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Financial Innovation: towards a balanced regulatory response

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Ladies and gentlemen,

I am delighted to be with you today. I would like to thank the London Business School's Centre for Corporate Governance for having invited me to participate. In my speech today, I will present to you a regulatory perspective on the opportunities and the challenges arising from financial innovation.

I will begin by saying a few words about the European Securities and Markets Authority, otherwise known as 'ESMA', and its mission and objectives. I will then explain how ESMA responds to financial innovation more generally. Finally, I provide some examples of the financial innovation work ESMA has done.

ESMA's mission

ESMA was established on 1, January 2011 as part of a series of measures taken to reinforce financial supervision across the European Union. ESMA forms part of the overall European System of Financial



Supervision, which includes our sister authorities EIOPA, responsible for insurance and pension regulation and supervision, and EBA, responsible for banking and payment services regulation and supervision. The European System of Financial Supervision provides a forum for bringing together national regulators and supervisory authorities from across the European Union to find common regulatory solutions, improve understanding of relevant risks in financial markets and enhance supervisory convergence.

ESMA's focus is on European securities markets and it has as its primary objectives to promote investor protection, orderly markets and financial stability. It achieves this by: assessing risks to investors, markets and financial stability, completing a single rule book for EU financial markets, promoting supervisory convergence and directly supervising credit rating agencies and trade repositories. And specifically in terms of innovation, ESMA is in charge of ensuring a coordinated approach to the regulatory and supervisory treatment of new or innovative financial activities in the securities markets.

[How does ESMA approach the topic of financial innovation?](#)

Over the past years, ESMA has put in place a framework within which the analysis of financial innovation can best take place. The framework provides a principles-based approach to the work both in terms of the range of innovation we track as well as the tools we employ. In designing the framework, we have been guided by the three core objectives of ESMA - namely investor protection, financial stability and orderly markets.

The ESMA objectives serve to ground the analysis of financial innovation for a number of reasons.

First, while innovation in finance can contribute to economic growth, some financial innovations have been identified as factors that have given rise to financial instability in the past. Analysing financial innovation can assist supervisors, policy makers and market participants to take a view on what types of innovations may give rise to financial instability and what type may support growth and prosperity.

Second, innovations that lead to deliberate misinformation or fraudulent behaviour among market participants threaten orderly markets. This in turn can lead to a loss of confidence among investors and investor or participant withdrawal from the market.

Third, investor confidence is critical to the robust functioning of markets. In the monitoring of innovation our analysis serves to guard against information asymmetry. Investors should have sufficient information as to the risk/return profile of a product to make investment decisions appropriate to their circumstances and needs. Appropriate protection of retail investors in particular will always be core to how we look at financial innovation developments.

Let me be clear, as regulators and supervisors we have a natural tendency to search for risks and concerns, we realize that financial innovation has beneficially contributed to the key pillars through which finance operates – providing a system of payments, a means to pool funds for savings, mechanisms to transfer savings for productive investments, and ways in which to manage and optimize the allocation of

risk. In turn, innovation has brought investors and consumers' material benefits whether through the widespread use of credit cards, the growth in index mutual funds or access to futures and swaps to manage risk. We have observed that those positive benefits originating from financial innovation are sometimes overlooked when the topic is discussed in favour of adverse innovations that have caused significant detriment e.g. through the financial crisis. It is important to stress that ESMA aims to bring to the subject a balanced approach, both protective and supportive.

In summary, when we examine financial innovation at ESMA we do so with a dual perspective. On the one hand, we try to understand what advantages it may introduce and whether there are barriers to the emergence of those benefits that we can work to address. On the other hand, we also want to ensure that we have identified potential risks, analysed them, developed mitigants such that we are comfortable that the potential advantages of the innovation outweigh the disadvantages.

So, how do we identify financial innovations? First, ESMA has established the Financial Innovation Standing Committee, made up of representatives from the competent authorities of the 28 Member States. It is charged with ensuring that the European national supervisory authorities achieve a harmonized approach to the supervision and regulation of innovative and products. The ways in which we source knowledge of financial innovation is both a challenge and an opportunity. There is no 'cookbook' to this process dictating the steps we need to take to track innovation. On the other hand the absence of a known accepted process is an opportunity to build what we consider to be the most effective framework. We look for market intelligence from both

qualitative and quantitative sources. Our sources of information include national competent authorities, academics, retail investor representatives, various types of media, quantitative data sources and a wide range of market participants. Innovations come to the market at a pace that is impossible to track on an individual basis. Moreover, the vast majority of these innovations will fail and not survive to be widely diffused. We nonetheless need to determine how best to allocate our limited resources to monitor innovations. In turn, we have developed what we view as a structured methodology for evaluating innovations in securities markets. The methodology results in a scoring system that better enables us to focus our attention. Over the last years we have scored more than 80 financial products and processes.

How do we proceed when we determine an innovation justifies additional analysis or action on the part of ESMA? We locate the market context in which the innovation operates, the market participants involved and the distribution channels employed. Based on the results of our analysis we determine how to respond. Before doing so, we ask a number of fundamental questions as to the nature of the innovation to better guide our action such as understanding the primary issue of the problem and its urgency, and the outcome we are hoping to achieve and its market impact. Our response may come in the form of an Opinion, Advice, Statement, Warning or in future product intervention.

Indeed, in the future, MiFIR will give ESMA and national competent authorities the power to prohibit or restrict the marketing, distribution or sale of financial instruments if there is a significant risk to investor protection, market integrity or financial stability.

ESMA balanced approach towards financial innovation.

Let me move on to provide some concrete examples of ESMA's balanced approach towards financial innovation. Most observers consider technological advances and regulation as the primary drivers of innovation in finance.¹ Indeed, innovators look for opportunities that exploit regulatory gaps, regulators impose new regulations, and each new regulation gives rise to new opportunities for more innovation.

I want to emphasize that regulators in general and ESMA in particular are not hostile towards financial innovation.

Financial innovation can foster competition especially in financial services where network effects can create monopolies and render financial services expensive and exclusive. However, it is of utmost importance that any potential risks innovative products or practices may create are not overlooked and this is why ESMA brings a balanced approach to the subject.

One example of financial innovation fostering competition is the development of so-called 'robo advice'. This new-found means of delivering financial advice can potentially provide inclusion to consumers previously excluded from the provision of professional advice. Additionally, this expanded access to financial advice comes at a lower cost and with the potential to deliver highly consistent consumer experiences for those seeking financial advice.

¹ 'The Consequences of Financial Innovation: A Counterfactual Research Agenda' Josh Lerner, Peter Tufano, NBER Working Paper No. 16780, Issued in February 2011

But the automation of financial advice may give rise to new or increased risks compared to traditional ‘human’ professional advice. These potential risks include: first, the risk that consumers could misunderstand advice provided to them without the benefit of a professional advisor to support them through the advice process; second, the potential for limitations or errors in automated tools; and third risks associated with the widespread use of automated advice tools, for example the possibility of a “herding risk” if a significant volume of consumers end up transacting in the same way in relation to the same financial products and services.

The Joint Committee of the three European Supervisory Authorities launched a Discussion Paper on the topic of automation in financial advice in December 2015, which explains the concept of automated advice and highlights the potential benefits and risks to consumers and to financial institutions.² The aim of the document is to assess what, if any, regulatory or supervisory action is required to mitigate some of the risks I have highlighted and at the same time how best to harness the potential benefits of this innovation.

Another example of a positive financial innovation is the development of exchange-traded funds (ETFs) to provide investors with a low-cost diverse set of investment solutions. While ETFs themselves have been in existence since the early 1990s, they have grown markedly in recent years as providers have used the ETF wrapper as a means to provide investors with exposures to different types of financial indices. These new types of financial indices go by the name of ‘alternative indices’ or

² <https://www.esma.europa.eu/document/discussion-paper-automation-in-financial-advice>

'smart beta' solutions. They straddle the world of active versus passive investing insofar as the investor's decision to choose an alternative to traditional market cap weighted benchmarks is an active decision, the implementation of that decision follows the low-cost methodology of passive investing. The investment outcome may seek to maximise dividends or minimize volatility or pursue a variety of other risk factor based solutions.

However, like any innovation ESMA is cognisant of the risks that they may introduce. You may remember that in December 2012 ESMA published a set of guidelines directed at ETFs highlighting certain investor protection concerns³. I am proud to say that ESMA was at the forefront of the regulatory response to the topic when we adopted specific guidelines which seek to provide enhanced investor protection. For example, ESMA recommended enhanced disclosure of information for leveraged ETFs and placed limits on the extent to which UCITS ETFs could invest in complex financial indices. We continue to monitor the development of the ETF alternative index sector, alert to the need of full risk disclosure and transparency around methodologies employed.

Let me introduce as a third example another way in which financial innovation has fostered a new means of financing economic activities, a phenomena I am sure you are familiar with --- crowdfunding. Over the last few years, many investment based crowdfunding platforms have been created across Europe providing entrepreneurs access to scarce capital and investors an alternative investment solution. If you allow me, I

³ https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2014-0011-01-00_en_0.pdf

will spend few minutes now in explaining in more details what ESMA has done over the past years in relation to crowdfunding.

Crowdfunding first became a topic of interest for ESMA in 2012 as a new means of providing financing and an alternative investment solution that was quickly growing, albeit from a small base. We realised that it could be a complementary source of funding for small businesses struggling to access capital. At the same time, we were alert to the fact that it was also likely to present risks which needed to be managed.

We were aware that Member States and National Competent Authorities had been working on how best to respond to crowdfunding. We were also aware that existing EU regulations were not necessarily designed with this type of industry in mind. At the same time, National Competent Authorities in many member states approached ESMA seeking to clarify how crowdfunding fit into existing legislation.

Against this backdrop we adopted a step-by-step approach to enable crowdfunding to reach its potential as a source of alternative finance while ensuring that risks to users of crowdfunding platforms were identified and addressed in a proportionate and convergent manner across the EU. Drawing on member states regulators' experiences within their home market we first assessed the state of the crowdfunding sector, the variety of business models, and the various risks to crowdfunding project owners, platforms and investors. We then prepared a detailed analysis of how the business models mapped to the existing EU legislation. Finally, we identified issues for consideration by policymakers at EU level. This work led to the publication of our Opinion to National Competent Authorities on how to supervise crowdfunding and

Advice to EU Parliament, Council and Commission in December 2014 on how they may wish to regulate crowdfunding. Later, in July 2015, we published Q&As specifically regarding pertinent risks in relation to money laundering and terrorist financing in relation to investment-based crowdfunding.

The Opinion provides clarity on the rules likely to apply to investment-based crowdfunding. It mitigates the risk of divergent interpretations of existing legislation within the EU. We think that an important message from the Opinion is that the regulatory burden under legislation such as MiFID need not be as great as some in the industry seemed to think at the time.

The Advice to the EU institutions highlights our concerns that strong incentives currently exist for crowdfunding platforms to structure their business to fall outside the scope of regulation and note that one important driver for this seems to be the current rules on prospectuses. We advised the institutions to consider possible policy options to reduce the incentives.

Finally, in concluding my remarks I will provide you with yet another example of financial innovation that has been discussed earlier today and is currently occupying ESMA's attention --- the Distributed Ledger Technology ('DLT'), also known by some as the 'block chain'. We observe that the DLT is among the most discussed technologies of recent years. There are nearly daily announcements in the press about initiatives in this field. As are other regulatory institutions, ESMA is analysing the technology and its potential applications across the securities markets investment life-cycle.

ESMA began examining the topic in early 2013 as the virtual currency known as ‘bitcoin’ became a widely known alternative payment service. ESMA then began analysing the degree to which there existed investment products that used virtual currencies as an underlying asset. We learned that such investment products were at best marginal at the time but should be monitored were they to grow and introduce risks to investors. As time passed, ESMA became aware that market participant’s focus was largely shifting from virtual currencies as such to the underlying technology.

In April 2015, ESMA published a ‘call for evidence’ on investments using virtual currency as an underlying and on the anticipated uses of the core distributed ledger technology. The resulting responses from the call for evidence indicated that investments using virtual currencies as underlying remained marginal. However, there was a clear consensus that the underlying core distributed ledger technology had many potential uses across the lifecycle of the investment chain and could have significant effects on the status quo. In particular, the responses emphasized that the DLT could be used as a more efficient lower cost alternative to the existing trading infrastructure.

Our initial research finds that the potential benefits sit more squarely in the post-trade environment. We have found that clearing and settlement, collateral management, record of ownership and securities servicing are the areas where the technology is most likely to bring useful changes. It does so through the provision of a unique reference database, instantaneous reconciliation across all participants, immutable shared records and transparent real-time data.

At the same time, ESMA sees a number of possible limitations to the technology. In particular, we question the ability of the DLT to handle large volumes, to manage privacy issues and to ensure a high level of security. Furthermore, as we anticipate that the DLT is deployed gradually, it will need to demonstrate its ability to interact with certain systems that must continue to co-exist with the DLT, e.g. trade platforms. Similarly, if different ledgers were to be used for different types of instruments, the interoperability of the different networks could be a challenge. However, if the technology is successful in overcoming these hurdles, we can envision significant benefits for financial markets and its participants, both in terms of cost and efficiency.

From the standpoint of ESMA's objectives which I referenced at the outset of my talk, DLT introduces both potential benefits and risks. As for investor protection, the DLT transaction may serve to reduce counterparty, operational and legal risks. Further, from a financial stability perspective, the DLT may decrease the risk of cybercrimes owing to the reduced dependency on a single centralised ledger. As to orderly markets, we have concerns that the DLT may raise fair competition issues if there emerges a monopolistic environment. Finally, although the system is meant to provide enhanced transparency, we believe the use of complex encryption techniques may potentially hinder transparency and regulatory oversight. .

When considering the current EU regulatory framework, it is clear that the activities/segments of the financial markets that are less regulated would allow for an easier implementation of the DLT. By contrast, when the legislation imposes the use of authorised central infrastructures like

CCPs or CSDs, the deployment of the DLT is likely to be less straightforward.

ESMA will continue its work on the DLT in an effort to determine whether a regulatory response to the deployment of this technology to financial markets is necessary.

Conclusion

I outlined at the beginning of my talk that ESMA's Financial Innovation framework is a principles-based approach. In taking a principle-based approach we recognize that the topic of innovation differs in magnitude from the vast majority of work ESMA does in policy space. There is for example no Level I Directive to follow. The types of innovation differ greatly across Member States. In turn, our framework in looking at these developments as a regulator needs to remain flexible and adaptive to market events. It also needs the subtlety to know how to balance our regulatory and supervisory responses between a supportive manner and a protective manner. The balance between the two is at times a challenge, but one that we consider most carefully, especially in light of our future product intervention powers.

Thank you.