## Letter from the Editors

The advent of new technologies, such as blockchain, has created a set of potential opportunities, still not fully tapped, in financial markets. At the same time, technological innovation in financial services (FinTech) has led to the emergence of numerous initiatives that, on a small scale, offer flexible online solutions, personalized and immediate service, and cost reductions. FinTech players already occupy a relevant space in the financial digitization process. However, the speed of financial innovation far exceeds the regulatory response, which poses the challenge of making innovative solutions compatible with the existence of adequate safeguards and guarantees.

In this context, the May issue of SEFO, Spanish and International Economic & Financial Outlook, focuses on recent developments in the digitalization of financial markets and their potential implications for Spain. First, we assess the evolution and dimensions of the crypto assets economy. Next, we explore a relatively novel concept that allows for controlled development of financial innovation – the regulatory 'sandbox'.

The crypto assets market has clearly been one of the fastest growing in the world in recent years, particularly since 2016. In total, these assets command an aggregate market value of 418.78 billion dollars – below only that of the leading tech giants on the Dow Jones. The rapid evolution of the crypto asset phenomenon, and their growing

scale, naturally raises many questions about whether these new digital currencies and alternate payment systems, which lack the official backing of central banks, can become an alternative to mainstream currencies, considering also the high volatility of these assets. While the lack of regulation and the speculative investment component of crypto assets gives rise to significant risks, there are also a breadth of opportunities to exploit the technological advantages that have arisen. One such possible opportunity lies in central bank digital currencies (CBDCs), which could facilitate improvements in current payment systems. Initial data suggest that Spain is not significantly positioned in the crypto asset market in quantitative terms, but is playing a prominent role in generating projects that are attracting considerable investment in the ICO market.

While FinTech presents a potential wealth of opportunities, these do not come without risks. Yet, the necessary regulation of financial innovation may put a brake on the innovation process itself. One possible solution to this dilemma is the creation of a regulatory sandbox. The sandbox is already widely used in the FinTech and digital banking arenas for its many advantages, including the ability to promote competition by allowing companies to test innovative products, services and business models in a real or live market environment, while ensuring the existence of appropriate safeguards. The UK has successfully pioneered the sandbox concept

back in 2015, but currently regulatory sandboxes are also already operating with promising results in Singapore, Abu Dhabi and Switzerland. Spanish authorities have recently announced their intentions to launch a national sandbox, which would provide an important stimulus to financial innovation within a regulated testing framework.

Also in relation to the financial sector, the improvement in banks' metrics (most notably their NPL ratios), which was facilitated by the creation of the Banking Union, was accompanied by a considerable rebound in their market valuations. While improvement has been uneven across geographies, better performance in Spain is being rewarded by higher valuations relative to European peers. In this SEFO, we analyse the factors having the biggest impact on market valuations within the US, Europe, and Spain profitability, asset quality, and efficiency. The results show that profitability, as measured by ROE, proves to be the most significant, especially when taking into consideration future market expectations for this indicator. However, the importance of the other two variables should not be overlooked, given the fact that lower NPL ratios and improved efficiency ratios are very strongly correlated to profitability.

On a related note, the new non-performing (NPE) coverage exposures requirements arising from European regulators' proposals, together with the entry into force this year of IFRS 9 accounting standards, are expected to put additional pressures on banks' income statements due to the still high existing amount of NPEs on banks' balance sheets. In this context. banks are given a clear-cut incentive to reduce their exposure to such assets. The Bank of Spain's recent modifications to NPE classification will help reduce the impact of IFRS 9 on Spanish banks. At the same time, Spanish banks, in line with some of their other European counterparts, have already reduced their NPEs by 46% since December 2013. Taking into consideration Spanish banks' strategic plans for further reducing NPEs and the portfolios already on sale, the market will once again be very active in 2018. However, concerns regarding the impact of the influx of properties as a result of large transactions closed last year could weigh on potential buyers' expected returns.

We then take a look at the fiscal situation in Spain, first by exploring progress on fiscal consolidation, as well as providing an assessment of Spain's independent fiscal authority the AIReF.

A favourable economic context has helped Spain meet EU fiscal objectives for 2017. This has been the case even in the face of political tensions at home stalling the budgetary process and any meaningful momentum on fiscal reform. On the basis of execution data for the first quarter of 2018, budgetary projections and possible amendments to further increase spending, compliance with fiscal targets for 2018 is far from guaranteed. Over the medium term, the latest Stability Programme envisions convergence to a balanced budget by 2021, but with little adjustment to reduce the structural deficit. Such a scenario raises concerns over the evolution and ultimate sustainability of Spain's public debt. having increased significantly during the crisis to reach close to 100% of GDP. Under the baseline scenario, public debt to GDP would converge to just below 80% over the upcoming ten-year period, rising to a further 85%, or more, should the economy experience a growth or interest rate shock.

More broadly, in an effort to make progress on EU fiscal consolidation, the need for member states to have independent fiscal institutions (IFIs) is gaining acceptance. Spain's IFI, the AIReF, was created in 2013 with the mandate of guaranteeing government compliance with the principle of budget stability. The results of a review of its first years of operation, in line with the OECD's recent findings, show that the institution has consolidated its independence and credibility. The AIReF has helped to support progress on budget stability and, by increasing the reputational costs of non-compliance, enhanced fiscal governance within Spain and the EU. Nevertheless, the AIReF still faces noteworthy challenges apart from preserving its independence, including accessing necessary information, improving the methodology of its projections, and increasing the impact of its recommendations.

Next, we explore some of the tensions in globalization and their potential implications for Spain. Although Spain has not engaged in recent protectionist rhetoric, it is relevant to analyse its role in global production chains and the potential channels for economic contagion. Spain's integration in cross-border production is concentrated in the sectors of greatest importance for manufacturing exports, namely the automotive, agro-food, textile, machinery and chemicals industries. The impact of the mainstreaming of protectionist measures would come, mainly, via those sectors and could be meaningful in light of their importance in terms of job creation and investment.

Finally, we close this SEFO by trying to determine the factors behind Spain's gender pay gap. In Spain, despite recent progress on gender equality, women continue to take more responsibility for childcare than men. This, together with other factors, limits many women's ability to enjoy the same pay conditions as men, particularly in the Spanish labour market - still dominated by inflexible working hours and long work days. As a result, Spain continues to demonstrate a sizeable gender pay gap – albeit similar in magnitude to neighbouring countries – with women's salaries ranging between 19% and 30% less than their male counterparts. Recent legislation represents an ambitious attempt to regulate work hour flexibility for family reasons, granting both male and female employees under this contract a high degree of flexibility and protection. In practice, however, the law has failed to reduce the gender gap, as well as created a rift between women protected by this contract and those who are not. Further narrowing the gap will entail: i) getting men more involved in caring for their children; and, reducing the cost of offering working hour flexibility.