Preface

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Financial innovation has by now become a permanent and irreversible phenomenon, which therefore deserves to be continuously studied in order to understand its origins and drivers, to analyse its various forms, to evaluate its positive and negative externalities at the macroeconomic level and finally to investigate the organic relationship with the competitive strategies of financial intermediaries.

The current and prospective context of financial globalisation – which involves both capital markets and financial intermediaries – is characterised by particularly intense competition, onto which financial regulatory authorities try to impose certain rules, without, however, imposing limits. Obviously the challenge lies in trying to achieve the dual objective of, on the one hand maximising positive externalities, in other words the benefits of innovation for the real economy itself, and on the other, limiting as far as possible the negative externalities that innovation inflicts on real economies and on the return/risk performance for stakeholders (financial intermediaries, firms, investors, public administrations and so forth).

As far as the strategy of financial intermediaries is concerned, innovation has now become an instrument or, as some would say, a crucial competitive weapon.

Process innovation, strongly supported and stimulated by new technologies, plays an essential role as a factor of differentiation between the single producer and his/her competitors. Process innovation is focused on obtaining results and levels of productivity and slashing the costs of production and distribution (cost leadership), as well as improving the quality and reliability of the procedures themselves for the benefit of the client, risk control and internal checks. This type of innovation contributes greatly in improving the reputation of those who are able to manage it. It is important to note that process technology is important for two different reasons: on the one hand, technology that produces cost savings through the substitution of technological investments *vis-à-vis* labour, increasing its productivity and favouring more-skilled jobs, and on the other, ‘enabling’ technology which allows for the creation and valorisation of activities,

products, services and solutions which were unattainable with previous levels of technological know-how.

Product innovation also has an important competitive role, as it allows financial intermediaries to differentiate their offer from that of their competitors, improving their ability to provide solutions for the needs of their clients (customer satisfaction) as well as allowing for greater freedom of pricing, with the obvious benefits this entails for profit margins. It is important to note that the innovation of financial products and services triggers different effects that make its interpretation complicated. In principle, innovation – as an invention of effective and efficient ‘financial solutions’ for the continuously evolving needs of clients – is a symptom and a factor of progress, contributing in the medium to long term to making financial markets more efficient.

This should be interpreted as a factor of improvement for financial markets. Without doubt, this interpretation of the phenomenon cannot be denied. On the other hand, innovation produced by the financial intermediary could be seen – especially within the competitive dynamics in the short term – as a temporary factor of inefficiency or market imperfection that can be exploited by the same actors of innovation, such as banks. We are referring here to the well-known theory of financial intermediation according to which constant improvement of capital markets in the long term leads to the gradual limitation of the economic rationale of financial intermediaries, thereby reducing their operative *raison d'être*.

Looking closer, innovation – in the short term, but also continuously, as it is an ongoing process – creates new opportunities for intermediaries, which is demonstrated by the constant expansion of capital market and investment banking activities compared to the phenomenon of credit disintermediation. This is the essential characteristic of the ‘evolution’ of the bank as an institutional subject. Innovation creates both positive and negative externalities. The offer of a new product or service produces *in primis* a situation of opaqueness and greater information asymmetry to the detriment of potential buyers. Faced with innovation and change, the potential buyers suffer from seeing their knowledge becoming obsolete (experience plus professionalism) and see themselves forced into making the costly effort of learning which may not be immediately productive for the necessary skills of analysis, evaluation, selection and decision concerning the purchase. If we add that, in most cases involving the offer of new products and services, the producer is also a ‘consultant’ for the purchase, the emerging conflict of interest is clear. In other words, product innovation inevitably incorporates risks of pre- and post-contractual opportunism by the producer towards the buyer, in such a way as to be directly correlated with the informative disadvantage of the latter. Put more simply: financial

innovation, although being beneficial in the long term, increases the probability of uninformed and suboptimal decisions.

It is important to add that, in order to achieve a realistic interpretation of the phenomenon of financial innovation, it needs to be remembered that it is something often associated with technological progress, even if such a notion should be considered in the widest possible terms. For example, even the 'legal techniques' used for drawing up contracts which involve complex financial relations are part of financial innovation. Project finance, private equity, and the securitisation of new financial products (derivative and structured) would be good examples of this.

Process and product innovation induces a metamorphosis or mutation effect not only of the business models of the financial intermediaries but also of their institutional models. This type of change, due to innovation, appears particularly insidious as it tends to modify the structure, organisation, economic-financial balance, risk and the solvency of the financial intermediary without its external configuration appearing to be substantially modified. Most people still have an idea or image of a bank that is far removed from reality. Perceptions and knowledge are constantly behind the times in terms of getting to know what banks are all about today. In brief: current knowledge (in particular that of retail banking customers) involves an idea of the bank which no longer corresponds to what it has now become.

Traditional or credit intermediation (collection of deposits in order to provide credit) is increasingly being overtaken by the activities of investment banking, in which the bank is not a direct producer and provider of financial resources, but represents an 'access point' for capital markets. The mutation of the banker from borrower/lender to financial adviser, private banker and corporate banker radically changes the required responses to the client's expectations, whose experience and knowledge of the bank's new 'way of working' has not yet been consolidated. If the expectations of the client are unrealistic, particularly in terms of the amount of risk involved, this may create a situation where the offer of the bank can generate false expectations and consequently disappointment. Proof of this is the often negative experience of selling investment products whose performance is related not to the solvency of the bank, but to capital markets and other third parties.

In general, the securitisation of illiquid assets is most typical. The bank transfers the function of asset holding to an external 'intermediation chain', namely specialised vehicles that create supposedly liquid liabilities (sometimes drastically altering the implied maturity gap). The latter are then underwritten by institutional investors who transform these financial structures and transfer them to final investors. This is one of the many ways

of unbundling, and substantial change, of credit intermediation. The bank, traditionally an asset holder, becomes specialised in screening, origination and monitoring assets which are potentially weakened in their selective rigour by the fact that the credit risk gets transferred to third parties. It is obvious that 'agency problems' take shape in intermediation chains created by securitisation and unbundling. This is another typical example of the potential negative externalities deriving from financial innovation.

We need to remember, however, that financial innovation can and should be a non-zero-sum game. This is a complex phenomenon for which it is necessary to devote a dual level of attention. On the one hand, attention needs to be paid to research and knowledge. Innovation should be studied continually in order to improve its comprehension for the benefit of those who produce it, use it and eventually who regulate it, in the common interest of creating and allocating value properly. On the other hand, attention needs to be paid to watchdogs, which have the difficult task of planning and keeping a 'mechanism design' which maximises incentives for virtuous conduct and establishes the rules of the game in order to prevent opportunistic behaviour and protect those for whom innovation could be a factor of information asymmetry.

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