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# SPAIN

## FINANCIAL SECTOR ASSESSMENT PROGRAM

August 2024

## TECHNICAL NOTE ON FINTECH DEVELOPMENTS AND OVERSIGHT

This paper on Spain was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with Spain. It is based on the information available at the time it was completed on July 12, 2024.

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# TECHNICAL NOTE

## FINTECH DEVELOPMENTS AND OVERSIGHT

Prepared By

**Monetary and Capital Markets Department**

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program in Spain. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at [http://www.imf.org/external/np/fsap/fssa.aspx](http://www.imf.org/external/np/fsap/fssa.aspx)

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# Glossary

| | |
|---|---|
| AEFI | Asociación Española de Fintech |
| AEPD | Spain's Data Protection Authority |
| ART | Asset-Referenced Token |
| AML | Anti-Money Laundering |
| ASBA | Asociación de Supervisores Bancarios de las Américas |
| BdE | Banco de España |
| BCBS | Basel Committee on Banking Supervision |
| BIS | Bank for International Settlements |
| BNPL | Buy Now Pay Later |
| CASP | Crypto-Assets Service Provider |
| CCR | Central Credit Register (of the BdE) |
| CEMLA | Centro de Estudios Monetarios Latinoamericanos |
| CFT | Counter-Financing of Terrorism |
| CNMV | Comisión Nacional del Mercado de Valores |
| CRD | Capital Requirements Directive |
| CRR | Capital Requirements Regulation |
| CSP | Cloud Service Provider |
| DeFi | Decentralized Finance |
| DESI | Digital Economy and Society Index (of the EC) |
| DGSFP | Directorate General for Insurance and Pension Funds (of MINECO) |
| DLT | Distributed Ledger Technology |
| DORA | Digital Operational Resilience Act |
| EBA | European Banking Authority |
| EC | European Commission |
| ECB | European Central Bank |
| EFIF | European Forum of Innovation Facilitators |
| EMD | European Marketing Distribution |
| EMI | Electronic Money Institution |
| EMT | Electronic Money Token |
| EU | European Union |
| FATF | Financial Action Task Force |
| FI | Financial Institution |
| Fintech | Financial technology |
| FMI | Financial Market Infrastructure |
| FSAP | Financial Sector Assessment Program |
| FSB | Financial Stability Board |
| ICT | Information and Communication Technology |
| IIC | Instituciones de Inversión Colectiva |
| ITRQ | IT Risk Questionnaire |
| IMF | International Monetary Fund |
| IOSCO | International Organization of Securities Commissions |
| IT | Information Technology |

| | |
|---|---|
| LMVSI | Law 6/2023 on Securities Markets and Investment Services Inclusion |
| LSI | Less Significant Institution |
| MiCA | Markets in Crypto-Assets Regulation |
| MiFID | Markets in Financial Instruments Directive |
| MiFIR | Markets in Financial Instruments Regulation |
| MINECO | Ministerio de Economía, Comercio y Empresa (Ministry of Economy, Trade and Enterprise) |
| NCA | National Competent Authority |
| NFT | Non-Fungible Token |
| PE | Private Equity |
| PI | Payment Institution |
| PISA | Payment instruments, schemes, and arrangements |
| POS | Point of Sale |
| PSD | Payments Services Directive |
| PSD2 | Revised Payments Services Directive |
| PSP | Payment Service Provider |
| RIIC | Reglamento de IIC |
| SCT | Schemes for credit transfer |
| SI | Significant Institution |
| SEPA | Single Euro Payments Area |
| SEPBLAC | Spain's Executive Service of the Commission for the Prevention of Money Laundering and Monetary Offenses |
| SGTIF | General Secretariat of the Treasury and International Financing (MINECO) |
| SLI | Specialized Lending Institution |
| SME | Small and Medium Enterprises |
| SSM | Technical Note |
| TN | Single Supervisory Mechanism |
| VA | Virtual Asset |
| VC | Venture Capital |

# EXECUTIVE SUMMARY

**The scope of this assessment covered fintech developments in Spain, including digitalization of the banking sector, and the supervisory oversight of fintech activity.** This technical note covers the impact of fintech on regulated firms, mainly banks; the interaction between new market entrants and existing firms; the approach towards industry monitoring; and the institutional arrangements for regulation and supervision of fintech, including overall supervisory cooperation.[1] The authorities under the scope of this analysis were the three sectoral financial supervisory authorities—Banco de España (BdE), Comisión Nacional del Mercado de Valores (CNMV), and Directorate-General for Insurance and Pension Funds (DGSFP). The engagement with the Sandbox Coordination Commission and General Secretariat of the Treasury and International Financing (SGTFI) was focused on their respective roles in operating the regulatory sandbox.

**Banks play a dominant role in Spain's fintech landscape.** A diverse group of entities—banks and other firms—are active in the provision and innovation of digital financial services and products in Spain. Banks are preeminent across the landscape where fintech penetration is significant in payments and only nascent in asset management, investments and lending. Within the payments sector, banks have been agile in seizing the opportunity provided by the significant shift in consumers' payment preferences. Owned by 23 Spanish banks and established in 2016, the arrangement for electronic payment instrument—Bizum—now serves over 25 million customers of 38 Spanish banks, representing 98 percent of the domestic banking sector. Spending on digital products, services and communication has increased across the banking sector, albeit sales and transactions growth are demonstrably proportional to bank size and business scope, reflecting shorter time-to-market and greater analytical capacity of the larger banks. Given the challenges smaller banks are facing, the BdE should consider assessing more thoroughly the impact of digitalization on Less Significant Institutions' (LSIs) business models.

**Most fintech activities are regulated, at least from a conduct of business perspective, even though outside of payments, they are not yet material enough to pose threats to financial stability.** Nonbank lending and crypto assets remain largely immaterial. In the non-bank digital lending space, similar to other jurisdictions, there are diverse players facing challenges in scaling up their balance-sheets due to funding constraints. The crypto assets sector is small (rapid growth from a very low base); concentrated (significant share of domestic investors served by two companies); with low penetration limited to small investors; and with speculative investments constituting the largest share of client activity. With the impending implementation of the Markets in Crypto Assets Regulation (MiCA) in December 2024, most activities in the crypto asset related space will be regulated. The Spanish authorities are striving to develop supervisory capacity to ensure complete operational readiness.

[1] The Financial Stability Board defines fintech as "technologically enabled innovation in financial services that could result in new business models, applications, processes or products."

**The authorities rely on a range of tools for effective supervision and monitoring of fintech developments.** Apart from operating an inter-agency Sandbox and an Innovation Hub, the financial sector authorities conduct ad-hoc horizontal assessments and thematic studies on emerging fintech issues while developing a database of fintech companies in Spain. The BdE, CNMV, and DGSFP organize, contribute to, and participate in, various fintech events at the domestic, European Union (EU), and global levels. Technological risks and the implications of digital transition were considered key priorities for banking supervision by the BdE for 2023 and included in the DGSFP's strategic supervision plan.

**The inter-agency sandbox is an important tool for the authorities' evaluation of fintech innovations, and for the supervisory authorities to monitor and gather intelligence regarding fintech activities and convey expectations to fintech service providers and the wider market.** Among the many strengths of the sandbox include: representation of a wide range of relevant Spanish authorities in a single body for purposes of evaluating fintech innovation and determining suitability for the market; comprehensive supervisory review of promoters' applications, including of a protocol agreement between the promoter and the supervisory authority or authorities; the establishment of a guarantee scheme to secure user and financial sector safety; and intensive monitoring by supervisory authorities during the sandbox testing phase. Experience through six cohorts of applicants for the sandbox has provided significant learning for the member authorities of the Coordination Commission, including the three sectoral supervisory authorities, and effective communication of supervisory expectations to promoters that, supported by transparency of reporting by the supervisory authorities, has enabled communication benefits to extend their reach to the broader ecosystem. While the sandbox is viewed as a tool to support supervisory intelligence gathering, evaluation and oversight of projects applying for testing inevitably require significant investment of supervisory resources.

**A better balance between the benefits of the sandbox and its significant supervisory costs could be achieved by considering some targeted changes to its operational arrangements.** In a context of stretched supervisory resources at both the BdE and CNMV, the sandbox is not an economical tool. Supervisors spend a significant amount of time in preparatory and testing phases which can have a combined average length of greater than 10 months. The rates of acceptance and post-testing take-to-market of projects are low; several promoters were observed approaching the Innovation Hub; and some promoters exit the sandbox process after significant supervisory resources have been expensed on their applications. The legislation establishing the operation of the sandbox does not provide administrative flexibility to the Coordination Commission to change the operational arrangements of the Sandbox (e.g., the semi-annual frequency of new cohorts) or flexibility to authorities to chose between alternative options available for monitoring fintech innovations. Against this background, legislative changes should be considered for enabling Sandbox Coordination Commission to make operational changes; some administrative procedures should be streamlined; and greater flexibility should be extended to supervisory authorities to rely on their wider range of tools to monitor market developments, convey expectations, and assess the adequacy of the regulatory perimeter.

**A key priority is to ensure that supervisory authorities are well resourced to address complex risks and emerging challenges.** In several areas, the need for resources, stretched at the BdE and less-than-adequate at the CNMV, will increase as new regulations come into force soon. The FSAP recommends granting full autonomy to the CNMV, which it currently lacks, over its recruitment process and ensuring alignment of resources at the BdE and CNMV to current and expected workloads.

**Table 1. Spain: Key Recommendations**

| | Recommendation | Agency | Priority | Timing |
|---|---|---|---|---|
| **Inter-agency Sandbox** | | | | |
| 1) | Provide for Sandbox Coordination Commission to make changes to sandbox operation and streamline administrative processes. | Government | H | I |
| 2) | Provide greater flexibility to supervisory authorities to use preferred mix of tools to monitor market developments, convey supervisory expectations, assess the adequacy of the regulatory perimeter, and assess whether supervisory approaches should be adjusted where necessary. | Government, BdE, CNMV, DGSFP | H | NT |
| **Fintech Monitoring and Oversight** | | | | |
| 3) | Intensify data collection on nonbank fintechs, including on nonbank digital lending and crypto asset lending, and undertake horizontal assessments and thematic reviews while analyzing the various channels of contagion between the nonbank fintechs and banks. | MINECO, BdE, CNMV | M | NT |
| 4) | Assess the current and projected workloads over a 3-to-5 year period in the area of fintech monitoring, regulation and supervision and ensure alignment of resources to these. | BdE | M | I |
| 5) | Estimate current and projected future workload, ensure alignment of resources to these, and grant full autonomy over the recruitment and retention process. | CNMV | H | I |
| **Digitalization of Banking Sector** | | | | |
| 6) | Conduct deeper assessment of the impact of digitalization on LSIs' business models, governance, and risk management strategies. | BdE | M | NT |

Note: In terms of priorities, H, M, and L stand for high, medium and low. In terms of time frame, I, NT, and MT stand for immediate (within one year), near-term (within 2–3 years), and medium-term (within 3–5 years).

# INTRODUCTION[2]

## A. Context

**1. Digital modes of delivering traditional financial products and services continue to grow in Spain.** The Spanish banking system, like the European one, is impacted by the societal changes being brought about by the wider adoption of digitalization, a trend accelerated by the pandemic. Digitalization has created business opportunities for banks in terms of offering to customers, both new products and services and greater efficiencies in delivering existing products and services. It has also facilitated entry of service providers from outside the banking system, which may exert pressure on existing firms if they are unable to adapt.

**2. These technological changes are creating new potential vulnerabilities and raising the bar for risk management by the financial sector.** Besides the attractiveness of new revenue sources offered by fintech investments, opportunity costs of inaction can potentially be significant over the medium-term, risking erosion of market share and business due to competition from nonbank fintechs and BigTechs. However, digitalization can increase the scope and speed of exposure of banks to new risks, e.g., due to the increasing reliance on third-party service providers and cybersecurity threats, risks that will be higher if adoption is not managed well. The rapid pace at which new technologies are being developed and rolled out increases these risks.

**3. Spanish banks have a multi-pronged approach to digitalization.** It reflects a mix of in-house development and reliance on BigTechs including partnerships targeted at client demanded service provision. Banks appear to have mixed views on relying on third-party vendors, with some expressing an aversion to asymmetric client data sharing.

**4. Changing payments preferences of consumers have been met with technology driven offerings from banks and electronic money institutions (EMIs) even as fintech activity outside payments remains small in scale and scope.** Payment is a segment where banks are both, competing with BigTechs and other nonbank payment service providers for market share and have also established partnerships and collaborative arrangements with them. There has been an increase in the number of EMI licenses issued by the BdE.[3] Outside of payments, most fintech activities are not yet material. While interest in crypto assets is on the rise, the market is small and concentrated. Most fintech lending, like in many other countries, is not formally regulated from a prudential perspective, and non-bank digital lending activity has increased, but volumes remain small.

**5. The Spanish regulatory framework follows the "same risk, same activity, same regulatory outcome" principle.** Therefore, the regulations do not discriminate based on the type of technology employed, but rather concentrate on the nature of the activity carried out and its licensing status. A range of firms is licensed, regulated and, in some instances, supervised by the regulatory authorities

[2] This technical note (TN) was prepared by Puja Singh.

[3] The number of licensed EMIs doubled between 2018 and 2023, from five to 10.

(Table 2). The regulatory framework combines EU legislations (e.g., Revised Payments Services Directive (PSD2), Markets in Crypto-Assets Regulation MiCA, Digital Operational Resilience Act (DORA), Distributed Ledger Technology (DLT) Pilot Regime Regulation, Consumer Credit Directive or Mortgage Credit Directive) and regulations issued in Spain.

**6. An inter-agency sandbox has been established to provide a controlled testing environment for new financial products and services**.[4] Specifically, the objective of the sandbox is to facilitate the digital transformation of the financial system by allowing the implementation of technological innovation projects in a controlled testing environment. The sandbox contributes to ensuring that financial supervisory authorities have adequate arrangements to continue fulfilling their functions in the new digital context besides providing an approach to monitoring fintech innovation and conveying supervisory expectations to incumbents and new promoters.

## B. Scope and Approach of this Note

**7. This technical note (TN) covers fintech developments and supervisory oversight in Spain as of February 2024.** It includes the impact of fintech on regulated firms, mainly banks, the interaction between new market entrants and existing firms, the approach towards market monitoring, the institutional arrangements for regulation and supervision of fintech, and overall supervisory cooperation.

**8. The TN does not aim at carrying out a detailed review of the current regulatory regime and is divided into three main sections.** The first section covers the overall fintech landscape with its segregation between banks and nonbank fintech companies that are collaborating with banks for scaling up their business. The second section focuses on four key issues (digitalization of the banking sector, the role of banks within payments, the crypto asset landscape and nonbank digital lending). The last section covers the regulatory and supervisory approach towards fintech, fintech monitoring and supervisory cooperation.

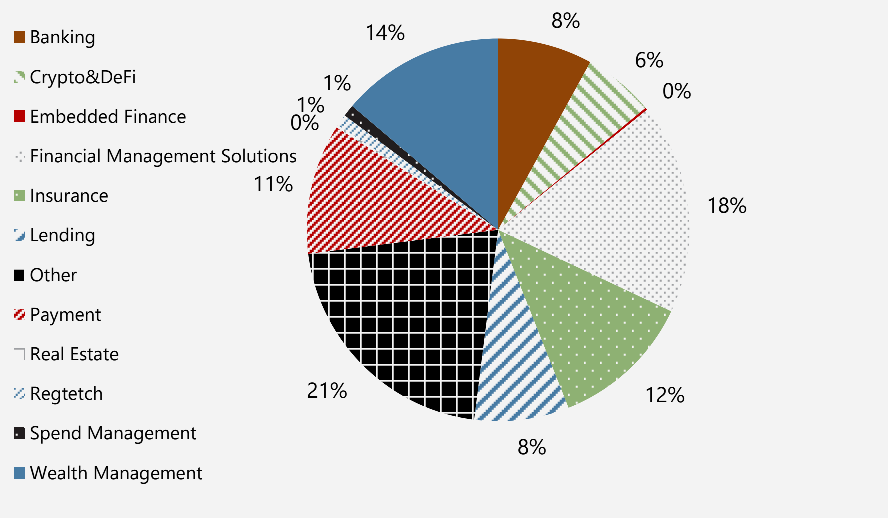
**9. The FSAP team appreciated the excellent cooperation from Spanish authorities and other counterparts.** In particular, the team would like to thank the staff from the Spanish supervisory authorities—the BdE, CNMV and DGSFP—as well as representatives of the SGTFI, the Sandbox Coordination Commission, the European Forum of Innovation Facilitators, and representatives of the private sector, for their time and the information and data that they provided, and which was vital to the analysis underlying this TN.

[4] Law 7/2020 (the "Sandbox Law")

# FINTECH OVERVIEW

**10. Digital delivery and product innovation touches most financial services in Spain today.** This reflects new business opportunities for banks and facilitation of entry of new nonbank service providers by digitalization. The European Commission ranked Spain seventh out of 27 EU Member States in their Digital Economy and Society Index (DESI) in 2022.[5] Data collected by the EU Commission show that more than 300 fintech firms are operating in Spain covering a range of financial services (Figure 1).[6]

**Figure 1. Spain: Breakdown of Fintech Firms by Type of Activities**




Note: data as of 1/31/2024. The percentages simply reflect the number of firms in each segment (e.g., payment) divided by the total number of firms proposing digital services. They do not reflect the market share in terms of volume of activities.

**11. Outside of banks, there is wide variety of fintech and technology service providers that are active**, comprising BigTechs; pure technology companies; nonbank Payment Service Providers (PSPs), such as Payment Institutions (Pis) and EMIs;[7] and consulting companies, acting as front-end for fintech companies. Digital only banks, typically backed by a traditional banking group and regulated and supervised like any other credit institutions, are also growing their presence in the Spanish fintech landscape.

**12. Technology driven innovation in financial services is concentrated largely in payments while activity is nascent in lending, asset management, and investments (Figure 3).**

**a. Payments**

**i. Consumers are increasingly relying on digital payment channels.** While debit and credit cards are the second most significant means of payment in Spain,[8] both in terms of possession and frequency of use at points of sale (POS), this is followed by bank transfers and

[5] DESI is composed of four elements—human capital, connectivity, integration of digital technology, and digital public services. In all four sectors, Spain has shown growth compared to previous years (Spain in the Digital Economy and Society Index | Shaping Europe's digital future (europa.eu)

[6] Fintech mapping | EU Digital Finance Platform (europa.eu)

[7] The difference between PIs and EMIs is that EMIs, in addition to the list of Payment Services that an authorized PI may conduct, can also issue electronic money. The definitions of these institutions are developed under different directives. Payment institution service provision is defined under PDS2 Directive (Directive 2015/2336/EU), while E-money institution services are defined by the EMI Directive (Directive 2009/110/EC ).

[8] The first mode is still cash.

payments through mobile devices and online payment platforms, with the latter growing at a faster pace than the former and being used more as daily means of payment. In 2022, 80 percent of non-recurring payments were made at the POS, down by nearly 7 percentage points. By contrast, online purchases were up by virtually the same proportion, rising to 16 percent of the total. These changes in consumer purchases directly affect the usage of different payment methods.

**ii. The use of cash has also decreased in absolute and relative terms, driven primarily by shifting payment preferences.** Cash remains the dominant means of payment (65 percent of total transactions), but its usage is declining (Figure 2), driven, notably by the growth in online purchases, with e-wallets or digital wallets now accounting for 30 percent of e-commerce transactions.[9]

**iii. New digital payment methods such as retail instant payment solutions have developed rapidly.** Statistics indicate a growing use of instant payment solutions. The Single Euro Payment Area (SEPA) Instant Credit Transfers facility (SCT Inst) in Spain accounted for 54 percent of total transfers in 2023, higher than the average of 15 percent across Europe.[10] The significant growth of instant payments in Spain is being driven by the bank consortium-led arrangement for electronic payment instruments "Bizum"[11] which competes with other emerging digital payment service providers.

**iv. The number of firms licensed and regulated as PIs or EMIs have increased in the last five years.**[12] Some of these firms are proposing online payment solutions to corporates, notably Small and Medium Enterprises (SMEs).

**b. Lending**

**i. The lending sector has witnessed the emergence of few non-bank digital lending players**, such as fintech companies offering crowdlending; equity crowdfunding; P2P finance platforms; and nonbank digital lending intermediation platforms proposing a range of services, including product comparison, credit rating, and customer credit profiling.[13] The consumer credit crowdfunding platform has been growing at a rapid pace in recent years serving a relatively risky profile of borrowers compared to those borrowing from credit institutions. There has also been a recent increase in the use of payment deferral solutions, such as Buy Now Pay Later (BNPL). Such payment solutions can be proposed by the merchants themselves,

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[9] Source: Biggest online payment methods in Spain 2027 | Statista

[10] The SEPA Instant Credit Transfer (SCT Inst) is an instant payment solution that delivers domestic and cross border Credit Transfers in the EA.

[11] Refer to para 24 for details on how Bizum constitutes as an arrangement and its oversight as per Eurosystem framework for electronic payments (PISA).

[12] The number of PIs licensed in Spain has increased from 54 in 2018 to 77 in 2023.

[13] The are for instance 26 crowdfunding platforms licensed with CNMV and another 21 offering crowdlending via the passporting route.

or more, often in collaboration with third-party lenders which can be regulated (e.g., a bank) or not (a nonbank fintech). More consumers are using BNPL products, particularly for online purchases.[14]

**ii. While the number of digital lending firms has grown in Spain, bank lending continues to be preeminent.** As per the classification of fintech companies provided by BdE,[15] a large proportion of Spanish fintech companies belong to the lending category. However, according to the BdE, the total volume of credit granted by these companies is low, for e.g., consumer finance crowdfunding platforms extended credit amounting to approximately €2 billion in 2019, which is extremely small in comparison with the size of the Spanish banking sector (more than €4.5 trillion) (Figure 3).[16]

**c. Asset Management and Investments**

**i. The development of investment management services, especially robo-advisors and other automated investment services is worth highlighting.** In the investment field, initiatives include platforms and distributors that compare financial products, as well as companies that help optimize personal finance by suggesting products that suit the user's risk appetite and spending and saving patterns. Overall, the acceleration of such platforms is driven by adoption of new technologies such as Big Data analytics and Artificial Intelligence. Within this segment, a notable process automation is that of robo-advisors and automated investment management platforms, providing algorithm-driven financial planning and investment services with little to no human supervision. In addition, the number of nonbank fintech firms offering investment analysis and stock tracking services is also growing.[17]

**ii. Within the robo-advisory segment, the larger service providers are banking groups.** Firms offering robo advisory services and other automated investment management platforms are licensed with the CNMV, like other investment advisors, nonbank fintech companies are partnering with banks to gain economies of scale.

[14] BNPL payment schemes let customers pay for their purchases with interest-free instalments rather than paying the full amount typically for online purchases on e-commerce platforms. When customers decide on a purchase and select the BNPL option at checkout, the lender at the backend (e.g., a BNPL platform or a bank proposing BNPL facilities) approves a credit line which pays the merchant the full amount of the goods purchased. As for the general economics of these transactions, merchants typically pay transactions fees to the BNPL providers. Late fees may also be charged to the customers in case of late or missed payments.

[15] Taxonomy_Fintech_en.pdf (bde.es) (2020). Credit providers and lending intermediation service providers account for the largest number of fintech firms (at 24.9 percent of the total number of fintech companies in 2019). This is confirmed by a more recent study from the BdE (Occasional Document 2214, 2022). The majority of firms in this lending category are lending intermediation service providers that do not take credit risks.

[16] FinTech Data Gaps (cemla.org) (2020). The BdE acknowledged that the significance of this segment in terms of channeling financial flows may be underestimated in cases where fintech companies are only offering services facilitating the conclusion of contracts for products or services by "funneling" customers to (the websites of) the ultimate service providers / lenders.

[17] Primarily using big data algorithmic trading systems that use artificial intelligence models to measure investor sentiment.

**13. While the development of new products and approaches to market them may pose potential risks to consumers, the fintech sector (except payments) is very small with no imminent financial stability implications.** The authorities are encouraging innovation and competition in the sector while closely monitoring the developments as such companies may tend to pose concerns from market conduct, consumer protection and market integrity perspectives. While the growth in the size and scope of fintech services may, over the medium-term, result in a more interconnected financial sector, with incumbent financial firms like banks engaging with fintech companies and BigTechs in new and complex ways, including outsourcing, partnerships, and other collaborative agreements, at the moment, most activities with the exception of payments are not large enough to pose financial stability concerns.

**14. Banks continue to dominate the fintech landscape in Spain by principally collaborating with nonbank fintech companies.** In this respect, Spanish Banks, particularly significant institutions (SIs), cooperate with fintech companies by acquiring their products, joining consortia, investing in start-ups, delegating services to them, and initiating incubators or partaking in accelerators to assist smaller companies with innovative solutions.[18] The regulated institutions are more prone to collaborating with fintech companies than acquiring them as there may be capital requirements on such investments. Further, within these collaborative arrangements, the nonbank fintech companies appear to typically provide the technology or service know-how (e.g., to facilitate pilot operations and explore new products), while the incumbents provide regulatory support and access to their customer database, which the banks are becoming increasingly wary of. Most digital only banks are actually owned by large banks, with a few independent new players that would be considered “challenger banks”.

# SPECIFIC ISSUES UNDER FOCUS

This section looks at four specific issues in greater depth for Spain, i.e., (A) digitalization of the banking sector; (B) the role of banks in payments; (C) the crypto-asset segment; and (D) nonbank digital lending.

## A. Digitalization of the Banking Sector

**15. Banks are offering digital services, including selling financial products online.** Specifically, the digitalization of service delivery channels; introduction of new products; changing consumer preferences, e.g., vis-à-vis payments and use of application-based services; and the appearance of new players, such as challenger banks, have altogether led banks to offer more digital banking services and sell financial products online.

**16. Spanish SIs follow a multi-channel approach to distributing their products and diversifying their income sources**. 70 percent of domestic Spanish customers use online banking

[18] For example, one bank is proposing a digital FX wallet as an alternative to holding multiple accounts in different currencies.

services, well above the EU average of 64 percent. A significant change evident across age-groups is the increased use of banks' mobile applications, even as customers continue to express preference for branch-based services for some core products and services (e.g., mortgages, insurance, and asset management). This has resulted in banks resorting to an omnichannel approach which represents a competitive advantage for the sector by maintaining physical branch operations while expanding digital channels for financial services delivery.

**17. Spanish banks have also increased spending on information and communication technology (ICT) to improve operational efficiency.** Most Spanish banks are increasing reliance on new technologies, e.g., on cloud service providers (CSPs). Spanish banks have also increased their investment in ICT to enhance their own digital transformation. BdE data shows that by June 2023, annual ICT investments by Spanish banks have reached €4 billion, as compared to €2.6 billion in 2009, and Spanish banks' ICT expenses as a share of their total administrative expenses was, at 33 percent, slightly higher than the EU average of 31 percent.

**18. While continuing to maintain a high number of branches in rural areas given their customer profile, cooperative banks have also increased their ICT investments.** Anecdotal evidence suggests that ICT expenses of some credit cooperatives increased by 60 percent over the past five years. The proportion of digital clients for several LSIs has also increased, reaching as high as 73 percent of total active clients in June 2023, compared to 58 percent in December 2020.

**19. Even as investments in digitalization have been seen across the board, growth in sales and transactions of digital banking services has occurred in proportion to bank size and business scope.** SIs are seeing significant direct impact of these expanded investments being reflected in the growth of their digital customer bases and revenues there from. LSIs on the other hand have improved their digital access for, and to, their customers, albeit with little visible impact on sales and revenues from these digital channels. Discussions with industry representatives and the official sector suggest differences in analytical capacity and shorter time-to-market of digital innovations as key drivers of these differential returns-to-date of ICT and other investments by SIs and LSIs.[19] One important question is whether smaller banks can sustain high ICT expenses if the digital revenues do not increase.

**20. As technological changes create new vulnerabilities and amplify existing ones, banks need to have appropriate mechanisms in place to ensure long-term resilience.** Spanish banks explained to the FSAP the ways in which governance and risk management arrangements have been adapted to reflect these risks, such as through greater representation of technical experts at the board level. Moreover, there has been an increased focus on operational resilience, concentration, and third-party risks.

[19] Anecdotal evidence gathered during the mission suggests that while SIs have realized a significant increase in their digital revenues over last 5 years, digital sales of some LSIs have stagnated despite a spectacular increase in their digital customer base compared to 2019.

**21. The BdE has conducted several horizontal reviews of the impact of digital transformation on SIs and LSIs.** These reviews, focused on operational resilience and banks' digitalization strategies, also covering the growth in the number of digital customers, and their engagement with platform aggregators for client acquisition. The BdE is currently involved in a comprehensive horizontal assessment conducted by the SSM of the impact of digitalization strategies on SIs' business models, governance, and risk management frameworks. At the end of this review, which is being conducted within the framework of the SSM, supervisory expectations will be shared with the banks participating in the first phase of this assessment wherein 6 out of 10 SIs are from Spain, selected on the basis of a number of factors, including the maturity of their digital strategies and strong innovator profile. Discussions with representatives of the BdE's Directorate General Banking Supervision reveal that supervisory staff is closely engaged in the assessment being conducted under the SSM purview.

**22. A comprehensive study has not yet been conducted for LSIs.** While the priorities in terms of LSI supervision for 2023 include notably business model sustainability and operational risk, no comprehensive ad-hoc horizontal assessment of the impact of digitalization on LSIs that would go beyond the operational resiliency perspective has been undertaken. Representatives of the BdE's Directorate General of Banking Supervision have explained that this is due to a lack of resources.

**Recommendation**

**23.** By drawing on lessons learnt from previous analysis performed by the BdE and its engagement in the ongoing SSM review noted above, the BdE should conduct a deeper assessment of the impact of digitalization on the business models, governance, and risk management strategies of LSIs.

## B. Role of Banks in Digital Payments

**24. Spanish banks have collaboratively designed and implemented a digital payment solution that has achieved comprehensive penetration in light of changing consumer payments preferences.** A consortium of SIs and LSIs launched an arrangement for electronic payment instruments – Bizum – in 2016 to facilitate interoperability of P2P payments across their customers (Box 1). Since its inception, it has enabled banks to respond effectively to the changing preferences of their domestic customers in favor of digital modes of P2P payments and more recently also e-commerce related payments.

### Box 1. Spain: Business Model of Bizum

**Background:** Bizum was launched by 23 Spanish banks in 2016 as an information layer between banks to allow users to make P2P payments through a smartphone, thus facilitating instant payment transactions between people by linking their phone numbers with their bank accounts with no fees to consumers. The service has strengthened the ability of Spanish banks to provide digital services. Bizum, in addition to providing P2P payments also offers added features, such as donations to non-governmental organizations (NGOs) (launched in 2018), e-commerce payments (initiated in 2019) followed by Consumer QR at POS (launched in 2022) and digital ID services (Bizum ID introduced in 2023).

**System & Procedures**: Bizum is built according to the Single Euro Payments Area (SEPA) Instant Credit Transfer (SCT Inst) standard and acts as an informational layer leveraging the new SEPA real-time payment standard. All electronic payments initiated by the user through Bizum interface were settled between respective banks through the National Electronic Clearing System, similar to any other electronic payment initiated by the user through his/her bank's platform. Further, every use case of Bizum follows PSD2.

**Scale of Operations:** Bizum's scale of operations is reflective of the substantial increase in instant transfers under the SCT facility where the SCT transfers in Spain accounted for 54 percent of total transfers in 2023, of which Bizum accounted for approximately 90 percent. This scale of usage of the SCT facility in Spain is significantly higher than the European Union (EU) average of 15 percent. From a customer coverage perspective, Bizum usage has expanded to reach greater than 90 percent of bank customers in Spain across all age-groups—25 million customers of 38 Spanish banks, representing 98 percent of the domestic banking sector. Further, the new e-commerce, consumer point-of-service has almost 60,000 participating merchants.

[1]The National Electronic Clearing System (SNCE) is the Spanish retail payment system managed by IBERPAY, a private company whose shareholders are the credit institutions participating in the SNCE. The BdE is responsible for approving the rules of the system and for its oversight.

25. **Bizum is overseen by BdE's payment systems oversight department as an arrangement for electronic payment instruments, with monitoring conducted under the PISA framework.**[20] The PISA framework is relatively new, and the classification is based on various statistics and parameters. The PISA framework assesses the security and efficiency of electronic payments and applies to the governing bodies of payment schemes and arrangements.[21] As per the framework, the governance body (which can be a licensed or non-licensed entity) may outsource functions/functionalities or rely on third parties to perform them, but it will remain ultimately

[20] The Euro system developed an oversight framework for electronic payment instruments, schemes and arrangements (PISA framework) that entered into force in November 2022. The PISA oversight framework is based on the CPMI-IOSCO Principles for FMIs. Examples of PISA entities are digital wallets (e.g., X-Pays), card payment schemes, e-money schemes, digital payment token schemes (e.g., crypto-assets and stablecoins), credit transfer schemes and direct debit schemes. Ongoing oversight activities include risk-assessments, evaluation of changes, major incidents reporting, and statistical monitoring.

[21] See section 3 of Eurosystem oversight framework for electronic payment instruments, schemes and arrangements.

responsible for ensuring adherence with this framework.[22] In this respect, Bizum is an unlicensed entity which is owned by banks and governed by them. Nevertheless, the BdE payments oversight department is now considering enhancing its monitoring over Bizum from an arrangement to that of scheme[23] under the PISA framework since Bizum has started offering additional services (primarily for e-commerce payments). If classified as a scheme, Bizum would be subject to enhanced monitoring.

**26. Spanish banks have also been relying extensively on BigTech to offer mobile payment services.** These partnerships are aimed at fully incorporating the financial cards of the banks into these services. For instance, data available from the BdE suggests that 22 banks work with Apple Pay, while Google Pay and Samsung Pay have 7 and 12 partners respectively.

## C. Crypto Asset Ecosystem

**27. Spain's crypto sector is marked by concentrated service provision and low penetration limited to small investors using crypto assets primarily for speculative purposes.** There is a large number of domestic and passported players operating in the crypto asset market, but the market is primarily serviced by two crypto-asset service providers (CASPs).[24] In a 2022 survey by the CNMV of the exposure of Spanish investors to crypto assets, only 6.8 percent of the 1,500 respondents had invested in crypto currencies. These investors, whose average age was about 40 years, devoted a very small share of their investable capital (of approximately 5 percent) into crypto assets and were investing through social media and technology platforms primarily for speculative purposes.[25]

**28. Banks' exposures to crypto assets are immaterial.** After the publication of the prudential treatment of crypto-asset exposures by the Basel Committee on Banking Supervision in December 2022, the BdE conducted a data collection exercise on banks' exposures to, and operations with crypto assets. It concluded that both SIs and LSIs have a conservative approach to crypto assets, with limited exposures overall. BdE has also indicated, that going forward, it intends to conduct this exercise on a regular basis.

**29. In this context, the current size of the crypto assets market does not pose a significant financial stability concern, but misconduct risks remain important.** The limited exposures and interconnectedness of existing regulated firms (traditional finance) to crypto asset markets means that

[22] Schemes and arrangements are exposed to legal, business, operational, interdependencies and financial risks. The governance body is expected to take all necessary and appropriate measures to mitigate these risks and maintain confidence in the schemes/arrangements and electronic payment instruments used.

[23] Examples of schemes are card payment schemes, e-money schemes, digital payment token schemes, credit transfer schemes and direct debit schemes. An arrangement is a set of operational functionalities which support the end users of multiple payment service providers in their use of electronic payment instruments. The Eurosystem oversight framework for electronic payments (PISA) is published (europa.eu)

[24] One passporting firm and one domestic exchange firm.

[25] ESTUDIO SOBRE LAS CRIPTOMONEDAS Y LA EFECTIVIDAD DE LAS MEDIDAS IMPULSADAS POR LA CNMV

these markets do not pose an imminent or near-term threat to financial stability. However, crypto asset markets pose other challenges, for instance pertaining to market abuse.

**30. Correspondingly, crypto asset activity is currently monitored by authorities from market conduct and AML perspectives.** Competencies of the CNMV on crypto advertising activities were initially granted by the Royal Decree-Law 5/2021, of 12 March, on extraordinary measures to support business solvency in response to the COVID-19 pandemic and implemented by the CNMV Circular 01/2022. The new Law 6/2023 on Securities Markets and Investment Services (LMVSI) designated CNMV as the competent authority to control the advertising of crypto assets as means of investment.[26] Prior communication to CNMV (Investors Department) for approval of massive advertising campaigns aimed at more than 100,000 people, or which are going to have a significant impact on the target public is required. Collective investment schemes can be authorized by the CNMV to invest in financial instruments whose profitability is linked to crypto assets.[27] For those authorized CIS the prospectus must include an express and prominent mention about the exposure to cryptocurrencies and the risks this may entail. In addition, the BdE, from an AML/CFT perspective, is responsible for managing the register of providers engaged in exchange services between virtual currency and fiat currencies and custodian wallet providers in Spain.[28]

**31. The implementation of the European MiCA Regulation will introduce uniform EU market rules for crypto assets, thereby creating a comprehensive regulatory framework.**[29] MiCA which institutes uniform EU market rules for crypto assets will start to apply in 2024 (June 2024 for Titles III and IV and December 2024 for Titles I, II, V, VI, VII). This will address the current absence of a framework for the regulation and supervision of crypto assets related activity across the EU, including Spain.[30] Following the new Securities Market Act of June 2023, the CNMV has been assigned the competences over crypto assets, other than asset-referenced tokens (ARTs) or electronic money tokens (EMTs) (Title II of MiCA) and the authorization and operating conditions for crypto-asset service

[26] Article 247 of the Securities Markets and Investment Systems Law (LMVSI) granted the National Securities Market Commission (CNMV) the power to draft and publish a Circular regulating the control modalities, including the introduction of warnings on the risks and characteristics of these products, as well as the objective and subjective scope, and granting it the supervision.

[27] The exposure of collective investment schemes to crypto is very limited due to the existing constraints on the nature and volume that can be invested which also depends on the type of collective scheme.

[28] This register has a limited purpose of catering only for anti-money laundering and counter terrorist financing needs. An entity’s inclusion in the register does not imply that it has been granted prudential authorization,

[29] While MiCA provides a framework for licensing and regulating CASP, key provisions included in MiCA that apply to issuing and trading crypto-assets (including asset-reference tokens and e-money tokens) cover transparency, disclosure, authorization and supervision of transactions. The objective is to support market integrity and financial stability by regulating public offers of crypto-assets and by ensuring consumers are better informed about their associated risks.

[30] Until MiCA becomes applicable, neither CNMV nor the BdE have the power to regulate, authorize or supervise the functioning of crypto-asset markets or their participants.

providers (Title V), while the, BdE has responsibilities over the issuers of non-significant ARTs (under Title 3) and EMTs (under Title IV) issuers.[31]

**32. Most, but not all, challenges and risks arising from crypto asset exposures will be addressed through the implementation of MiCA**. As certain activities are not covered under MiCA (DeFi activity or crypto asset lending[32]), it will be important for the authorities to evaluate and monitor the extent of such activities. In case these activities become material, the authorities should stand ready to adjust their regulatory perimeter and the approach to supervision. The mission found anecdotal evidence of a growing number of crypto asset lending platforms with many service providers collaborating with licensed EMIs to facilitate crypto asset credit intermediation or offering card solutions.[33] Further, crypto assets not covered by MiCA include those that qualify as financial instruments under MiFID II and those that are unique and not fungible with other crypto assets (non-fungible tokens (NFTs)).

**33. With MiCA becoming applicable by December 2024, the Spanish authorities are enhancing their supervisory capacity to provide for crypto assets licensing and supervision.**

- The CNMV has recently received approval to hire 76 new employees, out of which a significant portion is expected to support the new competence for licensing, supervision, conduct, and enforcement of the regime that will apply to CASPs. The CNMV is now in the process of providing adequate capacity building to staff to train them to carry out their newly allocated responsibilities. As the number of CASPs that will apply for a license is currently unknown, the CNMV intends to initiate a survey of market participants to gather insights on the extent of crypto asset activity and use cases. It also plans to acquire the necessary technological tools that shall enable it to supervise CASPs and monitor the crypto asset activity in Spain once MiCA is fully implemented.

- The BdE is at a preliminary stage of assessing the allocation of responsibilities across its different departments on ARTs (Title 3) and EMTs (Title IV). On EMTs and ARTs issuers (which are primarily stablecoin issuers), the BdE has been assigned competency for domestic EMTs and ARTs, albeit for significant EMTs and ART issuers across the EU, as per MiCA provisions, supervisory responsibilities will be shared between European Banking Authority (EBA) and relevant national competent authorities (NCAs). Hence, once MiCA is fully implemented, BdE for instance, shall be required to review the notification and white papers received from licensed EMIs and banks who intend to issue domestic EMTs, approve white papers from licensed banks who intend to issue domestic ARTs and grant authorization to legal persons who intend to issue domestic ARTs, in addition to shared supervisory responsibilities on significant EMTs and ART issuers .The BdE will therefore be

[31] As per article 59 of MiCA Regulations, ARTs and EMTs should be deemed significant when they meet, or are likely to meet, certain criteria, including a large customer base, a high market capitalization, or a large number of transactions.

[32] Crypto lending is a decentralized finance service that allows investors to lend out their crypto holdings to borrowers. Lenders then receive regular crypto interest, similar to interest payments earned in a traditional savings account. Spain has witnessed the emergence of crypto-asset lending platforms of which a few are also licensed as EMI with BdE to facilitate crypto-asset lending.

[33] For example, a crypto-asset lending platform partnering with Mastercard facilitates crypto-asset backed payments.

required to dedicate adequate supervisory resources for the supervision of issuers of EMTs and ARTs and significant EMTs and ARTS operating in Spain.

**Recommendation**

**34.** Supervisory authorities should collect information on crypto lending and DeFi activities that are not covered under MiCA.

## D. Nonbank Digital Lending and Financial Intermediation

**35. Several lending activities are not regulated and do not require a license.** Lending activities, such as credit agreements for consumers, mortgage loans, factoring, leasing, and guarantees, among others, may be carried out by individuals and companies in Spain, without legal reservation for any specific category of institution. Like many other EU countries, the regulation of nonbank lending is largely unharmonized.[34] While it is permissible to offer several types of nonbank lending services without any authorization or registration, some activities do require a license, including notably real estate crowdfunding activity[35]. In addition, an authorization or registration is required in order to act as a Specialized Lending Institution (SLI), a Mutual Guarantee Company, or a real estate nonbank lender in the market.[36] Lending activities are usually regulated from conduct and AML-CFT perspectives.

**36. This sector has witnessed new activities that fall outside the existing regulatory perimeter** (e.g., BNPL, peer-to-peer lending offered by nonbank lenders). While the average amount of BNPL loans is small in terms of ticket size and such loans are purely retail, the activity, in general is on the rise. Compared with traditional consumer credit, BNPL credit is extended on the basis of less information. BNPL platforms as compared to banks have soft credit checks, typically no reporting of credit history and provide full coverage of credit risks while the merchants pay high fees to transfer credit risk to the platforms and broaden the customer base. In the case of Spain, BNPL is offered via e-commerce platforms as well as at POS. Spanish banks are also offering BNPL solutions and are therefore exposed to unsecured lending without a detailed credit assessment of the client opting for the BNPL service. There was anecdotal evidence of BigTechs partnering with nonbank lending companies to offer BNPL and other lending solutions in Spain including few telecommunication service providers collaborating with such non-bank lending providers. In parallel there is also

[34] Applicable requirements combine EU rules (including the revised Consumer Credit Directive and the Mortgage Credit Directive) and national rules.

[35] Real estate crowdfunding activity is regulated via CNMV under Law 5/2015 of 27 April which was then derogated and replaced by EU Regulation (EU) 2020/1503 which lays down the uniform requirements for the provision of crowdfunding services in the European Union. The EU regulation allows platforms to apply for an EU passport based on a single set of rules, which makes it easier for them to offer their services across the EU with a single authorization.

[36] Before commencing their activities of granting or servicing activity of loans that fall within the scope of the Law 5-19, real estate nonbank lenders shall be registered in the special administrative register for real estate credit intermediaries and real estate lenders of the BdE or the competent authority of the Autonomous Regions.

emergence of many nonbank digital financial intermediation providers in Spain which facilitate consumer credit via banks through credit profiling using for instance, technology enabled tools relying on qualitative and quantitative parameters.[37] The emergence of new lenders, such as BigTech firms or alternative finance through crowdlending platforms, could also imply that such nonbank digital lending entities would not be bound to report to the Central Credit Register (CCR) of the BdE.

**37. Data limitations preclude a thorough analysis of the risks arising in some unregulated segments.** As mentioned above, anecdotal evidence suggest that the volume of nonbank credit remains very small compared to bank credit. There is, however, limited information on the business models of nonbank lending platforms, including BNPL platforms, with regard to their source funding, scale of activity, client base, and limited visibility on their arrangements and collaboration with banks.[38]

**Recommendation**

**38.** Supervisory authorities should continue to collect information on nonbank digital lending activities, undertaking horizontal assessments and thematic reviews to analyze the potential source of interconnectedness between banks and firms involved in non-bank lending.

# REGULATORY AND SUPERVISORY APPROACH

## A. Legal Basis

**39. There are different authorities overseeing the conduct of banking and other financial services businesses in Spain.** These public bodies have regulatory and supervisory authority over participants in both banking and other financial services. Since 2014, Spanish SIs are supervised within the SSM in which the ECB has the leadership role and BdE and other national financial supervisory authorities in the Euro Area participate.[39] In case of LSIs, the ECB has an indirect role and national authorities are the direct supervisors. Moreover, the BdE also supervises (i) specialized lending entities, which are financial institutions that are not allowed to take deposits from the public and that have a more limited corporate purpose; (ii) PIs, which are legally entitled to provide payment services; (iii) EMIs, which provide almost identical services as PIs but are also allowed to issue electronic money and (iv) real estate nonbank lenders and real estate credit intermediaries regulated by Law 5/2019 but only from market conduct perspective. The CNMV is Spain's market regulatory authority, responsible for overseeing Spanish securities markets and supervising the activities of all market participants. In relation to insurance, the Spanish Directorate General of Insurance and Pension Funds (DGSFP) is the

[37] For example, a consumer credit platform domiciled in Spain provides its customers with a score, which reflects their creditworthiness and enables them to access loan offers from various banks that are integrated into the platform application. This system operates as a personalized credit facility with the advantages of a higher acceptance rate and lower interest rates.

[38] There was anecdotal evidence of referral arrangement between banks and non-bank lending platforms which could point towards possible predatory lending practices.

[39] The term used within the EU is NCAs.

body responsible for supervising the various activities carried out by insurance and reinsurance undertakings and pension plans and funds in Spain. The Executive Service of the Commission for the Prevention of Money Laundering and Monetary Offenses (SEPBLAC) is the supervisory authority concerning the prevention of money laundering and the financing of terrorism, for which purposes, it has supervisory and enforcement authority relating to financial sanctions and countermeasures.

## B. Regulatory and Supervisory Approach to Fintech

**40. The Spanish authorization regime hinges on the provider's classification given the wide range of providers offering fintech services (Table 2).** The regulations do not discriminate based on the type of technology employed, but rather concentrate on the nature of the activity carried out and its licensing status. Some entities offering fintech related services may not specifically be subject to direct regulatory oversight of the Spanish authorities and need not report to them, such as companies that principally provide ancillary and support services to regulated financial institutions.[40] Other companies which are offering some services similar to licensed institutions (like asset managers) through use of technology like robo-advisory require corresponding authorization and are subject to supervision of CNMV to operate in the Spanish market. The authorities have indicated that they do not maintain a specific registry dedicated to fintech entities that provide financial services under their oversight.

**41. The authorities' objectives are to harness the benefits of fintech while managing additional risks it may generate**. They aim to keep up to date with European regulatory developments and possible improvements in national legislation.[41] Risks posed by fintech innovation that are of interest include the robustness of the business models of fintech services providing firms; threats to cyber security; operational interconnectedness and concentration of key service provision, e.g., CSP; and the impact that fintechs pose for incumbents' business models as well as for consumers.

**42. The authorities rely on a range of tools for effective supervision and monitoring of fintech developments.** Apart from operating a sandbox and an Innovation Hub, the financial sector authorities conduct ad-hoc horizontal assessments and thematic studies on emerging fintech issues while facilitating development of a database of fintech companies in Spain.[42] Furthermore, the authorities, specifically the BdE. CNMV, and DGSFP, participate in and organize various fintech events.

[40] One example could be of a company offering credit scoring and client profiling using AI tools to a licensed credit institution.

[41] For example, MINECO launched in April 2024 a public consultation on the draft law and draft royal decree for the digitalization and modernization of the financial sector. This draft law was not reviewed by the FSAP team as it was issued after the FSAP mission.

[42] BdE has undertaken a study in 2017, 2019 and then in 2021 to make a database of non-bank fintech companies and map their sectors, growth and other parameters through varied sources. These studies identified 130, 224 and 677 fintech companies in Spain respectively focused on micro-segmentation of the products. This mapping exercise is based on the business model and service provided by the company irrespective of its supervisory oversight which makes this different from a registry (as discussed in Para 37).

**43. In some areas, data limitations impede the assessment of the risks to financial stability.** The authorities have acknowledged the scarcity and unreliability of information due to its fragmentation and diversity in the provision of financial services that may be categorized as fintech. Certain activities are not regulated or are only subject to licensing or registration requirements without prudential supervision and oversight being undertaken. Some firms operate on a cross-border basis using passporting arrangements in the EU and do not have to provide specific reports to host authorities. Finally, there is limited information on nonbank digital lending activities.

## C. The Inter-Agency Sandbox

**44. The Spanish government approved Law 7/2020 of 13 November (the "Sandbox Law") to facilitate the digital transformation of the financial system.** To create a conducive environment for innovative processes in developing technology applicable to financial services, while ensuring adequate safeguards for users and financial stability, an inter-agency sandbox has been established to provide a controlled testing environment for new products and services. Specifically, the objective of the sandbox is to provide the requisite assurances and oversight by supervisory authorities, in a safe testing environment, of novel financial solutions that leverage technology.[43] The sandbox contributes to ensuring that financial supervisory authorities have adequate arrangements to continue fulfilling their functions in the new digital context.

**45. The governance structure of the inter-agency sandbox ensures that candidate projects are examined by all appropriate competent authorities (Figure 2, Step 1)**. The sandbox is coordinated by the General Secretariat of the Treasury and International Financing (SGTFI) through a Sandbox Coordination Commission that consists of representatives from the SGTFI,[44] three financial supervisory authorities (i.e., the BdE, the CNMV, and the DGSFP) with representatives from SEPBLAC, the Secretary of State for Digitalization and Artificial Intelligence (Ministry for Digital Transformation and of Civil Service), and Spain's Data Protection Authority (AEPD). The Coordination Commission meets on an approximately quarterly frequency and issues an annual report (two completed thus far, with one published). The governance structure ensured by the Commission and its operation is essential to the sandbox fulfilling its joint goals, namely ensuring a healthy pace of introduction of innovative digital financial technologies; providing adequate safeguards for users and against risk contagion; facilitating communication of supervisory expectations to fintech start-ups, entrepreneurs, and firms; and accelerating supervisory learning regarding technology solutions and innovations.

[43] A separate piece of legislation—the so-called Start-Up Law (28/2022)—has also been established to help new digital companies better tackle the early phase of their economic life cycle, providing several exemptions with respect to corporate, tax, and labor market laws.

[44] Out of the three representatives of SGTFI, one of them will serve as President of the Coordination Commission and another as Secretary of the Coordination Commission.

**46. The sandbox is an important instrument for facilitating digital innovation in the financial services sector.** Any type of company, consortia or even natural persons can participate.[45] Projects admissible to the sandbox typically ranged across three types.: (i)supervised entities (for instance banks and their affiliates), (ii) fintech start-ups including those that intend to serve regulated entities and (iii) IT solutions providers and consultants offering technology-based solutions, either for banking, securities markets or for insurance. Article 5 of the Sandbox Law states that, at a minimum, projects admissible for consideration for testing in the Sandbox must: offer a technology-based innovation applicable to financial services; have added value;[46] have maturity of preparation to render them ready for testing; and ensure compliance from AML- CFT and data protection regulations. The initial assessment of admissibility for consideration by the General Secretariat of the Treasury and International Financing (SGTIF) and the three supervisory authorities—BdE, CNMV and DGSFP—is expected to conclude within a maximum of two months.[47] Projects are assigned to one or a multiple of supervisory authorities (BdE, CNMV, and DGSFP), based on the type of services intended to test. During the discussions with the authorities, it was explained that projects to be tested have to meet the eligibility requirements specified under Article 5 of the Sandbox Law. However, subsequent to initial assessment of admissibility as per the Sandbox Law, there may be exemptions granted on case-by-case basis by the respective financial sector authorities within their own competencies.

**47. Supervisory authorities undertake a detailed review of key parameters of projects assigned to them, including agreeing to protocols with promoters with a view to erecting adequate safeguards for user-participants and agree on a testing plan (Figure 2, Step 2).**

- Promoters testing their solution in the sandbox do not require a license or specific authorization, as these testing activities would not constitute exercising them in a professional manner.

- Promoters are a heterogeneous group. In case of BdE, over 20 percent of promoters were from banks and fintech companies (including consortia), 30 percent being consulting firms, and 7 percent PIs.[48] A common feature of projects in the testing phase is that innovation comes together with some inherent advantages for a regulatory sandbox as institutional arrangement, such as a secure environment, perimeter with safeguards, and financial guarantees for real users, relative to ordinary supervisory arrangements.

- Protocols that lay out testing criteria are determined for projects to proceed to the testing phase, including financial guarantees for participants for those projects having real users who must also

[45] As per Paragraph 3. h) of the Sandbox Law, the Sponsor could be any natural or legal person who, individually or jointly with others, requests the initiation of their own pilot project in accordance with the provisions of this Law, including technology companies, financial entities, credit administrators, associations representing interests, public or private centers of research and any other interested party.

[46] The promoter must justify the added value that the project brings to the financial system.

[47] While the Sandbox law makes no provision for the SGTIF to play a role at the eligibility stage, discussions between the FSAP team and members of the SGTIF during the mission showed that the SGTIF is actively involved in the initial assessment of the eligibility of the projects.

[48] Consulting firms typically bring projects that are IT solutions for banks or represent small fintech firms.

give informed consent of their participation under such guarantees. The project can only proceed to the testing phase if it is able meet the requirements of the supervisor at this protocol determination stage, whose target duration is three months but can, on average take more time, reflecting the complexity of the process and comprehensiveness of the due diligence performed by supervisors.[49] For instance the, discussion of required protocols with a common section and project specific section —is an intensive process requiring continuous engagement, determination of timelines and of details of the testing plan and oversight during the testing phase, as well as communication with participants.

**48. Supervisory engagement with promoters and oversight of projects is intensive in the testing phase (Figure 2, Step 3).** For example, testing oversight by the BdE of sandbox projects that offer payments innovations can have intensive monitoring and require information reports to be filed by promoters. Supervisory oversight of banking innovations in the testing phase is project-specific and requires providing evidentiary support on assessment of testing outcomes, weekly follow-up meetings, and could be subject to onsite inspections. An additional safeguard built into the Sandbox Law is a provision enabling the responsible supervisory authority to interrupt testing if the project goes off track. At the end of the testing phase, both the promoter and supervisory authority draft an assessment report. The report prepared by the promoter containing information on the testing is reviewed and vetted by the supervisory authority, while the report of the supervisory authority with the main conclusions is published on the supervisor's website. Overall, the intensive engagement of the authorities during the protocol and testing phase help gather market intelligence and deep insights on such technological applications in the financial services delivery, product or service design, which could also be used, where necessary and feasible, to adjust the regulatory perimeter or adjust the approach to supervision.

**49. Experience gained from six cohorts of proposals that have been reviewed and moved into or through the testing phase provides several important insights**.

- First, and reflecting the comprehensive and intensive oversight of project quality and guarantee provided by the promoter in the context of testing[50], the supervisors spend a significant amount of time in testing and preparatory phases which can have a combined average length of greater than 10 months. This is accompanied by a completion rate which is quite low (of the 109 applications received, 16 projects have completed the testing process).[51] That said, the sandbox processes and administrative procedures for application, assessment and protocol stage have been streamlined since the first cohort and guidance has been published (the Sandbox Access Guide). The number

[49] As per discussion with authorities, it was understood that there were certain instances where the protocol determination stage took 4.5 to 6 months.

[50] As per Article 8, proviso 3 of the Sandbox Law.

[51] The low rate of completion reflects, to a material extent, the large number of applications received in the first cohort. Completion rates have increased after the first cohort, but information shared with the FSAP team was not sufficient to calculate a completion rate per cohort or quantify the magnitude of increase in completion rates for cohorts two through six.

of applications being received from second cohort onwards has declined while improvement in the maturity of solutions being received for testing has been observed.

- Second, of these 16 projects that have completed the testing phase, only one has acquired a license, with two more in the application process. This may, in part, reflect the fact that some projects that underwent testing offered business solutions or innovations that either already had a license or did not require authorization under the current registration rules and regulation, e.g., projects in the digital ledger technology, crypto asset service provision categories, IT solutions to be sold or outsourced to regulated entities.

- Third, low completion rates appear to reflect in part the fact that some promoters who sought access to the Sandbox to gain insight on supervisory expectations preferred to end their process mid-way once this objective was largely achieved, while other realized through the process that their solution was not mature enough.

- Fourth, the application rate for entry to the sandbox has fallen significantly even after excluding the large number of applications received in the first cohort. The CNMV still receives between one and three applications per cohort, with the number of applications received by the BdE having decreased considerably (from seven applications in second cohort to only three applications by the sixth cohort). Instead, more projects and promoters appear to be interested in accessing the Innovation Hub (see below). This trend is likely to sustain or even strengthen given the prominence of DLT projects and CASPs interested in applying for sandbox testing. The imminent entry into force of MiCA is likely to be a disincentive for crypto-related projects since there will no longer be additional benefit from going through the sandbox only to learn about supervisory expectations.

- Fifth, those who complete the testing phase are well placed to meet licensing and regulatory requirements should they proceed to the market. Independent of their being subject to such requirements, these projects are also better placed to promote their solutions and potentially, therefore, enhance their ability to access financing since the supervisory authorities publish testing results on their websites upon completion in addition to the annual report published by the SGTFI.

**Figure 2. Spain: Sandbox Process**

**APPLICATION – Through the Treasury website**

2 cohorts every year; Single point of entry (SGTFI)

Meet the eligibility criteria under Article 5 of the Sandbox Law

Preliminary evaluation by the SGTIF and the three regulators – BdE, CNMV and DGSFP

**SUPERVISORY REVIEW-Detailed assessment by the supervisory authorities**

Establishing testing parameters & signing of testing Protocol

Authorities seek financial guarantee/insurance & signed user agreements in projects involving real users

Promoter may migrate to Innovation Hub or exit if supervisory expectations are met

**TESTING – Closely monitored by supervisory authorities**

Authorities have power to suspend testing if testing goes off-track

Promoter may migrate to Innovation Hub

**EXIT - Assessment of test results by the supervisory authorities**

Submission of promoter report

Report from authority published on website

Output- Supervisory learning of the authority and promotion for sponsor

Sources: BdE, CNMV, DGSFP, and SGTIF.

50. **The inter-agency sandbox is an important tool for supervisory authorities to monitor and evaluate fintech innovations and communicate their expectations to promoters.** Among the many strengths of the sandbox include comprehensive supervisory review of applications for sandbox testing, including protocol determination to secure user and financial sector safety and intensive supervisory oversight during the testing phase. Experience through six cohorts of applicants moved into and through the testing process has provided significant supervisory learning and effective communication of supervisory expectations to promoters, supported by transparency of reporting by the supervisory authorities that enables communication benefits to extend their reach to the broader ecosystem.

51. **A better balance between these benefits of the sandbox and significant supervisory costs could be achieved by considering some changes to its operational arrangements.**

- While the sandbox is viewed as a tool to support supervisory intelligence gathering, evaluation and oversight of projects applying for testing inevitably requires investment of supervisory resources. In a context of stretched supervisory resources at both the BdE, CNMV, the sandbox is not an economical tool.

- The effort and resources invested by the supervisory authorities in processing two cohorts every year (at times in parallel), in the adequate monitoring of the tests, and in ensuring disclosure and transparency of the testing process are high. The legislation establishing the operation of the sandbox does not provide flexibility regarding the semi-annual frequency of entry of new cohorts, nor to the supervisory authorities in making a decision on whether individual applications could be equally or better served via other, lower costs alternatives, such as the Innovation Hubs.

- The Sandbox Coordination Commission in unable to modify the sandbox's operational arrangements.

- In addition, while the sandbox is relatively new and the benefits of this experimental approach are yet to be completely realized by the respective authorities, a preliminary analysis of the solutions tested so far indicates they need not be necessarily representative of the financial innovation in the market. For instance, in the case of the CNMV, the solutions tested in the sandbox are limited to asset tokenization, crypto-currency and DLT-FMI in relation to the EU DLT Pilot Regime.[52]

- Against this background, legislative changes should be considered for recommendations to be made by the Sandbox Coordination Commission to simplify the overall sandbox process based on lessons learned; accountability procedures could be simplified and administrative procedures streamlined to ensure that going forward the pace of entry better matches the pace of exit.[53] Since authorities do not have any control on the type of promoters applying to the sandbox for testing, greater flexibility should be extended to supervisory authorities to rely on their wider range of tools to monitor market developments, convey supervisory expectations, and assess the adequacy of the regulatory perimeter.

### Recommendations

**52.** The authorities (BdE, CNMV and DGSFP) should undertake a cost-benefit analysis of the efficiency of the sandbox process, including, but not limited to a comprehensive review of the administrative, operational and review procedures specifically being followed at the supervisory review and testing phase (as explained in Figure 1 above) and outcomes achieved at exit phase.

**53.** Consideration should be given to provide for the Coordination Commission to make changes to the sandbox operation, and to streamline administrative processes (e.g., adjust, where necessary, the frequency of cohorts and redirect, where seen beneficial, individual applications to other tools where these are available and more/equally suitable).

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[52] The DLT Pilot Regime is part of the Digital Finance Package introduced by the European Commission in 2020 to further enable and support the potential of digital finance while mitigating associated potential risks. The Regulation on a pilot regime for market infrastructures based on the DLT Pilot aims at developing the trading and settlement for DLT financial instruments. The DLT Pilot requires ESMA to assess whether the RTS developed under MiFIR relative to certain pre- and post-trade transparency and data reporting requirements need to be amended to be effectively applied also to securities issued, traded, and recorded on DLT.

[53] For instance, as required, the Coordination Commission has to publish an annual report on the digital transformation of the financial system (Art. 25 of Law 7/2020). Further a cohort has to initiate every 6 months when in actual practice there were instances of multiple cohorts running consequently due to varying period of testing (Art 6 (3) of Law 7/2020).

**54.** Authorities (BdE, CNMV and DGSFP) should rely on range of other tools to monitor market developments, convey supervisory expectations, assess the adequacy of the regulatory perimeter, and assess whether supervisory approaches should be adjusted where necessary.

**55. The Sandbox law also established the obligation of running an Innovation Hub which is currently in place in all three financial authorities (BdE, CNMV, and DGSFP**). In this respect, the CNMV has created an informal space where developers and financial institutions can share their initiatives in this field. The Fintech Portal provides support to developers and financial institutions on regulatory aspects of securities markets that might affect their projects. Since its initiation in 2020, the Fintech Portal of the CNMV has received more than 700 queries on various topics ranging from crypto assets/blockchain, automated advisory channels, crowdfunding platforms to name a few.[54] However, the Fintech Portal is purely a communication channel and opinions expressed by the CNMV within the framework of the Fintech Portal are exclusively informative. Every query received through the Fintech Portal at CNMV must follow the process which includes a separate documentation of each engagement with the applicant which may be invited to test the solution or product in the sandbox. Further, the CNMV in its Annual Report includes statistics and a general overview of the queries received through the Fintech Portal. In this regard, while CNMV has staff to exclusively respond to these queries, the resources for operating the Fintech Portal are shared with the Sandbox and other fintech initiatives of the sectoral authority. An analogous communication channel also exists at the BdE, through which queries on financial innovation can be addressed to the banking authority on new applications, processes, products, business models and other issues related to technological innovation applied to the provision of financial services. Since its inception, BdE has received approximately 40 such queries. The DGSFP has introduced a specific generic e-mail address for questions regarding the Sandbox and technological innovation. The questions received focused mainly on the Sandbox.

## D. Internal Organization and Resourcing for Fintech Supervision

**56. The authorities have adapted their internal processes.** With the intention of ensuring coordination and information sharing, the BdE established an internal Financial Innovation Group consisting of representatives from the various functions of the central bank (innovation, banking supervision, payments, conduct, regulation, financial stability, legal, information systems, and General Secretariat). This group meets in different compositions, deliberates on various issues related to innovation and produces outputs that are disseminated within the authority or submitted to senior management. One of its objectives is to help facilitate coordination of the functioning of the sandbox and the innovation channel. Meanwhile, the CNMV’s fintech department responsible for the sandbox and the Fintech Portal collaborates internally across various departments for overall fintech monitoring and is also principally engaged in the implementation of MiCA. Within DGSFP, the Conduct Market Department is responsible for processing applications received under the sandbox including any

[54] The innovation hub has been in existence at CNMV since 2017 and was formalized as a Fintech Portal in 2020 under the Sandbox Law.

ad-hoc queries, the IT department collaborates internally and depending on the subject matter of the project, other departments are also involved.

**57. A key priority is to ensure that supervisory authorities are well resourced to address complex risks and emerging challenges.** Currently, supervisory resources are stretched at the BdE, and less-than-adequate at the CNMV.[55] In addition, the CNMV's lack of flexibility and independence in the process of hiring staff, due to uncertainties associated with government approvals needed on a case-by-case basis, hampers its ability to recruit and retain key human resources and execute future oriented succession planning in specialist areas. These constraints will increase given the implementation of new regulations that will require enhanced supervisory capacity.

- The CNMV does not expect to receive license applications from larger CASPs as they are likely to be licensed outside Spain (due to their current domicile) while continuing to offer services in Spain via the passporting route. However, relatively smaller CASPs having Spain domiciled operations are expected to apply for a license. Also, the CNMV is responsible for supervision of all CASPs or other crypto-asset related service providers offering their services in Spain,

- The BdE will only be responsible for licensing and supervising some ARTs and EMT issuers.[56] However, resources will be needed to jointly monitor and supervise the significant EMT and ART issuers operating in Spain with EBA. The BdE staff is also aware of the cost associated with the operation of the sandbox.

**Recommendations**

**58. The CNMV should be provided full autonomy over its recruitment of staff, including in key specialist areas.** While the CNMV has recently been authorized to recruit 76 people, significant rigidities in the recruitment process remain. The FSAP, therefore, recommends that the CNMV ensure alignment of resources to current and projected future work by gaining full autonomy over its recruitment and retention processes.

**59.** The BdE should assess the current and projected workloads over a three to five years period and align resources and enhance capacity accordingly.

## E. Supervisory and International Cooperation

**60. Outside Spain, the authorities participate in various working groups that address Fintech issues**. For instance, BdE participates, amongst others, in the Bank for International Settlements (BIS), Asociación de Supervisores Bancarios de las Américas (ASBA), Centro de Estudios Monetarios Latinoamericanos (CEMLA) and various FSB working groups on fintech. The BdE also leads the Working

[55] As also detailed in the Technical Note on Regulation and Supervision of LSIs, the Technical Note on Cyber Risk, and the Technical Note on Regulation, Supervision, Oversight and Crisis Management of Financial Market Infrastructures. Other authorities involved in supervision and oversight may face similar issues, but they were not included in the scope of the FSAP.

[56] As detailed in para 30 above.

Group of Green Finance in the BIS Innovation Network and co-leads the CEMLA Fintech Data Gaps Working group. Within Basel Committee on Banking Supervision (BCBS), BdE IT Risk Experts participate in the Financial Technology Group (FTG) with members from other jurisdictions as well as on the workstream on Non-Financial Risks (WNFR) of the Supervisory Cooperation Group (SCG). BdE also participates in some working groups of the International Financial Consumer Protection Organization (FinCoNet) that address FinTech issues (i.e., BNPL). Meanwhile, CNMV participates in various committees of ESMA and IOSCO. The DGSFP maintains close collaboration with the Association of Latin American insurance supervisors (ASSAL), which conducted a survey on Insurtech in 2023.

**61. As members of European Forum for Innovation Facilitators (EFIF), BdE and CNMV exchange experiences from engaging with firms through innovation facilitators** (regulatory sandboxes and innovation hubs), to impart technological expertise, and to achieve consensus on the regulatory treatment of innovative products, services and business models. The BdE regularly holds bilateral meetings with other authorities, especially from the EU and Latin America and also welcomes invitations, among others, from international organizations such as ASBA or the Fondo Latinoaméricano de Reservas (FLAR), to share insights on various topics. As a member of the European Forum for Innovation Facilitators (EFIF) enables EU financial regulators to exchange technological knowledge and insights from their interactions with firms through innovation facilitators (such as regulatory sandboxes and innovation hubs). The platform also fosters consensus on the regulatory approach to innovative products, services and business models, and enhances bilateral and multilateral cooperation. The EFIF may invite authorities from both within and outside the EU and the financial services sector to present the tools they employ to support innovation and to discuss the future of innovation facilitators**.** Both BdE and CNMV participate in these discussions and are extensively engaged in various research initiatives undertaken and regular publications from EFIF on the functioning of innovation facilitators (innovation hubs and regulatory sandboxes).[57]

**62. Besides the above, there are consistent and significant cooperation and coordination mechanism with other European authorities in relation to fintech.** This is based on existing agreements and regulation that govern the participation of Spain in different European supervision and banking sector institutional arrangements, the SSM. BdE also participates in the Joint Team on Digitalization and Fintech which focus on the impact, risk, and supervision of new technologies by banks.

[57] ESA 2023 27 Joint ESAs Report on Innovation Facilitators 2023.pdf (europa.eu)

## Table 2. Spain: Regulatory Oversight of Fintech Ecosystem in Spain

| Nature of Activity | Type of Institution/Intermediary | Authorization / Registration | Regulation | Prudential Supervision and Oversight | Conduct | Market Integrity |
|---|---|---|---|---|---|---|
| | Credit Institutions/ Banks | | | | | |
| | Payment Institutions | | | | | |
| | Account information providers | | | | BdE | Sepblac in cooperation with BdE |
| | Payment initiation providers | | | | | |
| | Electronic money Institutions/EMI | | | | | |
| | P2P payment providers | | | | | |
| | Credit card companies | BdE | MINECO / BdE | BdE | | Are not OEs |
| **Payments** | Remittances service providers | | | | | Are PSPs: Sepblac & BdE |
| | Neobanks* | | | | | Sepblac & BdE |
| | Digital only banks** | | | | BdE | Sepblac & BdE (banks) |
| | Digital wallets*** | | | | | Sepblac (for VASP) |
| | Financial product comparators**** | | | | BdE | |
| | Account aggregators | BdE | MINECO / BdE | BdE | BdE | Sepblac & BdE (PSP under EU law) |
| | Real estate credit Intermediary | BdE | | | BdE | Sepblac |
| | Real estate lenders | | | | | |
| | Micro credit platforms | | | | | |
| | Trade finance for businesses and self-employed via notes discount, invoice factoring or credit facilities | | | | | Sepblac |
| **Lending** | P2B,P2P crowdlending | CNMV | MINECO | | | Sepblac (Crowdlending) |
| | Equity crowdfunding | | MINECO / CNMV | CNMV | CNMV | Sepblac in cooperation with BdE |
| | Consumer finance platforms | | | | | |
| | BNPL providers***** | | | | | |
| | Super Apps | | | | | |
| | Financial product comparison platforms and distributors | | | | | |
| | Personal financial management apps | | | | | |
| | Investment analysis and stock tracking services | CNMV | MINECO / CNMV | CNMV | CNMV | CNMV |
| **Investment** | Robo Advisors | | | | | |
| | Automated investment management platforms | | | | | |
| | Platforms issuing and placing tokenised securities | | | | | |
| | Platform issuing and placing tokenised loans, deposits | | | | | |
| | Online saving and deposit platforms (example Raisin) | | | | | |
| **Others** | | | | | | |
| Crypto Assets | Crypto exchanges | BdE / CNMV | MINECO / CNMV | CNMV | CNMV | |
| | Crypto custodians/ wallet providers | | | | | Sepblac |
| | Crypto lending platforms | | | | | |

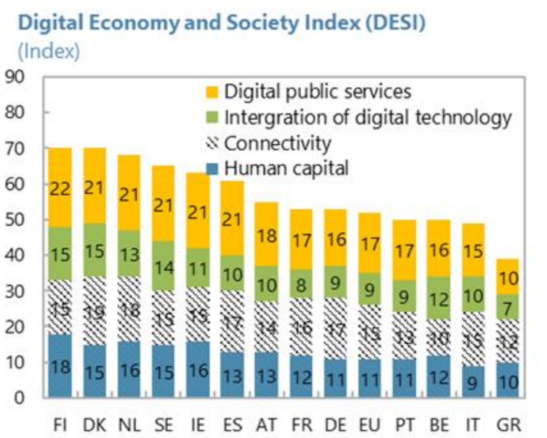
| | |
|---|---|
| (green) | The authorities have oversight on the entity in this domain |

Source: BdE, CNMV, MINECO

(*) if they have a credit institution license
Neobank it is not a legal term and does not appear in the regulation. Some fintech firms are not banks and have an EMI or PI license. Only those that have a credit institution license are banks (i.e. banks, savings banks and credit cooperatives). This means that they are subject to the same regulation as traditional banks. See https://clientebancario.bde.es/pcb/en/blog/neobancos-que-son-y-que-ofrecen-.html
**Digital only banks are credit institutions that offer their services only through digital channels. From the perspective of regulation and supervision they are not different from
***Digital wallets usually are e-money wallets. To provide an e-money wallet you have to have an EMI license
****Prior to commencing their activity, operators wishing to set up a website that allows the comparison of the fees applied by payment service providers must submit to the Banco de España a declaration of compliance with the applicable legal and regulatory requirements. The Banco de España verifies compliance with and maintenance of such requirements.
*****Credit institutions might also act as BNPL providers.

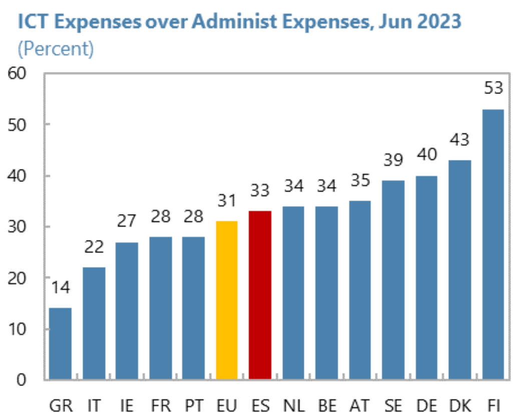
## Figure 3. Spain: Digitalization of the Financial Sector

*Spain stands above the EU area in the DESI ranking*



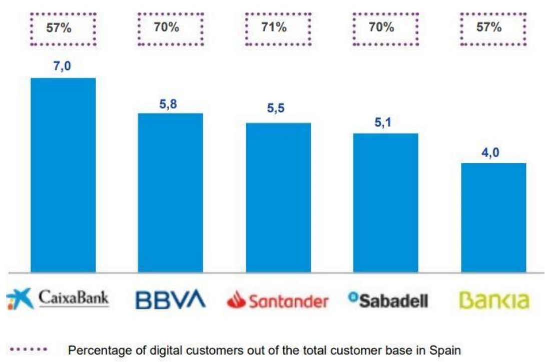

Source: European commission

*...Spanish banks ICT expenses over total administrative expenses are comparable to most EA peers*

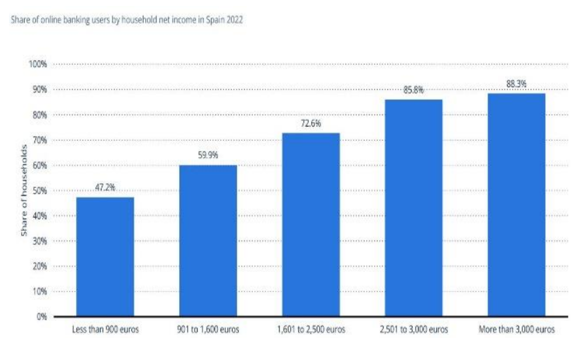



Source: EBA

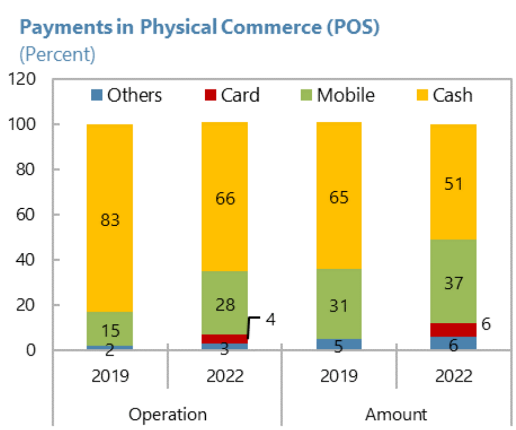
*Digital banking is showing widespread use...*




*... notably among households with higher net income*

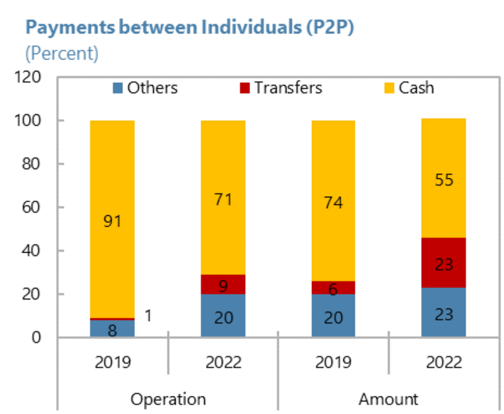



*The use of cash is declining, both for payments in physical commerce...*




Source: BdE.

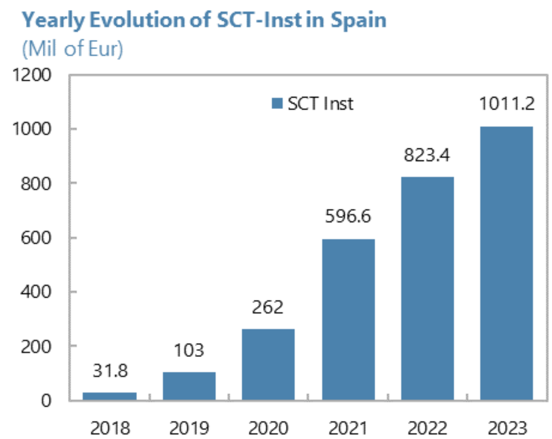
*... and between individuals, notably to new payment methods offered by banks*




Source: BdE.

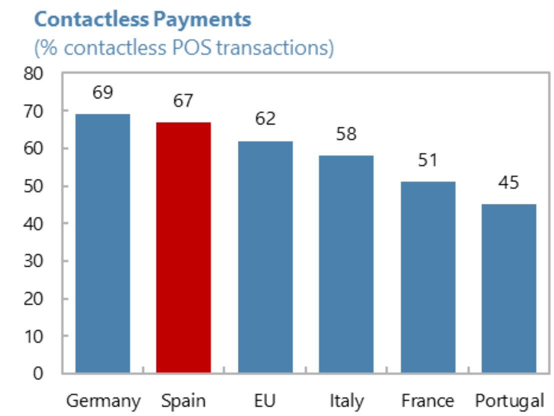
## Figure 3. Spain: Digitalization of the Financial Sector (concluded)

*The use of SEPA instant credit transfer (SCT Inst) has grown very rapidly…*



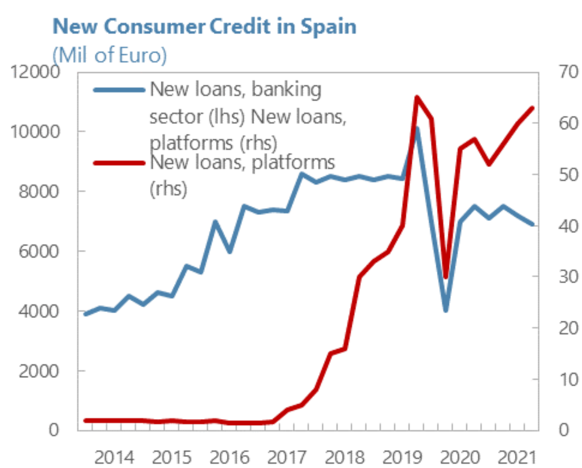

Source: Iberpay

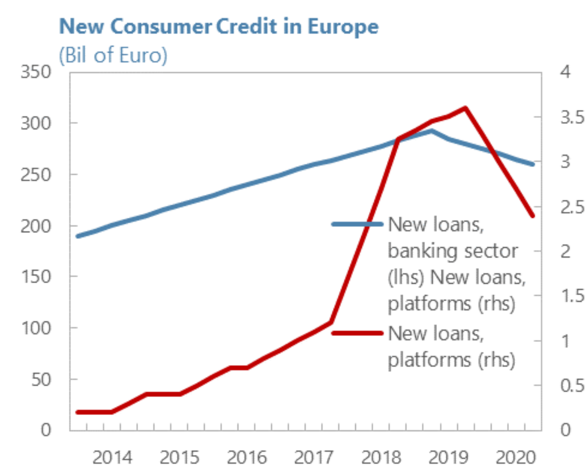
*… while the proportion of contactless payments is higher than the EU average*




Source: ECB, 2022.

*New consumer credit granted by crowdfunding platforms recorded very strong growth both in Spain and Europe, albeit from a very low volume base.*




Sources: BdE publications (Consumer credit crowdfunding platforms in Spain. Analytical Articles. Economic Bulletin 3/2022. (bde.es)), KPMG report, Chainalysis, and Statista.