

Part III

Fintech's Institutional and
Regulatory Setting



*Regulating Fintech and BigTech:
Reconciling the Objectives
of Financial Regulation
and Promoting Competition*

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I. INTRODUCTION

INNOVATIONS IN TECHNOLOGY have been developing that change the way financial services are delivered. Financial assets and services, many of which are globally mobile and capable of being represented in digital form, are highly susceptible to the developments in information, communications and transmission technologies. The Financial Stability Board, a global body that monitors trends and coordinates policy in international financial regulation, defines the new industry of ‘fintech’ as: ‘technologically enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services’.¹ At the same time, ‘BigTech’ firms, ie, large technology companies whose primary activity is platform-based digital services, are also becoming increasingly active in the provision of financial services.²

Fintech and BigTech offer potential to change financial services through digital transformations and delivery. In general, the value chain of banks and incumbent financial institutions includes many bundled services and activities. Fintech companies, including BigTech, could focus on one or a few of

¹Financial Stability Board, ‘Fintech’ (2021), available at: www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/fintech/, 1.

²D Evans and R Schmalensee, ‘The Antitrust Analysis of Multi-Sided Platform Businesses’ in R Blair and D Sokol (eds), *The Oxford Handbook of International Antitrust Economics* (Oxford University Press, 2014).

these activities in an unbundled way (what we call disintermediation),³ and/or rebundle with other services, financial or non-financial, in new ways. Langley et al⁴ observe that the initial hype regarding the ‘disintermediation’, ‘decentralisation’ and ‘democratisation’ of fintech is giving way to new forms of reconsolidation or recentralisation, in the hands of partnerships between incumbents and fintechs, or among fintechs themselves, notably, the BigTech companies such as Google or Facebook that leverage their technological superiority in other fields and foray into finance.⁵ In response to both the rise of fintech and the inroads of BigTech into finance, a number of incumbent bank and non-bank financial institutions are also moving to a platform model by making greater use of big data and automation to offer third-party services, such as digital payments, credit insurance and wealth management, to their existing customers. This entails a change to the traditional business model of financial institutions, where firms seek to match different groups of clients in the market.

Fintech and BigTech pose new challenges to regulators in three ways. First, the transformation of financial services entail ‘boundary’ considerations for financial regulation, such as whether financial services or products could fit into existing financial regulation ‘categories’. The main categories relate to banking services (which involve full intermediation by banks of financial risks); insurance products (which relate to full intermediation by insurance companies that underwrite certain future risks); and securities products and services, which relate to fundraising in public markets; and fund products which relate to the management of pooled assets over different time horizons and for different savings objectives.⁶ All categories have developed regulatory tenets based on certain assumptions of compliance capacity on the part of the industry incumbents. These can be over-inclusive for new services or products led by fintechs. Second, financial regulators such as the UK Financial Conduct Authority (UK FCA), struggle with the need to promote competition enabled by disruptive innovation while ensuring a level regulatory playing field for the same function of financial intermediation.⁷ But, financial regulatory regimes are hardly technologically neutral and the mantra of functional rather than entity-based regulation is more idealistic than implemented in reality. In this respect, we observe in section III

³ For a survey of fintech applications and innovations see J Madir, ‘What is Fintech?’ in J Madir (ed), *Fintech: Law and Regulation* (Edward Elgar, 2019).

⁴ P Langley and A Leyshon, ‘The Platform Political Economy of FinTech: Reintermediation, Consolidation and Capitalisation’ (2021) 26 *New Political Economy* 376.

⁵ L Enriques and W-G Ringe, ‘Bank–Fintech Partnerships, Outsourcing Arrangements and the Case for a Mentorship Regime’ (2020) 15 *Capital Markets Law Journal* 374.

⁶ See a broad overview of the categories of financial activities in J Armour et al, *Principles of Financial Regulation* (Oxford University Press, 2016) ch 2.

⁷ Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG), *30 Recommendations on Regulation, Innovation and Finance* (December 2019) 67 (Recommendation 13 on ‘same risks, same rules’), available at: ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/191113-report-expert-group-regulatory-obstacles-financial-innovation_en.pdf.

that financial regulators have increasingly carved out specialist regulatory regimes for fintech sectors, such as crowdfunding platforms and crypto-assets in the European Union (EU).

Nevertheless, the Organisation for Economic Co-operation and Development (OECD) has observed that bespoke regulation is not needed where the innovation is not disruptive enough, for example in roboadvice or online insurance distribution.⁸ Further, the introduction of specialist financial regulatory regimes catering for particular types of fintech can also lead to regulatory fragmentation. Nevertheless it can be argued that such fintechs would not be subject to competitive disadvantage, since similar business models are grouped together and regulated in the same fashion. But, as will be discussed in section IV below, this bespoke approach may fail to capture the operation of fintech ecosystems, where financial services may be part of a wider business model, which can be financial or otherwise, such as that provided by BigTech companies. Implications for financial regulation and its interaction with other regulatory systems, such as data governance, competition law, privacy and consumer rights etc, would also arise. These are new and unfamiliar challenges that extend beyond the realm of financial regulation as traditionally conceived.

Owing to the limitations of the bespoke approach, we argue that two further regulatory approaches have arisen. The first is (re)consolidatory movements in regulation where new and common risks are identified, and across-the-board regulatory proposals are introduced. The second is BigTech-specific regulatory measures, which the European Union and United Kingdom (UK) are increasingly inclined towards (eg, the introduction of the EU's Digital Services Act and Digital Markets Act).⁹

Reconsolidatory regulatory measures address cross-cutting issues such as data governance, privacy, platform responsibilities, digital delivery responsibilities and codes of conduct. These can address similar modes of digital interaction or delivery in different sectors, avoiding duplication or arbitrage between the regulations that apply to different sectors. However, one question remains – whether some BigTechs in finance are special, in the sense that they have such a global footprint and vast market share that special rules and responsibilities should apply to them apart from cross-cutting rules that apply to platforms in general. The BigTechs in question, such as Meta, Google and Amazon, possess platform powers beyond many other types of platform businesses and it is queried to what extent they should be subject to distinct regulations that reflect that.

This chapter maps what we refer to as a three-pronged regulatory response to the rise of fintech firms and BigTech in finance, as discussed above. Section II

⁸ Organisation for Economic Co-operation and Development (OECD), 'Digital Disruption in Banking and its Impact on Competition' (2020), available at: www.oecd.org/competition/digital-disruption-in-banking-and-its-impact-on-competition-2020.pdf.

⁹ See below (n 91) 103.

discusses the new regulatory challenges posed by fintech. Section III discusses specialist or bespoke regulatory regimes that financial regulators have introduced in the European Union and United Kingdom in response to the differences observed between fintech and conventional financial services, primarily based on the need to promote innovation and competition so that disruptive movements are not snuffed out by onerous existing regulatory categories. Section IV explores the special issues posed by BigTech and considerations for BigTech-specific regulatory measures that are beyond ‘normal’ competition law tools. Section V discusses the reconsolidatory movements in cross-cutting rules, such as the EU’s Digital Services Act and Digital Markets Act, and critically discusses their achievements and limitations. We recognise that one single integrated regulatory solution is unlikely to be either feasible or optimal at the moment, but there is likely a need to consider an institutional response in due course, which is beyond the scope of this chapter to provide in detail. A number of commentators have urged financial regulators to move towards new, radically disrupted and holistic regulatory models,¹⁰ where financial regulation is integrated with regulatory issues such as digital identity infrastructures, global finance and trade policy implications, while punctuated with competition vigilance throughout, monitoring the power concentration risks in new business models and developments.¹¹ In section VI, where we provide concluding remarks, we sketch out some thoughts in relation to the existential implications for regulatory agencies and the need to reconfigure their capacities in light of new regulatory needs. The need for interdisciplinary openness and technological competence on the part of public bodies will be imminent, to match the radical recombinations and innovations introduced by fintech and beyond.

II. NEW REGULATORY CHALLENGES POSED BY FINTECH

Fintech is understood here to mean a technologically enabled configuration of a financial product or means of delivery of financial services; hence, fintech is not necessarily a new species of financial activity in the eyes of financial regulators. In other words, it is not assumed that fintech-specific financial regulation is either necessary or warranted. Indeed, many financial regulators and policymakers conceive of financial regulation as ideally based on economic function, so that financial products or services that serve the same economic function should be regulated in the same manner. The UK FCA adopts the ‘functional regulation’¹²

¹⁰DW Arner, DA Zetzsche, RP Buckley and JN Barberis, ‘FinTech and RegTech: Enabling Innovation While Preserving Financial Stability’ (2017) 18 *Georgetown Journal of International Affairs* 47; ST Omarova, ‘Dealing with Disruption: Emerging Approaches to Fintech Regulation’ (2020) 61 *Washington University Journal of Law & Policy* 25.

¹¹T Smith and D Geradin, ‘Maintaining a Level Playing Field when Big Tech Disrupts the Financial Services Sector’ (2022) 18 *European Competition Journal* 129.

¹²*FSA v Anderson* [2010] EWHC 599, see chapter on the granting of regulatory licences based on the economic function of services offered.

approach inherited from its predecessor the Financial Services Authority, so that its licensing regime is based on specific financial activities¹³ and not on the entity of the financial institution concerned. Further, European policymakers' doctrine of 'same risks, same rules'¹⁴ reflects the same policy preference. In this manner, it is arguable that fintech should be regulated according to its essential economic functions and the involvement of technology is a matter of *modus* but not of substance. The underlying regulatory regime applicable to the economic function being served, such as lending, investment intermediation, brokerage etc, should just be extended. This would be the essence of technologically neutral financial regulation,¹⁵ whose regulatory objectives and classifications attain a timeless and normative quality. On the face of it, such application of financial regulation to fintech would also raise no competition implications, especially adverse ones, as the same economic functions in finance are subject to the same rules in a level playing field.

However, the basis for technologically neutral financial regulation, ie, timeless and fully comprehensive regulatory objectives expressed in perfect classifications of financial products and services according to economic function, is arguably flawed.¹⁶ Therefore, financial regulation is essentially not capable of being fully technologically neutral, and in this manner, technological changes to product configuration or delivery of services do matter in relation to the optimality of existing regulation being applied to such products or services. Over the years of its evolution, financial regulation has mapped onto certain business models developed by financial institutions. In brief, two models of financial intermediation are adopted by different entities in financial markets, these entities also having combined and bundled certain products and services over time to attain sectoral recognition for their differences.

First, deposit-taking banks or financial institutions that provide capital guarantee promises perform a full intermediation financial model whereby investors are promised capital safety and sometimes a small guaranteed return on capital. The institutions that make such promises take on the full risks of intermediation of investors' capital, but also keep the full rewards of returns.¹⁷ These institutions often also become social utilities for the safeguarding of money and

¹³ Financial Services and Markets Act 2000, s 19, and Schedule 2.

¹⁴ See above (n 7).

¹⁵ eg, ESMA Keynote Speech by Steven Maijoor, 'Cryptoassets: Time to Deliver' (26 February 2019), available at: www.esma.europa.eu/document/keynote-steven-maijoor-crypto-assets-time-deliver. See critically R Brownsword, 'Regulatory Fitness: Fintech, Funny Money, and Smart Contracts' (2019) 20 *European Business Organisations Law Review* 5.

¹⁶ See the discussion on various forms of 'shadow banking' where similar risks are being managed but policymakers ultimately conclude that existing rules, such as banking regulation are inappropriate for products such as money market funds despite very similar financial promises made and risks transformed, in IH-Y Chiu, 'Transcending Regulatory Fragmentation and the Construction of an Economy-Society Discourse: Implications for Regulatory Policy Derived from a Functional Approach to Understanding Shadow Banking' (2016) 42 *Journal of Corporation Law* 327.

¹⁷ *Foley v Hill* [1848] 2 HLC 28.

assets and have a vast social footprint.¹⁸ This allows them to engage with diversified and bundled lines of financial businesses, thus extending their economic, risk and social footprint more widely. Such institutions attract regulatory policy aimed at securing their prudential management in order to avoid failure and damaging public confidence.

Second, financial institutions including those that call themselves ‘banks’ may engage in a partial intermediation financial model whereby investors are served in terms of expert allocations of their capital, but intermediaries do not promise capital safety and returns may be variable.¹⁹ In this model, intermediaries are not bound by strict capital safety promises but would have to account for the results made on investments. Partial intermediation is often reflected in capital markets activities and investment fund management. Financial regulatory policy for partial intermediation business models focuses on client protection and rights, and prudential concerns may be aimed at qualities such as governance and liquidity rather than the prevention of institutional failure.²⁰

The brief account above explains why financial regulators have ultimately developed regulatory regimes that cater for the different implications of full and partial intermediation models and their different combinations by different entities. Full intermediation models are undertaken largely by banking entities and despite the mantra of functional regulation, ‘bank regulation’ has very much become a recognised regime of financial regulation, ensuring that the full range of entity risks are captured by regulators. For example, in the United Kingdom, the Prudential Regulation Authority (PRA) oversees banks and large insurers due to their full intermediation business models and risk. Other financial institutions are overseen by the FCA whose objectives differ from the PRA’s by being more focused on protecting users and well-functioning markets.²¹ Despite the mantra of functional regulation, financial regulation is very much dependent on the dominant business models adopted by financial institutions, so that sectoral supervision along the lines of banking, securities services, collective investing, insurance providers, brokerage services, etc have been developed. Firms that engage in their dominant business models often combine financial services in particular manners. In sum, financial regulation and supervision, albeit designed to an extent for specific economic functions, reflects categories

¹⁸ Such as ‘too big to fail’ banks, discussed in Financial Stability Board, Global Systemically Important Financial Institutions (G-SIFIs), available at: www.fsb.org/work-of-the-fsb/market-and-institutional-resilience/post-2008-financial-crisis-reforms/ending-too-big-to-fail/global-systemically-important-financial-institutions-g-sifis/.

¹⁹ See above (n 6).

²⁰ The dominant paradigm for financial regulation in capital markets and investment fund management is disclosure-based governance of customer relations and conduct duties where other principal-agent issues are involved, MB Fox, ‘Rethinking Disclosure Liability in the Modern Era’ (1997) 75 *Washington University Law Quarterly* 903; AM Paces, ‘Financial Intermediation in the Securities Markets Law and Economics of the Conduct of Business Regulation’ (2000) 20 *International Review of Law and Economics* 479.

²¹ ss 1B–1E, Financial Services and Markets Act 2000 amended in 2012.

of economic functions or activities as adopted by financial services business models observed in the industry. Hence, regulation is often carried out in an entity-based approach, recognising that certain firms would carry out certain dominant activities under an umbrella entity label. Entity-based financial regulation is even more pronounced in the United States (US) as regulatory agencies have been instituted based on established financial services business lines.²²

The reality of entity-based financial regulation may not be appropriate for fintech firms as the extension of similar regulatory regimes is often over-inclusive and likely to impose more regulatory cost than warranted.²³ This results in an adverse competitive impact for certain fintech firms. The group of fintechs likely to be most adversely affected are challenger or start-up firms that do not have an established anchor (or parent company) in the financial sector and are not part of the BigTech corporate groups.

Challenger fintech firms frequently disintermediate the bundled economic functions carried out by established incumbent financial institutions, by specialising in particular services in a novel and more efficient manner.²⁴ For example, a challenger firm may focus on disintermediating the payment interface business so that payments can be initiated online, on mobile apps, on peer-to-peer networks, etc, innovating away from established manners of payment interfaces that rely on carrying certain card instruments or having to go through account-holding banks.²⁵ In this manner, although challenger payment services firms are carrying out a similar economic function as a bank, it would be over-inclusive to impose on them the corpus of bank regulation. This explains why e-money institutions became specifically regulated under more precise and proportional regulatory treatment by the European Union²⁶ and payment services firms are now treated distinctly under the Second Payment Services Directive of 2015 (PSD2).²⁷ In the United Kingdom, regulators and policymakers explicitly encourage the creation of challenger banks in order to address the oligopolistic hold by a few high street banks.²⁸ Even such challenger banks arguably do not deserve to have the same entity-based bank regulation applied to them as their digital only interfaces and limited range of retail services may require specific regulatory thinking about

²² HE Jackson, 'The Nature of the Fintech Firm' (2020) 61 *Washington University Journal of Law & Policy* 9.

²³ OECD (n 8).

²⁴ Similar to the process of disruption described in J Bower and C Christensen, 'Disruptive Technologies: Catching the Wave' (1995) 73 *Harvard Business Review* 43, where disruption starts at a 'low' or not spectacular end of the market then mobilised to capture attention at greater scale.

²⁵ See IH-Y Chiu, 'A New Era in Fintech Payment Innovations? A Perspective from the Institutions and Regulation of Payment Systems' (2017) 9 *Law, Innovation and Technology* 190.

²⁶ Directive 2009/110/EC on the taking up, pursuit and prudential supervision of the business of electronic money institutions [2009] OJ L267/7.

²⁷ Directive (EU) 2015/2366 on payment services in the internal market [2015] OJ L337/35.

²⁸ Bank of England, 'New Bank Start-up Unit' (2022), a facility dedicated to overseeing the induction of potential challenger banks, available at: www.bankofengland.co.uk/prudential-regulation/new-bank-start-up-unit.

their prudential risks.²⁹ Changes in customer interaction may also trigger different policy thinking about customer protection aspects.³⁰ Further, in relation to capital markets activities, the regulatory regime catering for securities offerings has tended to assume that large, mature companies go to market and investor protection is designed in comprehensive and costly terms.³¹ Such a regulatory regime has always been criticised to be inappropriate for smaller, less mature companies now intermediated by new technologically enabled platforms.³²

The perception of over-inclusiveness in financial regulation that would apply to fintech firms that innovate upon similar services is arguably a key reason that shapes fintech innovation in ways that evade established regulatory boundaries. In one sense, many challenger-type fintech firms (and also BigTech firms to an extent) are able to come to market or achieve early mover success by exploiting regulatory arbitrage. Commentators have reported that although the success of some fintech firms operating in regulatory grey areas is attributed to regulatory arbitrage, they also seemed to have reached into markets where access and inclusion were previously challenging.³³ It seems that fintech firms enjoy some competitive benefits, regardless of regulatory arbitrage, a point we flesh out more in section III.

In our view, financial regulators like the UK FCA seem to covertly appreciate the potential over-inclusiveness of existing regulatory regimes if applied to fintech.³⁴ This may explain why the UK FCA waited to regulate online crowdfunding platforms which were in operation a few years ahead of regulation. For example, the peer-to-peer lending platform Zopa has been in operation in the United Kingdom before any specific regulation of online loan or equity crowdfunding came into being.³⁵ The UK FCA did not strictly extend regulation over Zopa in respect to the intermediation of lending activities, or treat such

²⁹ Bank of England, 'A Strong and Simple Prudential Framework for Non-Systemic Banks and Building Societies' Discussion Paper, 2021, available at: www.bankofengland.co.uk/prudential-regulation/publication/2021/april/strong-and-simple-framework-banks.

³⁰ eg, digital fraud on consumers requires specific regulatory responses such as the authorised push payment fraud issue for online and digital banking and payment services, see Siddharth Venkataramakrishnan, 'Regulator to Force UK Banks to Offer Scam Victims Compensation' *Financial Times* (10 May 2022), available at: www.ft.com/content/aabee7a-324c-4850-a91d-fc41aa6d8802.

³¹ SM Solaiman, 'Revisiting Securities Regulation in the Aftermath of the Global Financial Crisis: Disclosure – Panacea or Pandora's Box?' (2013) 14 *Journal of World Investment & Trade* 646; E Howell, 'An Analysis of the Prospectus Regime: The EU Reforms and the "Brexit" Factor' (2018) 15 *European Company and Financial Law Review* 69.

³² See section III below on online equity crowdfunding.

³³ H Bollaert, F Lopez-de-Silanes and A Schwienbacher, 'Fintech and Access to Finance' (2021) 68 *Journal of Corporate Finance* 101941; G Buchak, G Matvos, T Piskorski and A Seru, 'Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks' (2018) 130 *Journal of Financial Economics* 453.

³⁴ See below (n 35) paras 2.7–2.13 on the FCA explaining how crowdfunding platforms potentially fall within existing regimes and the benefits of rationalising them under a specialist regulatory regime.

³⁵ The UK's regulatory regime came into force in 2015, FCA, 'The FCA's Regulatory Approach to Crowdfunding over the Internet, and the Promotion of Non-Readily Realisable Securities by Other Media', Policy Statement PS14/4 (March 2014), available at: www.fca.org.uk/publications/policy-statements/ps14-4-fca%E2%80%99s-regulatory-approach-crowdfunding-over-internet-and.

intermediation as functionally akin to a collective investment scheme,³⁶ which would need to be approved and comply with regulation designed essentially for investment funds.³⁷ An evidence-based approach and period of consultation ultimately allowed the UK FCA to introduce bespoke regulation for online crowdfunding platforms.³⁸

This is not to say that fintech products and services must give rise to tailor-made regulatory regimes, as such regimes also result in increased regulatory fragmentation³⁹ Regulatory fragmentation may serve the needs of more effective and fair competition among like business models but may also reflect the capture of regulators by ‘glittering’ innovators and their pro-competition rhetoric. Such regimes also tend to be market-building and enabling in nature. Compelling categorical neatness in regulatory classifications may minimise regulatory arbitrage among similar economic functions and risks, but may be conservative and contrived, giving rise to the oft-quoted critique of innovation stifling. For example, the US Securities Exchange Commission’s uncompromising categorisation of many crypto-tokens as securities raises a number of fit-for-purpose problems⁴⁰ and has also distorted the market towards pivoting only to accredited investors.⁴¹ We argue that trends of regulatory fragmentation are observed in both the United Kingdom and European Union, alongside emerging trends of (re)consolidation of financial regulatory regimes for common risks and problems.

III. SPECIALIST REGIMES FOR FINTECH IN FINANCIAL REGULATION

Bespoke regulation for fintech is an approach taken by financial regulators in the United Kingdom and European Union as a response to certain developments that persuade policymakers⁴² of distinguishing characteristics and market impact.

³⁶ Financial Services and Markets Act 2000, s 235. Zopa’s business model is to allocate an investor’s capital across different loans, in a way undertaking management of a pool of capital on an operational basis for investors expecting a return.

³⁷ Such as FCA Handbook COLL in relation to non-UCITs retail investor schemes.

³⁸ See: www.zopa.com/.

³⁹ A Smoleńska, J Ganderson and A Héritier, ‘The Impacts of Technological Innovation on Regulatory Structure: Fintech in Post-Crisis Europe’ in A Héritier and MG Schoeller (eds), *Governing Finance in Europe: A Centralisation of Rule-Making?* (Edward Elgar, 2020).

⁴⁰ J Rohr and A Wright, ‘Blockchain-based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets’ (2019) 70 *Hastings Law Journal* 463; L Rinaudo Cohen, ‘“Ain’t Misbehavin’’: An Examination of Broadway Tickets and Blockchain Tokens’ (2019) 65 *Wayne Law Review* 81, distinguishing crypto-tokens from securities, but see U Rodrigues, ‘Semi-Public Offerings? Pushing the Boundaries of Securities Law’ (2018), available at: ssrn.com/abstract=3242205; SEC, ‘Framework for Investment Contract Analysis of Digital Assets’ (2019), available at: www.sec.gov/corppfin/framework-investment-contract-analysis-digital-assets.

⁴¹ SAFT or Simple Agreement for Future Tokens, developed as a template for ICOs clarifying that sales are of tokens for future use, saftproject.com/.

⁴² eg, FCA PS14/4 (2014) (n 35).

In this manner, it seems contrived to subject certain fintech innovations to existing financial regulatory regimes.⁴³ Regulators see the introduction of the bespoke regime as enabling in nature, legitimating and helping to build out the fintech sector, while addressing erstwhile regulatory objectives such as retail investor/customer protection.⁴⁴ This enabling role takes over from market-based governance, where the development of credible voluntary standards can be slow.⁴⁵ The protective side of regulation also provides for standards underpinning market confidence, reinforcing the enabling effect.

We introduce two brief case studies to explain the pathway to bespoke fintech regulation. First, the rise of online crowdfunding platforms in the early 2010s took place in an unregulated landscape, although commentators took the view that investment firm regulation in the European Union, such as the Markets in Financial Instruments Directive,⁴⁶ would functionally capture the investment activities conducted on these platforms.⁴⁷ Online crowdfunding platforms comprise many types,⁴⁸ where a digital platform operator would be able to bring together those who seek to provide funds and those who seek to receive funds, in multi-sided markets. The supply side of the market could be retail, institutional or even corporate providers, while the demand side could be personal or business recipients. Platforms match C2C (consumer to consumer), C2B (consumer to business), B2C (business to consumer) and B2B (business to business) funding. They can do so at various levels of intermediation or disintermediation, from providing a mere information presentation and choice service, to intelligent matching, or even fund management, such as slicing up investors' capital and allocating it to minimise portfolio risk.⁴⁹ In this respect, credit intermediation activities on online crowdfunding platforms have changed in character in terms of supply source, the nature of the demand side accessing such services, the modus of credit underwriting (in terms of differences in technologically enabled information services underpinning such underwriting), and the modus of credit intermediation, with platforms performing an array of gatekeeping, diligence

⁴³ Explanatory Memorandum to European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on European Crowdfunding Service Providers (ECSP) for Business' (2018) para 1, available at: eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018PC0113.

⁴⁴ A Minto, M Voelkerling and M Wulff, 'Separating Apples From Oranges: Identifying Threats to Financial Stability Originating from Fintech' (2017) 12 *Capital Markets Law Journal* 428.

⁴⁵ eg, P2PFA, the trade association for loan-based crowdfunding platforms, has not taken off to provide robust industry standardisation.

⁴⁶ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU [2014] OJ L173/349.

⁴⁷ G Ferranini, 'Regulating Fintech: Crowdfunding and Beyond' (2017) 2 *European Economy* 121.

⁴⁸ Donation-based, loan-based, investment or reward-based, see F de Pascalis, 'Fintech Credit Firms: Prospects and Uncertainties' in IH-Y Chiu and G Deipenbrock (eds), *Routledge Handbook of Financial Technology and the Law* (Routledge, 2021).

⁴⁹ Such as by Zopa.

and managing services.⁵⁰ The introduction of structural changes in terms of platforms' roles, as well as new user protection needs⁵¹ have been recognised by UK and EU policymakers.

The United Kingdom introduced bespoke regulation for online crowdfunding platforms starting in 2014. The UK FCA required a minimal set of platform governance such as prudential regulation to limit risk creation on platforms, as well as investor protection through mandatory advice for retail participants on the supply side and caps on maximum amounts of investment they can make.⁵² The EU's Crowdfunding Regulation was only finalised in 2020,⁵³ and it adopted some different approaches in terms of placing more duties on platform operators to ensure adequate standardised disclosure to supply-side investors, and harmonising platforms' duties of governance and conduct to an extent with the EU Markets in Financial Instruments Directive 2014 (MiFID) standards. The EU Regulation recognises that the platform may be the most powerful corporate player in the landscape and establishes a new form of sectoral regulation for platforms. The EU Regulation also provides for a new form of 'shared responsibility' on the part of investors on the supply side to show evidence of knowledge and competence before participating in the market. This reflects the balance achieved in a lighter form of regulation overall for crowdfunding products in order not to stifle the sector.⁵⁴ Although these regimes came about after extensive evidence gathering and consultation, the sector continues to change. Platforms may partner with incumbents, or in the case of Zopa, the online crowdlending platform, attain a full banking licence in the United Kingdom. It may be queried whether regulation is able to capture the reintermediation dynamics that are occurring as fintech firms attempt to capture the market share and revenues of incumbents. It may also be queried to what extent the sectoral distinction for fintech firms, now recognised, is used as an advantageous foothold to compete unfairly against incumbents. On the other hand, fintech firms may complain that they are prevented from competing fairly in other respects. For example, the government favours accreditation of incumbent banks, compared with the few accredited crowdlending platforms, for government-backed lending to support business recovery in the wake of the Covid-19 pandemic.⁵⁵ Borrowers

⁵⁰ Platforms' array of intermediation or gatekeeping activities, JA Ande and ZG Kavame Eroglu, 'Could New Zealand's Equity Crowdfunding Regulations Be the Model for the Developing World?' (2021) 29 *New Zealand Universities Law Review* 557.

⁵¹ D Ahern, 'Regulatory Arbitrage in a Fintech World: Devising an Optimal EU Regulatory Response to Crowdlending' (2018) 3 *Journal of Business Law* 193.

⁵² FCA Handbook COBS 4.7.10.

⁵³ Regulation (EU) 2020/1503 of the European Parliament and of the Council of 7 October 2020 on European crowdfunding service providers for business, and amending Regulation (EU) 2017/1129 and Directive (EU) 2019/1937 [2020] OJ L347/1.

⁵⁴ E Macchiavello, 'Disintermediation in Fund-raising: Marketplace Investing Platforms and EU Financial Regulation' in IH-Y Chiu and G Deipenbrock (eds), *Routledge Handbook of Financial Technology and Law* (Routledge, 2021).

⁵⁵ de Pascalis (n 48). On the Coronavirus Business Interruption Loan Scheme, see: www.british-business-bank.co.uk/ourpartners/coronavirus-business-interruption-loan-scheme-cbils-2/.

from regulated credit institutions and from crowdlending platforms are treated differently, exacerbating fintechs firms' disadvantage.⁵⁶ For example, the right for borrowers to take payment holidays during the pandemic lock-down applied to regulated lenders but not to borrowers on online crowdfunding platforms.⁵⁷ This resulted in each platform developing its own rules to cater for lenders' and borrowers' emergency needs. The continued unavailability of the Financial Compensation Services guarantee for customers of platforms also remains a disadvantageous policy for investors.

The second case study concerns bespoke regulation in the European Union for initial coin offerings which have exploded since 2017,⁵⁸ although the United Kingdom is still debating the matter.⁵⁹ Entrepreneurs who have an idea to develop an application for blockchain technology that facilitates peer-to-peer economic activity usually through automated code protocols called 'smart contracts',⁶⁰ can make direct offers of yet to be developed digital tokens to funders. Funders provide financial support with a view to bringing the project to life, and afterwards to enjoying the multiple features that the digital tokens provide in connection with the blockchain project. Tokens are designed to confer rights to digital goods and services and even participation and governance in the blockchain community.⁶¹ The development of secondary markets for

⁵⁶ Responsible lending obligations for regulated lenders are not applicable to platforms or participating lenders; see also, CK Odinet, 'Predatory Fintech and the Politics of Banking' (2021) 106 *Iowa Law Review* 1739.

⁵⁷ FCA, Mortgages and coronavirus: information for consumers, available at: www.fca.org.uk/consumers/mortgages-coronavirus-consumers (updated 19 June 2020); Coronavirus: information for consumers on personal loans, credit cards, overdrafts, motor finance and other forms of credit (updated 1 July 2020), available at: www.fca.org.uk/news/press-releases/fca-confirms-further-support-consumer-credit-customers. Payment holiday rights extended from early November 2020: www.fca.org.uk/news/press-releases/fca-announces-further-proposals-support-mortgage-borrowers-impacted-coronavirus; www.fca.org.uk/news/press-releases/fca-announces-proposals-further-support-consumer-credit-borrowers-impacted-coronavirus.

⁵⁸ European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937', available at: eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593, arts 4–14. The Council and Parliament have agreed to a final text on the Regulation, TBC.

⁵⁹ HM Treasury, 'UK Regulatory Approach to Cryptoassets and Stablecoins: Consultation and Call for Evidence' (January 2021), available at: www.gov.uk/government/consultations/uk-regulatory-approach-to-cryptoassets-and-stablecoins-consultation-and-call-for-evidence. The government's response in April 2022 indicates its wish to study further a comprehensive crypto-regulatory regime, see: www.gov.uk/government/news/government-sets-out-plan-to-make-uk-a-global-cryptoasset-technology-hub. See earlier call for a bespoke regulatory approach in *The Kalifa Review of UK Fintech* (2021), available at: www.gov.uk/government/publications/the-kalifa-review-of-uk-fintech.

⁶⁰ N Szabo, 'Smart Contracts: Building Blocks for Digital Markets' (1996), available at: www.fon.hum.uva.nl/rob/Courses/InformationInSpeech/CDROM/Literature/LOTwinterschool2006/szabo.best.vwh.net/smart_contracts_2.html. For a layman's version, see: www.coindesk.com/information/ethereum-smart-contracts-work.

⁶¹ S Díaz-Santiago, LM Rodríguez-Henríquez and D Chakraborty, 'A Cryptographic Study of Tokenization Systems' (2016) 15 *International Journal of Information Security* 413; C Goforth, 'Securities Treatment of Tokenized Offerings under US Law' (2018) 46 *Pepperdine Law Review* 405.

pre-sold tokens, however, also means that tokens have investment value.⁶² The market for such cryptotokens or cryptoassets is not insignificant, but as transactions are mostly in private cryptocurrency, this market is not financialised in a mainstream manner,⁶³ resulting in many regulators delineating their regulatory oversight to exclude them.⁶⁴ EU policymakers, however, see the opportunity to mobilise a potentially beneficial market that may serve small business financing in the blockchain universe and are providing a light touch regulatory regime to standardise the legitimisation of cryptoasset issuances and investor protection.

The bespoke approach in the European Union is still controversial in terms of whether there is sufficient distinction between cryptoassets and securities or investment assets to warrant lighter regulatory treatment.⁶⁵ Further, commentators raise doubt that the Regulation fully captures innovations in decentralised finance (DeFi), a broad array of blockchain-enabled automated financial protocols and activities that are currently unregulated.⁶⁶ This also brings to question the aptness of bespoke treatment for cryptoassets, namely are the products of cryptoassets sufficiently distinct to warrant a bespoke sectoral approach that would be lasting, or is the blockchain technology that underlies them the truly distinguishing aspect? The latter is described to be structurally disruptive,⁶⁷ but this technology permeates many forms of business, including finance. Hence, it is queried if it is more appropriate to reconsolidate regulatory policy around the deployment of blockchain technology more broadly.⁶⁸

The critical review of bespoke regulatory regimes is not intended to be disparaging toward the regulatory efforts made to build out new challenger market sectors. However, even when policymakers attempt to transcend the existing limits of entity-based regulatory regimes, limits in financial regulation reforms remain. Bespoke financial regulatory regimes raise issues regarding establishing (new) scope of coverage, under-inclusion or over-inclusion as business models are being developed. Further, standards for enabling markets may underserve

⁶² P Maume and M Fromberger, 'Regulation of Initial Coin Offerings: Reconciling US and EU Securities Laws' (2019) 19 *Chicago Journal of International Law* 548; A Collomb, P de Fillippi and K Sok, 'Blockchain Technology and Financial Regulation: A Risk-Based Approach to the Regulation of ICOs' (2019) 10 *European Journal of Risk Regulation* 263.

⁶³ Argument against regulating, G Ferranini and P Giudici, 'Digital Offerings and Mandatory Disclosure: A Market-based Critique of MiCA' (2021) ECGI Working Paper, available at: ssrn.com/abstract_id=3914768.

⁶⁴ FCA, 'Guidance on Cryptoassets Policy Statement' (July 2019), available at: www.fca.org.uk/publication/policy/ps19-22.pdf.

⁶⁵ DA Zetzsche, F Annunziata, DW Arner and RP Buckley, 'The Markets in Crypto-Assets Regulation (MiCA) and the EU Digital Finance Strategy' (2020), available at: papers.ssrn.com/sol3/papers.cfm?abstract_id=3725395 call for clarification in terms of crypto-asset definition.

⁶⁶ G Maia and J Vieira dos Santos, 'MiCA and DeFi' (2021), available at: ssrn.com/abstract=3875355.

⁶⁷ S Davidson, P de Fillippi and J Potts, 'Blockchain and the Economic Institutions of Capitalism' (2018) 14 *Journal of Institutional Economics* 639.

⁶⁸ IH-Y Chiu, *Regulating the Crypto-economy: Business Transformations and Financialisation* (Hart Publishing, 2021).

the needs for protection, while the characteristics of supply and demand sides are also being figured out. It is also inevitable that bespoke regimes do not stand alone and need to be comparatively considered with existing regulatory regimes in relation to where advantages and disadvantages lie for both challengers and incumbents. It is possible to conceive of bespoke regulation as transitory or experimental. For example, after regulating loan-based and equity-based online crowdfunding differently, the UK FCA has made harmonising adjustments between the two regimes. Regulators more than ever need to consider when regulatory fragmentation serves certain purposes and when such fragmentation may need to be revisited.

Next, we interrogate the rise of BigTech in finance which raises pressing issues for considering if financial regulation should reconsolidate around the risks they pose, instead of fragmenting along more specialist lines.

IV. THE ENTRY OF BIGTECH INTO FINTECH: REGULATORY ARBITRAGE, COMPETITION CONCERNS AND THE CORRESPONDING REGULATORY RESPONSES

This section first explores the challenges brought about by the advent of BigTech into fintech (section 4.A). Next, it examines the corresponding, financial regulation and BigTech-specific, regulatory responses that have recently emerged (section 4.B).

A. Challenges

We identify two main challenges. First, the risk of regulatory arbitrage. Second, the competition risks that arise from the various competitive strategies and business models adopted by BigTech in finance. Each will be examined in turn.

As already discussed above, many authorities around the globe explicitly adopt a ‘same business, same risks, same rules’ approach to fintech providers, including those with a platform-based business model. In other words, they apply existing licensing, regulatory reporting, deposit insurance, capital and liquidity requirements to fintech and BigTech platforms.⁶⁹ This effort to fit new models into existing regulatory schemes, so as to make sure that entities carrying out the same activity follow the same set of rules (regardless of how they carry them out) is explained by the need to avoid regulatory arbitrage.

However, the recent foray of BigTech into finance and the challenges surrounding its regulation reveal that the promotion of a level playing field between incumbents and new entrants and the promotion of, mostly, innovation-based

⁶⁹JC Crisanto, J Ehrentraud and M Fabian, ‘Big Techs in Finance: Regulatory Approaches and Policy Options’ (March 2021) FSI Briefs No 12.

competition do not always go hand-in-hand.⁷⁰ Primarily because of the variety of business models characterising their operation, BigTech cannot be easily pigeonholed into existing regulatory frameworks. This creates opportunities for regulatory arbitrage. For example, differences in the regulatory treatment of banks and non-bank financial institutions may have an implication for what type of financial services BigTechs choose to provide and how to provide them. Banks and certain non-bank financial institutions are subject to microprudential requirements based on internationally agreed standards.⁷¹ These make them subject to minimum capital obligations calculated on the basis of their consolidated balance sheets, and supervisors must review the main activities of the group as a whole. In addition, banks identified as global systemically important banks are subject to additional prudential measures to mitigate the problems which would emanate from their failure.⁷² In cases where a BigTech entity operates through partnerships or joint ventures with incumbents and provides its financial services in collaboration with financial entities, it will normally not need any licence. This, however, can be problematic, since the unbundling of financial services across multiple players can render unclear who is accountable for which risk or activity and, relatedly, it may encourage risk-taking behaviour when it comes to screening and monitoring activities that could impact the financial condition of the firms involved. More concretely, with regard to financial stability, partnerships with incumbents could diffuse accountability and promote excessive risk-taking when BigTech firms provide only the customer-facing layer of the value chain while not bearing any underwritten risks themselves.

Before we turn to examine the competition risks, it is useful to first appreciate the advent of BigTech into finance and the various competitive strategies they have implemented. This is crucial for better understanding the competition concerns that call for BigTech-specific regulation. While BigTech firms do not operate primarily in financial services, they offer them as part of a much wider set of activities. BigTech firms' involvement in finance started with payments and they are now also involved in the provision of credit banking, crowdfunding, asset management and insurance. BigTech firms provide their financial services either in competition with traditional financial institutions (head-to-head competition), raising funds and lending them to consumers and firms, or in partnerships with financial institutions, with BigTech firms only providing the customer-facing layer (eg, Apple/Goldman Sachs and Amazon/JPMorgan Chase to offer credit cards). Traditional financial regulation, even in a functional manner, may not fully capture the entity-based risks posed by BigTech as

⁷⁰F Restoy, 'Fintech Regulation: How to Achieve a Level Playing Field' (2021) FSI Occasional Paper No 17.

⁷¹See the Basel III regulatory framework, available at: www.bis.org/bcbs/basel3.htm#:~:text=Basel%20III%20is%20an%20internationally,and%20risk%20management%20of%20banks.

⁷²See discussion in IH-Y Chiu and J Wilson, *Banking Law and Regulation* (Oxford University Press 2019) chs 8 and 9.

well as govern their tremendous power. Apart from providing financial services themselves, BigTech firms are also investing in financial institutions outside their groups. When competing with traditional financial institutions, BigTech firms can either effectively become banking intermediaries, bundle their offers, and exploit economies of scope using different activities within their platforms, or they can become a multi-sided intermediary platform. For example, as intermediaries they may offer cheap credit to customers who subscribe to their online services outbidding incumbents with a narrower product portfolio.⁷³ When acting as a multi-sided platform, they may benefit from network effects by bringing together lenders and borrowers (marketplace model). In the latter case, the advent of BigTech's platform-based business model in financial services can change the market structure. As Padilla explains, banks may need to join these platforms in order to reach out to borrowers and 'borrowers who have joined a marketplace that is participated by many banks or other lenders will likely benefit from increased banking competition'.⁷⁴ This is in contrast to the status quo where each borrower is de facto locked into the bank with which it has a relationship.

Where platforms collect large amounts of data for a variety of different business lines, this may lead to network effects and economies of scale and scope. Also, BigTech firms have the potential to become dominant through the advantages afforded by the so-called data analytics, network externalities and interwoven activities loop (otherwise referred to as 'data-network-activities loop' or 'DNA loop'), raising competition concerns.⁷⁵ Once a BigTech has attracted a sufficient mass of users on both sides of its platform, network externalities kick in, accelerating its growth and increasing returns to scale leading to a 'winner-takes-all' situation.⁷⁶ Every additional user creates value for all others – more buyers attract more sellers and vice versa. The more users a platform has, the more data it generates. More data, in turn, provides a better basis for data analytics which enhance existing services and attracts more users. As an example, payment services generate transaction data, network externalities facilitate the interaction among users, and this helps BigTech firms in other activities such as wealth management generating more engagement with existing users and attracting new ones.⁷⁷ Thus, network externalities are stronger on platforms

⁷³ J Padilla, 'Big Tech "Banks", Financial Stability and Regulation' (20 April 2020), available at: papers.ssrn.com/sol3/papers.cfm?abstract_id=3580888.

⁷⁴ *ibid.*, 5.

⁷⁵ For instance, in the UK, Google and Facebook have already been found dominant in the online advertising market. See UK Competition and Markets Authority (2020), 'Online Platforms and Digital Advertising Market Study', 5: 'Both are now protected by such strong incumbency advantages – including network effects, economies of scale and unmatched access to user data – that potential rivals can no longer compete on equal terms'.

⁷⁶ P Belleflamme and M Peitz, *The Economics of Platforms: Concepts and Strategy* (Cambridge University Press, 2021).

⁷⁷ For an analysis see K Croxson, J Frost, L Gambacorta and T Valletti, 'Platform-based Business Models and Financial Inclusion' (10 January 2022) BIS Working Papers No 986, available at: www.bis.org/publ/work986.pdf.

that offer a broader range of services. One would expect the source and type of data and related DNA synergies to vary across BigTech platforms, depending on their main focus and activity. For example, BigTech firms with a focus on social media have data on individual preferences as well as their network of connections. E-commerce platforms collect data from vendors, and combine financial and consumer preferences information. This data can be invaluable in credit scoring models.

While BigTech's DNA loop can lower the barriers to the provision of financial services by reducing transaction costs, they could at the same time introduce new risks if the DNA loop is left unchecked. BigTech's market power and business models raise specific issues such as customer protection as part of financial regulation, as well as general problems in terms of market power and the governance of data privacy. Significant network effects may enable BigTech firms to become gatekeepers, 'allowing them to leverage their dominant position in a given market to exert influence over its functioning'.⁷⁸ This may include control over who can enter the market, who receives what kind of data and how the market operates. Their sphere of influence in one market often extends to other adjacent markets connected to it. Furthermore, BigTech firms' large and captive user base allows them to scale up quickly in market segments that are outside their core business. Once a captive userbase has been established, potential competitors may have little scope to build rival platforms.

Dominant platforms can consolidate their position by raising entry barriers and over time become bottlenecks for a host of services. There is the potential for various anticompetitive practices. First, price discrimination, including through the use of big data. Once their dominant position in data is established, BigTech companies can divide a customer population in categories each charged a different price representing the maximum price each individual is willing to pay.⁷⁹ By extracting more of the consumer surplus by those willing to pay more, prices can also be reduced for those able to pay less. But such price discrimination may overlap with protected categories such as gender and race.⁸⁰

Second, anticompetitive behaviour, such as creating barriers to entry and 'enveloping' competitors. Envelopment refers to entry by one platform provider into another provider's market by bundling its functionality with that of the target, to leverage shared user relationships.⁸¹ To explain this further, when BigTech firms have accumulated large datasets about individual consumers they

⁷⁸ Crisanto et al (n 69) 4.

⁷⁹ O Bar-Grill, 'Algorithmic Price Discrimination When Demand Is a Function of Both Preferences and (Mis)Perceptions' (2019) 86 *University of Chicago Law Review* 217; M Stucke, 'Should We Be Concerned About Data-opolies?' (2018) 2 *Georgetown Law Technology Review* 275.

⁸⁰ See L Sweeney, 'Discrimination in Online Ad Delivery' (2013) 11 *Communications of the ACM* 44.

⁸¹ T Eisenmann, G Parker and M van Alstyne, 'Platform Envelopment' (2011) 32 *Strategic Management Journal* 1270.

can combine them with payments data in order to deliver products that traditional banks cannot replicate. Banks then risk being enveloped by the platform operator who can now bundle services that cannot be replicated by traditional players, such as banks, ultimately leading to market tipping in the banking sector too.⁸² In principle, financial services can also help platform operators to tip other markets. For example, if a consumer is buying a car or a refrigerator, and a platform operator offering financial services like loans or insurance knows consumer preferences and creditworthiness in real time, this may help it to tip these markets as well. A platform operator may also steer users towards its own (or its preferred partners') financial services, for instance by putting these offers at the top of a list of offers. Or it may favour its own products and try to obtain higher margins by making financial institutions' access to prospective clients via their platforms more costly.

Third, the use of sophisticated algorithms by BigTech may impede competition 'on the merits', for example a platform operator might self-preference its own goods and services over the offerings of competitors on its platform. In its recently published paper the UK Competition and Markets Authority (UK CMA) also discusses how algorithmic design in search ranking practices might achieve self-preferencing outcomes leading to foreclosure.⁸³

Fourth, there exists also the risk of data privacy violations. Unlike the case of credit reporting, where the data can only be accessed by licensed entities and only upon customer consent and for authorised purposes, in the case of BigTech the data those firms capture are far more granular and touch several aspects of one's personal life, thus increasing the impact of privacy-related violations.

Differentiation strategies and multi-homing can temper platforms' winner-takes-all dynamic. For example, a platform offering banking services may distinguish itself by specialising in enhanced privacy protection. Multi-homing, ie, the possibility of users to utilise more than one platform at the time,⁸⁴ also plays a role in constraining the winner-takes-all dynamic. However, this is not easy to achieve in practice, because of behavioural biases such as default bias, or consumer inertia in switching.⁸⁵ Hence the need for regulation to promote, inter alia, interoperability, as we shall explain in the section below.

Having explored the competition risks arising from the entry of BigTech in finance, we can now turn to the regulatory responses. The remainder of this chapter surveys the regulatory approaches in competition, general and financial

⁸² J Padilla and M de la Mano, 'Big Tech Banking' (2018) 14 *Journal of Competition Law & Economics* 494.

⁸³ CMA (2021), 'Algorithms: How They Can Reduce Competition and Harm consumers', available at: www.gov.uk/government/publications/algorithms-how-they-can-reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers.

⁸⁴ JP Choi, 'Tying in Two-Sided Markets with Multi-Homing' (2010) 58 *Journal of Industrial Economics* 607.

⁸⁵ D Kahneman, *Thinking, Fast and Slow* (Allen Lane, 2011).

regulation in order to determine to what extent a holistic or joint approach is perceived by regulators to address the mixture of objectives in regulating BigTech and fintech firms' emergence in finance. We argue that the response is generally reactive and can be improved.

B. Regulatory Responses

While BigTech firms are subject to several regulations, the regulatory approach up to now is mostly activity based and does not seem to pay due attention to the unique features of their business models and the corresponding risks. Because platform-based business models differ from traditional modes of offering financial services, there is the potential for regulatory arbitrage. Finance-specific regulations and cross-industry regulations are geared towards individual legal entities within BigTech groups or the specific activities they perform and not the risks from possible spillover effects across all the activities BigTechs perform. Further, this activity-specific approach in financial regulation has already not coped well with financial supermarkets, which are financial services firms with multiple lines of businesses and scale, performing regulatory arbitrage among different types of financial services to benefit from most favourable regulatory treatment. Hence, the mixing of financial activities with other non-financial operations and activities in the BigTech context will further challenge financial regulators. This may lead to some activities and risks falling into the cracks of existing regulation and supervision. Moreover, the current policy approach falls short of allowing for recognition of the potential systemic impact of incidents in BigTech operations. There may therefore be the need to complement the activity-based approach with an entity-based approach, particularly when BigTech platforms become systemically important.⁸⁶

Another approach to address the disruption caused by the entry of fintech and BigTech firms, adopted by many countries around the globe is to set up innovation facilitators, such as sandboxes, innovation hubs and accelerators.⁸⁷ These can help reduce uncertainty about financial regulation, such as licensing expectations, but they fail to address the issues brought about by BigTech. Other countries have adopted new licensing regimes to account for new entities and activities and/or have updated existing regulations. This has included defining new types of licences, for example for virtual banks that allow for digital-only banks with targeted regulatory requirements.⁸⁸

⁸⁶ See Crisanto et al (n 69) 10.

⁸⁷ 'Regulatory Sandboxes and Innovation Hubs for Fintech', available at: [www.europarl.europa.eu/RegData/etudes/STUD/2020/652752/IPOL_STU\(2020\)652752_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2020/652752/IPOL_STU(2020)652752_EN.pdf).

⁸⁸ eg, China's first virtual bank, aiBank, a joint venture between China CITIC Bank and tech player Baidu offers financial solutions to underbanked younger customers.

Other approaches include enhancing competition through application programming interfaces (APIs) to enhance data portability. The most salient case comes from the relatively recent Open Banking initiative that was introduced in the United Kingdom in 2018.⁸⁹ Open Banking allows users to securely share banking data with third parties through application programming interfaces pursuant to PSD2 thus allowing competitors to offer services based on the same user data. The UK CMA requires banks to adopt and maintain a common and open API standard that permits authorised intermediaries to access information about bank services, prices and service quality. Among the many firms enrolled in Open Banking, there are several fintech firms developing innovative solutions helping consumers manage their cash flow more effectively or improve how they save.⁹⁰ However, under the General Data Protection Regulation (GDPR), BigTech platforms are obliged to facilitate data portability only where it is *technically feasible*, thus allowing them to retain economic sovereignty over their customers' data.⁹¹ Hence, BigTech platforms benefit from a *regulatory asymmetry* when competing with established banks in Europe.

Thus, the foray of platform-based business models in finance requires more proactive, regulatory in nature policies to address the potential risk of the various anticompetitive practices discussed above. Prominent among these is data sharing, data unbundling and interoperability, all contemplated in the Digital Markets Act (DMA), a legislative proposal of the European Commission to deal with dominant digital companies (defined as 'gatekeepers') that was recently adopted by the EU Parliament.⁹² Article 6(1)(h) of the DMA proposal requires gatekeepers to provide

effective portability of data generated through the activity of a business user or end user, and shall, in particular, provide tools for end-users to facilitate the exercise of data portability, in line with Regulation EU 2016/679, including by the provision of continuous and real-time access.

Article 5(a) of the DMA limits the scope for bundling banking data with data stemming from, say, a search engine, unless there is consent. However, it is not entirely clear what is meant by 'specific choice' and 'consent' according to Recital 36. Finally, platforms are interoperable if the users of one platform are

⁸⁹ A Brener, 'EU Payment Services Regulation and International Developments' in IH-Y Chiu and G Deipenbrock (eds), *Routledge Handbook of Financial Technology and Law* (Routledge, 2021).

⁹⁰ Plum offers a savings app that links to a person's bank account, analyses their income, expenses and spending habits and helps to set aside an affordable amount for savings. It can also help people review their spending, understand where they may be overpaying on bills and engage a utility switching service.

⁹¹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) [2016] OJ L119/1, Art 20 (2).

⁹² 'Proposal of the Commission of 15 December 2020 for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act)' COM(2020) 842 final (hereafter DMA).

able to interact with the users of another platform. Seen this way, interoperability plays a similar role to multi-homing, in that the implications of choosing a particular platform do not prevent users from interacting with users on the other platform. For example, interoperability in payment systems can facilitate competition and lead to greater efficiency in payments. Interoperability may have to be supported by *ex ante* competition policy tools. Indeed, interoperability is one of the key proposals in the DMA. Provisions are made for gatekeepers to ensure interconnection and interoperability with competing core platform services providers: gatekeepers should grant access to technical functionalities used in the provision of ancillary services,⁹³ grant access to data held by the gatekeeper and provider or generated by businesses and users,⁹⁴ and in the case of search engines, grant access to search-related data.⁹⁵

In the United Kingdom, the Digital Markets Taskforce has recommended the creation of a Digital Markets Unit (now established in shadow form) with new powers to support greater competition in digital markets.⁹⁶ The Taskforce has proposed that there should be an *ex ante* code of conduct for the most powerful of digital firms. In the United States, the House of Representatives Subcommittee on Antitrust, Commercial, and Administrative Law issued a list of recommendations to regulate BigTech platforms so as to reduce anticompetitive behaviour.⁹⁷ In China, the State Administration for Market Regulation in November 2020 published draft guidelines to prevent monopolistic behaviour by internet platforms,⁹⁸ which were finalised and issued by the Anti-Monopoly Commission of the State Council in February 2021.⁹⁹ Together, these measures show that a more proactive, entity-based approach to antitrust policy for platforms is being adopted globally, in many cases defining new frameworks and institutions to keep markets competitive.

V. TRENDS TOWARDS REGULATORY (RE)CONSOLIDATION AND LEVELLING THE PLAYING FIELD?

This section discusses the trends towards regulatory ‘stock-taking’ and ‘reconsolidation’ of regulatory governance in response to market and structural changes introduced by fintech and BigTech. These may apply beyond the fintech sectors

⁹³ DMA, 6 (1)(f).

⁹⁴ DMA, 6(1)(i).

⁹⁵ DMA, 6 (1)(j).

⁹⁶ See Digital Markets Taskforce (2020), available at: www.gov.uk/cma-cases/digital-markets-taskforce.

⁹⁷ See: judiciary.house.gov/uploadedfiles/competition_in_digital_markets.pdf?utm_campaign=4493-519.

⁹⁸ For a full Chinese version of the draft guidelines, see: www.samr.gov.cn/hd/zjdc/202011/t20201109_323234.html.

⁹⁹ For the Chinese version, see: gkml.samr.gov.cn/nsjg/fldj/202102/t20210207_325967.html.

as new technologies raise governance issues in a cross-cutting manner for many businesses, such as in relation to digitalisation, cloud computing, platformisation, use of machine learning in artificial intelligence systems and blockchain technology enabling peer-to-peer automated transactions. We see reconsolidating regulations as a means of addressing similar digital commercial risks across sectors in a consistent manner, including in finance. On the one hand, these may fill gaps in financial regulation where the nature of risks emanating from a financial activity is not merely financial in nature but relates to cross-cutting issues such as data governance and privacy. On the other hand, this trend may create a more regulatory patchwork in addition to sectoral regulation. Further, such reconsolidating regulation also needs to be mindful of a level playing field for digital services and should not be pitched at a level only targeted at BigTech. In this section, we briefly survey a number of reconsolidating regulatory proposals from the European Union.

The GDPR is often regarded as a key legislative endeavour of cross-cutting nature, ensuring common standards in business handling of personal data and data subjects' horizontal, cross-cutting rights.¹⁰⁰ The GDPR gives customers more control over their data compared with Open Banking regulations. To the extent that they entail the transfer of data ownership from BigTech firms to customers, both regulations can promote market contestability. At the same time, however, they limit the scope of data sharing. Open Banking regulations restrict the range of data that can be shared (financial transaction data) as well as the institutions among which such data can be shared (accredited deposit-taking institutions). Similarly, the GDPR requires a customer's active consent before a firm can use their personal data. The Platform to Business Regulation (P2B Regulation)¹⁰¹ aims to promote transparency and fairness of all 'intermediation services' and search engines linking businesses and corporate websites with consumers, including on access to data. The recently agreed Data Governance Act¹⁰² will further provide rights of data portability between businesses as well as government and business. The recently agreed DMA¹⁰³ addresses the technological innovation of platformisation, and the techniques deployed by platforms in relation to big data, bundling and cross-selling or tying of services or products, profiling and marketing, etc.

¹⁰⁰ ME Kaminsky, 'Binary Governance: Lessons from the GDPR's Approach to Algorithmic Accountability' (2019) 92 *Southern California Law Review* 1529.

¹⁰¹ Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services [2019] OJ L186/57.

¹⁰² 'Proposal for a Regulation of the European Parliament and of the Council on European data governance (Data Governance Act)' (2020), available at: eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0767.

¹⁰³ 'Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act)' (December 2020), available at: eur-lex.europa.eu/legal-content/en/TXT/?qid=1608116887159&uri=COM%3A2020%3A842%3AFIN.

That said, sectoral specific differences continue to be maintained such as in terms of financial data portability in the PSD2¹⁰⁴ and in the Regulation of online crowdfunding platforms.¹⁰⁵

The proposed Digital Services Act¹⁰⁶ (DSA) provides cross-cutting rules for a range of digital services providers from web-hosting services to online platforms, reserving a definition of very large platforms upon which more regulatory obligations are imposed. The proposed Act sets out common obligations of conduct of business and standardises for platforms certain consumer protection measures such as removal of illegal content,¹⁰⁷ transparency of advertising,¹⁰⁸ instituting complaint and redress mechanisms.¹⁰⁹ Very large platforms are obliged to be subject to regulations on their organisational governance and controls.¹¹⁰ These cross-cutting rules provide a set of consistent expectations for conduct of digital business. However, one queries if the obligations have been distilled from the strongest sectoral regulations found in EU legislation, such as in MiFID. The investor protection provisions such as complaints and redress handling and oversight of third-party suppliers are relatively strong¹¹¹ and seem to have influenced the DSA, although it is arguable that outsourcing regulations in finance are more prescriptive and detailed. In this manner, cross-cutting regulation may not be genuinely cross-cutting if it results largely in an exercise of upgrading for consistency across sectors.

The proposed Regulation for artificial intelligence (AI) systems¹¹² purports to set out governance expectations of systems with unacceptable, high, limited or minimal risks to persons and society, but regulatory delineations as well as governance standards and design are subject to controversy and critique.¹¹³ When introduced, this cross-cutting legislation will affect not only fintech

¹⁰⁴ See O Borgogno and G Colangelo, 'Data Sharing and Interoperability Through APIs: Insights from European Regulatory Strategy' (2018), ssrn.com/abstract=3288460; 'Data, Innovation and Competition in Finance: The Case of the Access to Account Rule' (2020) 31 *European Business Law Review* 573.

¹⁰⁵ PSD2, s 3.

¹⁰⁶ 'Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC', available at: eur-lex.europa.eu/legal-content/en/TXT/?qid=1608117147218&uri=COM%3A2020%3A825%3AFIN (hereafter DSA).

¹⁰⁷ DSA, Arts 8, 13–15, 19–20.

¹⁰⁸ DSA, Art 24.

¹⁰⁹ DSA, Arts 17, 18.

¹¹⁰ DSA, Arts 25–28, 32.

¹¹¹ MiFID, Art 75.

¹¹² 'Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act)' (2021), available at: eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206.

¹¹³ N Smuha et al, 'A Response to the European Commission's Proposal for an Artificial Intelligence Act' (2021), available at: ssrn.com/abstract=3899991; M Veale and F Zuiderveen Borgesius, 'Demystifying the Draft EU Artificial Intelligence Act' (2021) *Computer Law Review International*, available at: doi.org/10.9785/cr-2021-220402.

businesses applying algorithmic credit scoring¹¹⁴ or algorithmic compliance such as with anti-money laundering,¹¹⁵ but also other sectors dealing with self-learning systems in production, marketing and other operations, such as in medical diagnostics.¹¹⁶ We also observe examples of more limited forms of consolidating regulatory initiatives such as in the Digital Operational Resilience Act¹¹⁷ (DORA) and proposed Regulation for Market Infrastructures using Distributed Ledger Technology (DLT).¹¹⁸ DORA applies exclusively to financial firms although digital operational resilience is increasingly becoming pervasive for businesses that pivot towards digitalisation. DORA is also heavily based on the assumption that observed technological outsourcing is largely made to cloud computing providers dominated by BigTech,¹¹⁹ hence necessitating a form of direct supervision of outsourcees by European financial regulatory agencies. Arguably, DORA may not be taking into account the rise of blockchain-based cloud computing¹²⁰ and how this may affect the market. The proposed Regulation for Market Infrastructures using DLT is highly limited to existing markets for securities and financial instruments, although DLT may be more widely used for a variety of digitalised commercial markets.

Reconsolidating regulatory endeavours in the European Union are horizontal legislative initiatives, ie, they apply across one or more business sectors. Commentators see this as positive, since common standards for certain technologies can be established, addressing common governance problems in a consistent manner.¹²¹ This minimises opportunities for unintended regulatory arbitrage by businesses. In particular, horizontal legislative initiatives may capture BigTech companies' activities that are increasingly diversified, whereas sectoral regulation may fail to address the full extent of their governance problems or large-scale risks.¹²² In relation to the EU's proposed regulation for

¹¹⁴ K Langenbucher, 'Responsible A.I.-based Credit Scoring – A Legal Framework' (2020) 31 *European Business Law Review* 527; N Aggarwal, 'The Norms of Algorithmic Credit Scoring' (2020), available at: papers.ssrn.com/sol3/papers.cfm?abstract_id=3569083.

¹¹⁵ Accenture, *Evolving AML Journey* (2017), available at: www.accenture.com/_acnmedia/pdf-61/accenture-leveraging-machine-learning-anti-money-laundering-transaction-monitoring.pdf.

¹¹⁶ EJ Topol, 'High-Performance Medicine: The Convergence of Human and Artificial Intelligence' (2019) 25 *Nature Medicine* 44.

¹¹⁷ 'Proposal for a Regulation of the European Parliament and of the Council on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014 and (EU) No 909/2014' (September 2020), available at: eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0595.

¹¹⁸ 'Proposal for a Regulation of the European Parliament and of the Council on a pilot regime for market infrastructures based on distributed ledger technology', available at: eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0594.

¹¹⁹ H Scott, 'The EU's Digital Operational Resilience Act: Cloud Services & Financial Companies' (2021), available at: ssrn.com/abstract=3904113.

¹²⁰ eg, Filecoin.io.

¹²¹ Borgogno and Colangelo (n 104).

¹²² A Boot, P Hoffmann, L Laeven and L Ratnovski, 'Fintech: What's Old, What's New?' (2021) 53 *Journal of Financial Stability* 100836; LP Rodriguez and P Urbiola Ortún, 'From Fintech to Bigtech: An Evolving Regulatory Response' (2020) 229 *Boletín de Estudios Económicos* 119.

AI systems, Floridi argues in favour of the nature of horizontal legislative initiatives, as they are rooted in the common values and protective rights enshrined as fundamental in the European Union and constitute an emerging ‘EU digital constitution’.¹²³ There may also be scope for EU regulation to influence international harmonisation but, equally, such regulation may present tensions and opportunities for regulatory arbitrage for global technology companies where international regulatory fragmentation persists.¹²⁴

However, reconsolidating regulatory endeavours is fraught with challenges. Although policymakers observe cross-cutting issues, themes and the need for common standards, the identification of issues may be incomplete and the framing of scope of application may be challenging. The scope of application can be over-inclusive and there may be cases yet again for exceptions for sectoral approaches with specific needs.¹²⁵ There may also be a risk that all-inclusive cross-cutting regulation would be high-level and based on principles which are susceptible to varied implementation. As observed in the proposed Regulation for AI systems, as well as DORA, cross-cutting legislation often imports heavy doses of meta-regulation. Meta-regulation refers to a regulatory technique whereby only broad standards or principles are spelt out in legislation, such as ‘robust risk governance’, while firms are left to implement the exact processes and frameworks that would achieve the set standards or principles.¹²⁶ Meta-regulation can be heavily relied upon when technical implementation details are not yet mature for standardisation and the regulator relies on firms’ technical and organisational expertise for their individual implementation, subject to regulators’ meta-level oversight. Such regulatory designs can effectively co-opt the private sector to work together with public regulatory goals, but can also give rise to minimalism, shirking and cosmetic compliance that are difficult to oversee by the regulator.¹²⁷

Further, the scope of cross-cutting regulation can also be under-inclusive if based on certain assumptions of technological development. For example, in the proposed Regulation for DLT market infrastructures, EU policymakers have decided to provide standardisation for the use of DLT in the settlement

¹²³ L Floridi, ‘The European Legislation on AI: a Brief Analysis of its Philosophical Approach’ (2021), available at: ssrn.com/abstract=3873273.

¹²⁴ DW Arner, G Castellano and E Selga, ‘The Transnational Data Governance Problem’ (2022) *Berkeley Technology Law Journal*, forthcoming, available at: papers.ssrn.com/sol3/papers.cfm?abstract_id=3912487.

¹²⁵ eg, whether platformisation raises special issues for finance, EBA, *Report on Use of Digital Platforms* (September 2021), available at: www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Reports/2021/1019865/EBA%20Digital%20platforms%20report%20-%2020210921.pdf.

¹²⁶ C Parker, *The Open Corporation* (Cambridge University Press, 2000); F Akinbami, ‘Is Meta-Regulation All it is Cracked Up to Be? The Case of UK Financial Regulation’ (2013) 14 *Journal of Banking Regulation* 16.

¹²⁷ J Black, ‘Paradoxes and Failures: “New Governance” Techniques and the Financial Crisis’ (2012) 75 *Modern Law Review* 1037.

and clearing of existing markets for financial instruments, but this may turn out to be under-inclusive given the developments in DeFi and the engagement of non-conventional financial assets. The scope of this proposal might also not capture the deployment of DLT in other forms of commerce. Reconsolidation can indeed lead to new siloes.

Horizontal legislative endeavours may also have the effect of introducing new normative responsibilities, duties and obligations. These are not uncontroversial. For example, the proposed Regulation for AI systems imposes an array of compliance duties for ‘providers’ of systems, while ‘approved representatives’, ‘distributors’ or ‘users’ are subject to relatively less burden, relying on providers’ primary compliance. It is questionable whether the optimal balance is achieved in such allocation of responsibility in cases where users commission bespoke systems and are intensely involved in design. It is also commented that private enforcement rights for harms are not articulated in the proposed Regulation.¹²⁸ In the DMA, although certain prescriptive standards for platforms’ gatekeeper conduct are based on observed monopolistic practices, one of us has argued that there is scope to consider standardising more of the expected governance standards and users’ rights in relation to platforms.¹²⁹

Although reconsolidation poses a regulatory risk, regulators are in a continuous learning landscape in relation to introducing bespoke regulation as well as reconsolidation initiatives. This may not appeal to needs for legal certainty, but stability of law or regulation may, in fact, be inefficient, if maintained in the face of disruptive change.¹³⁰

VI. CONCLUSION

Fintech and BigTech entrants have already made substantial inroads in some market segments and incumbent traditional financial institutions are also moving closer to a platform-based business model. The overall public policy objective is to respond to these disruptors so as to benefit from the gains while limiting the risks. But as their operations span regulatory perimeters, regimes and geographical borders, new challenges emerge both to substantive regulation and to regulatory agencies.

We propose a high-level response both when it comes to substantive regulation and to regulatory agencies. As shown in this chapter, much work is under

¹²⁸ Smuha et al (n 113).

¹²⁹ IH-Y Chiu, ‘The Platform Economy and the Law of Organisations and Governance’ in RM Barker and IH-Y Chiu (eds), *The Law and Governance of Decentralised Business Models* (Routledge, 2020).

¹³⁰ For the debates between keeping law coherent in spite of technological changes and instrumentally refashioning law, see R Brownsword, *Law, Technology and Society: Reimagining the Regulatory Environment* (Routledge, 2019).

way in relation to substantive regulation, in terms of: (a) specialist fintech regulation where evidence suggests they are sufficiently different and that their innovative potential should not be damaged by applying existing over-inclusive and onerous regulations; and (b) reconsolidatory regulations that attempt to minimise sectoral inconsistencies and duplication where digital services are concerned. Together, they form an evolutionary process, as this corpus need not be the end point in substantive regulation. This corpus benefits from allowing sectoral specific risks to be addressed while also recognising cross-cutting issues.

The more challenging aspect is at the level of regulatory agencies. Many regulatory agencies are sector-facing in nature, although cross-cutting agencies such as the competition or data/information authorities have been set up to deal with cross-cutting competition law and new GDPR compliance. Perhaps there needs to be more institutional thinking about the needs for sectoral regulators to absorb new risk perceptions while also cooperating with existing cross-cutting agencies. Such cooperation should also be extended internationally, given the cross-border nature of many innovations. Applying a cross-agency approach to fintech (involving relevant ministries and agencies) could help foster domestic coordination and reinforce the policy framework. Coordination across multiple arms of government and regulatory agencies (financial and non-financial) is needed in fintech, as it often generates novel complexities from new firms, products and activities that lie outside the current regulatory perimeter. However, cross-agency coordination is not straightforward in nature and can involve trade-offs between multiple policy goals. For example, consider the interplay between competition objectives and financial stability. One would expect entry of new firms into banking to foster competition and reduce the incumbent's market power, but this may come at a cost of financial stability. Furthermore, the relationship between entry and effective competition may be far from obvious when the BigTech's DNA feedback loop is taken into account. New entry may not increase market contestability and competition, when BigTech firms are able to entrench their market power through the control of key digital platforms, such as e-commerce platforms. Such coordination, between competition authorities and financial services regulators is likely to be more difficult than coordination between financial authorities. Interoperability is a prime example of the need for a joined-up approach in government to create a conducive policy environment for fintech. Interoperability stands out as a critical component in building up the backbone of the fintech ecosystem and achieving it requires coordination of several foundational infrastructures (eg, telecommunications) along with digital and financial infrastructures (such as broadband internet mobile data services, data repositories, and payment and settlement services). Further, cross-agency coordination also gives rise to questions regarding the enforcement turf, ie, who has responsibility for supervision and enforcement, and hence the committal of regulatory resources that may benefit the wider network of agencies involved. Finally, this chapter foreshadows further questions, which cannot be explored fully, such as whether new cross-cutting agencies are needed, and to what extent

would there be existential threats to present regulatory agencies, whether sectoral or cross-cutting. A telling example comes from the United Kingdom, where the Penrose Report suggests a number of radical changes to the architecture and operation of UK competition and utility regulation.¹³¹ One of the most radical proposals is that of centralising monopoly regulation under a proposed new unit in the UK CMA – a Network and Data Monopolies Unit (NDMU). In time, the Report envisages the role of sectoral regulators being entirely subsumed by the UK CMA, with regulators' residual oversight of core network monopolies being handed to the NDMU. The evolution of agencies has not caught up with the evolution of legal standards we canvass above, but is a development we look forward to.

¹³¹ In September 2020, John Penrose MP was commissioned by the UK Chancellor of the Exchequer and the Secretary of State for Business, Energy and Industrial Strategy to write an independent report on how the UK's approach to competition and consumer issues could be improved. The report was published in February 2021; see, 'Power to the People: Independent Report on Competition Policy' available at: www.gov.uk/government/publications/power-to-the-people-independent-report-on-competition-policy.