

June 2017

Discussion Paper: Consumer Protection Code and the Digitalisation of Financial Services



Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem

Contents

Acronyms 	Table of Acronyms	3	»»
Exec. Sum 	Executive Summary	4	»»
Section 1 	Introduction	7	»»
Section 2 	Digitalisation		
	A Brief Overview of an Evolving Financial Services Landscape	11	»»
Section 3 	Benefits and Risks to Consumers	25	»»
Section 4 	The Consumer Protection Framework	37	»»
Section 5 	Next Steps	52	»»
	Summary of Questions	54	»»
	Practical Information for Submission of a Response to this Discussion Paper	56	»»
Annex 1 	Consumer Protection Code Provisions	58	»»
Annex 2 	Overview of the EU Consumer Protection Regulatory Framework	61	»»
Annex 3 	EU Initiatives on Digitalisation	62	»»
Annex 4 	International Policy Work on Digitalisation	64	»»

Table of Acronyms

AFM	The Netherlands Authority for the Financial Markets
BCBS	Basel Committee on Banking Supervision
CCD	Consumer Credit Directive
CCPC	Consumer and Competition Protection Commission
CSO	Central Statistics Office
DMD	Distance Marketing Directive
DPD	Data Protection Directive
E-Commerce Directive	Electronic Commerce Directive
eIDAS	Electronic Identification and Trust Services Regulation
EMD	Electronic Money Directive
ESAs	The three European Supervisory Authorities for banking (the European Banking Authority), insurance (the European Insurance and Occupational Pensions Authority) and markets (the European Securities and Markets Authority)
EBA	European Banking Authority
EC	European Commission
E-Privacy Directive	Privacy and Electronic Communications Directive
EIOPA	European Insurance and Occupational Pensions Authority
EP	European Parliament
ESMA	European Securities and Markets Authority
EU	European Union
FATF	Financial Action Task Force
FCA	Financial Conduct Authority (UK)
FinCoNet	International Financial Consumer Protection Organisation

FSB	Financial Stability Board
FSO	Financial Services Ombudsman
FSUG	Financial Service Users Group, an expert group established by the European Commission
G20	Group of Twenty (international forum for the world's 20 major economies)
GDPR	General Data Protection Regulation
IDD	Insurance Distribution Directive
IOSCO	International Organisation of Securities Commissions
JC	Joint Committee of the EBA, EIOPA and ESMA
KYC	Know Your Consumer
MCD	Mortgage Credit Directive
MIFID/II	Markets in Financial Instruments Directive/II
NIS	Network and Information Systems Directive
OECD	Organisation for Economic Co-operation and Development
PRIIPS	Regulation on key information documents for packaged retail and insurance-based investment products
PAD	Payment Accounts Directive
PSD	Payment Services Directive
PSD2	Revised Payment Services Directive
TFFT	European Commission Task Force on FinTech
UCP	Unfair Commercial Practices Directive
UTCC	Unfair Terms in Consumer Contracts Directive
WEF	World Economic Forum

Executive Summary







As in many sectors of the economy, digital technologies are transforming retail financial services and the consumer journey. The Consumer Protection Code 2012 (the Code) places obligations on regulated financial services providers (firms) across all areas of a consumer’s interaction with a firm, from access to financial services, provision of information, assessment of suitability to the proper handling of claims and complaints from consumers. However, the digitalisation of financial services introduces new benefits and risks for consumers.

It is therefore appropriate that the Central Bank should consider how consumers are protected in this environment and if the risks emerging from digitalisation are adequately addressed in the Code. To that end, the Central Bank committed in our 2017 Consumer Protection Outlook Report¹ to publish a Discussion Paper on this topic as it relates to consumer protection and in particular, the Code.

Financial products and services provide many benefits to consumers and are critical to both their day-to-day lives and safeguarding their future. All firms have a responsibility to help their customers make the right decisions. This responsibility arises not only when selling new products and services but throughout the whole relationship with the customer. It is imperative that consumers are adequately protected at all stages of their relationship with their financial services provider. This means looking at the relationship through the lens of the consumer, not purely from the firms’ perspective and

ensuring that the right outcomes are achieved for consumers regardless of the method through which they undertake their financial affairs.

While all the rules contained in the Code can be impacted by digitalisation, the focus of this Discussion Paper is on those areas of the Code that follow the consumer journey with a regulated² firm:

-  Requirements regarding **access**
-  Provision of **information** requirements
-  **Suitability** requirements
-  **Complaints** handling requirements
-  **Claims** handling requirements
-  Retention of consumer **records**/ record keeping requirements

The objective of this Discussion Paper is to generate discussion and stimulate debate:

- 1 on how the Code addresses emerging risks from digitalisation; and
- 2 to determine if the existing protections need to be enhanced or adapted in specific areas.

Executive Summary *Continued*

Of course, we welcome any additional views of stakeholders, where they have identified any other specific requirements of the Code where consumer protections could be enhanced in the context of digitalisation. In addition, we would welcome stakeholders' views on whether the Code currently impedes firms from adopting technologies that may be beneficial to consumers.

The feedback to this Discussion Paper will inform our consideration on whether the Code protections for consumers should be enhanced or amended in the face of innovative trends and products. Should specific policy proposals be advanced on foot of feedback to this Paper, we will bring forward a consultation paper in 2018. Learnings from this project will also be considered in any future review of other parts of the Central Bank's suite of consumer protection rules in place³.

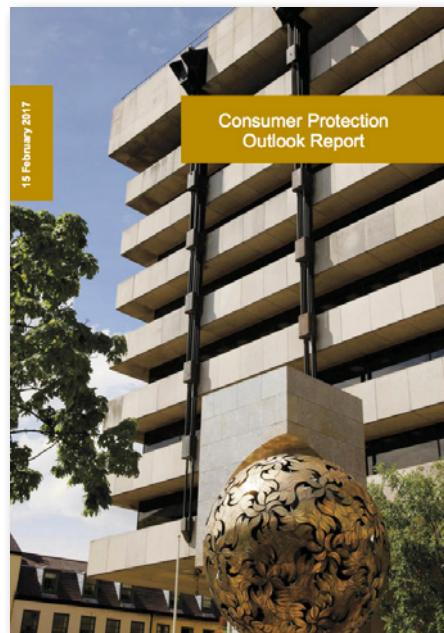
While the Central Bank's consumer protection framework also comprises our gatekeeper, supervision, and policy functions, supported by our research and risk analytics work, in this Discussion Paper we are seeking views specifically on the requirements of the Code, and whether the Code protections remain appropriate in a digital environment.

The Central Bank's consideration of Fintech and innovation in financial services has and will continue separately to this project. Work has been undertaken, for example the enhancement⁴ of our authorisation process; the assessment of how firms are utilising technology to support their consumer risk management as part of our new Consumer Protection Risk Assessment Model; the introduction of new product oversight and governance guidelines since January 2017; and our policy work at EU and international level⁵.

Finally, while there is a close link between data protection and personal privacy rules and many of the issues discussed in this Paper, data protection legislation is the responsibility of the Data Protection Commissioner and, consequently, is outside the scope of this Discussion Paper. Moreover, the new General Data Protection Regulation (GDPR) will come into effect from 25 May 2018 and provide a comprehensive legal framework on the management of personal data that will apply to all entities that handle personal data. A high-level overview of the GDPR is set out in Annex 2.

Footnotes to Executive Summary

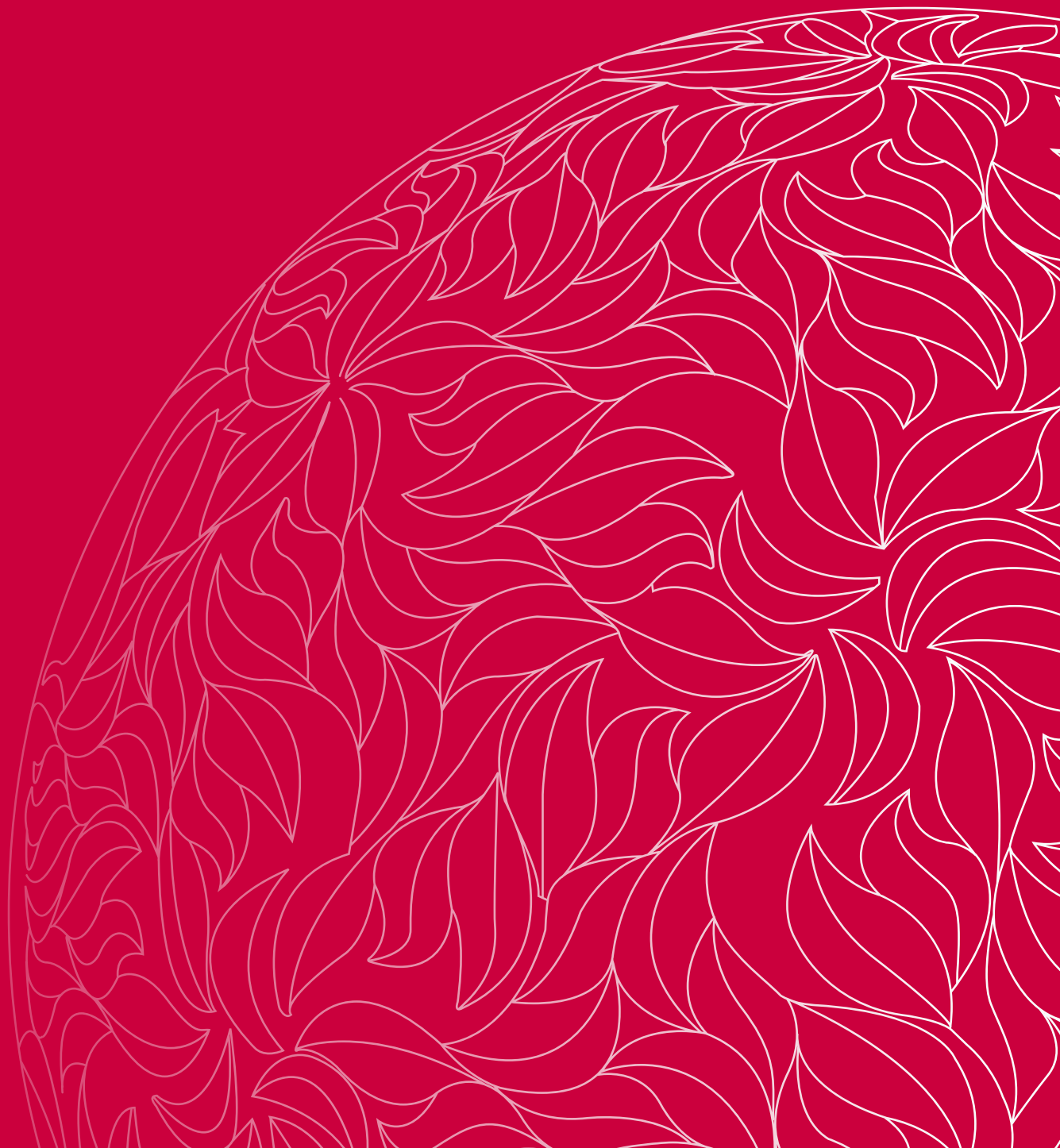
- 1 [Consumer Protection Outlook Report 2017](#)
- 2 Further details on the Code requirements on access, provision of information, suitability, complaints handling, claims handling and retention of consumer records/record keeping are in Annex 1.
- 3 For example the Consumer Protection Code for Licensed Moneylenders, Section 48 (Lending to Small and Medium-Sized Enterprises) Regulations 2015, Code of Conduct on Mortgage Arrears, Non-Life Insurance (Provision of Information) (Renewal of Policy of Insurance) Regulations 2007
- 4 Our new authorisation models implemented in 2016, introduced, amongst other things, defined timeframes for each step of the authorisation process, against which we have commenced reporting publicly in 2017
- 5 Further details on the various EU initiatives on digitalisation are outlined in Annex 3 to this paper. Further details on international policy work on digitalisation are outlined in Annex 4 to this paper.



Consumer Protection Outlook Report 2017

01

Introduction



Introduction

Digital technologies are transforming retail financial services and digitalisation is now an established part of how financial services are delivered to consumers across the financial system. Changing lifestyles and buying preferences, driven by the Internet, have affected current models of distribution of financial products and services to retail consumers, offering the potential for many consumer benefits.

Increased connectivity to consumers via online and mobile channels is changing the way that firms interact with consumers. This provides opportunities regarding access but also means that consumers may have less control in terms of initiating the interaction with their financial service provider. While emerging digital business models and new digital offerings expand choice for consumers, they also create a more complex financial services landscape, where the supply and distribution chain can become fragmented by a multitude of players. Where different specialist actors are responsible for different parts of that chain or where traditional firms are partnered with non-financial services firms, consumers may find it harder to ascertain which services are regulated and what their rights are if something goes wrong.

Digitalisation of financial services may mean that consumers are also exposed to “newer” risks and threats (particularly when compared to traditional financial products), including the risk of fraud, mis-use of personal financial data, digital profiling, cybercrime, etc. Firms can now optimise a wealth of research and data in order to target and customise their product offerings. The increasing trend towards hyper-personalisation of financial services can bring benefits for consumers in terms of more customised products at a better/bespoke price, with more personalised contract terms. However, it also brings risks in terms of closing down some behavioural checks and critical thinking by consumers at key points in the purchase decision-making process. As the purchase of financial products becomes more convenient and quicker for consumers, the necessary frictions in that purchasing process, that allow consumers an opportunity to consider their decision to purchase, can be removed.


From a consumer protection perspective, the Central Bank encourages innovation where it is in the best interests of consumers. However, as new products and services are being developed and rolled out, the need to focus on delivering fair consumer outcomes, through sound product oversight and governance arrangements, is critical in order to prevent consumer detriment. Where firms are moving more to selling financial products and providing financial advice and recommendations through on-line channels, they


must ensure that digital journeys are designed so as to support consumer decision-making and deliver good outcomes for consumers. Firms must place as much importance on the design and layout of the digital journey as on the information that is provided during the journey. As firms move away from traditional delivery models, they must also ensure that the needs of existing customers, including those who may be more vulnerable, continue to be met and that particular cohorts of consumers are not financially excluded.


Fintech¹ is having a profound impact on the consumer journey in financial services, particularly in the following areas:





Access: With increasing product proliferation, the market for financial services can be a complex world for consumers, where they have access to an increasingly broad range of financial products and services. Technology can help consumers to access products and services that are tailored to their needs. But it can also restrict the access of some consumers to products and services that were traditionally available to them and increase financial exclusion, particularly for consumers that are not technologically literate or have limited or no access to modern technological devices.

 **Information disclosure:** Before a product or service is provided, consumers reasonably expect firms to seek to understand their needs and what is important to them. Financial products can be complex, and so consumers require access to high quality, appropriate information to help them make informed decisions about their finances. Information disclosure is important not only when products are sold but also throughout on-going customer relationships. Technology, through the creation of the digital journey, can assist firms in delivering information in ways that encourage better understanding and ultimately better consumer decisions. However, technology and increased convenience can increase the risk of consumers making quick, uninformed decisions.

 **Suitability:** When it comes to the sales process, consumers depend on high quality advice and a recommendation of a suitable product, which has especially taken into consideration the consumer's needs, personal and financial situation, other financial objectives, knowledge and willingness to take risks. Technology can enable the provision of products and services tailored to consumers' needs and circumstances, but that is dependent on the necessary information being collected from consumers and such information being used correctly and without bias.

 **Complaints:** When things go wrong or difficulties arise, consumers reasonably expect their complaints to be handled in a fair and reasonable way by firms. Technology can make it easier for consumers to complain and to engage with firms during the complaints process. However, increased fragmentation in the advice and distribution processes can make it difficult to trace the end-to-end customer journey and allocate responsibility and/or liability along the distribution and supply chain.

 **Claims handling:** Consumers expect that firms will handle and process their claims fairly and properly when they arise. Technology can make it easier for consumers to invoke firms' claims processes and to engage with firms during that process. However, the complexity of new technology for claims handling may be difficult for consumers to understand or challenge in order to seek redress.

 **Record Keeping:** Throughout the relationship, consumers expect their data and information to be retained correctly, securely and that appropriate records are available should they request them. Technology can facilitate collection and storage of vast quantities of consumer data and information. It is imperative that this is maintained securely.²

Firms must steer innovation towards an improved consumer experience. We want consumers to have access to better offers and greater supply of goods and services, while maintaining and enforcing the high levels of protection afforded by the Code. The Code already contains obligations

on the regulated firms across all areas of the consumer journey and these are underpinned at all times by the principle to act with due skill, care and diligence in the best interests of customers.







In the context of our consumer protection mandate and innovation, the role that the Central Bank plays includes continuously seeking to ensure the Code serves consumers' best interests and does so regardless of the type of technology used to provide the financial product or service. Consequently, it is timely that we focus our consideration on whether the Code requirements, as set out under the above areas, remain appropriate and adequate. Our focus in this regard is largely based on identifying potential risks to consumers and ensuring that the Code requirements that are in place continue to address or mitigate those risks. We would also seek to understand whether the Code impedes firms from adopting technologies that may be beneficial to consumers.

The objective of this Discussion Paper is to generate discussion and stimulate debate with Central Bank stakeholders:

- on how the Code addresses emerging risks from digitalisation; and
- to determine if the existing protections need to be enhanced or adapted in specific areas.

This Discussion Paper describes the evolving financial services landscape observed by the Central Bank in Section 2. The potential benefits and risks to consumers arising from the digitalisation of financial services are highlighted in Section 3. Having considered this information,

Section 4 of the Discussion Paper outlines a focussed discussion on specific areas of the Code that we see as being most impacted by digitalisation and technological advances:


-  access;
-  provision of information/disclosure requirements;
-  suitability;
-  complaints handling/redress;
-  claims handling process and
-  retention of consumer records/record keeping.

Consumer protection requirements other than the Code requirements apply to specific firms, for example, the investor protections under MiFID2 and additional consumer protection requirements apply to specific activities, for example, requirements in PSD applicable to the provision of payment services. However, as stated above, for the purposes of this paper we are focussing only on the consumer protections in the Code, not other or additional requirements.

As issues relating to personal data, privacy, etc. are the mandate of the Data Protection Commissioner, these matters are not covered in this Discussion Paper. Moreover, the new General Data Protection Regulation (GDPR) will come into effect from 25 May 2018 and provide a comprehensive legal framework on the management of personal data that will apply to all entities that handle personal data.

Finally, the paper invites views as to whether our current Code protections are appropriate in respect of new digitalised models of financial services or whether further revisions are warranted to ensure the high levels of consumer protections are maintained and that firms keep focus on supporting good consumer outcomes in an increasingly complex environment.

This paper provides an important opportunity for all of our stakeholders to contribute in a positive way to protecting consumers now and into the future. We all can and must play our part in ensuring that innovation and consumer protection are closely aligned and, above all, that the Code continues to focus on getting it right for the consumer. Innovators working with regulated firms or developing unregulated financial products or services need to take existing consumer protection standards into account throughout the development process. Innovation cannot be an excuse for lowering standards or for not focusing on good consumer outcomes.

 Questions are listed throughout the Discussion Paper to stimulate views, and we also welcome more general observations and evidence as it relates to the Code.

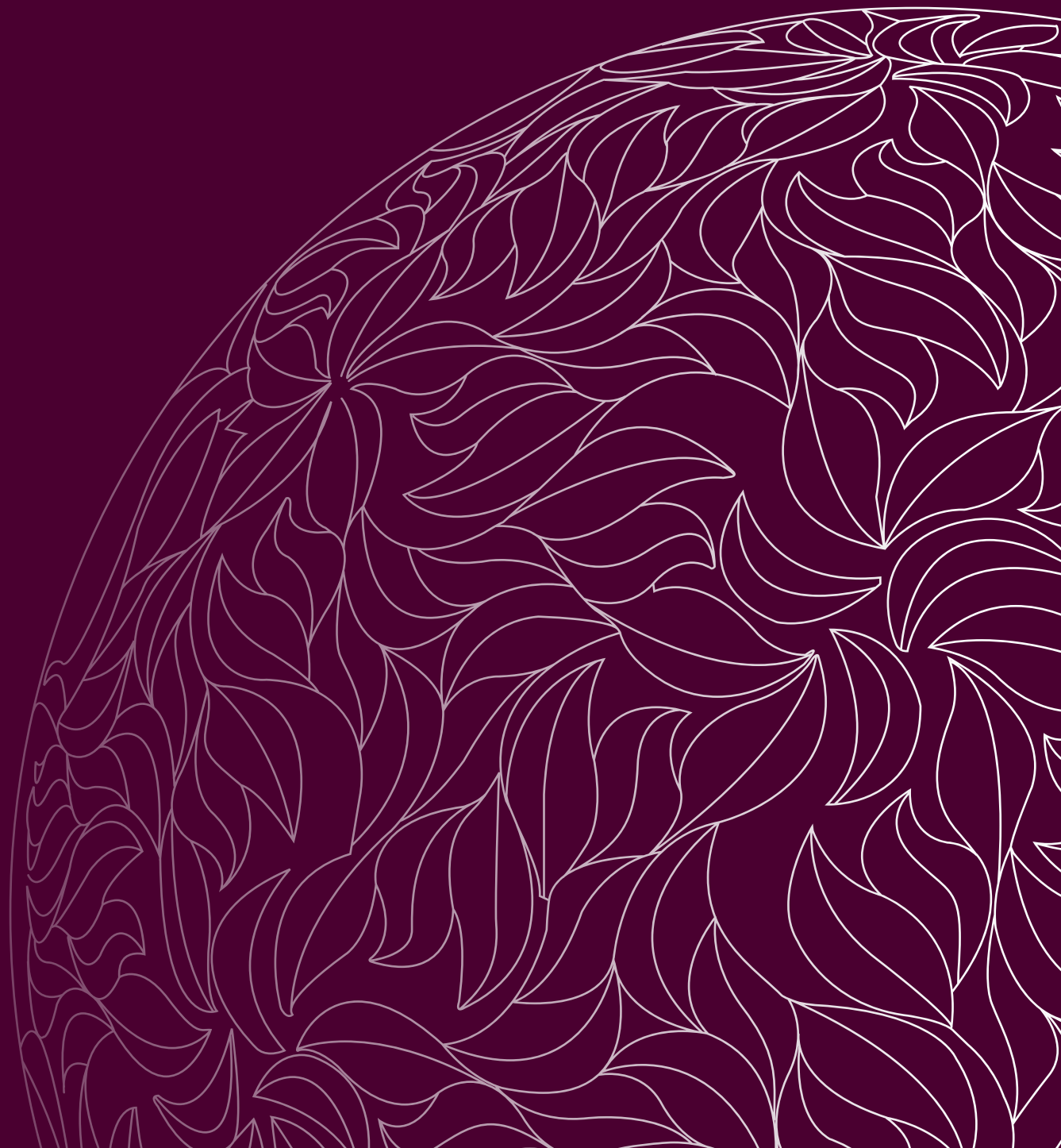
This report includes reference to a number of private companies and financial service providers involved in Fintech, including links to videos. These references should not be construed as an endorsement by the Central Bank, nor do they imply any conclusion about the status of any product or service described, but instead are offered as illustrative of new business models and emerging technologies currently being contemplated, proposed or offered.

Footnotes to Section 1

- 1 The European Commission's 2017 Consultation Paper on FinTech describes "FinTech" as "technology-enabled innovation in financial services, regardless of the nature or size of the provider of the services. Non-disruptive FinTech triggers incremental innovation and increases efficiency, often in mature markets, whereas disruptive FinTech results in more radical breakthroughs that can create completely new markets." See https://ec.europa.eu/info/sites/info/files/2017-fintech-consultation-document_en_0.pdf
- 2 The existing data protection framework will be replaced by the [General Data Protection Regulation \(GDPR\)](#) which will come into force on the 25 May 2018, see <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679&from=EN>

02

Digitalisation: A Brief Overview
of an Evolving Financial Services
Landscape



Digitalisation – A Brief Overview of an Evolving Financial Services Landscape

Financial services have always been driven by technological change from ATMs to online sales to same-day payments. Yet, technological innovation is now reshaping the financial services landscape at an accelerating pace. New technologies and processes are being leveraged to develop innovative financial products and services. Traditional financial institutions have been joined – and sometimes challenged – by a range of new players in an increasingly complex eco-system of firms. New business models have emerged from online-only providers to large technology firms who are expanding into areas such as the provision of payment services for their customers. And the way people manage their finances and interact with firms is being profoundly changed by the impact of technology.

The European Banking Authority (EBA) noted, in a 2016 discussion paper on the innovative uses of consumer data, that “financial innovation has a broad meaning and encompasses not only innovative products and services but also processes, functions, conduct, and distribution channels through which financial institutions bring their products and services to the market.”¹

This chapter of the Discussion Paper will set out a brief, high-level overview of the impact of new technologies and innovation on the financial services landscape. To inform our understanding of the current landscape in Ireland, we surveyed an indicative representation of firms across the banking, payments, insurance and investment sectors to discover what innovations are already in place or are planned for the next 12 months by the industry. Given the scale, nature and speed of new and emerging technologies, the aim of this section is not to provide an exhaustive account or list, but instead to describe some key trends, most particularly as they apply to Irish consumers in the banking, payments, insurance and investment sectors. We invite stakeholders to share examples of any other innovations or technologies that could emerge or have emerged in the Irish market. However, before looking at the trends in new and emerging technologies as they affect financial services, it is first useful, for context, to consider the impact of wider digitalisation trends on consumer behavior.



Digitalisation and consumer behaviour

The digital revolution across wider society continues to shape general consumer behaviour and preferences that in turn influence consumer expectations in the financial services sector. Consumers increasingly expect a consumer-centric, seamless digital experience when buying financial products and services or engaging with their financial service provider.

Widespread Internet use and the growth of smartphone and tablet use are driving consumer preferences for online and mobile platforms. In 2016, 87% of households in Ireland had access to the internet at home and 83% of individuals used mobiles or smartphones to access the Internet.² 70% of Irish individuals use the internet every day, up 15% since 2013.³ 64% of individuals had also banked online⁴. According to 2016 research, 78% of Irish consumers “manage their money or make payments using a mobile device.”⁵ And these trends were not just observable in younger demographics. The same 2016 survey found that nearly 60% of people aged between 55 and 64 years had used their mobiles for banking and that this age category was growing at the fastest rate of 33%.⁶ These trends are reflected in the approaches of many Irish firms that increasingly emphasise the primacy of digital in all aspects of their business. They are also reflected in the emergence globally of new products and services such as short-term or “pay as you go” home or motor insurance that reflect trends for short term rentals of cars or homes in the “sharing economy.”⁷

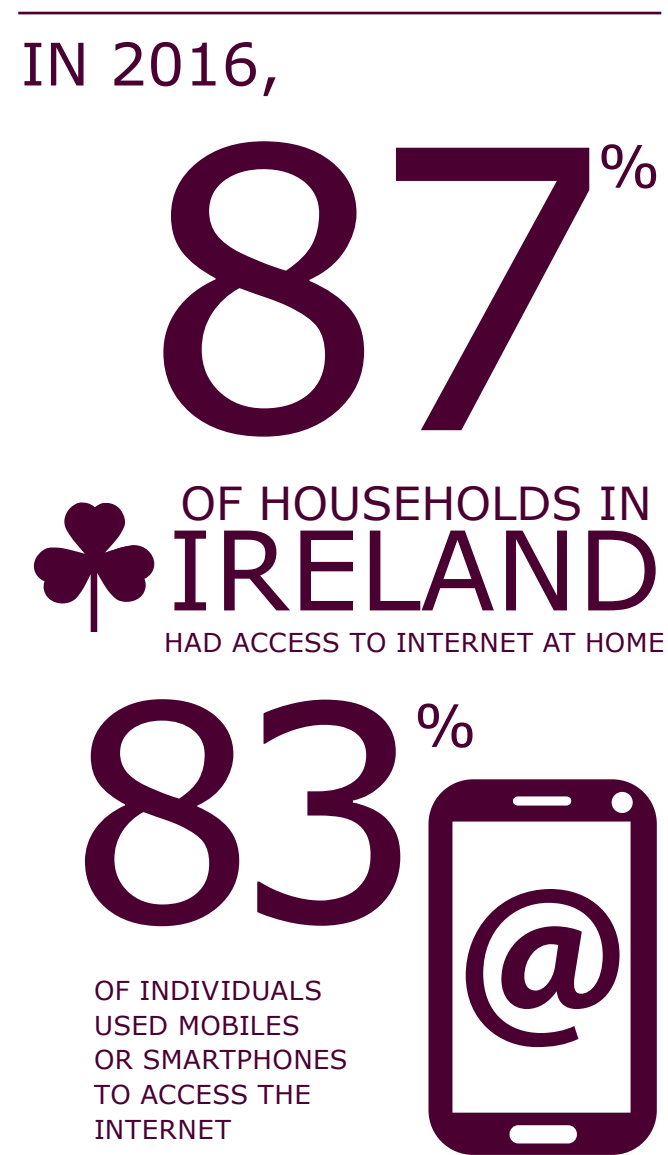
Consumers in Ireland are also rapidly adopting to new technologies. Research published in March 2017, found that the use of contactless payments through debit cards in Ireland has nearly tripled

in the past year from 1.3 million a week in March 2016 to nearly 3 million a week in March 2017.⁸ Recent Central Bank statistics on credit and debit card use show a 14% increase to over €2.7 billion in the use of point-of-sale debit cards in March 2017 on the same month in 2016.⁹ The more recent introduction of Android Pay and Apple Pay in Ireland is likely to accelerate the contactless trend. These mobile payment services allow consumers to purchase goods or services in-store, online or through apps using a range of devices including smartphones, tablets and technology-enabled watches.

Impact of social media

The proliferation of social media platforms and the growth of comparison websites have impacted consumer behaviour by enabling consumers to gather information and compare options for financial products and services like never before. The internet was used by 82% of users to find information about goods and services and by 70% of users for social networking.¹⁰ Irish enterprises (employing 10 employees or more) have also embraced social media and online platforms, with 67% of Irish enterprises using some type of social media such as Facebook, Twitter and YouTube in 2016.¹¹ Financial technology initiatives are being introduced in many financial firms, including using social media for interacting with consumers.

A 2014 survey of UK retail banks’ customer engagement on the social media platform, Twitter, found that, “100% of all the banks contacted in the survey responded within 90 minutes and half of those were under 15 minutes.”¹² Online forums that allow consumers to engage directly with Irish firms prominently cite the average response time and response rates for consumers using the site.¹³





Watch video explaining the Internet of Things here

The growing impact of social media and digital trends can be seen in a description of an “ideal” insurance call centre as comprising a “seamless, real-time, 360-degree view of social media engagement, mobile application interaction, and geo-awareness from Internet of Things (IoT)¹⁴ sensor.”¹⁵

The instant and public nature of modern communication through social media has implications for consumer expectations of customer service, claims and complaints handling

by firms.¹⁶ As outlined in the Central Bank’s Consumer Protection Bulletin on social media monitoring¹⁷ published in May 2017, the Central Bank observed a total of 3,716 online mentions relating to financial products and services in Ireland in the second half of 2016. Of those mentions, 84% expressed dissatisfaction. The banking sector represented 98.2% of mentions expressing dissatisfaction. In addition, in 2015, the Central Bank undertook consumer research on consumer experiences of the complaints

handling process in the banking and insurance sectors. The research found 40% of respondents had most recently complained to their financial services provider by letter/email and 30% had done so through social media or an online form.¹⁸ More specifically, 14% had last complained by filling in a form on the company’s website, 9% had last complained by writing on the company’s Facebook page and a further 7% had done so through tweeting the company.¹⁹ The Central Bank is aware that a significant range of firms in the Irish banking, payments, insurance and investments markets engage in both marketing of products and services and in complaints handling practices via social media.

Digital comparison tools

Price comparison websites (PCWs) have been described as a “fundamental part of (the) UK retail financial services”²⁰ which “appeal to both buyers and sellers.”²¹ Digital comparison tools including PCWs and online calculator tools are now a part of the Irish retail financial services landscape with a number of independent and commercial Irish-based websites that offer consumers the ability to compare current accounts, saving accounts, credit cards, personal loans, mortgages, investment products and motor, health, home and life insurance products. These comparison tools often play a dual role. Firstly, they provide consumers with information including on product prices and charges. Secondly, they allow consumers to compare products and services across a range of categories which can facilitate the switching of products if the consumer is so minded. The use of independent, high quality online comparison websites is also mandated under certain European

directives such as Payment Accounts Directive (PAD) to enhance transparency and choice for consumers.

The website of the Competition and Consumer Protection Authority (CCPC)²² has online tools that allow consumers to compare financial products. Similarly, the Health Insurance Authority²³ (HIA) hosts an online tool in relation to health insurance products. As part of a wider campaign to promote the switching of financial products, the Department of Finance has recently facilitated the www.SwitchYourBank.ie website, which allows consumers to compare current accounts, credit cards or mortgages.

Emergence of new financial service providers and business models

As consumers adopt more technologies and transact their financial services business online, they increasingly interact with multiple firms. In addition, FinTech companies are emerging which specialise in the provision of a particular technology enabled process or solution that makes up just one part of the final product of service that a consumer purchases. These trends can complicate the “customer journey” and make the allocation of responsibility along the product supply and distribution chain more difficult. As such, innovation and technological advances have led to a more fragmented landscape of firms and this trend looks set to continue.

FinTechs, including in Ireland,²⁴ now provide a range of financial products and services that were once the preserve of traditional financial institutions. This ranges from lending to payments to asset and wealth management. Online-only providers offering deposit account and overdraft

services have also emerged in Europe. Large technology companies are now offering payment services to their customers including issuing e-money, credit transfers, payment transactions and money remittance.

In turn, many traditional financial institutions are responding to the challenge of digitalisation and technological change by engaging with FinTech companies²⁵ or establishing their own innovative hubs or units. EIOPA recently noted that “Fintech/ Insurtech firms are increasingly present in

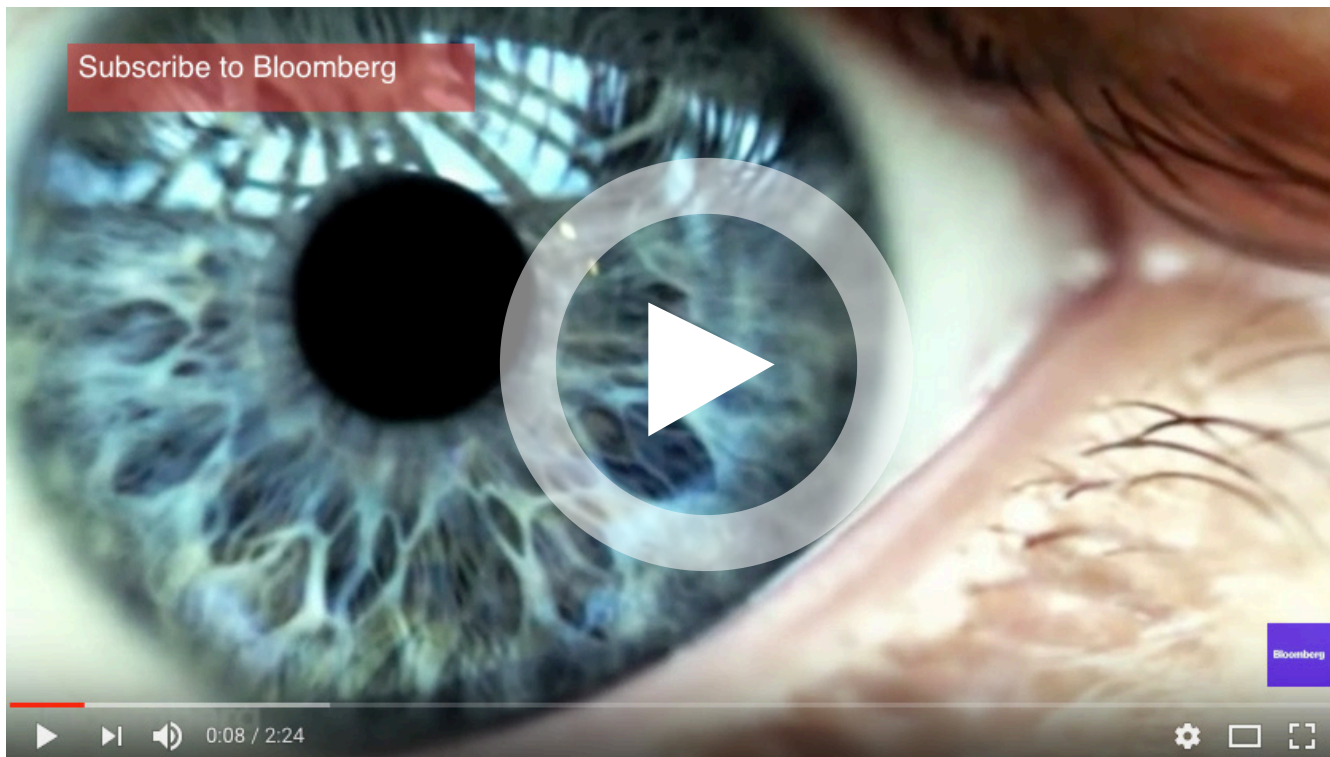
insurance, very frequently via cooperation agreements with established insurers.”²⁶ In the Irish context, a number of firms have indicated to the Central Bank that they have established innovation hubs or dedicated units focusing on digital, research and innovation within their organisations.

New and emerging technologies

Many consumers have already tangibly experienced the impact of the digitalisation of the financial services landscape. This can range from



Watch video on technology disruption of banking



Watch video which highlights the use of biometrics in financial services here

changes to the traditional bank branch network to the transformation in how consumers’ access information about their bank account or purchase insurance or investment products.

Parallel to the growth of digital connectivity, a number of new and emerging technologies and trends have become particularly important for driving innovation in financial services. Many of these technologies, even if complex and obscure at present to consumers, have the potential to significantly impact how financial services and products are delivered to them as well as to the

on-going management of those products and services²⁷.

Key technologies driving innovation in financial services include cloud-based services; telematics, biometrics²⁸ and wearable technologies; distributed ledgers and blockchain; robotic processes automation (RPA) and automated tools, artificial intelligence; cognitive computing; application programming interfaces (API); Big Data analytics; the Internet of Things (IoT) and aggregator services. Technologies such as blockchain²⁹ and APIs, in particular, have the

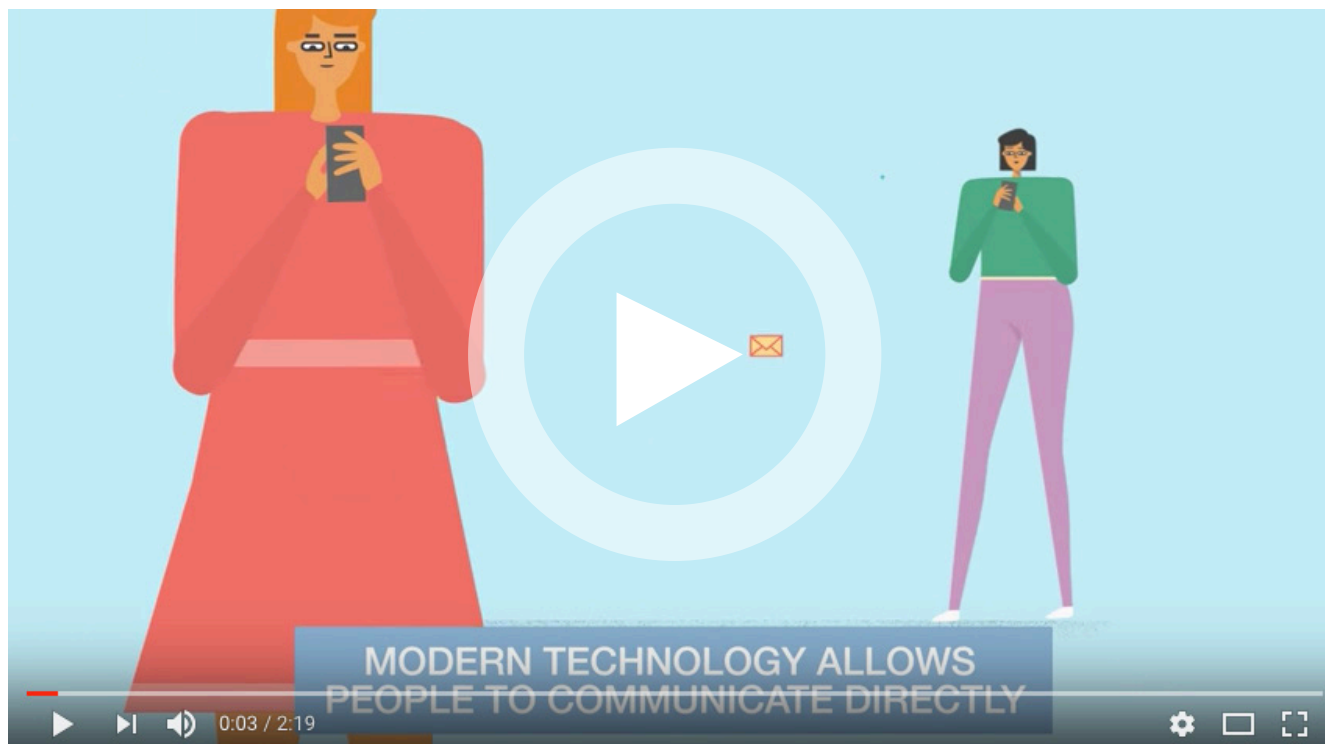
potential to drive further dis-intermediation and disruption of the financial services landscape.³⁰ Both technologies are driven by underlying decentralised processes – distributed databases in the case of blockchain and applications in the case of APIs – that may transform the way financial services are provided and the way consumers manage their finances.

The Central Bank is aware that a range of firms in the banking, payments, insurance and investment sectors in Ireland are currently examining the potential innovative use of technologies as diverse as artificial intelligence and machine learning, blockchain, biometrics, robotics and virtual and augmented reality.

It is too early to gauge the full impact of some of these technologies on the provision of financial products and services. However, for the purposes of this Discussion Paper, the following sections will set out a number of significant technology-enabled innovations or trends that are in place or in development across the sectors within the financial services market in Ireland. The examples set out below under each heading are intended to illustrate innovations that are currently in place or may be developed in the future for consumers. They are not intended to provide an exhaustive overview in any instance.

Big Data analytics

As consumers move more and more online, large volumes of personal data are generated by every interaction on digital and mobile platforms. Utilisation of that data increasingly informs innovation across the financial services sector. In addition, Big Data analytics intersects with the utilisation of a number of new and emerging



Watch video explaining blockchain technology

technologies (described below) in the development of technology-enabled financial products and services.

Firms have access to large amounts of consumer data including “structured data (such as credit card payments, money withdrawals, and account balance check via smartphones); semi-structured data (such as emails, and browsing history); and non-structured data (such as through their call centres, or exchanges between consumers and advisers).”³¹ Tools such as algorithms, decision

trees and artificial intelligence are used to “process these extreme quantities of data and analyse in a meaningful way.”³² How these tools are structured can greatly impact the access to and types of products and services that are available to consumers. In the context of price comparison websites, the structures or algorithms used can influence how products are ultimately presented or displayed on such websites. Firms may also combine with data vendors or other third parties to utilise general consumer data for financial products and services or even to offer

“shopping discounts to consumers based on their buying behaviour.”³³

Throughout the financial services sectors, the use of data analytics is already apparent in the advertising of products and services to consumers, which can be done on a more targeted basis on social media platforms. More profoundly, the use of a consumers’ “pattern of life”³⁴ data has the potential to drive the development of uniquely personalised financial products and services. This includes, for example, using consumer data to assess a consumer’s creditworthiness or suitability for a range of products from mortgages to motor or health insurance. In particular, in the insurance sector technological advances potentially challenge the fundamental idea of insurance provision itself, i.e. the pooling of risk, as underwriting becomes more and more personalised through the use of data.

The Central Bank is aware that firms in Ireland are already utilising innovative uses of data in the banking, payments and insurance sectors. This is impacting a range of products and services for consumers including personal loans, savings and deposits products, payment services, credit cards, mortgages, life, home, motor and health insurance and investment products. In addition, firms in the Irish banking and insurance markets have indicated that they are utilising both their own data and some external publicly available data sources in their business. Other firms in the banking sector have indicated that they are considering the use of third party data sources for the delivery of future products and services.

Digital distribution and online platforms

The share of financial products and services provided online continues to grow as consumers migrate to online and mobile platforms.³⁵ Consumers increasingly apply for and purchase products and services via online and mobile channels.³⁶ The emergence of digital-only providers has helped accelerate this trend and has enabled the provision of a growing range of products and services.



Examples of trends in the Irish market

- **Online and mobile banking**, including account monitoring and carrying out transactions online.
- **Mobile banking apps** that allow consumers to access banking services from their smartphone or tablet.
- Application and **opening a payment or deposit account wholly via digital means.**
- **Online fulfilment and drawdown** of personal loans.
- **Loan application online** or via text or other messaging services.
- Provision of **mortgage advice via online** or social media platforms including Skype or messaging services.
- **Online sales, renewal payments and arrears payments** processes for insurance products;
- **App-based sales tools** for insurance products.

- **Digital uploading** of medical receipts for an immediate and convenient triggering of the **claims process in the health insurance sector.**
- **Online login and access to balances** and transactions for investment products.
- **Online gathering of clients' KYC and suitability information** for investment products.
- Use of **online platforms for execution-only services** for investment products.
- Use of **e-mail and electronic distribution services** for mass-distribution of material to intermediaries, which enables product manufacturers to analyse the engagement of intermediaries with the sent product material.³⁷
- Introduction of **end-to-end online approval for mortgages** and the use of **e-signatures and secure document uploading** are also being explored in the banking sector.

Payments technology

The high level of mobile use and technological innovation continues to transform the payments space for consumers. Many consumers will already have directly experienced the use of contactless technology through their debit or credit card. However, other innovations including wearable, mobile point of sale and Near Field Communication technologies are also driving innovation in payments' products and services. Mobile payments are evolving to include payment by text message, the use of mobile apps linked to

a payment account, the use of payment-enabled devices including smart phone handsets or watches, direct mobile operator billing and innovative third party payments systems that may, for example, allow consumers to make person-to-person payments using only their phone number.³⁸ Instant payments across Europe allowing consumers make instant transfers through mobile devices - and potentially using only mobile numbers - will be facilitated by a Eurosystem³⁹ initiative rolling out from November 2017.



Examples of trends in the Irish market

- **Banking apps** that allow consumers to view and monitor their spending, pay for goods and services and make transactions on their mobile or tablet.
- **Digital or mobile wallets** that allow consumers to pay for goods and services using a digital wallet linked to a payment account via their mobile.
- **Integrated payments** systems where the payment transaction is integrated into a product or service through, for example, a consumer registering payment details for a "one click" payment system or using a company app to seamlessly purchase the product or service while online.

Automated advice or “robo” advice

Automated or “robo” advice is financial advice or recommendations that are provided “to consumers without, or with very little, human intervention and (which) rely instead on computer-based algorithms and/or decision trees.”⁴⁰

A 2016 report⁴¹ by the Joint Committee of the European Supervisory Authorities (ESAs) found that the majority of advice currently being provided across the EU was at least a hybrid of automated and human interaction rather than fully automated advice. However, automated advice is increasingly cited as the future primary mechanism for providing advice to consumers, in particular, in the insurance and investment sectors.⁴² Business-to-business robo-adviser platforms that entail the provision of robo-advice to intermediaries have also emerged as a significant trend in automated advice.⁴³

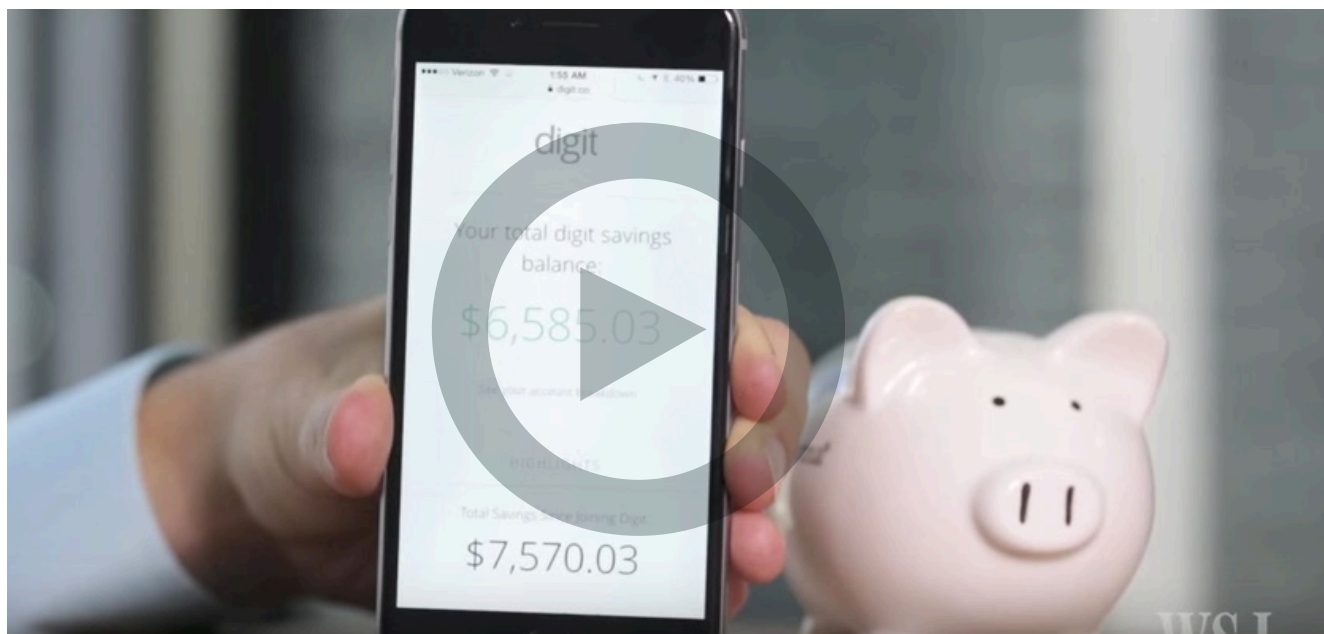


Examples of trends in the Irish market

- The use of **automated financial advice** is currently being examined in the banking, insurance and investment sectors.

Automated systems

Automated systems are similar to automated advice and other automated tools. They automatically perform functions that, as part of the process for purchasing a financial product or service, may previously have been wholly or predominantly performed by a human. In the investments space, for example, risk-profiling



Watch video showing the use of savings app

software can assign clients a risk tolerance score or profile after they have completed an online questionnaire and the automatic tool has calculated a risk score based on the answers provided. In the era of MiFID II and enhanced Product Oversight and Governance (POG) requirements, automated tools and applications may be used to assess clients against the identified target market.⁴⁴

The use of automated systems and mass distribution systems can allow for greater visibility and analysis of product and client data, ensuring that a product’s target market(s) are adhered to in line with product specifications.



Examples of trends in the Irish market

- A fully integrated **end-to-end automated process** for certain categories of intermediaries has been introduced in the banking sector.
- **‘Advisory applications/tools’** in the **on-boarding process for new clients** which allow a client to input their risk profile into the system and then view a series of potential outcomes based on their objectives and appetite for risk. They also enable the client to view graphical representations of their potential investment return over several years.

Chatbots

Automated bots or “chatbots” allow consumers to engage with their financial service provider via text message, instant messaging or voice activation services in natural-style conversations “to ask questions about their financial accounts, initiate transactions and get financial advice via text messages or social media messaging services.”⁴⁵ “Chatbots” that are already in operation internationally in the banking sector tend to be “humanised” with attributes such as human names.⁴⁶

“Chatbots” have been described as the future main method of engagement between consumers and firms.⁴⁷ They also have potential to facilitate the claims process in pay-as-you-go (PAYG) insurance models and micro-insurance products.



Examples of trends in the Irish market

- The use of chatbots to **handle customers’ complaints via social media platforms** is currently being examined for possible use in the banking sector.

Automated financial management tools

Automated financial management tools provide consumers with a range of options via an app or as part of a digital account to manage their money, budget or regularly save. These tools often tend to be combined with “no frills” accounts. Savings apps⁴⁸ can automatically analyse and

deduct the “appropriate” savings level given a consumer’s income or a “rule” to which a consumer has signed up.⁴⁹ Automated budgeting programmes or apps can analyse and categorise expenditure by the consumer once all of their key financial information such as salary, loan repayments and outgoings has been inputted into the app or programme.



Examples of trends in the Irish market

- The introduction of digital customer financial planning tools is currently being considered in the banking sector.

Telematics, wearable and biometric technology

The use of telematics and wearable technology allows consumers to use internet-connected devices in making transactions or the purchase or management of financial products and/or services. In the insurance sector this could enable insurance policies to be priced on the basis of data transmitted from a device in a person’s car (motor), home (house) or worn on their person (life and health). This allows an insurance policy to be tailored and priced specifically to the needs, lifestyle and risks of the individual consumer.

At its most developed, a “connected house”, for example, could transmit data from a range of devices in the home including flooding sensors, smoke detectors, thermostats and smart metres measuring electrical and heating consumption which would then feed into a wholly customised household insurance product. The use of geo-

location technology can facilitate more targeted home and flood insurance products as it allows for the identification of areas that may be more or less prone to flooding.

Biometric technologies allow for the authentication of a consumer’s identity when accessing their account or purchasing products or services through voice, iris or fingerprint recognition.



Examples of trends in the Irish market

- The use of **watches or other wearable technologies to make transactions** are already facilitated in the banking sector in Ireland
- **Personal or wearable devices** including smartphones, smart watches and fitness bracelets to inform a **uniquely individually tailored health, home or life insurance policy** - a **telematics-based insurance** product is currently offered to consumers on a voluntary basis in Ireland which allows data transmitted via a mobile app for a selected time period in a given 12 months to help inform the insurer on the pricing of the policy
- The introduction of **voice biometrics** is being considered in the banking sector in the Irish market.

Smart contracts

Smart contracts are “programmable contracts which are capable of automatically enforcing themselves upon the occurrence of pre-defined conditions.”⁵⁰ They operate wholly as a function

of the underlying distributed ledger and blockchain technology and need no human intervention to activate once the agreed conditions are met.

The use of smart insurance contracts could see claims paid to consumers automatically and immediately once the claim falls within the specific terms of the contract. The growth of smart contracts in the insurance sector has been predicted over the next five years, particularly in relation to “short term risks where there are clear parameters as to payment, the potential for disputes is low and the claims management process is uncomplicated or pre-determined.”⁵¹ Smart contracts could also enable innovative insurance products such as “insurance for the sharing economy, autonomous vehicles, peer-to-peer insurance, and cyber insurance.”⁵²



Examples of trends in the Irish market

- **Connected/smart contracts** in relation to **personal loans** have been introduced in the **payments** sector.
- The potential adoption of **smart contracts** and other **distributed ledger technology** is also being considered in the **insurance** sector.

Reg Tech

Regulatory Technology, or RegTech, is a category of technology-enabled solutions that help firms to address their regulatory requirements and “manage their compliance risks.”⁵³ The key characteristics of RegTech have been described as being its “agility, speed, integration and analytics.”⁵⁴



Examples of the application of RegTech to financial services

- ‘Robo – handbooks’ that make use of Artificial Intelligence techniques for leading firms through regulatory handbooks
- Application of distributed ledger technology and smart contracts to screen compliance returns and automate the monitoring process
- Use of advanced analytics to identify instances of market abuse
- Use of gaming technology in compliance training apps
- Advanced real time call listening technology – the use of voice, behavioural and speech analysis technology for live messaging to a call handler where a consumer is unresponsive to the risks being disclosed to ensure that the risks are re-articulated to the consumer

The use of RegTech is primarily aimed at facilitating the internal processes of firms. However, its use, for example, in analysing compliance risks, undertaking risk management

or monitoring online fraud and the general increased integration of systems in firms may result in risks and benefits for consumers similar to those that arise for the use of a consumer-centred technology. In the Irish context, a number of firms have indicated that they are currently using or plan to use RegTech in the future.

Conclusion

Financial services are being transformed by a range of new and emerging technologies. Innovation is driving change from how back-end services operate to the development of new and innovative products to how customers engage with firms. Given the fast-paced and multi-faceted nature of much of the change these trends are likely to continue to significantly disrupt the landscape of financial services and to impact consumers of financial services and products, both positively and negatively.



Questions for Discussion

- Q1.** Are there examples of other relevant types of innovation in retail financial services, which are not already covered in this Discussion Paper? If so, please provide details.
- Q2.** Considering the Irish market, what innovations are more likely than others to develop and/or have the greatest impact on consumers? Please provide reasons for your answer.

Footnotes to Section 2

- 1 EBA, (2016) "Discussion Paper on innovative uses of consumer data", <https://www.eba.europa.eu/documents/10180/1455508/EBA-DP-2016-01+DP+on+innovative+uses+of+consumer+data+by+financial+institutions.pdf>
- 2 CSO, (2016) *Information Society Statistics – Household 2016*, <http://www.cso.ie/en/releasesandpublications/er/issbh/information societystatistics-households2016/>
- 3 CSO,(2016), *Information Society Statistics – Households 2016*, <http://www.cso.ie/en/releasesandpublications/er/issbh/information societystatistics-households2016/>
- 4 CSO, (2016) *Information Society Statistics – Households 2016*,<http://www.cso.ie/en/releasesandpublications/er/issbh/information societystatistics-households2016/>
- 5 RTE, (2016) "Mobile payments survey", <https://www.rte.ie/news/business/2016/1019/825197-mobile-payments-survey/>
- 6 RTE, (2016) "Mobile payments survey", <https://www.rte.ie/news/business/2016/1019/825197-mobile-payments-survey/>
- 7 *The Economist*, (2013), "The rise of the sharing economy", <http://www.economist.com/news/leaders/21573104-internet-everything-hire-rise-sharing-economy>
- 8 Taylor, Charlie, "More than 3m contactless payments made each week in Republic", *The Irish Times*, March 23 2017, <http://www.irishtimes.com/business/financial-services/more-than-3m-contactless-payments-made-each-week-in-republic-1.3021602>
- 9 CBI(2017) *Credit and debit card statistics*,<https://www.centralbank.ie/docs/default-source/statistics/data-and-analysis/credit-and-banking-statistics/credit-and-debit-card-statistics/credit-and-debit-card-statistics-q1-2017.pdf?sfvrsn=8>
- 10 CBI (2017)*Consumer Protection Bulletin Edition 6* <https://www.centralbank.ie/news/article/consumer-protection-bulletin-using-social-media-to-inform-consumer-protection>
- 11 CSO (2016)2016, *2016 Information Society Statistics – Households 2016*, <http://www.cso.ie/en/releasesandpublications/er/issbh/information societystatistics-households2016/>
- 12 Eldridge, Richard, (2016) "How social media is changing financial services", *The Huffington Post*, http://www.huffingtonpost.com/richard-eldridge/how-social-media-is-shapi_b_9043918.html
- 13 For example see <http://www.boards.ie/tforum/1522>
- 14 Watch video explaining the Internet of Things here - <https://www.youtube.com/watch?v=QSIPNhOiMoE>
- 15 Palmer, Matthew, (2016) "8 innovation trends for digital insurance", *The Digital Insurer*, <https://www.the-digital-insurer.com/wp-content/uploads/2016/05/732-solution-brief-eight-innovation-trends-for-digital-insurance.pdf>
- 16 Eldridge, Richard, (2016) "How social media is changing financial services", *The Huffington Post*, http://www.huffingtonpost.com/richard-eldridge/how-social-media-is-shapi_b_9043918.html
- 17 CBI, (2017)*Consumer Protection Bulletin Edition 6*, <https://www.centralbank.ie/news/article/consumer-protection-bulletin-using-social-media-to-inform-consumer-protection>
- 18 CBI, (2016) *Complaints handling within regulated financial services firms: Consumer Research*, <https://www.centralbank.ie/docs/default-source/Regulation/consumer-protection/compliance-monitoring/reviews-and-research/gns4-2-1-1-complts-handg-reg-fin-sers-firms.pdf?sfvrsn=4>
- 19 CBI, (2016), *Complaints handling within regulated financial services firms: Consumer Research*, <https://www.centralbank.ie/docs/default-source/Regulation/consumer-protection/compliance-monitoring/reviews-and-research/gns4-2-1-1-complts-handg-reg-fin-sers-firms.pdf?sfvrsn=4>
- 20 Laffy and Gandy, (2009) "Comparison websites in UK retail financial services", *Journal of Financial Services Marketing* Volume 14, Issue 2, <http://rd.springer.com/article/10.1057/fsm.2009.15>
- 21 Laffy and Gandy, (2009) "Comparison websites in UK retail financial services", *Journal of Financial Services Marketing*, Volume 14, Issue 2, <http://rd.springer.com/article/10.1057/fsm.2009.15>
- 22 See <http://www.consumerhelp.ie/>
- 23 See <https://www.hia.ie/ci/health-insurance-comparison>
- 24 See description of FinTechs in Ireland across the following categories: transactions and payments, asset management, currency trading, mobile banking, crowdfunding and peer-to-peer lending, financial advisory, security and privacy, risk and compliance, trading available at <http://www.fintechtop100.com/>
- 25 See for example www.bankofireland.com/about-bank-of-ireland/press-room/press-releases/item/435/bank-of-ireland-signs-major-long-term-deal-with-evo-payments-international/

- 26 EIOPA, (2016) *Fifth Consumer Trends Report*, <https://eiopa.europa.eu/Publications/Reports/06.0. EIOPA-BoS-16-239%20-%20EIOPA%20Fifth%20Consumer%20Trends%20report%20-%20Clean%20after%20BoS.pdf>
- 27 Watch video on technology disruption of banking at <https://www.youtube.com/watch?v=i35xfEGAu-I>
- 28 Watch video which highlights the use of biometrics in financial services here - https://www.youtube.com/watch?v=88Rjg8gM_DI
- 29 Watch video explaining blockchain technology at <https://www.youtube.com/watch?v=6WG7D47tGb0>
- 30 CGI, (2016) "How banks can create value from the rise of the open API economy in financial services", https://www.cgi.com/sites/default/files/SIBOS2016/open_apis_banking_paper_14_oct.pdf
- 31 Financial Service Users Group (FSUG) (2016), "Assessment of the impact of Big Data on Financial Services", https://www.google.ie/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0ahUKEwjLxY-1zLLTAhUSUIAKHc4eB4AQFggMAI&url=https%3A%2F%2Fec.europa.eu%2Finfo%2Ffile%2F46888%2Fdownload_en%3Ftoken%3DMgdghb0P&usg=AFQjCNEv7IZTQTMmYnWIBTVc28HLN0oXA
- 32 FSUG, (2016) "Assessment of the impact of Big Data on Financial Services", https://www.google.ie/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0ahUKEwjLxY-1zLLTAhUSUIAKHc4eB4AQFggMAI&url=https%3A%2F%2Fec.europa.eu%2Finfo%2Ffile%2F46888%2Fdownload_en%3Ftoken%3DMgdghb0P&usg=AFQjCNEv7IZTQTMmYnWIBTVc28HLN0oXA
- 33 FSUG, (2016), "Assessment of the impact of Big Data on Financial Services", https://www.google.ie/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0ahUKEwjLxY-1zLLTAhUSUIAKHc4eB4AQFggMAI&url=https%3A%2F%2Fec.europa.eu%2Finfo%2Ffile%2F46888%2Fdownload_en%3Ftoken%3DMgdghb0P&usg=AFQjCNEv7IZTQTMmYnWIBTVc28HLN0oXA
- 34 See for example discussion in FSUG "Assessment of the impact of Big Data on Financial Services, and the International Association of Supervisors' "Report on FinTech Developments in the Insurance Sector."
- 35 EIOPA reports that although traditional distribution channels such as "direct sales, insurance brokers and insurance agents" continue to dominate in most EU states, "online insurance marketplaces such as comparison websites increasingly offer consolidated distribution channels" for the purchase of insurance products and services (see EIOPA's Fifth Consumer Trends Report, 2016)
- 36 A 2015 survey of insurance companies found that there will be significant transitioning from physical to digital channels over the next three to five years. It found that "20-40% of physical activities in insurance will be transitioned to digital. Specifically, pre-purchase, purchase, servicing, renewals, claims handling and management, payments, and customer feedback and resolution will become digital first, followed by other functions later" (see Palmer, M., (2016) "8 innovation trends for digital insurance", *The Digital Insurer*, at <https://www.the-digital-insurer.com/wp-content/uploads/2016/05/732-solution-brief-eight-innovation-trends-for-digital-insurance.pdf>)
- 37 The increased Product Governance requirements coming in MiFID II, may increase the use of such information sharing systems/applications between manufacturer and distributor, particularly to ensure compliance with the relevant target market requirements.
- 38 See FCA and OfCOM, (2014) "Innovation in UK consumer electronic payments: A collaborative study by Ofcom and the Payment Systems Regulator", https://www.ofcom.org.uk/_data/assets/pdf_file/0014/45041/e-payments.pdf
- 39 ECB, (2015) "Instant payments across Europe by November 2017", <https://www.ecb.europa.eu/press/pr/date/2015/html/pr151127.en.html> . For reports on how Irish firms plan to provide services under this initiative see O'Donoghue, P., (2017) *The Journal.ie*, "Irish banks are looking at a scheme for instant money transfers using only mobile numbers", <http://www.thejournal.ie/ireland-instant-bank-transfers-2-3255496-Feb2017/>
- 40 Joint Committee of the European Supervisory Authorities (ESAs), (2016), "Report on automation in financial advice", [https://esas-joint-committee.europa.eu/Publications/Reports/EBA%20BS%202016%20422%20\(JC%20SC%20CPFI%20Final%20Report%20on%20automated%20advice%20tools\).pdf](https://esas-joint-committee.europa.eu/Publications/Reports/EBA%20BS%202016%20422%20(JC%20SC%20CPFI%20Final%20Report%20on%20automated%20advice%20tools).pdf)
- 41 Joint Committee of the European Supervisory Authorities (ESAs), (2016) "Report on automation in financial advice", [https://esas-joint-committee.europa.eu/Publications/Reports/EBA%20BS%202016%20422%20\(JC%20SC%20CPFI%20Final%20Report%20on%20automated%20advice%20tools\).pdf](https://esas-joint-committee.europa.eu/Publications/Reports/EBA%20BS%202016%20422%20(JC%20SC%20CPFI%20Final%20Report%20on%20automated%20advice%20tools).pdf)
- 42 A March 2017 report found that in the investments space there were at least "106 direct-to-consumer online fund advisers that offer a guided one-stop-shop service to invest in mutual funds or exchange traded funds" across Europe with the UK and Germany as the most popular markets for automated advice platforms. See *Ignites Europe*, (2017), "Competition grows as list of 106 robo-advisors revealed", http://igniteseurope.com/c/1589113/185243/competition_grows_list_robo_advisors_revealed?referrer_module=emailHeadlines&module_order=0&code=Wld4aGFxNwXmbVJsWldkaGrQmpaVzUwY21Gc1ltRnVheTVwWIN3Z09UVTBPRFUwTXI3Z09URTJOalkyTnpRMQ

- 43 *Ignites Europe* has cited business-to-business robo advice as the current “biggest trend in the robo-advice market”, see http://igniteseurope.com/c/1550953/180363/firms_emulate_blackrock_robo_push?referrer_module=emailMorningNews&module_order=1&code=YW05b2JpNXJaV0YwYVc1bIFHTmxibJJ5WVd4aVIXNXJMbWxsTENBNU5EZ3hNREF6TENBM01EUXpNREEyT1RZPQ
- 44 Under MiFID II, manufacturers of Financial Instruments will be required to identify a Target Market, using a set of defined categories, for the financial instruments they manufacture; distributors will be required to conduct their own assessment of their client base, to assess against the Manufacturers’ Target Market. Distributors are to use the Manufacturers’ target market assessment, in conjunction with their knowledge of their own client base, to make an overall assessment; in this regard the use of automated systems/applications is likely to be useful to meet the Target Market requirements of MiFID II. The identified target market is also subject to ongoing review by both manufacturer and distributor, and this review, and ongoing relationship between both entities, would likely be facilitated by automated systems.
- 45 *Popper, Nathaniel, New York Times*, (2016) “Banks bet on the next big thing; financial chatbots”, <https://www.nytimes.com/2016/10/27/business/dealbook/banks-bet-on-the-next-big-thing-financial-chatbots.html>
- 46 *Noto, Grace*, (2016), *Bank Innovation*, “Meet Erica, Bank of America’s chatbot for digital banking”, <http://bankinnovation.net/2016/10/video-meet-erica-bank-of-americas-chatbot-for-digital-banking/>
- 47 *Popper, Nathaniel, New York Times*, (2016), “Banks bet on the next big thing; financial chatbots”, <https://www.nytimes.com/2016/10/27/business/dealbook/banks-bet-on-the-next-big-thing-financial-chatbots.html>
- 48 Watch video showing the use of savings app here <https://www.youtube.com/watch?v=bOasH3KwB30>
- 49 *Financial Times*, (2017) “Robots could help you to save more and spend less”, <https://www.ft.com/content/681d1b2e-e7d9-11e6-893c-082c54a7f539>
- 50 Capgemini Consulting UK, (2016) “Smart contracts in financial services”, <https://www.capgemini-consulting.com/resource-file-access/resource/pdf/smart-contracts.pdf>
- 51 Norton Rose Fulbright, (2016, “The future of smart contracts in insurance”, <http://www.nortonrosefulbright.com/knowledge/publications/142730/the-future-of-smart-contracts-in-insurance>
- 52 Capgemini Consulting UK, (2016) “Smart contracts in financial services”, <https://www.capgemini-consulting.com/resource-file-access/resource/pdf/smart-contracts.pdf>
- 53 Deloitte, (2016) “RegTech is the new FinTech: How agile regulatory technology is helping firms better understand and manage risk”, <https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/performance/lu-how-agile-regulatory-technology-is-helping-firms-better-understand-and-manage-their-risks-24052016.pdf>
- 54 Deloitte, (2016) “RegTech is the new FinTech”, <https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/performance/lu-how-agile-regulatory-technology-is-helping-firms-better-understand-and-manage-their-risks-24052016.pdf>

03

Benefits and Risks to Consumers



Understanding the potential benefits and risks to consumers of the digitalisation of financial services

Technology is driving major change and innovation in financial services, both here in Ireland and globally. The Central Bank recognises that financial innovation may result in significant benefits for consumers. From a consumer protection perspective, we welcome innovations that promote consumers' best interests. We also recognise that financial innovation may introduce new risks or magnify existing ones. Understanding and balancing these benefits and risks in a way that protects consumers and fosters a fair, transparent, and competitive marketplace is critical to the Central Bank's mission.

Technology-enabled innovation in financial services has the potential to benefit consumers in terms of cost, convenience and greater choice of financial products and services. Prices of financial services and products for consumers may be driven down through increased competition, more tailored products and services and reduced operating costs. Technological innovation is accelerating transaction speeds and enhancing the convenience and immediacy of access to products and services for consumers.

Advances in technology can also empower consumers to move between firms and to find products and services that are more suitable to their needs. The increasing use of consumer data across financial services is likely to drive the development of more customised products and services in banking, payments, insurance and investment, and away from the "product and process standardisation...(of) the past years."¹ Technology can also facilitate the adoption of spending and savings habits that are more consistent with the consumer's long-term aspirations. Innovative solutions can be used to enhance consumers' access to their own financial data and facilitate the portability of consumers' data. Consumers can then feed their data into technology-enabled financial management tools, such as price and product comparison websites, to gain better insight into, and control over, their financial situation.² The right to data portability is

also a feature of the new GDPR that applies from May 2018.³

However, although technological developments can change and improve the way consumers manage their money and conduct their financial affairs, they are not without risk. There are significant security, fraud and data protection risks for all consumers associated with increased digitalisation.⁴ These risks to consumers helped to inform the Central Bank's "Cross Industry Guidance in respect of Information Technology and Cybersecurity Risks"⁵ for regulated firms which was published in September 2016.

Financial services and products are different to other consumer goods. It may not be appropriate for a consumer to be able to purchase a mortgage or another complex financial product in a "one click" purchase process, because the process does not create any time for the consumer to consider their purchase decision before committing to it. Increased personalisation of products and services may also limit a consumer's ability to make informed decisions about the financial product or service that best meets their needs. Optimising business outcomes rather than consumer needs may be the priority for firms in designing the "digital journeys" which are an increasing feature of the digitalised financial services landscape.







Technological innovation has the potential to negatively impact the imbalance of knowledge

and power between a consumer and a financial service provider if it is not underpinned by a strong consumer-focused culture and product oversight and governance. Some consumers may enjoy enhanced access to financial products and services and an enhanced user experience. For other consumers, however, the move to digital channels and services may have the opposite effect and increase financial exclusion. Consumers may not understand the increasingly complex technologies and mechanisms that underlie products and services they purchase. This may include the processes that drive a financial service provider’s suitability/Know Your Consumer, disclosure, complaints or claims handling practices. The complexity of technology may also limit or reduce a consumer’s ability to challenge firms and to seek redress.

It is important that regulatory frameworks seek to mitigate the risks associated with technological advances and protect consumers. As the international financial consumer protection organisation, FinCoNet, noted in its report last year, the ongoing digitalisation of financial services “cannot compromise the maintenance of a proper financial consumer protection

framework.”⁶It is particularly important to understand the potential benefits and risks of innovation and digitalisation from the consumer’s perspective. For the purposes of this Discussion Paper, we have focused on the areas of the Code that reflect protections during stages of the consumer journey impacted by digitalisation, as described in Section 1. Each of these identified areas comprises a vital part of the consumer’s relationship with their financial services provider, from the initial purchasing stage to the on-going maintenance of the product and service. Many innovations or new technologies in the financial services sector have been adopted relatively recently and so it is too early to tell whether all of the benefits and risks outlined below may actually materialise for consumers. For that reason, we are also interested in hearing from stakeholders if they have any evidence that the highlighted benefits and risks have materialised and what particular benefits and risks they believe are likely to materialise.

In what follows, we outline at a high-level the potential benefits and risks that arise from digitalisation under the following headings:

-  REQUIREMENTS REGARDING ACCESS TO FINANCIAL SERVICES
-  PROVISION OF INFORMATION REQUIREMENTS
-  SUITABILITY REQUIREMENTS
-  REDRESS/COMPLAINTS HANDLING REQUIREMENTS
-  CLAIMS HANDLING REQUIREMENTS
-  RETENTION OF CONSUMER RECORDS / RECORD KEEPING REQUIREMENTS



Access to financial services

Potential benefits for consumers:

- ✓ Enhanced user experience through quicker, and sometimes instant, access to financial products and services.
- ✓ Financial products or services that are more consumer-focused and are easier to use due to the enhanced functionality of digital or mobile platforms.
- ✓ Greater consumer choice in the variety of products and services on offer, the distribution channels and platforms through which consumers can access services and the range of service providers in the market.
- ✓ Greater access to financial products and services for cohorts of consumers that were previously underserved, excluded or rarely engaged with firms through traditional channels. Examples include improved access to credit through new lending products, online products and channels, or the use of personal data to provide a credit history for those who previously had none.
- ✓ Improved consumer decision-making due to access to a wider range of online information sources which can also reduce over-reliance on one financial advisor or provider.
- ✓ Provision of more effective financial management and budgetary tools to help less financially literate consumers to understand and manage their finances including, for example, automated prompts or triggers to make savings.⁷
- ✓ Increased investor protections through the use of automated profiling tools which can specifically designate a particular 'Risk Profile' which the investor must stay within which means they can only invest in certain low-risk financial instruments.
- ✓ Enhanced consumer control of personal finances through access to data that was previously controlled by firms⁸
- ✓ Hyper-personalisation can result in more customised products at a better/bespoke price, with more personalised contract terms.

Potential risks to consumers:

- ✗ Instant and/or over-simplified access to certain financial products and services may result in poor consumer decision-making and potential financial detriment.
- ✗ Security and fraud risks for consumers if there are inadequate systems in place to protect against possible breaches of digital infrastructure and systems.
- ✗ When firms are transitioning to a new digital service or delivery channel they may automatically transfer consumers to the new digital service/delivery channel without allowing them to "opt-in" or "opt-out" of the new digital service depending on their preferences.
- ✗ Use of digital only consumer data to assess creditworthiness may reduce the accuracy of credit assessments and increase financial exclusion.
- ✗ Reduced access to financial products and services for consumers who lack the digital skills or access to technology to operate in the digitalised financial services environment.
- ✗ Reduction or removal of traditional face-to-face interaction and assistance for consumers especially in relation to more complex products.
- ✗ Increased difficulty for firms to identify vulnerable consumers and engage with them accordingly due to the loss of direct, human interaction.
- ✗ Uncertainty or lack of awareness of the regulatory status of a provider where the consumer accesses financial products and services from other jurisdictions online.
- ✗ Exclusion from certain products and services such as tailored products because the consumer has not generated a digital footprint or sufficient online personal data or declines to share their personal.
- ✗ Restriction or exclusion from certain products or services because "algorithm profiling" or "pattern of life" data is used to cherry pick preferred consumer types.⁹
- ✗ Hyper-personalisation can close down some behavioural checks and critical thinking by consumers in the decision-making process.



Provision of information/disclosure

Potential benefits for consumers:

- ✓ Presentation of financial information in a simpler and more effective way through the use of digital tools such as videos, online tutorials, live chats, graphics or interactive Q&A's.
- ✓ Greater opportunity for consumer to engage directly with firms given the participatory nature of digital and social media platforms.
- ✓ Technology can facilitate a "layered"¹⁰ approach to the provision of information, through the use of digital platforms and interactive online tools.¹¹ The layering of information ensures that the most important information for the consumer is "provided upfront, in a form of summary disclosure ... (then) there is a nesting of information, depending on how important it is to the consumer's decision."¹² The UK's Financial Conduct Authority (FCA) described the layering of information as providing the consumer with the "most important information upfront, with clear signposts to other additional information"¹³ and found it "particularly effective at enhancing consumer engagement."¹⁴ The layering of information digitally can allow consumers to access and retrieve a range of information more easily and conveniently through the use of tools including pop-ups and hyper-linked text.
- ✓ Advertisement of products and services that is more targeted and adapted to a consumer's particular needs and circumstances rather than irrelevant or unsuitable generic offers.
- ✓ Technology-enabled tools may also allow consumers to manage or block targeted advertising more effectively.

Potential risks to consumers:

- ✗ Risk of "information overload" for consumers on smaller devices which could result in the obscuring of key information, charges or risk warnings.
- ✗ Increased difficulty in reading or understanding mandatory, key information provided on smaller smartphone or tablet devices.
- ✗ Poorly designed presentation of information in an online or mobile format could "encourage poor choices, possibly resulting in mis-selling"¹⁵ to the consumer.
- ✗ Easier for consumers to pass over or ignore information online that they would have to listen to if provided through human interaction.
- ✗ Reduced consumer awareness and understanding of the complexity of the underlying technologies and systems involved in the provision of financial products and services such as the use of algorithms in the provision of robo-advice.
- ✗ "Information asymmetries" for consumers if computer-based rules appear "non-transparent and somewhat arbitrary, notably because consumers may not be aware of the factors that led to the decision (e.g. non approval of credit application because of automatic credit scoring based on consumer data)."¹⁶
- ✗ Increased intrusion for consumers due to the ubiquitous nature of digital devices and platforms and increased targeted advertising on social media platforms.
- ✗ Lack of consumer awareness that their personal data may be collected and used for targeted products, services and advertising.
- ✗ Use of promotions and/or paid advertising of products or services in the online and digital space or advertisements that are falsely presented as unbiased or independent, for example, if bloggers or social media users do not disclose payments received for the promotion of products or services.
- ✗ Use of social media advertising to inappropriately target consumers who do not fully understand the risks involved with certain products and services, particularly investment products.



Suitability

Potential benefits for consumers:

- ✓ Provision of customised financial advice, products and services. The use of automated systems can enable firms to collect and assess more reliable suitability information, for example, through risk profiling tools and online questionnaires, which assess a consumer's knowledge and experience, as opposed to relying on 'self-assessment' by the consumer.
- ✓ Reduced scope for mis-selling as financial products are more individually targeted and products are adopted that "allow insights in consumers' lifestyles, life-events, behaviours or preferences."¹⁷
- ✓ Collection of more accurate KYC/suitability information by firms. This could include automatic triggers when updates are required, for example, when a consumer reaches retirement age, or the enforcement of automatic blocks when all necessary information has not been collected from the consumer.
- ✓ More responsive products and new products brought to the market earlier due to faster innovation cycles and data-driven approaches.
- ✓ Enhancement of product design and the earlier identification of product defects through the use of new and specialised technologies and personal data.
- ✓ Easier to understand and compare complex products through the use of cost-comparison websites, online calculation tools and social media feedback.
- ✓ Decreased comparability of products and services may result in consumers receiving more personalised advice based on their own financial needs and personal data rather than on a range of standard products through comparison websites and other digital tools.
- ✓ Earlier detection and management of a consumer's financial difficulties due to individual data-driven approaches to products and services.
- ✓ Provision of usage-based insurance products and on-demand insurance coverage that is more suitable to a consumer's needs and lifestyle and may reduce costs for consumers as they only pay for what they need.

Potential risks to consumers:

- ✗ Provision of unsuitable advice, products or services because of the collection of incomplete or inaccurate KYC/suitability information. Online questionnaires may not fully collect all the required suitability information about the consumer or may be overly simplistic and not capture important information or nuances that human interaction tends to identify. Consumers may over-estimate their knowledge and experience and overall financial literacy when answering questions in an online questionnaire.
- ✗ Inadequate understanding of how to use an online or digital tool. The tool itself, or the algorithm underlying the technology providing the product or service, may have a bias, limitations or undetected errors that could result in the mis-selling of a product to a consumer or other consumer detriment.
- ✗ Firms may focus more on designing a general "digital journey" which reflects the firm's business strategy rather than prioritising the needs and requirements of consumers.
- ✗ Poor consumer decision making because of wrong or inaccurate information being supplied or processed.
- ✗ Provision of unreliable data, for example, on income or expenditure habits, due to manipulation of data from digital sources or social media.
- ✗ Increased consumer indebtedness due to the ease of access to and convenience of online credit.
- ✗ Decreased comparability of products and product providers, due to the "hyper-personalisation"¹⁸ of products to individual consumers resulting in reduced consumer choice and ability to evaluate different purchasing options.
- ✗ Development and sale of products and services without due product oversight and governance given the speed and transformative nature of technology.
- ✗ Use of data sharing models or other digital tools to target unsuitable consumers for irresponsible lending or investment.
- ✗ Consumers using poorly constructed digital tools or using tools for which they do not have the required knowledge and experience may purchase an unsuitable financial product or service.



Redress/Complaints Handling

Potential benefits for consumers:

- ✓ Easier and more convenient for consumers to make a complaint and seek redress due to the instant nature and growing ubiquity of digital and social media platforms.¹⁹
- ✓ More efficient processes to correct errors by firms and enhanced consumer satisfaction if they are not referred to offline methods to pursue a formal complaint.²⁰
- ✓ Earlier detection of fraud if technology identifies unusual patterns in a customer's transactions or activities in an easier and faster manner and a longer redress and claims process is circumvented for the consumer.

Potential risks to consumers:

- ✗ More difficult to identify who is liable for a product or service if different specialist providers are responsible for different parts of the development of a product or service or if financial services have been partnered up with non-financial services. Increased fragmentation in the advice and distribution processes can make it difficult to trace the end-to-end customer journey and allocate responsibility along the distribution and supply chain.
- ✗ More difficult to identify financial detriment and seek redress if the cause of the detriment is inaccurate data or complex underlying technologies that the consumer does not understand.
- ✗ A systems or information error in an automated tool may result in a large number of complaints being generated at the same time from impacted consumers. A firm may have difficulties in handling such a large volume of complaints at the one time and as a result complaints may not be appropriately handled.
- ✗ Consumer perceptions of "lack of reliability of devices and infrastructure, security risks, fraud and deceptive practices"²¹ in the digital financial services landscape may also act as a barrier to consumers making a complaint and seeking redress.



Claims Handling

Potential benefits for consumers:

- ✓ More timely, responsive and fairer claims resolution process through the use of Big Data and other technology enabled solutions. The use of black boxes, telematics, geo-location technology and 'connected' or 'smart' houses have the potential to speed up claims management and settlement procedures thanks to the more accurate and timely reconstruction of the scene of an accident or the covered risk.
- ✓ More accurate and efficient system of analysing and executing claims for consumers due to the integration of external data by firms into their claims process.
- ✓ With the use of smart contracts, policy conditions on insurance contracts allow claims on a policy to be automatically triggered for the consumer.
- ✓ Reduction in settlement delays and fraudulent claims due to the automatic nature of smart contracts.
- ✓ Reduced costs for the consumer as automated claims processes "eliminate the need for loss adjusters to review every claim"²² and eliminate the need for third party intermediaries in the claims process²³.

Potential risks to consumers:

- ✗ Less effective oversight of the claims handling process²⁴ due to decreased human interaction in the process as a whole.
- ✗ Limitations, biases or errors in the underlying technology itself could cause significant consumer detriment. In addition, the complexity of the technology underlying the claims handling process may be difficult for consumers to understand or challenge in order to seek redress.
- ✗ Lack of flexibility in the execution process as automatic execution tools such as smart contracts are wholly bound by a computer model unlike "real-world contracts (that) can be modified as long as the parties in the contract agree."²⁵



Retention of Consumer Records

Potential benefits for consumers:

- ✓ Enhancement of the speed and efficiency of the archival and retrieval processes due to digital technologies and storage systems.
- ✓ Facilitation through digital and cloud storage systems of large volumes of documents and records which may also allow for documents and records to be kept for longer periods of time.
- ✓ Increased consumer access to data held about them by firms due to the increase in digital data storage.

Potential risks to consumers:

- ✗ Fraud and theft of consumer data if stringent security systems are not in place to protect personal data and records.
- ✗ Inadequate record keeping, governance and audit procedures if firms struggle with the sheer scale of data generated.
- ✗ Difficulty in accurately capturing and recording customer engagement via social media and digital platforms. For example, how should a complaint made on social media be archived or recorded? Similarly, how should data captured from connected devices in a consumer's home or car be archived and how can the volumes of data be managed?²⁶
- ✗ Risk of consumer detriment if it is unclear whether cloud computing users effectively retain full control over their data.²⁷

Conclusion

This section of the Discussion Paper has illustrated that the digitalisation of the financial services landscape has the potential to bring many benefits to consumers. While a number of new innovations do not pose new risks or may pose risks that are already effectively regulated, there are other cases where digitalisation can bring new risks for consumers and can also magnify the potential impact of existing risks.

The Central Bank plays an important role in helping to protect the interests of consumers of financial services, by creating a regulatory framework that seeks to mitigate current and emerging risks and challenges to consumer protection. Section 4 will provide a high-level overview of the relevant consumer protections within the Code and seek views as to whether, in the context of the risks identified here, the Code continues to ensure high levels of consumer protection where consumers choose to interact with financial products and services by means of innovative digital solutions.



Questions for Discussion

Q3. Please outline any other potential benefits or risks for consumers that have not been captured in this section?

Q4. Considering the Irish market, what benefits and risks do you think are most likely to materialise and/or have the greatest impact on consumers? Please provide reasons for your answer.

Q5. If you have observed detriment caused to a consumer(s) as a result of digitalisation/financial innovation, please provide details and evidence of same.

Footnotes to Section 3

- 1 See the European Commission's Financial Service Users Group (FSUG), (2016) "Assessment of current and future impact of Big Data on Financial Services", , https://ec.europa.eu/info/file/46888/download_en?token=Mgdghb0P
- 2 In the UK in 2011, the government launched the "midata" programme which is a voluntary partnership with industry across a variety of sectors including financial services, which over time will "give consumers increasing access to their personal data in a portable, electronic format." (See <https://www.gov.uk/government/news/the-midata-vision-of-consumer-empowerment> for more details). Firms involved in the programme allow consumers to download their current account transactions in a "standard midata file format, which has been designed by the main providers of current accounts in the UK." The consumer can then send their "midata file to an organisation (known as a 'comparison provider') that offers midata comparison services. They will analyse your file and, based on the pattern of your transactions, may make suggestions about how to manage your account in the future, including switching to another current account provider." See <http://www.nationwide.co.uk/support/support-articles/manage-your-account/midata> for more information.
- 3 Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and the free movement of such data ('GDPR')
- 4 See the European Commission's Financial Service Users Group (FSUG),(2016), "Assessment of current and future impact of Big Data on Financial Services", https://ec.europa.eu/info/file/46888/download_en?token=Mgdghb0P
- 5 See <https://centralbank.ie/docs/default-source/Regulation/how-we-regulate/policy/cross-industry-guidance-information-technology-cybersecurity-risks.pdf?sfvrsn=2>
- 6 FinCoNet,(2016), Online and Mobile Payments: Supervisory Challenges to Mitigate Security Risks", http://www.finconet.org/FinCoNet_Report_Online_Mobile_Payments.pdf
- 7 Less financially sophisticated consumers may also benefit from 'hybrid' systems, for example, which combine robo-advice with human interaction, thus getting the benefits of digitalisation whilst also having some element of human interaction.
- 8 The use of application programming interface (API) technologies and the emergence of new providers that aggregate or bring together all of a consumer's information from various accounts (for example Account Information Service Providers (AISPs) and Payment Initiation Service Providers (PISPs) that are mandated under the revised Payment Services Directive) can empower a consumer to have more control over their personal financial data and their own finances.
- 9 The European Commission's Financial Service Users Group has described, for example, how some consumers may be deemed "uninsurable" because of the high risk they present due to the personal data patterns that they have generated. These consumers would otherwise have been able to get insurance. Certain consumers may not fit into identifiable data patterns or correlations or may indeed be specifically excluded from computer driven models including algorithms and decision trees.
- 10 Oxera, (2014), "Review of literature on product disclosure: Prepared for the Financial Conduct Authority", www.fca.org.uk/publication/research/review-of-literature-on-product-disclosure.pdf
- 11 EIOPA, for example, has recommended the "layering" of information for certain pension schemes as this approach "recognises the limitations on consumer time and attention", See Oxera,(2014) "Review of literature on product disclosure: Prepared for the Financial Conduct Authority", www.fca.org.uk/publication/research/review-of-literature-on-product-disclosure.pdf . See also EIOPA, (2013), "Good practices for information provision for DC pension schemes", https://eiopa.europa.eu/publications/reports/report_good_practices_info_for_dc_schemes.pdf
- 12 Oxera,(2014), "Review of literature on product disclosure: Prepared for the Financial Conduct Authority", www.fca.org.uk/publication/research/review-of-literature-on-product-disclosure.pdf
- 13 FCA, (2015), "Smarter consumer communications", <https://www.fca.org.uk/publication/discussion/dp15-05-smarter-consumer-communications.pdf>

- 14 FCA,(2015) "Smarter consumer communications", <https://www.fca.org.uk/publication/discussion/dp15-05-smarter-consumer-communications.pdf>
- 15 FCA, (2015) "Social media and customer communications", <https://www.fca.org.uk/publication/finalised-guidance/fg15-04.pdf>
- 16 EBA, (2016) "Discussion Paper on innovative uses of consumer data", <https://www.eba.europa.eu/documents/10180/1455508/EBA-DP-2016-01+DP+on+innovative+uses+of+consumer+data+by+financial+institutions.pdf>
- 17 EBA, (2016), "Discussion Paper on innovative uses of consumer data", <https://www.eba.europa.eu/documents/10180/1455508/EBA-DP-2016-01+DP+on+innovative+uses+of+consumer+data+by+financial+institutions.pdf>
- 18 Dinants, P., Bahl, M., & Anand, A., (2016) "The Work Ahead. Seizing the digital advantage in banking and financial services", <https://www.cognizant.com/FoW/twa-banking-and-financial-services-codex2320.pdf>
- 19 In research published by the Central Bank in 2016 on the attitudes and experiences of consumers to making a complaint to firms, focus group participants indicated they would welcome a complaints process that was "more convenient to their lifestyle and less time consuming." The research found that particularly younger participants, "were open to online complaint processes such as an online complaints form, email or live web-chat ... (which) were appealing to participants due to the ability to access via working hours and the perceived immediacy of acknowledgement and potential to receive a record of complaint and regular updates. See CBI (2016), *Complaints handling within regulated financial services firms: Consumer Research*, <https://www.centralbank.ie/docs/default-source/Regulation/consumer-protection/compliance-monitoring/reviews-and-research/gns4-2-1-1-complts-handg-reg-fin-sers-firms.pdf?sfvrsn=4>
- 20 CBI, (2016), *Complaints handling within regulated financial services firms: Consumer Research* <https://www.centralbank.ie/docs/default-source/Regulation/consumer-protection/compliance-monitoring/reviews-and-research/gns4-2-1-1-complts-handg-reg-fin-sers-firms.pdf?sfvrsn=4>
- 21 FinCoNet,(2016), "FinCoNet releases its Report on "Online and Mobile Payments: Supervisory challenges to mitigate security risks", http://www.finconet.org/Press-Release_Online_Mobile_Payments.pdf
- 22 World Economic Forum, (2016) "The future of financial infrastructure", http://www3.weforum.org/docs/WEF_The_future_of_financial_infrastructure.pdf
- 23 The International Association of Insurance Supervisors (IAIS) recently noted that the use of distributed ledger technology (DLT) is "still in its infancy" in the insurance sector. However, the use of DLT and other technologies for tools such as smart contracts can potentially reduce costs for consumers and eliminate the need for third party intermediaries" in the execution of the claims process. See IAIS, (2017), *FinTech Developments in the Insurance Sector*, https://www.google.ie/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKFwjCv5ibtorTAhVIGsAKHdmPA0sQFggZMAA&url=https%3A%2F%2Fwww.iaisweb.org%2Ffile%2F65625%2Freport-on-fintech-developments-in-the-insurance-industry&usq=AFQjCNFPpBpyrzNU5uirtOmB2Ap_asO9YA&bvm=bv.151426398,d.ZGg
- 24 The Central Bank's 2016 Consumer Outlook Report, warned that any cost-cutting or other measures must not be at the expense of basic customer service. Consumers will have already paid for that service through their premium and therefore have a legitimate expectation that their claims will be processed fairly and fully and that they will be processed by employees who have the relevant experience to do so.
- 25 Capgemini Consulting, (2016), "Smart contracts in financial services: From hype to reality", <https://www.capgemini-consulting.com/resource-file-access/resource/pdf/smart-contracts.pdf>
- 26 Palmer, M., (2016), "8 innovative trends in digital insurance", *The Digital Insurer*, <http://www.tibco.com/blog/2016/01/15/8-innovation-trends-for-digital-insurance-in-2016/>
- 27 The European Commission raised this issue in its recent Consultation Paper on FinTech. The European Commission has advocated that regulated firms using cloud computing services have to ensure that outsourcing requirements are fulfilled in the sense that all risks are sufficiently managed and that supervisors can have effective oversight.

04

The Consumer Protection Framework



Introduction to the Consumer Protection Code

The purpose of the Code is to ensure the same level of protection for consumers regardless of the type of financial services provider they choose. It requires regulated entities to act in consumers' best interests by ensuring that they know and understand the consumer's needs, sell them products and services that are suitable and provide them with appropriate information to enable them to make an informed choice. The Code also requires firms to have in place an effective complaints handling procedure and sets out a timeframe within which regulated entities must deal with complaints from consumers.

The Code aims to deliver effective protection for consumers of financial services and to maintain high levels of protections in a rapidly evolving financial service landscape. The Code already contains high-level principles and specific rules relevant to the provision of financial services by digital and mobile means. These are underpinned at all times by the principle to act with due skill, care and diligence in the best interests of customers. In order to consistently deliver the right outcomes for their customers, firms must put consumers' interests at the centre of everything they do. This starts with firms understanding the risks faced by their consumers, not only from the products and services they buy, but also from the behaviour of the firms themselves and the wider market and environment.

We believe that the rules in the Code are in keeping with a 'technology-neutral' stance, meaning that the same principles of regulation apply equally to digital and other traditional delivery environments. Notwithstanding this, some requirements are long established from previous iterations of the Codes that were developed with more traditional retail financial services markets in mind. Given the increase in technological advancement and digitalisation in financial services (as illustrated in Section 2) and the benefits and risks that may arise for consumers (as shown in Section 3), we are seeking to ensure that that innovation develops in

a manner that ensures the best interests of consumers are protected.

It should be noted that, in addition to the Central Bank's consumer protection framework, Irish consumers are also protected through European Union legislation. In relation to the EU consumer protection framework, firms are bound by an existing body of European law in the areas of consumer protection, data protection and e-commerce, which are relevant in the context of financial innovation¹. It is also important to note that in certain circumstances, the Code requirements will be superseded by European legislation, for example, the Code is not applicable to firms that provide investment services and are regulated under the MiFID Regulations, instead the investor protections contained within the MiFID Regulations apply.² To support the existing framework, we seek to maintain key Irish consumer protections through our active participation and contribution to the development of European Union legislation and ESA technical standards, guidelines, etc. The Central Bank is also actively engaging and participating in the work at European Union³ and international level to influence and contribute to the digitalisation of financial services agenda, particularly in those areas that align with our own priority areas. Finally, a number of initiatives have been taken to enhance security in the financial services sector over recent years including the EBA own-initiative guidelines on the security of







internet payments under PSD1⁴ and the range of security requirements under PSD2.⁵ But we would highlight that certain risks and challenges identified in Section 3 fall outside of the Central Bank’s consumer protection mandate, in particular risks relating to data protection and e-authentication. In Section 3, we noted the ever-increasing possibilities on data storage and use (e.g. profiling, identifying patterns of consumption and making targeted offers) which are revolutionising the financial services market. The existing data protection framework will be replaced by the GDPR which will come into force on the 25 May 2018. Since the Data Protection Commissioner is responsible for matters concerning personal data and privacy, these matters are outside scope of this Discussion Paper. Similarly, matters relating to E-ID, digital on-boarding and Anti-Money Laundering are outside the scope of the Central Bank’s consumer protection mandate and are not addressed here. Specifically, in relation to cybersecurity, the Central Bank has issued “Cross Industry Guidance in respect of Information Technology and Cybersecurity Risks.”⁶ In addition, the EBA recently launched a public consultation on its draft guidance for the use of cloud service providers by financial institutions.⁷

Specific Areas for Discussion

Fintech is having a profound impact on the consumer journey and, as outlined in Section 3, can support many good consumer outcomes, when driven by the needs, expectations and best interests of consumers. However, as called out in Sections 1 and 3, digitalisation can also increase consumers’ exposure to certain risks, in particular across six areas of the Code that we have identified as being most impacted by digitalisation.⁸

We are seeking views on whether the current Code protections are appropriate in respect of new digitalised models of financial services or whether further enhancements are warranted to ensure the high levels of consumer protections are maintained and that firms keep focus on supporting good consumer outcomes in an increasingly complex environment. In addition to a specific question under each heading, general questions for discussion are set out at the end of this Section. Of course, we welcome any additional views of stakeholders, where they have identified any other specific requirements where consumer protections could be enhanced in the context of digitalisation or where additional action may be necessary by the Central Bank on this topic.

This section of the paper focuses on whether those protections continue to address or mitigate potential risks across the following areas:

-  REQUIREMENTS REGARDING ACCESS TO FINANCIAL SERVICES
-  PROVISION OF INFORMATION REQUIREMENTS
-  SUITABILITY REQUIREMENTS
-  REDRESS/COMPLAINTS HANDLING REQUIREMENTS
-  CLAIMS HANDLING REQUIREMENTS
-  RETENTION OF CONSUMER RECORDS / RECORD KEEPING REQUIREMENTS

Code requirements regarding Access



One of the most potentially significant benefits for consumers arising from the digitalisation of financial services is the expanded access it may enable, facilitating financial inclusion and making financial products and services available to consumers who were previously underserved, locked out of the mainstream financial system or have unique or special needs of financial services. The recent European Parliament Report⁹ on FinTech supports the view that innovation has opened up more tailor-made financial services to those who could not access them before.

Research in the UK¹⁰ has shown that digitally capable consumers can save significantly using online tools and services. It found consumer with digital 'know-how' also have increased financial resilience as they save more money, and save more frequently than those who are less digitally capable, thus making them better equipped to cope with unplanned financial strains. The same study asserts that the over 60s age group has the most to gain digitally as they are financial savvy and adept at saving and using a variety of financial products and services, yet are lacking the same level of digital skills to capitalise on this capability. In Ireland, consumer research by the CCPC on Insurance Consumer Behaviour in 2015 found that consumers over 65 years are the least likely to shop around when taking out/renewing insurance policies.

Safeguarding access to financial services is enshrined in General Principle 2.11 of the Code which provides that '*a regulated entity must ensure that in all its dealings with customers and within the context of its authorisation it: without prejudice to the pursuit of its legitimate commercial aims, does not, through its policies, procedures, or working practices, prevent access to basic financial services*'. Digitalisation has brought about a complete transformation of retail financial services and while it delivers benefits of improved access and choice for many, it also creates potential access issues for some consumer groups, e.g. consumers who have lower levels of

computer literacy or those without access to the necessary technology/broadband.

From a consumer protection perspective, firms have to steer innovation in financial services towards an improved consumer experience. Proper product oversight and governance¹¹ is essential to increase consumer confidence in innovative solutions. Critical to this internal governance is that firms' senior management and directors have a thorough understanding of innovative products and processes. From 2017, new Product Oversight and Governance guidelines¹² are in place for banks and payment institutions in the first instance, which will be followed by other sectors over time. These guidelines are a key part of the overall consumer protection framework placing responsibilities on firms to demonstrate that their products are delivering the best outcomes for consumers throughout their life cycle from product development to their launch and sales. There is a clear opportunity for firms seeking to meet these new guidelines to adopt new financial innovations and technologies particularly in relation to product testing and monitoring.



Questions for Discussion

Q6. With reference to the potential risks and benefits for consumers in the area of access, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.

Q7. How could the consumer protections in the Code relating to access be enhanced? Please outline the reasons for your proposed enhancements.

Provision of Information Requirements



The provision of information to consumers engaged in the purchase of financial products and services is a key element in the consumer protection framework set out under the Code. The consumer protection objective underpinning mandatory disclosure of information by firms to consumers, is to address the information asymmetry between the consumer and the firm. Full information disclosure is considered an important part of a consumer's ability to have informed consent in the purchase of a financial product or service. However, how information is disclosed is as important as the information that is disclosed. As such, in the context of digitalisation, firms must place importance on the design and layout of the digital journey as much as the information that is provided during the journey.

Also, disclosure of key information about regulated firms and their regulated activities is even more crucial in an online, connected world without borders, to enable consumers to understand who exactly the provider they are dealing with is, where they are located and what protections apply to them in using the service.

High Level principle 4 of the G20 high-level principles on Financial Consumer Protection relates to proper disclosure by financial service providers and includes the promotion of easily-accessible clear information on consumer protection, rights and responsibilities and the disclosure to consumers of key information informing them of the fundamental benefits, risks and terms. Also, the Code's requirements cover a range of the key principles associated with a transparent and effective information provision and disclosure system for consumers. These include clear, accessible and accurate language and mechanisms for providing the information; disclosure of any conflicts of interest; information about products, charges and remuneration; and requirements on the different stages throughout the process of buying or using a product/service from pre-purchase to post-sale requirements. The Code requires strict warnings on the effects of missing

scheduled payments or purchasing investment products, for example, where a consumer could ultimately lose as well as gain financially. The Code also includes detailed requirements with respect to the provision of accurate and up-to-date information, the clarity of language and use of plain English and the inclusion in advertising of key information and qualifying criteria.

The Code prescribes the following specific provision of information and disclosure requirements:

- Information about regulatory status;
- Terms of business information about the regulated entity and its regulated activities;
- Information about products;
- Clear disclosure of actual underwriter;
- Information about charges;
- Information about remuneration;
- Specific information to be provided to debt management consumers;
- Post-sale information requirements, including provision of annual statement of accounts;
- Notification of any change in interest rate on a loan;
- Information to consumers changing from tracker interest rate;
- Information in cases of arrears;
- Information about charges; and
- Specific information in advertisements, including:
 - Regulatory disclosure statement
 - Warning statements
 - Key information on qualifying criteria
 - Use of comparisons
 - References to 'free'.

Increasingly EU legislation includes information disclosure requirements that firms in Ireland must comply with and, in some cases, this supersedes the Code requirements. As such, discussion of disclosure requirements is broader than the Code and includes EU mandated requirements. However, we are aware that the European Commission, in its Consumer Finance Action Plan¹³ has committed to monitoring how these disclosure requirements will be applied by digital providers before suggesting any amendments to these laws.

Traditionally, disclosure of information on financial products and services has been provided in paper-based format and while disclosure is designed to help consumers, it may not meet today's consumer information needs nor help them understand the products or services in question. The Central Bank acknowledges that consumers, who choose to use digital channels, need communications that are suitable and compatible with these channels, whilst also ensuring the necessary information is provided. EIOPA research¹⁴ has indicated that consumers may be less inclined to read standard disclosure documents outlining the details of products when buying online. The European Commission in its Action Plan states that feedback from industry suggests that the current pre-contractual disclosure requirements might not be fit for the digital world. Respondents to the European Commission's Green Paper on Retail Financial Services¹⁵ suggested the use of more interactive and engaging platforms, suited to smartphones or tablets are needed to enhance the consumers' understanding of financial products.

As outlined in Section 3 of the Discussion Paper, information in a digital form carries the advantage of being interactive, which can facilitate a consumer's access to a range of information unavailable in paper-based format, but it can also overwhelm the consumer or lose them completely in poorly designed websites/apps/user interfaces. The Central Bank believes that technology (used properly) provides exciting opportunities to involve the consumer in delivering better understanding through plainer language and presentation of information. In particular, it enables consumers to read, reflect, test and view illustrations in a manner that is engaging and educational and tailored to their own circumstances. Digital communication can be as, or more effective than paper-based communication, particularly among certain types of consumers. Some examples of innovative communications in financial services include:

- Using videos to explain complex information to consumers
- Using infographics and interactive tools to present complex information to consumers
- Creating 'bite-sized' guides to help consumers engage with a financial product or service
- Using text alerts to draw consumer attention to important information
- Use of virtual appointments
- Allowing clients to open 'Demo' accounts in order to trial new products and services

The Central Bank uses consumer research to inform our work in the area of disclosure and the findings of such research can be instructive in the field of innovation. We are also aware of the profound recent influence of behavioural economics¹⁶ on information disclosure and the growing trend for "behaviourally informed regulation." The Central Bank has been at the forefront of studying the science behind consumer choices in Ireland and jointly funded the Economic and Social Research Institute (ESRI)'s PRICE Lab research programme in behavioural economics.¹⁷ The lab uses computerised experiments to study what consumers are capable of understanding and what they are not. This research gives us an empirical picture of the capacity of an individual to weigh up different factors and compare them when making price related decisions. This, and other behavioural studies, shows the inherent human biases and errors that should compel regulated firms to look beyond mere clarity of words into what needs to be communicated to consumers, when and how, and to take the time and make the effort to do so.

As financial products and services can be very complex, firms have an obligation to help consumers to fully understand the associated risks and benefits before they make their decisions. Proper product oversight and governance includes a focus on consumer testing, clarity in how the features of a product and its costs are explained to consumers and avoiding unnecessary complexity. Through our supervisory work, consumer research, market monitoring and stakeholder engagements, we have found that consumers continue to find many financial products and services complex

and difficult to understand. The fast pace of financial innovation has also created a complex world for consumers, where the range of available financial products is broad, and the consequences of financial choices are significant.

The Central Bank believes that current disclosure requirements give rise to important protections that consumers need to understand financial services and products. We believe that the way information is presented, and the design of the website or app that hosts the information, can greatly affect the user's experience and understanding of the information. We acknowledge that a key challenge for communications in a digital environment is that consumers are incentivised to engage with critical disclosure information. We welcome stakeholders' perspectives on how best to ensure the Code continues to provide high levels of consumer protections in a digital world with regard to the provision of sufficient and appropriate disclosure information.

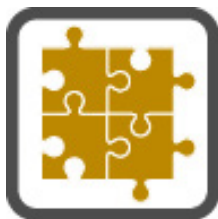


Questions for Discussion

Q8. With reference to the potential risks and benefits for consumers in the area of provision of information, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.

Q9. How could the consumer protections in the Code relating to the provision of information be enhanced? Please outline the reasons for your proposed enhancements.

Suitability Requirements



While a good product oversight and governance process should identify the target market for a product before it is launched for sale, there is still a necessity to have requirements to assess the suitability of a product for an individual consumer. As such, the Code contains suitability requirements to make sure that any product sold is suitable for the consumer's needs and circumstances.

Key suitability provisions as set out in the Code, include:

- Requirement to collate information under the 'Knowing the Consumer' process to assess whether a product or service is suitable for a particular consumer prior to offering it;
- Requirement on lenders to assess affordability of credit;
- Requirement that any product recommended to a consumer from a range of products is the most suitable from the range available, having regard to the consumer's individual circumstances and needs; and
- Requirement to provide a written statement of suitability to the consumer.

As already outlined in Section 2, the way that consumers choose to buy financial products and services has changed radically in a digitalised market. We have already outlined in Section 3 that the provision of advice through an automated means can provide real benefits and opportunities for consumers – but only once firms have thoroughly identified any associated risks to consumer protection and manage these risks accordingly. Consumers place great trust in firms that they are working in their best interests and firms need to live up to that expectation and demonstrate that they are acting in the interests of all consumers. The matching of the needs of consumers to the most suitable product or service, is critical for ensuring the right consumer outcomes. Innovation cannot be allowed to diminish existing consumer protections and where firms are moving more to providing financial advice and recommendations through on-line channels,

they must ensure that the necessary protections are in place to deliver the right consumer outcomes.

The suitability framework established by the Code clearly places the best interests of the consumer at the core of the provision of products and services to that consumer. The Central Bank believes that this core principle is valid regardless of the method of providing the product or service involved. The suitability requirements are a cornerstone of the Code and where any advice is given, whether automated or otherwise, the product must be suitable for the consumer. Firms must not seek to circumvent the suitability requirements of the Code by providing automated models of information or guidance to consumers, which would amount to the provision of advice in a face-to-face distribution model.



Questions for Discussion

Q10. With reference to the potential risks and benefits for consumers in the area of suitability, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.

Q11. How could the consumer protections in the Code relating to suitability be enhanced? Please outline the reasons for your proposed enhancements.

Complaints Handling Requirements



The Central Bank has put in place a regulatory framework for complaints handling in the Code. Under this framework, firms are required to have in place adequate systems and controls to handle consumer complaints effectively, on an individual basis and on the merits of each case.

An expression of dissatisfaction from a consumer can, in many instances, indicate that the business is not running satisfactorily from the consumers' point of view. Complaint handling is considered an effective indicator in this regard as it is a signal as to the robustness of all controls, procedures, training needs, and service levels across firms. An efficient complaints handling system should be a mechanism by which firms foster a good relationship with their consumers and for firms to use the information gathered to make improvements to existing systems and processes within their business. The Central Bank believes that complaints handling, when dealt with in an open, fair and timely way can represent a real opportunity for firms to restore confidence in their consumer relationships. This includes the identification of root causes of issues to ensure that the whole problem is solved rather than solely focusing on the individual complaint.

For the purpose of the Code, a complaint is defined broadly as meaning: *"an expression of grievance or dissatisfaction by a consumer, either orally or in writing, in connection with:*

- a) *the provision or the offer of the provision of a product or service to a consumer by a regulated entity;*
- or
- b) *the failure or refusal of a regulated entity to provide a product or service to a consumer;"*

Key complaints handling provisions as set out in the Code, impose the following obligations of regulated firms:

- strict timelines for acknowledging, updating on and resolving consumer complaints;
- provision of details of the nominated point of contact in the regulated entity who will be dealing with their complaint to the consumer;
- maintenance of a complaints log detailing each complaint, date received, summary of the complaint, actions taken to resolve etc.;
- communications with consumer on the status of their complaint, which must be on paper or another durable medium; and
- maintenance of up-to-date records relating to the handling of the complaint for six years in order to demonstrate compliance with the Code requirements.

Platforms such as social media sites and public discussion fora make it easier and more convenient for consumers to make a complaint to and seek redress from firms. These platforms allow for more dynamic interaction than in the past, with the opportunity for users to communicate with each other. The instant and public nature of modern communication through social media facilitates consumers in making a complaint immediately after the event complained of occurs. This has implications for consumer expectations of real time responses in terms of customer services and complaints handling by firms. Digital communication and social media require firms to be alert, responsive, open to feedback and willing to listen and act as a result of issues raised on digital platforms. Social media communication often occurs outside traditional channels used by regulated firms in the past, and it can be more public than some of the traditional channels.

Our research on consumer complaints, published in May 2016¹⁸, found that traditional channels for making and handling complaints, such as face-to-face or telephone, are still the most popular channels among consumers. Consumers also cited a knowledgeable and experienced point of contact within the firm as one of the most important aspects when going through the firm’s complaints process. When we delved deeper in our consumer focus groups, we found that people are “time poor” and would welcome a more convenient and less time consuming complaints process including an appropriate online channel as part of the overall formal complaints handling process and supported by knowledgeable staff. This presents a real challenge as to how innovation can be utilised better to marry the two consumer needs i.e. having a convenient and easy to use complaints process while at the same time enabling interaction with an experienced member of staff to resolve complaints in a fair, timely and transparent way.



Questions for Discussion

Q12. With reference to the potential risks and benefits for consumers in the area of complaints, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.

Q13. How could the consumer protections in the Code relating to complaints be enhanced? Please outline the reasons for your proposed enhancements.

Claims Handling Requirements



The Central Bank expects all regulated insurers to work in the consumer's best interest by handling claims properly when they arise, directly or through a third party such as a loss adjuster. The Code prescribes specific obligations on insurers concerning the claims process. The Code requires that insurers have a written procedure for the effective and proper handling of claims. It also requires, amongst other things, that:

- The insurer must offer to assist in the process of making a claim, including alerting the consumer to policy terms and conditions that may be of benefit to the consumer;
- Any claim settlement offer made to the consumer is fair, taking into account all relevant factors, and represents the insurer's best estimate of the consumer's entitlement under the policy;
- Consumers must be informed within 10 business days in writing or other durable medium of the outcome of the investigation and explaining the terms and conditions of any settlement offer, and allow the consumer at least 10 business days thereafter to consider whether to accept or reject the offer;
- Insurers must discharge the claim within 10 business days of the consumer's decision to accept the offer.

As outlined in Section 2, developments in digitalisation can allow insurers to move past the traditional claims-handling procedures, to enable a nimbler, flexible and responsive claims process. In a digitalised environment, consumers increasingly expect prompt contact, effective investigation and timely, fair claims resolution. From the consumer protection perspective, the underlying principle in respect of claims handling is that any innovative methods used by firms in respect of claims treat consumers in a fair manner. In our 2016 Consumer Outlook Report¹⁹, the Central Bank warned that any cost-cutting measures must not be at the expense of basic customer service. Consumers will have already paid for that service through their premium and therefore have a legitimate expectation that their claims will be processed fairly and fully.



Questions for Discussion

Q14. With reference to the potential risks and benefits for consumers in the area of claims handling, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.

Q15. How could the consumer protections in the Code relating to claims handling be enhanced? Please outline the reasons for your proposed enhancements.

Record Keeping Requirements



The Code includes prescriptive obligations on regulated firms in respect of record keeping, including that records of consumer instructions, decisions, conditions and other details must be logged and specifying timeframes for retention of such records. The potentially transient nature of online information increases the challenge in interpreting existing rules on record keeping in respect of new technologies or solutions.

The Code also contains an obligation to provide specific information in a 'durable medium' in respect of a number of requirements. As regards what constitutes a 'durable medium' for providing information to consumers, the Code definition is "*any instrument that enables a recipient to store information addressed personally to the recipient in a way that renders it accessible for future reference for a period of time adequate for the purposes of the information and which allows the unchanged reproduction of the information stored*".

The Central Bank acknowledges that the definition and use of the term 'durable medium' in the Code may require updating given the evolving digitalised environment. We are aware that issues have been raised in other jurisdictions that, for example, the concept of 'durable medium' may not easily allow the availability of long-term cloud based storage applications to be taken into account. The concept of 'durable medium' may also benefit from reconsideration in light of that fact that consumers may access services via their mobile devices and regulated firms are increasingly using websites or messages sent through accounts created on servers to communicate to consumers. In this regard, the recent EU Court of Justice (CJEU) ruling²⁰ on durable media is significant, in that it recognised that special email boxes on the servers of financial institutions may be considered as a durable medium, provided that certain conditions are fulfilled.

We are interested in views from stakeholders as to whether the framework would benefit from more specific guidelines for technology in this area or whether the current requirements on record keeping should be updated to reflect developments in digitalisation.



Questions for Discussion

Q16. With reference to the potential risks and benefits for consumers in the area of record keeping, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.

Q17. How could the consumer protections in the Code relating to record-keeping be enhanced? Please outline the reasons for your proposed enhancements.



Other questions for Discussion

Q18. Are there other areas of the Code, where the current protections should be enhanced or amended to address risks arising from digitalisation?

If so, please:

- a. set out the protections that you consider should be enhanced and why;
- b. outline how those protections could be enhanced, including the reasons for your proposals.

Q19. Are there other 'new risks' to consumer protection associated with technology/innovation where additional specific requirements are needed in the Code (arising from actual or potential consumer detriment), for example, cybersecurity risks?

Q20. Given responsibility for the protection of consumers lies with regulated firms, how should the Code put greater obligations on firms to use innovative technologies in a positive way, to improve services and better protect consumers' best interests? Please provide specific suggestions of how this could be achieved.

Q21. Should a principle be included in the Code that requires firms to design digital journeys in a manner that support consumers' decision-making and delivers good outcomes for consumers?

Q22. Are there any impediments in the Code that currently prevent firms from adopting technologies which may be beneficial to consumers? If so, please elaborate to explain how the Code could be amended to facilitate access to such benefits, without diluting existing consumer protections.

Q23. In the context of the development of consumer protection policy related to innovative technologies, should the Central Bank be more innovative in its approach to stakeholder engagement? If so, what approaches should be considered and why?

Conclusions

Under the Central Bank Act 1942, the Central Bank's statutory objectives include the "*proper and effective regulation of financial institutions and markets while ensuring that the best interests of consumers of financial services are protected.*" Furthermore, the Central Bank has defined its mission as "*Safeguarding Stability, Protecting Consumers*". Technology driven innovation is transforming retail financial services and while it can have many benefits for consumers, the Central Bank must play its part in enhancing the Code as necessary if the current rules are not sufficient in this area. This includes making sure that our consumer protection rules drive a process and approach to such innovation that protects consumers' best interests and safeguards the consumer protection framework into the future.

Footnotes to Section 4

- 1 The regulatory framework for consumer protection is comprised of both **general** and **financial services sector specific** measures. An overview of the EU regulatory framework is outlined in **Annex 2** to this Discussion Paper.
- 2 Where these regulated firms are providing payment services, insurance distribution or certain credit agreements they will be subject to certain general requirements of the Code and European requirements in other specific areas (e.g. disclosure requirements). The applicability, or otherwise, of the various Code requirements, is set out in the 'Clarification of Scope' at the beginning of each chapter.
- 3 Further details on the various EU initiatives on digitalisation are outlined in **Annex 3** to this paper.
- 4 See the EBA's guidelines on the security of internet payments <https://www.eba.europa.eu/documents/10180/934179/EBA-GL-2014-12+%28Guidelines+on+the+security+of+internet+payments%29.pdf/f27bf266-580a-4ad0-aaec-59ce52286af0>
- 5 See the EBA's draft Regulatory Technical Standards on strong customer authentication and secure communication under the PSD2 to enhance consumer protection, promoting innovation and improve the security of payment services across the European Union at <https://www.eba.europa.eu/regulation-and-policy/payment-services-and-electronic-money/regulatory-technical-standards-on-strong-customer-authentication-and-secure-communication-under-psd2>
- 6 See <https://centralbank.ie/docs/default-source/Regulation/how-we-regulate/policy/cross-industry-guidance-information-technology-cybersecurity-risks.pdf?sfvrsn=2>
- 7 See <https://www.eba.europa.eu/-/eba-consults-on-its-guidance-for-the-use-of-cloud-computing> The EBA Recommendations intend to clarify the EU-wide supervisory expectations if institutions intend to adopt cloud computing, so as to allow them to leverage the benefits of using cloud services, while ensuring that any related risks are adequately identified and managed. The consultation runs until 18 August 2017.
- 8 Further details on the Code requirements on access, provision of information, suitability, complaints handling, claims handling and retention of consumer records/record keeping are in Annex 1
- 9 European Parliament, (2017), *Report on FinTech: the influence of technology on the future of the financial sector (2016/2243(INI))*, <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2F%2FEP%2F%2FNONSGML%2BCOMPARL%2BPE-597.523%2B01%2BDOC%2BPDF%2BV0%2F%2FEN>
- 10 Lloyds Banking Group, (2016), "UK consumer Index 2016", <http://lloydsbankinggroupdigital.com/uk-consumer-index-2016/>
- 11 EBA, (2015), *Guidelines on product oversight and governance arrangements for retail banking products*, <https://www.eba.europa.eu/regulation-and-policy/consumer-protection-and-financial-innovation/guidelines-on-product-oversight-and-governance-arrangements-for-retail-banking-products>
EIOPA, (2016) Preparatory Guidelines on Product Oversight and Governance (POG) arrangements to be followed by insurers (manufacturers of insurance products) and distributors, <https://eiopa.europa.eu/Pages/News/EIOPA-publishes-Preparatory-Guidelines-on-Product-Oversight-and-Governance.aspx>
- 12 EBA, (2015), *Guidelines on product oversight and governance arrangements for retail banking products*, <https://www.eba.europa.eu/regulation-and-policy/consumer-protection-and-financial-innovation/guidelines-on-product-oversight-and-governance-arrangements-for-retail-banking-products>
EIOPA, (2016), Preparatory Guidelines on Product Oversight and Governance (POG) arrangements to be followed by insurers (manufacturers of insurance products) and distributors, <https://eiopa.europa.eu/Pages/News/EIOPA-publishes-Preparatory-Guidelines-on-Product-Oversight-and-Governance.aspx>
- 13 European Commission,(2017) - COM(2017) 139 final Consumer Financial Service Action Plan: Better Products, More Choice, https://ec.europa.eu/info/publications/consumer-financial-services-action-plan_en

- 14 EIOPA, (2015), "Opinion on sales via the Internet of insurance and pension products", [https://eiopa.europa.eu/publications/opinions/opinion_on_sale_%20via_the_internet\(published\).pdf](https://eiopa.europa.eu/publications/opinions/opinion_on_sale_%20via_the_internet(published).pdf)
- 15 European Commission, (2015) –Final Green Paper on retail financial services: Better products, more choice, and greater opportunities for consumers and businesses, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0630&from=EN>
- 16 Provision of information strategies have specifically referenced the impact of behavioural economics including EIOPA's "Good practices on information provision for Defined Contribution (DC) schemes" which describes its approach as a "new approach to information disclosure" based on the insights from "behavioural economics and communication science." In the US, the "Smart Disclosure" project has been led by leading behavioural economic theorists Cass Sunstein and Richard Thaler. Sunstein was Administrator of the White House Office of Information and Regulatory Affairs in President Obama's first term.
- 17 Jointly funded by the Central Bank of Ireland, the Commission for Communications Regulation, the Commission for Energy Regulation and the Competition and Consumer Protection Commission
- 18 <https://www.centralbank.ie/press-area/press-releases%5CPages%5CCentralBankpublishesresearchonconsumerperceptionsofcomplaintshandlinginregulatedfirms.aspx>
- 19 [Consumer Protection Outlook Report 2016](#)
- 20 25 January 2017 [CJEU Judgement C-375/15](#)

05

Next Steps



Next Steps

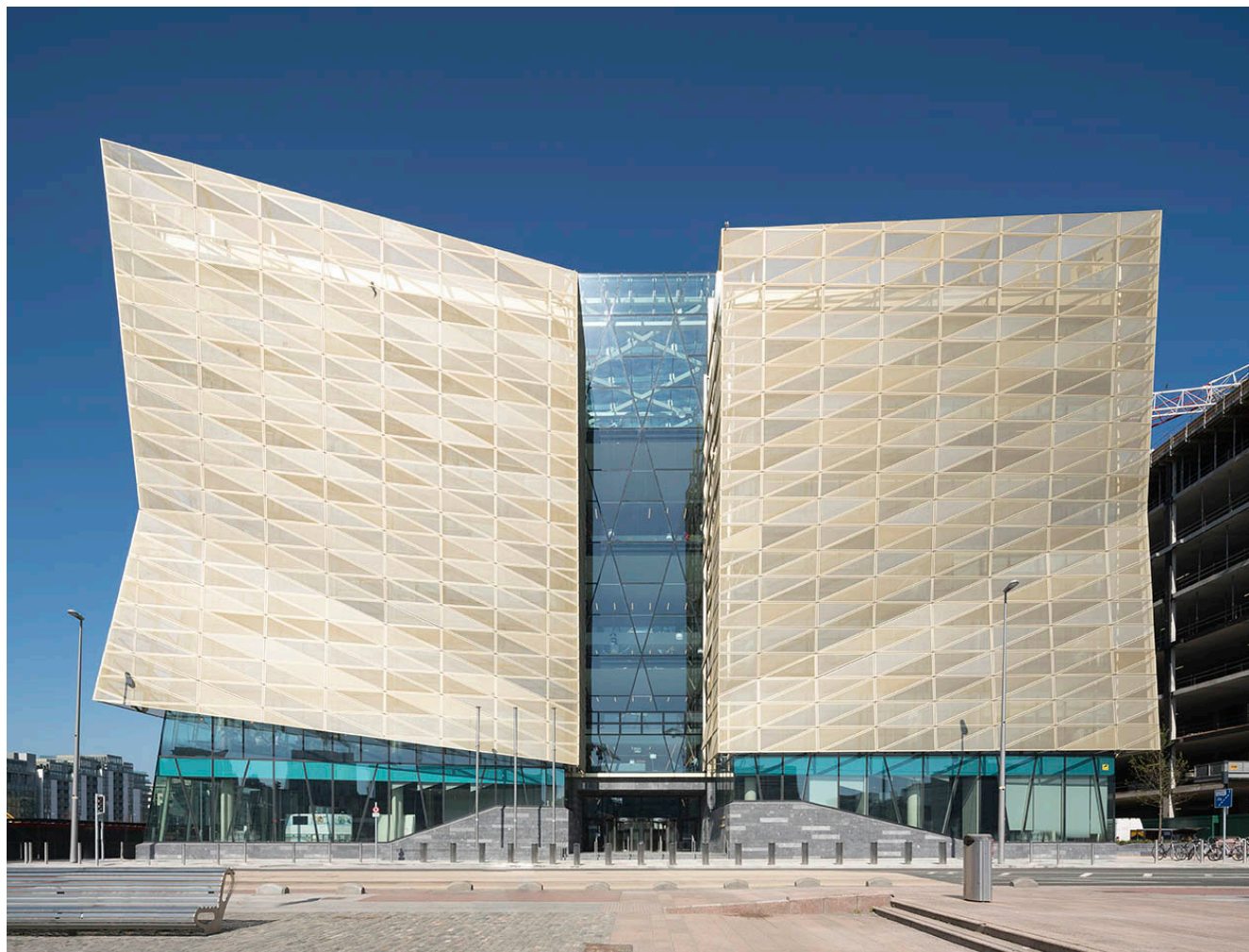
Feedback to this Discussion Paper will inform our ongoing consideration of our policy position on whether protections for consumers in the Code should be enhanced in the face of innovative trends and products. The Central Bank will assess feedback received from interested parties and decide which, if any, action is required.

Should we choose to advance any specific policy proposals as a result of the feedback to this Discussion Paper, we will bring forward a consultation paper in 2018.

The Central Bank is committed to considering learnings from this project in any future review of other parts of the Central Bank's suite of consumer protection rules in place¹.

Footnotes

- 1 For example the Consumer Protection Code for Licensed Moneylenders, Section 48 (Lending to Small and Medium-Sized Enterprises) Regulations 2015, Code of Conduct on Mortgage Arrears, Non-Life Insurance (Provision of Information) (Renewal of Policy of Insurance) Regulations 2007



Summary of Questions

Digitalisation and the evolving financial services landscape

- Q1** Are there evidence or examples of other relevant types of innovation in retail financial services, which are not already covered in this Discussion Paper? If so, please provide details.
- Q2** Considering the Irish market, what innovations are more likely than others to develop and/or have the greatest impact on consumers? Please provide reasons for your answer.

Potential Risks and Benefits

- Q3** Please outline any other potential benefits or risks for consumers that have not been captured in this section?
- Q4** Considering the Irish market, what benefits and risks do you think are most likely to materialise and/or have the greatest impact on consumers? Please provide reasons for your answer.
- Q5** If you have observed detriment caused to a consumer(s) as a result of digitalisation/ financial innovation, please provide details and evidence of same.

Consumer Protection Framework

- Q6** With reference to the potential risks and benefits for consumers in the area of access, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.
- Q7** How could the consumer protections in the Code relating to access be enhanced? Please outline the reasons for your proposed enhancements.
- Q8** With reference to the potential risks and benefits for consumers in the area of provision of information, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.
- Q9** How could the consumer protections in the Code relating to the provision of information be enhanced? Please outline the reasons for your proposed enhancements.
- Q10** With reference to the potential risks and benefits for consumers in the area of suitability, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.
- Q11** How could the consumer protections in the Code relating to suitability be enhanced? Please outline the reasons for your proposed enhancements.
- Q12** With reference to the potential risks and benefits for consumers in the area of complaints, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.
- Q13** How could the consumer protections in the Code relating to complaints be enhanced? Please outline the reasons for your proposed enhancements.
- Q14** With reference to the potential risks and benefits for consumers in the area of claims handling, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.

Questions 15 – 23 >>

Summary of Questions *continued*

Q15 How could the consumer protections in the Code relating to claims handling be enhanced? Please outline the reasons for your proposed enhancements.

Q16 With reference to the potential risks and benefits for consumers in the area of record keeping, do you consider consumers to be adequately protected in a more digitally-enabled financial services environment? Where possible, please provide examples and/or evidence to support your answer.

Q17 How could the consumer protections in the Code relating to record keeping be enhanced? Please outline the reasons for your proposed enhancements.

Other General Questions for Discussion

Q18 Are there other areas of the Code, where the current protections should be enhanced or amended to address risks arising from digitalisation? If so, please:

a. set out the protections that you consider should be enhanced and why;

b. outline how those protections could be enhanced, including the reasons for your proposals.

Q19 Are there other 'new risks' to consumer protection associated with technology/innovation where additional specific requirements are needed in the Code (arising from actual or potential consumer detriment), for example, cybersecurity risks?

Q20 Given responsibility for the protection of consumers lies with regulated firms, how should the Code put greater obligations on firms to use innovative technologies in a positive way, to improve services and better protect consumers' best interests? Please provide specific suggestions of how this could be achieved.

Q21 Should a principle be included in the Code that requires firms to design digital journeys in a manner that support consumers' decision-making and deliver good outcomes for consumers?

Q22 Are there any impediments in the Code that currently prevent firms from adopting technologies that may be beneficial to consumers? If so, please elaborate to explain how the Code could be amended to facilitate access to such benefits, without diluting existing consumer protections.

Q23 In the context of the development of consumer protection policy related to innovative technologies, should the Central Bank be more innovative in its approach to stakeholder engagement? If so, what approaches should be considered and why?

Practical Information for Submission of a Response to this Discussion Paper

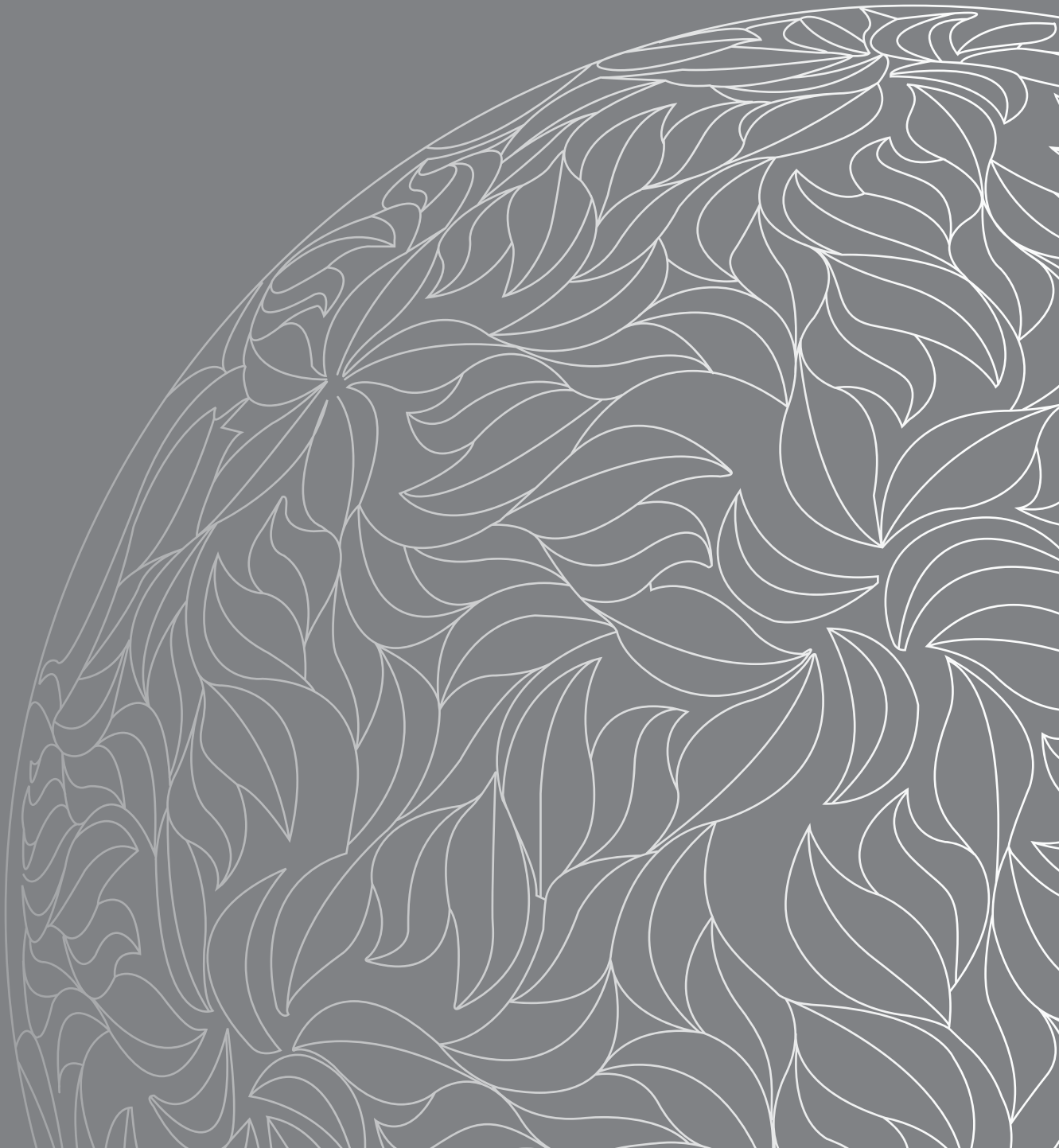
Comments from all interested parties are welcome. The Central Bank is interested in the views of consumers, financial entities, financial advisors, innovators, academics, researchers and any other interested parties.

This paper will be open for comment until 27 October 2017. Submissions should be made to consumerprotectionpolicy@centralbank.ie clearly labelled with subject title "Consumer Protection Code and Digitalisation Discussion Paper."

There are a number of questions included, but responses should not necessarily be limited to these. It is important to note that although you may not be able to respond to each and every question, the Central Bank would encourage partial responses from stakeholders on those questions that they believe are most relevant to them.

We intend to make submissions received available on our website after the deadline for receiving submissions has passed. Because of this, please do not include commercially sensitive material in your submission, unless you consider it essential. If you do include such material, please highlight it clearly so that we may take reasonable steps to avoid publishing that material. This may involve publishing submissions with the sensitive material deleted and indicating the deletions.

Despite the approach outlined above, we make no guarantee not to publish any information that you deem confidential. So be aware that unless you identify any commercially sensitive information, you are making a submission on the basis that you consent to us publishing it in full.



Annexes 1 – 4

Annex 1: Consumer Protection Code Provisions

[Annex 1 page 1 of 3 >](#) | [Annex 2](#) | [Annex 3](#) | [Annex 4](#)

Code Requirements concerning Access

Safeguarding access to basic financial services (General Principle 2.11)

Reasonable arrangements and/or assistance for vulnerable consumers (Provision 3.1)

Advance notification and information to be provided in respect of amendments to service delivery (Provisions 3.10-3.12)

Code Requirements concerning Disclosure

Provision of Information (Pre-sale)

Information about Regulatory Status (Provisions 4.7-4.11)

Terms of Business (Provisions 4.12-4.20) - Information to be provided to the consumer about the regulated entity and its regulated activities

Information about Products (Provisions 4.21-4.22)

- Credit (Provisions 4.23-4.29)
- Insurance Products (Provisions 4.30-4.40)
- Lifetime mortgages and home reversion agreements (Provisions 4.41-4.45)
- Investment Products (Provisions 4.46-4.29)
 - Standalone Key Information Document (Provision 4.46)
 - Key Features Document for Tracker Bonds (Provisions 4.49-4.52)
 - Key Information for PRSA's (Provision 4.53)

Information about Charges (Provisions 4.54-4.56)

Information about Remuneration (Provisions 4.57-4.61)

Information to be provided to debt management consumers (pursuant to provision 13.1)

Standalone signed agreement on debt management services (pursuant to provision 13.2)

Statement of debt management services at least every six months (Provision 13.23)

Annex 1: Consumer Protection Code Provisions

[Annex 1 page 2 of 3 >](#) | [Annex 2](#) | [Annex 3](#) | [Annex 4](#)

Provision of Information Requirements (Post-sale and Ongoing)

Annual statement of accounts for:

- Term and notice products (Provision 6.3)
- Loans (Provision 6.5)
- Insurance products (Provision 6.13)
- Investment products (Provision 6.16)

Notification of any change in interest rate on a loan (Provision 6.6)

Information to consumers changing from tracker interest rate (Provision 6.9)

Provision of information in cases of arrears (Provision 8.2, 8.4, 8.6-8.12)

Information about charges (Provision 6.18-6.19)

Provision of information in advertisements, including:

- Regulatory disclosure statement (Provision 9.1)
- Warning statements (Provision 9.8)
- Key information on qualifying criteria (Provision 9.6)
- Use of comparisons (Provision 9.16)
- References to 'free' (Provision 9.18)

Code Requirements concerning Suitability

Knowing the Consumer

Knowing the Consumer (Provisions 5.1-5.5)

Mortgages (Provisions 5.6-5.8)

Suitability

Assessing affordability of credit (Provisions 5.9-5.15)

Assessing suitability (Provisions 5.16-5.18)

Statement of suitability (Provisions 5.19-5.23)

Exemption from Knowing the Consumer and Suitability (Provision 5.24)

Annex 1: Consumer Protection Code Provisions

[Annex 3 page 1 of 3 >](#) | [Annex 2](#) | [Annex 3](#) | [Annex 4](#)

Code Requirements concerning Claims Handling

Claims Processing (Provisions 7.6-7.21)

Code Requirements concerning Complaints Handling

Requirement to handle complaints speedily, efficiently and fairly (General Principle 2.8)

Complaints Resolution (Provisions 10.7-10.12)

Code Requirements concerning Record-Keeping

Obligations to provide certain information in a 'durable medium' (Provisions 3.6, 3.20, 3.21, 3.22, 3.23, 3.29, 3.36, 3.57, 4.21, 4.22, 4.24, 4.27, 4.31, 4.39, 4.41, 4.42, 4.54, 4.55, 4.57, 5.14, 5.24, 6.6, 6.8, 6.9, 6.12, 6.19, 7.7, 7.13, 7.14, 7.16, 7.19, 7.21, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 10.3, 10.9, 13.14, 13.17, 13.20, 13.23)

Records (Provisions 11.1- 11.7)

Annex 2: Overview of the EU Consumer Protection Regulatory Framework

[Annex 1](#) | [Annex 2](#) | [Annex 3](#) | [Annex 4](#)

In relation to the EU regulatory framework, regulated firms are bound by a regulatory framework for consumer protection which is comprised of both general and financial services sector specific measures.

Please note the following annex is not an exhaustive list and is up-to-date as of June 8 2017.

General consumer information/protection legislation

Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (the Data Protection Directive), soon to be replaced by the General Data Protection Regulation and Directive (GDPRD), which becomes effective in May 2018.

A number of measures under the new GDPR of particular interest include:

- The “right to portability” of data for a customer if they are moving to a new bank/ insurer, etc.
- The right of a customer not to be subject to data profiling.
- A “data protection by design” requirement (article 25) which will require regulated firms to have a specific data protection policy when designing any new products or service.
- A “duty to secure” data requirement – if a regulated firm fails to secure an individual’s data they have to inform both the ODPC and the individual consumer (this is in effect an admission of liability).

- The requirement on regulated firms to have a Data Protection Impact Assessment (DPIA) when undertaking data processing operations.
- The requirement to appoint a Data Protection Officer (DPO) – this is a quasi-independent role so it is unclear how it will work in relation to a Compliance Officer’s role in a regulated firm.

- Directive 2000/31/EC on electronic commerce.
- Directive on Electronic Communications and Privacy.
- Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts.
- Electronic Identification and Trust Services. (eIDAS) Regulation.
- Unfair Commercial Practices Directive.

Financial services specific legislation

A number of individual specific financial services measures have also been implemented to strengthen investor and consumer protection and confidence, including:

- EU Directive 2002/65/EC – consumer protection in cases of distance-selling of financial services (Distance Marketing Directive)
- EU Directive 2009/110/EC of the European

Parliament and of the Council of 16 September 2009 (the Electronic Money Directive)

- EU Directive 2015/849/EC on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing (the Forth Anti-Money Laundering Directive).

Sector specific legislation which specify conduct of business requirements and which are applicable to online and offline distribution, including:

- EU Directive 2008/48/EC on credit agreements for consumers (the Consumer Credit Directive)
- EU Directive 2014/17/EU on credit agreements for consumers relating to residential immovable property (the Mortgage Credit Directive)
- EU Directive 2014/92/EU on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features (the Payment Accounts Directive)
- EU Directive 2015/2366/EU on payment services (Payment Services Directive 2),
- EU Directive 2016/97/EU on insurance distribution (Recast) (the Insurance Distribution Directive)
- EU Directive 2014/65/EU on markets in financial instruments (Markets in Financial Instruments Directive II)

Annex 3: EU Initiatives on Digitalisation

[Annex 1](#) | [Annex 2](#) | **[Annex 3 page 1 of 2](#)** | [Annex 4](#)

Please note the following annex is not an exhaustive list and is up-to-date as of June 8 2017.

EU Policy – Current Developments and Outputs

EUROPEAN COMMISSION (EC) - outputs so far include:

December 2015: Green Paper on retail financial services included examination of the impact of digitalisation on retail financial services with a view to allow for growth of innovative solutions in this area in the EU.

June 2016: EC Study on the Role of Digitalisation and Innovation in Creating a True Single Market for Retail Financial Services and Insurance published.

June 2016: EC Financial Services User Group (FSUG) Report on Assessment of current and future impact of Big Data on Financial Services published.

September 2016: EC (DG CNE T) commissioned a Fact-Finding Study on Fintech to better understand the FinTech sector and its players and to evaluate its impact on the banking sector and financial services industry and its incumbent players.

November 2016: Establishment of the EC Task Force on FinTech (TFFT) bringing together financial regulation, Digital Single Market, competition and consumer protection policy. Aim of the TFFT is to monitor technological developments affecting the financial sector and to

develop appropriate responses where necessary.

January 2017: Information Note to the Economic and Financial Committee on the G20 Conference on digitising finance, financial inclusion and financial literacy published

March 2017: As a follow-up to the Retail Financial Services Green Paper, the Commission published a Consumer Financial Services Action Plan setting out steps to build a deeper single market for retail financial services. The Plan, among other things, considers ways to:

Improve consumer protection when buying financial services cross-border and online; and

Make disclosure requirements fit for purpose in the digital world.

March 2017: Publication of EC Consultation Paper on policy options and recommendations on the topic of FinTech in March 2017. The Paper outlined the Commission's stance on FinTech relies on three core principles:

- Technology-neutral to ensure that the same activity is subject to the same regulation irrespective of the way the service is delivered, so that innovation is enabled and level-playing field preserved.
- Proportional, reflecting the business model, size, systemic significance, as well as the complexity and cross-border activity of the

regulated entities.

- Integrity-enhancing, as application of technologies to financial services should promote more market transparency to the benefit of consumers and businesses without creating unwarranted risks (e.g. market abuse, mis-selling, cyber security issues, systemic risks).

The feedback to the consultation will help the Commission to:

- A.** Gauge how FinTech can make the single market for financial services more competitive, inclusive and efficient;
- B.** Create an enabling environment, where innovative FinTech products and solutions take off at a brisk pace all over the EU, while ensuring financial stability, financial integrity and safety for consumers, firms and investors alike;
- C.** Achieve its goal of making the single market more competitive by highlighting specific regulatory requirements or supervisory practices that hinder progress towards the smooth functioning of the Digital Single Market in financial services; and
- D.** Identify potential loopholes in the regulatory framework that adversely affect the level playing field between market participants as well as the level of consumer protection.

Annex 3: EU Initiatives on Digitalisation *continued*

[Annex 1](#) | [Annex 2](#) | [Annex 3 page 2 of 2](#) | [Annex 4](#)

EUROPEAN PARLIAMENT (EP) outputs so far include:

May 2016: EP Report and motion on Virtual Currencies published

January 2017: Committee on Economic and Monetary Affairs - Cora van Nieuwenhuizen MEP, draft Own Initiative Report on FinTech: the impact of technology on the future of financial services published

February 2017: EP Briefing Note 'How blockchain technology could change lives' published

EUROPEAN SUPERVISORY AUTHORITIES (ESA's)

A number of topics related to financial innovation are receiving regulatory attention by the ESA's including the following streams of work:

Joint Committee of the ESAs (JC) outputs so far include:

December 2015: JC Discussion Paper on automation of financial advice published

December 2016: The Final Report on automation in financial advice published

December 2016: JC Discussion Paper on the Use of Big Data by Financial Institutions published. Consultation closed on 17/03/2017

European Banking Authority (EBA) outputs so far include:

December 2013: EBA warning on Virtual Currencies (VCs) issued on a series of risks deriving from buying, holding or trading virtual currencies such as Bitcoins

July 2014 and August 2016: EBA Opinions on VCs published

October 2015: EBA workshop on Cloud services – EBA jointly held a workshop on cloud computing in the banking sector with the European Network and Information Security Agency (ENISA). Subsequently the ENISA issued a report including a number of recommendations for the secure adoption of cloud computing in the banking sector at the EU level

May 2016: EBA discussion paper to examine firms' innovative uses of consumer data by financial institutions published

February 2017: Public consultation on draft guidelines on procedures for complaints of alleged infringements of the PSD2 launched

May 2017: Public consultation on draft guidance for the use of cloud service providers by financial institutions. The consultation runs until 18 August 2017

June/July 2017: expected publication of EBA Discussion Paper on its strategy for FinTech

European Insurance and Occupational Pensions Authority (EIOPA) outputs so far include:

January 2014: EIOPA Good practices for Comparison Websites published

January 2015: EIOPA Opinion on sales via the internet published

December 2015: EIOPA Report on sale of Mobile Phone Insurance published

August 2016: EIOPA Good practices on communication tools and channels for communicating to occupational pension scheme members published

December 2016: EIOPA InsurTech Consumer Trends Report 2016 published

April 2017: EIOPA holds InsurTech Roundtable

European Securities and Markets Authority (ESMA) outputs so far include:

May 2015: ESMA Analysis of survey of NCAs on regulated investment-based crowdfunding platforms in the EU published

July 2015: ESMA Q&A on money laundering and terrorist financing in relation to investment-based crowdfunding published

February 2017: ESMA Report on Distributed ledger technology (DLT) Applied to Securities Markets published

Annex 4: International Policy Work on Digitalisation

[Annex 1](#) | [Annex 2](#) | [Annex 3](#) | [Annex 4](#)

Please note the following annex is not an exhaustive list and is up-to-date as of June 8 2017.

INTERNATIONAL FRAMEWORK

In the international context, the following international organisations are actively involved in developing policy research and guidance on the implications of digitalisation of finance for relevant consumer protection issues:

FinCoNet (the international organisation of financial consumer protection supervisory authorities)

- FinTech seminar held on April 7 2017, examining topics on FinTech, consumer protection and supervisory authorities
- Report on digitalisation of high-cost lending envisaged November 2017
- Online and Mobile Payments: Supervisory
- Challenges to Mitigate Security Risks published September 2016

International Organisation of Securities Commissions (IOSCO)

- Final Report on Financial Technologies (FinTech) published February 2017
- Final Report- Update to the Report on the IOSCO Automated Advice Tools Survey published December 2016
- Report on the IOSCO Social Media and
- Automation of Advice Tools Survey published July 2014

International Association Of Insurance Supervisors (IAIS)

- Report on FinTech Developments in the Insurance Industry published March 2017

Financial Action Task Force (FATF)

- Dialogue with the Private Sector on FinTech and RegTech held in Vienna on 20 March 2017, as part of the FATF Private Sector Consultative Forum.
- Roundtable on FinTech and RegTech held in Paris in February 2017
- Guidance for a Risk-based approach to Virtual Currencies published June 2015
- Guidance for a Risk-Based Approach to Prepaid Cards, Mobile Payments and Internet-Based Payment Services published June 2013

Bank For International Settlements (BIS)

- Report on Distributed ledger technology in payment clearing and settlement published February 2017

Basel Committee on Banking Supervision (BCBS) Task Force on Financial Technology

Financial Stability Board (FSB)

- Financial Innovation Network

World Economic Forum (WEF)

- World Economic Forum Annual Meeting: The Global Fintech Revolution January 2017
- The future of financial infrastructure: An ambitious look at how blockchain can reshape financial services, Report published August 2016
- Deep Shift: Technology Tipping Points and Societal Impact, Final Report September 2015f
- The Future of Financial Services: How disruptive innovations are reshaping the way financial services are structured, provisioned and consumer Final Report published June 2015

Organisation for Economic Cooperation and Development (OECD)

- Draft Report on Ensuring financial education and consumer protection for all in the digital age published April 2017

Footnotes to Annexes 1–4

- 1 Directorate-General for Communications Networks, Content and Technology: <http://ted.europa.eu/udl?uri=TED:NOTICE:249747-2016:TEXT:EN:HTML>
- 2 European Commission, (2017), 'Consumer Financial Services Action Plan: Better Products, More Choice', http://europa.eu/rapid/press-release_IP-17-609_en.htm
- 3 European Commission, (2017) 'Consultation Document, FinTech: A More Competitive and Innovative European Financial Sector', https://ec.europa.eu/info/sites/info/files/2017-fintech-consultation-document_en_0.pdf
- 4 European Parliament Committee on Economic and Monetary Affairs, (2016) 'Report on virtual currencies', <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A8-2016-0168+0+DOC+XML+V0//EN>
- 5 European Parliament, (2017) '[How Blockchain Technology could change our lives](http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/581948/EPRS_IDA(2017)581948_EN.pdf)', [http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/581948/EPRS_IDA\(2017\)581948_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/581948/EPRS_IDA(2017)581948_EN.pdf)
- 6 Joint Committee Discussion Paper on the Use of Big Data by Financial Institutions, (2016), https://esas-joint-committee.europa.eu/Publications/Discussion%20Paper/jc-2016-86_discussion_paper_big_data.pdf
- 7 EBA , (2016), '[Discussion Paper on innovative uses of consumer data by financial institutions](https://www.eba.europa.eu/documents/10180/1455508/EBA-DP-2016-01+DP+on+innovative+uses+of+consumer+data+by+financial+institutions.pdf)', <https://www.eba.europa.eu/documents/10180/1455508/EBA-DP-2016-01+DP+on+innovative+uses+of+consumer+data+by+financial+institutions.pdf>



Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem

P.O. Box No 559,
New Wapping Street,
North Wall Quay,
Dublin 1