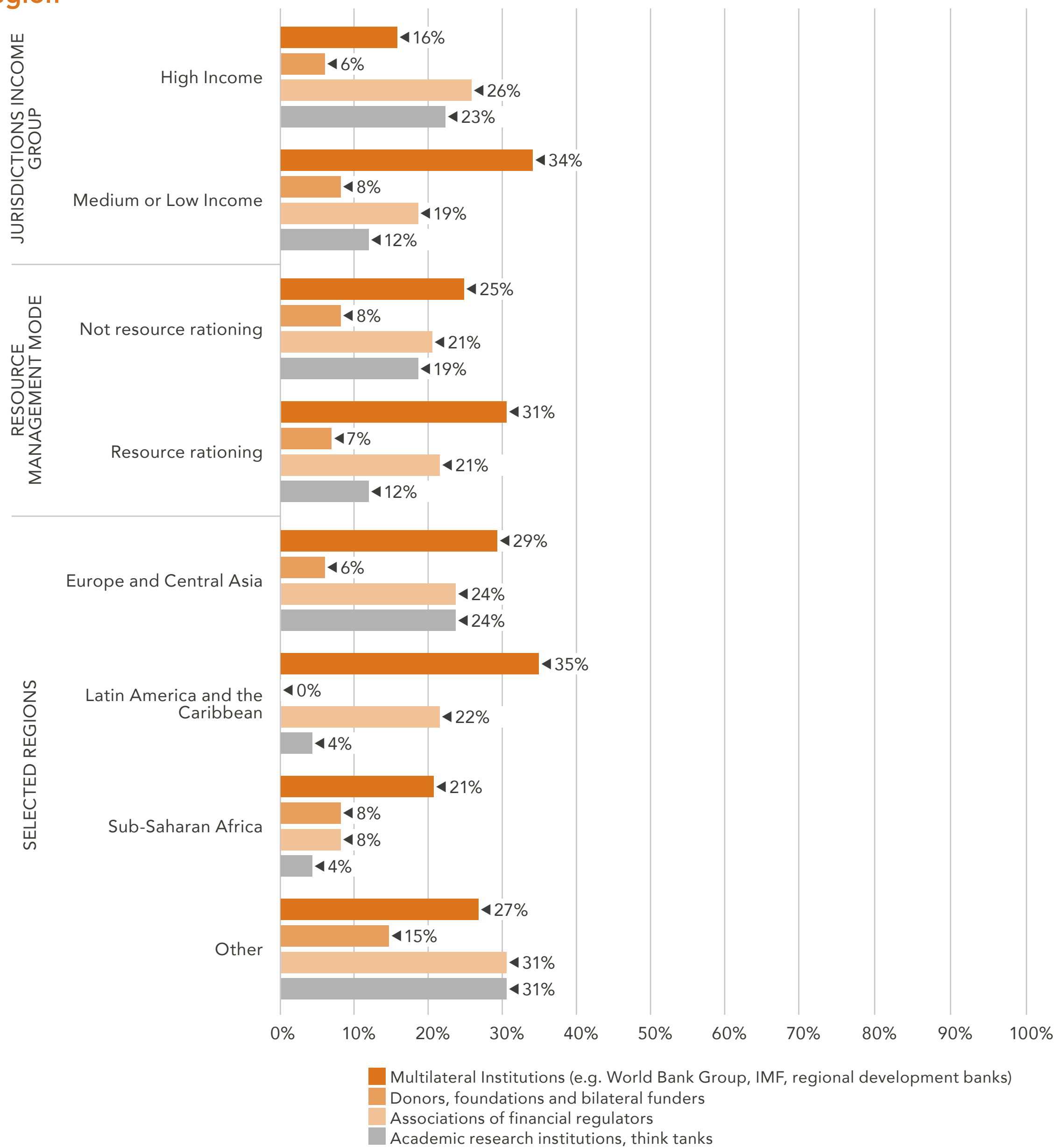
"In order to make supervisory and financial regulation authorities increase their expertise in the use of crowdfunding, regional and international organizations must provide training programs to help address technical and legal facets of it."

There is also a strong appetite for co-learning from other regulators, with 58% of respondents expressing a desire for support from associations of financial regulators. This is perhaps unsurprising given the earlier finding that regulators are strongly influenced by benchmarking against other jurisdictions when developing their approach to the regulation of alternative finance activities.

Patterns in the supply and demand for external support on regulatory innovation

The type of support received differs by income level and by region. This is illustrated in Figure 7.3 below. Regulators in high-income jurisdictions were almost twice as likely to have received support from academic research institutions and think tanks than those in medium and low-income jurisdictions (23% and 12% respectively). This difference is largely accounted for by the relatively limited engagement between academic research institutions and think tanks with regulators in Latin America and the Caribbean, and Sub-Saharan Africa – just 4% of surveyed regulators in each of these regions have received support from this source.

Figure 7.3: Support received, by source, income level, resource management mode, and region



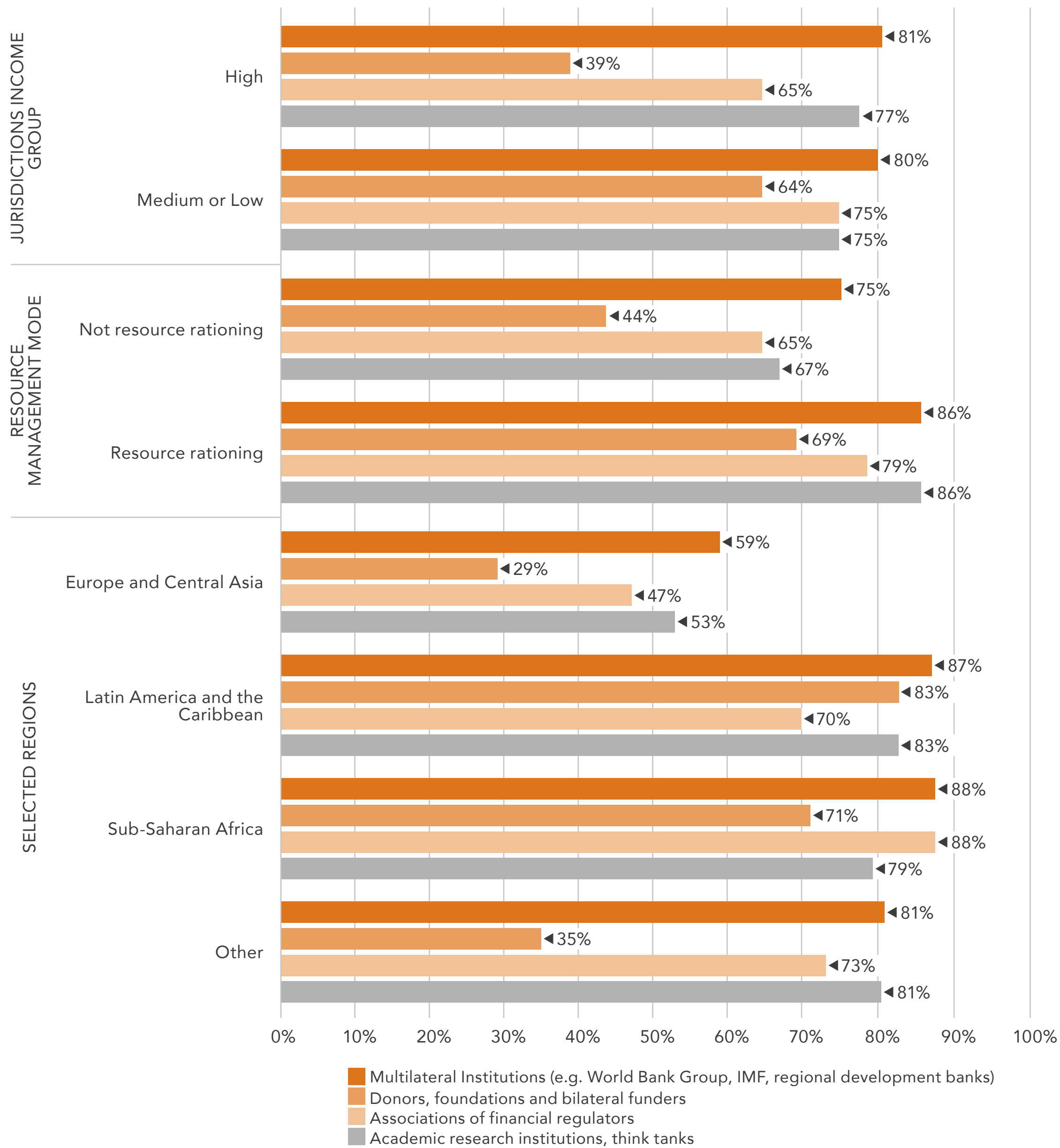
Regulators in high income jurisdictions were also much more likely to be receiving support from their fellow regulators, with 26% of high income jurisdictions receiving this versus just 19% in the case of medium and low income jurisdictions. Associations of financial regulators are currently the most common source of support for regulators in high income jurisdictions. This may be explained by the role of organizations such as IOSCO and the Financial Stability Board. Regulators in Sub-Saharan Africa reported the lowest incidence of support from associations of financial regulators, at 8% of respondents.

Regulators in lower-income jurisdictions (34% of respondents) were more likely to have received support from multilateral institutions, such as the World Bank, than regulators in high-income jurisdictions (16% of respondents). However, demand for support from such institutions did not vary significantly between the two groups, with 80% of regulators in low-income jurisdictions and 81% of regulators in high-income jurisdictions seeking support.

Regulators in Latin America and the Caribbean were most likely to report having received support from multilateral institutions, with 35% highlighting this. This compares to 21% of regulators in Sub-Saharan Africa and 29% in Europe and Central Asia.

Surprisingly, donor groups were similarly active in lower and higher-income jurisdictions (8% and 6% respectively), despite a much higher percentage of regulators in lower-income jurisdictions seeking further support from this source (64% and 39% respectively).

Figure 7.4: Demand for support on regulatory innovation, by source, income level, resource management mode, and region



An alternative to the analysis presented in Figure 7.3 is to compare support received across all potential sources – that is, focusing on whether a regulator has received any support *at all* regardless of source. From this perspective, the sharpest dividing line between those regulators which have received external support in their regulatory response to alternative finance activities is between regulators who are actively rationing their

supervisory resources[61] and those that are not: 44% of resource-rationing regulators have received support from at least one, compared to only 27% of regulations that are not resource-rationing.

Demand for support on regulatory innovation is unequivocally high among regulators, with typically little differential by income group. This is illustrated in Figure 7.4 below. Support is generally most demanded from multilateral institutions, followed closely by academic research institutions and think tanks, and associations of financial regulators.

Demand for support is, on average across the four sources, highest among regulators in Sub-Saharan Africa, Latin America and the Caribbean: the average percentage indicating demand among the different sources is 81% in both broad regions. Resource rationing regulators are, as might be expected, more likely to be seeking support than those who are not. However strong demand for support is still reported among those who did not self-report resource constraints.

Towards a supportive future

It is clear from this study that regulators around the world believe that alternative finance is a force for good and understand the benefits which it can bring about for access to finance, financial inclusion, competition in financial services, job creation and economic growth. There is also a desire among regulators to make the necessary changes to bring this about, and plans are being made to do so.

However, it is also clear that there is a large and unmet demand for support among regulators to help bring about this change. This is in part due to limited technical expertise and resource constraints, though regulators across the spectrum report demand for support. Comparison and benchmarking among regulatory peers, in part through associations of financial regulators, provides a source of inspiration for many regulators, without diminishing the demand for support from a variety of other external sources.

A significant and coordinated effort is therefore required among external stakeholders to spur and support the development of enabling regulatory frameworks for alternative finance and, in turn, bring about the advantages conferred by the sector.

61 As previously stated, resource rationing need not result from a regulator having limited resources in absolute terms; the term is used to refer to regulators who indicated that it is *harder to supervise alternative finance than more traditional industries* because of limited resources.

Annexes

Annexes

Annex 1: List of survey respondents by jurisdiction*

JURISDICTION	NAME OF REGULATOR
Abu Dhabi, United Arab Emirates	Abu Dhabi Global Market - Financial Services Regulatory Authority
Albania	Albanian Financial Supervisory Authority
Angola	Comissão do Mercado de Capitais
Argentina	Comisión Nacional de Valores
Astana International Financial Centre, Kazakhstan	Astana Financial Services Authority (AFSA)
Australia	Australian Securities and Investments Commission
Austria	Financial Markets Authority
Bahrain	Central Bank of Bahrain
Belgium	Financial Services and Markets Authority
Bhutan	Royal Monetary Authority of Bhutan
Bolivia	Autoridad de Supervisión del Sistema Financiero
Brazil	Comissão de Valores Mobiliários - CVM (Securities Commission)
Brunei Darussalam	Autoriti Monetari Brunei Darussalam
Bulgaria	Financial Supervision Commission
Burundi	Banque de la Republique du Burundi
Cabo Verde	General Audit of Securities Market (AGMVM)
Economic and Monetary Community of Central Africa (CEMAC)	Central African Financial Market Supervisory Commission (COSUMAF)
Chile	Comisión para el Mercado Financiero
China	China Securities Regulatory Commission
Colombia	Financial Regulation Unit - Ministry of Finance
Comoros	Central Bank of Comoros
Costa Rica	Superintendencia General de Valores (SUGEVAL)
Czech Republic	The Czech National Bank
Democratic Republic of Congo	Banque Centrale du Congo
Djibouti	Banque Centrale de Djibouti
Dominican Republic	Superintendencia del Mercado de Valores de la República Dominicana
Estonia	Finantsinspektsioon
Fiji	Reserve Bank of Fiji
Finland	Finnish Financial Supervisory Authority (Fin-FSA)
France	Autorité des Marchés Financiers (AMF)
Greece	Hellenic Capital Market Commission
Guinea	Banque Centrale de la République de Guinée
Guyana	Bank of Guyana
Honduras	Comisión Nacional de Bancos y Seguros
India	Securities and Exchange Board of India
Ireland	Central Bank of Ireland
Isle of Man	Isle of Man Financial Services Authority
Italy	CONSOB
Jersey	Jersey Financial Service Commission

JURISDICTION	NAME OF REGULATOR
Kazakhstan	National Bank of Kazakhstan
Kenya	Capital Markets Authority
Kosovo	Central Bank of the Republic of Kosovo
Kuwait	Capital Markets Authority
Latvia	The Financial and Capital Market Commission
Lebanon	Capital Markets Authority
Liberia	Central Bank of Liberia
Libya	Central Bank of Libya
Lithuania	Bank of Lithuania
Madagascar	Commission de Supervision Bancaire et Financière
Malaysia	SC Malaysia
Maldives	Capital Market Development Authority
Malta	Malta Financial Services Authority
Marshall Islands	Banking Commissioner
Mauritania	The Central Bank of Mauritania
Mauritius	Financial Services Commission
Mexico	Comisión Nacional Bancaria y de Valores
Morocco	Autorité Marocaine du marché des capitaux
Mozambique	Banco de Moçambique
Nauru	Republic of Nauru
Nepal	Securities Board of Nepal (SEBON)
New Zealand	Financial Markets Authority
Nicaragua	Superintendencia de Bancos y de Otras Instituciones Financieras
Nigeria	Securities & Exchange Commission
Norway	Finanstilsynet (Norwegian Financial Supervisory Authority)
Organization of Eastern Caribbean States	Eastern Caribbean Securities Regulatory Commission
Palestine	Palestine Capital Market Authority (PCMA)
Panama	Superintendency of Securities Market
Papua New Guinea	Bank of Papua New Guinea
Paraguay	Comisión Nacional de Valores
Peru	Superintendence of Securities Market
Portugal	Portuguese Securities Market Commission (CMVM)
Qatar	Qatar Financial Market Authority
Qatar Financial Centre	Qatar Financial Centre Regulatory Authority
Quebec, Canada	Autorité des marchés financiers
Republic of Serbia	Securities Commission
Romania	Financial Supervisory Authority
Russia	The Bank of Russia
Rwanda	Capital Market Authority
Samoa	Central Bank of Samoa
Saudi Arabia	Capital Market Authority
South Africa	Financial Sector Conduct Authority
South Korea	Financial Services Commission
Spain	Comisión Nacional del Mercado de Valores
Sudan	Central Bank of Sudan
Suriname	Centrale Bank van Suriname
Taiwan, China	Financial Supervisory Commission
Tajikistan	National Bank of Tajikistan
Tanzania	Capital Markets and Securities Authority
Thailand	The Securities and Exchange Commission
The Bahamas	Securities Commission of The Bahamas

JURISDICTION	NAME OF REGULATOR
Trinidad and Tobago	Trinidad and Tobago Securities Exchange Commission
Tunisia	Conseil du Marche Financier
Turkey	The Capital Markets Board of Turkey
Uganda	Capital Markets Authority
Uruguay	Central Bank of Uruguay
United Kingdom	Financial Conduct Authority
United States	Commoditiy Futures Trading Commission
Vanuatu	Reserve Bank of Vanuatu
Zimbabwe	Securities and Exchange Commission of Zimbabwe

* Jurisdictions are listed alphabetically and named according to the relevant World Bank guidelines and common practices.

Annex 2: Unweighted base sizes

For the purposes of transparency, this Annex contains reference tables of the number of observations underlying each of the Figures in this report. Greater caution should be taken when interpreting and generalizing findings that are based on very small base sizes.

TABLE A2A: UNWEIGHTED BASE SIZES - SIMPLE TABLES AND GRAPH	
FIGURE NUMBER	BASE
1.1	N/A
1.2	N/A
1.3	75
2.1	99
2.2	99
2.3	99
3.2	99
3.3	99
4.8a	84
4.8b	84
5.5	87
6.1	92
6.3	17
6.4	92
of which respondents with a RegTech programme	14
6.5	36
of which respondents with a Regulatory Sandbox	26
of which respondents with an Innovation Office	21
of which respondents with a RegTech Programme	14
7.2	78

TABLE A.2B: UNWEIGHTED BASE SIZES - BREAKDOWNS BY ACTIVITY			
	BASE SIZE BY ACTIVITY		
FIGURE NUMBER	P2P	ECF	ICO
2.7 (sector supervisors)	29	44	18
2.7 (non-sector supervisors)	70	55	81
3.1 to 3.5	98	99	99
3.6	23	35	9
3.7 to 3.8	97	97	98
3.9 (Triggers)	30	45	22
3.9 (Elements)	42	62	37
3.10a	22	38	19
3.10b	24	40	20
4.1 to 4.6	20	34	7
4.7 (Pre-existing or exemption-based)	9	17	N/A
4.7 (Bespoke)	12	21	N/A
5.1 (with remit)	23	38	14
5.1 (no remit)	37	41	47
5.2	20	32	13
5.3	16	26	6
5.4	13	21	10
7.1	98	99	99

TABLE A.2C: UNWEIGHTED BASE SIZES - BREAKDOWNS BY RESPONDENT CHARACTERISTICS										
	BASE SIZE BY JURISDICTION INCOME GROUP		BASE SIZE BY RESPONDENT'S JURISDICTION		BASE SIZE BY RESPONDENT'S RESOURCE MANAGEMENT MODE		BASE SIZE BY RESPONDENT'S REGION			
Figure Number	High Income	Medium or Low Income	Remit Over Alternative Finance	No Remit over Alternative Finance	No Resource Rationing	Resource Rationing	Europe and Central Asia	Latin America & the Caribbean	Sub-Saharan Africa	Others
1.4a-c	29	35	32	45	41	36	20	17	15	25
2.4 - 2.5	33	55	41	47	49	39	20	18	18	32
2.6	29	24	53	N/A	30	23	17	7	9	20
3.11	N/A	N/A	N/A	N/A	N/A	N/A	8	10	8	16
5.6	31	56	41	46	N/A	N/A	22	18	19	28
6.2	33	49	N/A	N/A	51	41	N/A	N/A	N/A	N/A
7.3	24	54	N/A	N/A	43	35	17	16	19	26
7.4	24	54	N/A	N/A	43	35	17	16	19	26