Philip R Lane: Technological innovation and financial services

Address by Mr Philip R Lane, Governor of the Central Bank of Ireland, at Financial Services Ireland Ibec Annual Lunch, Dublin, 16 June 2016.

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The long-term economic and social implications of technological innovation are widely debated. The international central banking community devotes considerable effort to assessing future productivity trends, with opinion divided between techno-optimists and those that consider that the current wave of technological innovation will generate only limited macroeconomic gains compared to previous waves of innovation in the nineteenth and twentieth centuries.

Today, I wish to focus more narrowly on the opportunities and risks posed by technological innovation for the financial services industry. As a financial regulator, the Central Bank of Ireland must try to anticipate shifts in the financial services landscape, in view of the implications for regulated firms and industries and, indeed, the implications for our capacity to deliver our mandate in relation to the preservation of financial stability and the protection of consumers. While recognising that we do not possess a crystal ball, the Bank has to consider the effects and risks of potential innovations. To this end, we seek to understand: (i) the drivers of technological innovation; (ii) the possible outcomes; (iii) the associated risks; and (iv) the preparedness of financial firms.

I will consider each of these areas in a little more detail.

1. Drivers of Technological Innovation in the Financial Sector

Several forces are at work in driving technological innovation in the financial sector. First, the challenges facing existing business models and the identification of opportunities associated with new technologies are push and pull factors that build momentum for technological innovation. Second, as consumers increasingly move online in relation to a wide range of personal and retail activities, the market for financial services naturally evolves in the same direction, with incumbent providers of financial services possibly facing competition from online firms that have built strong relationships with consumers in other areas.

The ongoing digital revolution poses fundamental trade offs for incumbent firms, given the burden of legacy infrastructures and cost bases. However, from the perspective of consumers, the potential for increased competition from new entrants may help to reduce costs and increase choice in the provision of financial services.

Individual firms and sectors are grappling with technological innovation in different ways and with different perspectives, with many welcoming the associated challenges and opportunities. It is inevitable that there will be winners and losers associated with technological innovation, both among incumbent firms and new entrants.

2. Potential Outcomes for the Financial Sector

I am struck by the conflicting forces at work in reshaping the structure of the financial sector. In one direction, economies of scale and scope may result in a higher degree of consolidation across financial services providers. For the banking sector, this would reverse the retreat to domestic markets that followed the onset of the financial crisis in 2007 / 2008. In addition to the scalability of successful new technologies, another factor that supports consolidation are the significant fixed costs in meeting contemporary international regulatory requirements. Whether the next wave of consolidation requires cross-border M&A activity is questionable, since the need to acquire national franchises to operate on a cross-border basis has been significantly reduced by freedom of services legislation, the move to a single supervisory mechanism for banks in the euro area and the increasing harmonisation of regulations for non-bank financial firms.

In the other direction, there are other forces that may lead to increasing fragmentation of in the provision of financial services, with specialist providers increasing the level of competition in individual market segments and threatening the integrated model of universal banking. In particular, it is possible to envisage an increasing role for specialist firms that target particular niche services and cherry pick higher-margin business lines.

A third pathway is the development of partnerships between larger incumbents and newer financial technology providers, with such partnerships focusing on complementing existing service offerings and developing entirely new categories of financial services.

It is possible for all of these outcomes to occur simultaneously. Consolidation may be driven by the bigger players across Europe seeking to drive down costs in a continued low-interest environment, moving to a more fee-based business model and competing across borders through freedom of services. At the same time, new entrants may grow by offering niche service offerings, through different and newly-conceived delivery channels.

Whatever the outcomes, resolution planning is thrown into sharp relief, in view of the potential financial stability risks associated with the failure of larger, established firms and the elevated likelihood of failure for smaller, newly-formed, mono-line enterprises. Orderly resolution regimes enable the financial system to absorb the failure of individual firms: especially in a period of innovation, a “zero failures” objective is not appropriate.

3. Risks

This brings me to the myriad associated risks. I will start from a financial stability perspective, where we need to consider the risks to incumbents. An increase in competition in or across these sectors may result in reduced income (for example, through squeezed margins or reduced fee income) as a result of more profitable business lines being targeted by new competitors. At best, those that do not respond to these threats effectively, including those that back the wrong horses, may be reduced to the role of utilities, with lower income and higher costs due to legacy infrastructure and capability issues; at worst, some incumbents may fail altogether.

These risks may well result in the demise of certain types of business model and categories of financial service providers. A byproduct may be loss of access to critical financial services for some cohorts of society. The former may be acceptable and even desirable, if the externalities of failure can be managed. The latter may be highly problematic in relation to consumer welfare and the implications for social cohesion.

Technological innovations may also generate new risks for consumers in relation to innovations in the marketing and delivery of financial services that result in new categories of mis-information and mis-selling. Risk exposures in the handling and storage of customer data also pose a challenge for both new entrants and existing firms.

Accordingly, technological change presents multiple operational risks, both in relation to the intrinsic characteristics of some new technologies and in terms of implementation risk. Higher probability but lower impact human risks are being replaced by lower probability but higher impact technology risks associated with operational failures and the threat of devastating cyber crimes.

4. Preparedness

It is difficult to manage and mitigate the diverse risks associated with this uncertain environment. As a regulator, our experiences regarding the awareness and preparedness of regulated firms for this changing environment are mixed. It is clear that some firms are considering these risks in a coherent, considered and appropriate way and are embracing the technological opportunities in a calibrated manner. However, many other firms, including some of the entities that have been damaged by the crisis and are still dealing with the legacy issues of the past, are less well prepared, perhaps less able to invest in new technologies to improve processes and reduce costs and, consequently, less able to cope.

The fundamentals of running businesses well and in a prudent manner will remain critically important as the financial services sector continues to evolve. Strong governance, clear strategic planning, effective and embedded risk management, and the careful shepherding of resources are vitally important in times of innovation as in times of greater stability.

Regardless of the future shape of the financial services sector, lessons from our most recent financial crisis will remain critical and must inform our policy framework and policy actions into the future.

Role of the Central Bank of Ireland

As a regulator, the Bank also has to ensure that it keeps abreast of the changing technological environment and is able to assess the level of preparedness of regulated firms, both in the authorisation process and during ongoing supervisory engagement. This is quite challenging, particularly given the uncertainty about the future structure of the financial sector. In many respects, we have the same challenges as the firms that we authorise, regulate and supervise: we also need to adapt and evolve to ensure that we continue to be effective in our capacity to understand the benefits and risks of financial innovation.

Regulators should also embrace technological advances that can contribute to positive regulatory outcomes by developing better tools, undertaking better analysis of "big data" in the identification of financial risks and the allocation of regulatory resources, and incorporating improvements in key risk management tools, such as the use of identity verification techniques in providing assurance in the implementation of anti-money laundering processes. To this end, the Bank is committing significant resources to improve our data architectures and establish quantitative analytical teams for our banking, insurance and markets directorates.

Let me highlight four primary challenges in the regulatory treatment of financial innovations. First, in relation to the authorisation of new firms, regulators must strike the appropriate balance between encouraging innovation-related entry and ensuring that new firms are sufficiently ready to fulfill all regulatory obligations in relation to financial stability and consumer protection. Second, in supervising existing firms, regulators must make measured judgement calls in relation to the shifting business models and the appropriate level of capital required to provide a buffer vis-à-vis the associated risks. Third, as noted earlier, credible and effective resolution regimes are necessary to manage the failure of established or new firms. Fourth, the increased scope for cross-border delivery of financial services reinforces the importance of international regulatory harmonisation and cooperation, especially where home and host regulatory authorities have different supervisory responsibilities.

Furthermore, technological innovation may also alter the role of central banks in managing the money supply and acting as a lender of last resort. At one level, growth in various types of electronic payment technologies looks set to reduce the traditional role of notes and coins in the monetary system. At another level, there is much discussion of the relative merits of more widespread adoption of private-sector digital currencies versus a new role for central banks in the direct issuance and management of publicly-backed digital currencies. Alas, it is beyond the scope of today's speech to pursue this fascinating topic in any detail.

In conclusion, the challenge for policy makers is to understand and attempt to appropriately regulate the evolving financial services landscape, while at the same time balancing often-competing objectives of competition and choice, financial stability, and the effectiveness of macroeconomic policies.

We remain vigilant and alive to these challenges, just as we expect a similar attitude from our regulated firms. To state this is easy, to deliver more difficult. I wish you all well in your endeavours in navigating this phase of technological innovation in financial services.

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