



**FINTECH SURVEY
OF THE
ITALIAN FINANCIAL SYSTEM**

November 2021

Introduction

This document presents the results of the third fact-finding FinTech survey conducted by Bank of Italy in the first half of 2021.

Released twice-yearly, the survey covered the entire banking system, comprising 59 banking groups and 53 stand-alone banks. A further 51 non-bank intermediaries also took part,¹ selected based on their volume of operations; some of the respondents, though operating on a smaller scale, were included because of their business models or propensity to innovate.

The participation rate was 97 per cent; considering banks alone, the coverage rate in terms of assets was equal to 98.7 per cent of the system total.

The first part of this document describes the main results of the survey, with reference to the investments approved, interaction between the banks and firms in making these investments and holdings of crypto-assets.

The second part examines the characteristics of the projects in terms of technology, objectives, implementation and the repercussions on business models and the risk profiles of intermediaries. Their implications for open banking, customer experience, and the technologies used to combat money laundering and terrorist financing, are also assessed.

¹ This includes financial companies pursuant to Article 106 of the Consolidated Law on Banking (TUB), payment institutions (PIs), electronic money institutions (EMIs), asset management companies (SGRs) and securities investment firms (SIMs).

Main findings

Investment profile – The use of FinTech technologies in the Italian financial industry is on the rise: spending on these technologies² for the two years 2021-22 amounts to €530 million, up on the previous two years (from €456 million).³ Compared with the previous survey, the number of investor banks also rose (from 77 to 96) as did projects (from 267 to 329), suggesting a greater take-up rate of innovative technologies within the financial system. Starting from 2023, and up to their entry into production, the projects surveyed will entail further costs amounting to €281 million.

Economic factors slowed or impeded the investments, such as insufficient anticipated demand for the planned products and services, the financial cost of the investments, the selection of personnel and technological factors, such as scant interoperability between old and new systems and the complexity of monitoring IT security risks. Organizational and regulatory constraints appeared to weigh less in intermediaries' assessments. The COVID-19 epidemic impacted only 11 per cent of the projects, mostly leading to the acceleration of their implementation.

Expenditure continues to be distributed across a small number of intermediaries and is more concentrated compared with the previous survey: the share of investment made by the top ten investors has in fact risen by around 5 percentage points, to 84.7 per cent. The picture is nonetheless very varied and in constant evolution: small- and medium-sized banks feature in the leading ten investors as well as non-bank intermediaries; only three intermediaries are included in this particular ranking in both of the last two surveys; there has also been a considerable increase in the scale of investment.

For the two years 2019-20 only, the banking system's expenditure on FinTech amounted to 3.1 per cent of the total amount spent on the purchase of software, hardware and technological systems and for IT system maintenance;⁴ in the previous two years, it was equal to 1.5 per cent.

Shareholdings and partnerships – Some intermediaries developed an investment model which, alongside production investment, envisages a direct participation in FinTech companies: the value of these holdings amounts to €204 million and is ascribable to 28 intermediaries.

Some 80 per cent of the projects were developed either in tandem with other companies and third-party institutions or by entrusting them with the entire

² FinTech projects refer to investments that focus on technological-financial innovation and are capable of generating new processes, products, services and business models. The list and description of the technologies used are contained in the methodological note.

³ Based on the information found in the previous edition of the survey, the intermediaries spent €233 million overall in the two years 2017-18.

⁴ Expenditure on IT systems maintenance includes the life cycle costs of software and computer equipment.

implementation cycle of the project. Recourse to these kinds of collaborations mostly responds to the need for intermediaries to ensure the use of advanced technologies that would otherwise not be available internally and to accelerate implementation timelines, thereby reducing the time to market. Respondents reported 330 partnership agreements relative to 199 companies, around two thirds of which have their registered office in Italy. Relations between firms and intermediaries are almost always exclusive: only a few firms work with more than one intermediary.

Business areas – Innovative projects for credit disbursement and digital payments (especially mobile banking, digital lending and services associated with open banking) stand out, owing to their high number and the resources they absorb. There are also numerous projects for innovating business operations and governance processes, though with significantly fewer resources invested in this case.⁵ The share of innovative projects in the areas of investment and insurance services is limited both in terms of the number of projects under way and of expenditure.

Technologies – The share of investments in Application Programming Interfaces (API) and IT infrastructure remains high, accounting for 58 per cent of expenditure. Projects based on biometrics, linked primarily to onboarding procedures and Robot Process Automation (RPA), have also risen in number, in the context of business operations and governance. Projects based on artificial intelligence, including Machine Learning (ML) and Natural Language Processing (NLP), while declining in number, have risen in terms of expenditure, mostly driven by digital lending applications.

Risks – According to the intermediaries, the projects would leave strategic credit and market risks practically unchanged; the greatest anticipated expected impact is on operating risks. The growing automation of processes and strengthening of controls on fraud and regulatory violations should help to mitigate legal and reputational risks. By contrast, forms of investment based on partnerships with third companies or developed through outsourcing could trigger legal disputes that are not adequately legislated for in the contracts between the various operators involved in providing these technologically innovative services.

Open banking – A little over one fourth of the projects surveyed presuppose the development of open banking activities. In the two years 2019-20, these projects generated cash inflows and outflows equal to €202 million and €97 million respectively; starting in 2021, with respect to a relatively stable investment profile, cash inflows are expected to record a significant acceleration.

Anti-money laundering – The progressive digitalization of banking and financial services has pushed anti-money laundering processes towards technologies that allow adequate remote verification using digital IDs, digital certs and biometrics. The adoption of solutions based on artificial intelligence (AI) remain limited, owing to issues around customer risk and the monitoring of suspicious transactions.

Customer experience – The intended recipients of the benefits of innovative projects are consumer households and firms (targeted by more than half and one

⁵ The business operations area includes projects on internal processes, such as back office, business and customer support; governance and projects dedicated to risk management and compliance.

quarter of the projects respectively). Customer experience is expected to improve thanks to the dematerialization of documentation, digital signatures and automated assistance tools. More generally, interactions with customers should benefit from investments made to improve the navigability of apps and websites.