

Policy responses to fintech: a cross-country overview¹

Executive summary

Technological innovations in financial services (fintech) are increasingly transforming the way financial services are provided. This transformation opens opportunities but comes with potential risks to consumers and investors and, more broadly, to financial stability and integrity, which financial regulation seeks to mitigate. As for opportunities, fintech can support potential growth and poverty reduction by strengthening financial development, inclusion and efficiency. In this context, financial authorities are adjusting their policy frameworks and providing guidance based on their assessments of the implications of emerging technologies for the financial sector.

The challenge for policymakers is to maximise the benefits of fintech while minimising potential risks for the financial system. However, this is easier said than done as regulators face several challenges. Fintech developments present issues that are beyond the traditional scope of financial authorities, and the speed of innovation makes it difficult for regulators to respond in a timely manner. Also, important trade-offs may arise between different policy objectives.

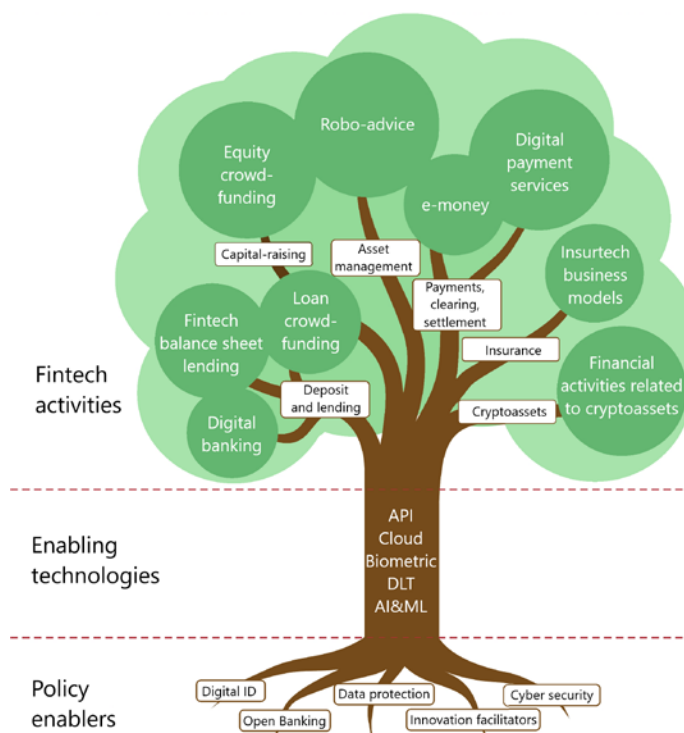
This paper surveys 31 jurisdictions on their policy responses to fintech developments. The key aim of our study is to provide a cross-country overview of the responses that financial authorities have pursued in relation to fintech. The paper is based on responses to a survey conducted in early 2019 by the Financial Stability Institute (FSI), which was supplemented by a comprehensive review of published regulations and documents as well as the authors' own analysis.

Building on the work by global standard-setting bodies and other international organisations, we propose a conceptual framework through which we analyse policy responses to fintech, referred to as the "fintech tree" (see chart on next page). The fintech tree distinguishes three categories: fintech activities, enabling technologies and policy enablers. Fintech activities (eg digital banking or robo-advice) can take various forms and may be performed in different sectors of the financial industry. Enabling technologies (eg cloud computing or artificial intelligence) are those that make innovation possible in the provision of financial services and, as such, form the backbone of fintech activities. Policy enablers refer to public policy measures and initiatives (eg digital ID systems) that support the development of fintech activities and the use of enabling technologies.

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Fintech tree: a taxonomy of the fintech environment



Source: FSI staff.

Policy responses to new fintech activities take various forms. Regulatory authorities may respond to fintech activities in a number of ways. For example, authorities may put in place fintech-specific licensing regimes that require entities to go through an authorisation process before they can offer their fintech services. Alternatively or complementarily, they may issue requirements that are fintech-specific, modify existing ones or even prohibit certain activities. Some authorities may take the path of explaining how the existing regulatory framework is applied to fintech business models and clarify their supervisory expectations.

Authorities pursue a range of approaches when regulating fintech activities. For digital banking, licensing regimes or other specific requirements are the exception. Some jurisdictions, however, have launched initiatives to facilitate the establishment of new banks, including digital banks. In the context of fintech platform financing, while most surveyed jurisdictions do not have a dedicated regulatory regime for fintech balance sheet lending, many have one for both loan and equity crowdfunding. For robo-advice, fintech-specific regulations are not common, but around a third of surveyed jurisdictions published guidance on issues that are unique to robo-advice as compared with traditional financial advice. For digital payment and e-money services, most surveyed jurisdictions have specific regulations. Regarding the former, initiatives put in place often aim at strengthening regulatory requirements for non-banks or facilitating their access to the payments market. For technology-driven business models emerging in the area of insurance distribution and underwriting, existing regulations are generally considered as sufficient to address the features and risks of these innovations. Cryptoassets are subject to a wide array of regulatory responses, with warnings and clarifications of the regulatory security treatment as the most common response. New crypto-specific licences or authorisations are emerging in a few jurisdictions.

For enabling technologies, regulators have adjusted their existing regulations to add technology-specific elements in existing laws, regulation or guidelines. As a result of the level of market adoption, some technologies have received more attention than others. Regulators have been particularly active on application programming interfaces (APIs), cloud computing and biometric-based identification and authentication. In contrast, for artificial intelligence, machine learning and, to some

extent, distributed ledger technology, authorities have not gone beyond conducting risk assessments and issuing general guidance.

Public policies that enable the provision of digital services have received much attention.

Most jurisdictions have implemented digital ID systems that allow financial institutions to verify the identity of their clients. Data protection laws that allocate rights and responsibilities for accessing and sharing consumers' data have been issued in almost all jurisdictions. Also common are national cybersecurity frameworks, supplemented by cybersecurity regulations and guidance specific for the financial sector. Several jurisdictions have adopted, or are in the process of adopting, open banking initiatives. Last, innovation facilitators have frequently been put in place, with innovation hubs as the most common form.

Policy responses to fintech may need to weigh several policy objectives. Achieving an orderly application of new technologies in the financial system will probably remain a desirable outcome of regulatory actions. At the same time, policy actions need to be consistent with the preservation of financial stability, market and financial integrity, competition and consumer protection. Furthermore, the prevention of regulatory arbitrage and the promotion of a level playing field, where appropriate, may be sought while maintaining adequate control of firms with a larger potential to generate systemic risk.

At the international level, authorities are working to address emerging risks and develop schemes that facilitate a coordinated regulatory response for global challenges. This should be stressed given the wide scope in which technological innovations may be applied to the provision of financial services as well as the potential scale that the provision of these services may take, especially where firms with a large customer base enter the market. This could be the case for proposed global stablecoin arrangements that may affect existing financial, monetary and payment systems or global cloud service providers that occupy a dominant position.

Going forward, financial authorities may face further challenges as technology evolves and is applied to new services. Continuous efforts from authorities will be needed to understand novel business models and their underlying risks, to build or maintain the skills and capacity to adequately assess potential implications on financial markets and to adjust their regulatory responses in an agile manner. Only with sufficient resources and access to timely and reliable information will authorities be able to steer innovation in a desirable direction, while minimising potential risks to the financial system. In this context, cooperation and coordination at the local and international level remain essential.