Providing Meaningful Protection for Mobile Payment Consumers: What Tools are fit for Purpose?

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Refereed Article (Accepted version)

Keywords Mobile Payments · Consumer Protection · Information Remedies · Mandatory Disclosures · Financial Consumer Education ·

Abstract

Mobile payments provide consumers with an innovative and convenient way of exchanging value. However, there are broader implications involved in adopting them especially in the area of consumer protection. Owing to the consumer issues associated with mobile payments, it is imperative that regulators develop appropriate responses to these issues. A starting point in protecting mobile payment consumers is to ensure that they have access to the information necessary for evaluating the suitability of the service. This article considers two information remedies which may assist consumers in making such informed evaluations. While acknowledging the usefulness of these remedies, the article highlights the need for a more robust approach to protecting mobile payment consumers.

Introduction

Mobile payments ("m-payments") represent any payment in which a mobile device is used to initiate, authorise and confirm an exchange of financial value.[1] The innovation in m-payments lies not only in the method of giving instructions to execute financial transactions but also in the identity of new intermediaries involved such as Mobile Network Operators (MNOs).[2] Underneath this novelty, is still a basic payments framework involving a payer and payee accepting variations to their balance, vis-a-vis a third party, as payment.[3] Thus, as with traditional payment methods, m-payments still involve three basic steps in payment processing - authorisation, settlement and funding.[4]

The ubiquitous nature of mobile devices and their impressive technological capacity make m-payments an attractive service for several reasons. First, m-payments are attuned to

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[1] Y.A. Au, R.J. Kauffman, 'The Economics of Mobile Payments: Understanding Stakeholder Issues for an Emerging Financial Technology Application' (2008) 7 Electronic Commerce Research and Applications 141, 141.

[2] R. Bollen, 'Recent Developments in Mobile Banking and Payments' (2009) 24(9) JIBLR 454, 454.

[3] R. Bollen, 'Recent Developments in Mobile Banking and Payments' (2009) 24(9) JIBLR 454, 454.

[4] <https://www.chasepaymentech.com/the_basics.html> accessed 31 January 2018.

customer needs. Findings suggest that the relative advantage of m-payments is tied to the specific benefits provided by mobile technology.[5] With the aid of their mobile device, a consumer can remotely perform domestic and international bill payments and execute peer-to-peer transfers without the limitation of time and location.[6] These advantages will be particularly significant where there is an unexpected need to make a payment.[7]

Second, m-payments are well suited for micro-payment transactions which are expensive when made with traditional non-cash alternatives.[8] M-payments will assist consumers with everyday small-value transactions eliminating the inconvenience of carrying coins and loose change.[9] Thus, m-payments will be conveniently used at vending and ticketing machines and to support other micro-payments for digital content like ringtones, logos, music or games.[10]

M-payments also present a high degree of flexibility because they can be funded in several ways. To begin with, funding may be directly from a bank account or a pre-paid account held with a non-bank service provider such as an MNO. M-payment transactions may also be funded through debit, credit or prepaid cards. Another option is to pay for purchases by including it in a user's monthly phone bill (known as 'direct mobile billing'). These funding options are not mutually exclusive, and may all be consolidated in a 'mobile wallet' on the consumer's mobile device.[11] The possibility of consolidating several funding instruments in a mobile device arguably gives it an edge in terms of a portability. Mobile devices can eliminate the inconvenience of carrying multiple plastic cards in a physical wallet.

Furthermore, m-payments play a significant role in helping consumers manage their finances in ways traditional bank cards cannot. Because consumers have access to multiple payment platforms on their mobile device, they can conveniently check and compare their account balances before initiating any transaction. This will enable them to choose the payment platform with the most favourable financial impact. M-payments can also help consumers develop financial discipline if they set purchase thresholds on their device for different

[5] N. Mallat, 'Exploring Consumer adoption of Mobile Payments - A Qualitative Study' (2007) 16 Journal of Strategic Information Systems 413, 425.
[6] R. Bollen, 'Recent Developments in Mobile Banking and Payments' (2009) 24(9) JIBLR 454, 455.
[7] N. Mallat, 'Exploring Consumer adoption of Mobile Payments - A Qualitative Study' (2007) 16 Journal of Strategic Information Systems 413, 425.
[8] Bollen, 'Recent Developments in Mobile Banking and Payments' (2009) 24(9) JIBLR 454, 454.
[9] F. Hayashi, 'M-payments: What's in it for Consumers?' (2012) 1 Econ.Rev. 35, 43.
[10] T. Dahlberg, N. Mallat, J. Ondrus and A. Zmijewska, 'Past, Present and Future of Mobile Payments Research: A Literature Review' (2008) 7 Electronic Commerce Research and Applications 165, 165.
[11] F. Hayashi, 'M-payments: What's in it for Consumers?' (2012) 1 Econ.Rev. 35, 37.

categories of spending. With this functionality, consumers are notified when these thresholds are met, regardless of the underlying funding instrument in use.[12]

Finally, one of the biggest arguments in favour of m-payments is their capacity to expand the reach of non-cash payment services to financially excluded persons cost-effectively.[13] Access to banking services in regions like sub-Saharan Africa is insufficient. This is particularly so in rural areas. One of the reasons banks have failed to serve rural communities is because of the high costs of providing services and low-profit margins.[14] In contrast, this region has seen a steady growth in both mobile device ownership and a subscription to mobile money accounts supporting m-payments. The World Bank estimates that Sub-Saharan Africa leads the world in mobile money accounts: while just 2% of adults worldwide have a mobile money account, 12% in Sub-Saharan Africa have one.[15] As of December 2016, there were about 227 million registered mobile money accounts in sub-Saharan Africa as against 178 million bank accounts in the region.[16]

In such regions, financial inclusion takes centre stage as a socio-economic policy objective, and m-payments are positioned to take on a transformational role.[17] For instance, in Kenya, the dominant m-payment platform 'M-pesa' has assisted in doubling the users of non-bank financial institutions, thus, contributing to financial inclusion.[18] Before the launch of M-pesa in 2007, only 26% of Kenya's population were banked as of 2006. By 2013, this figure had increased to 67% with approximately 18 million Kenyans signing up for the service as opposed to the 7 million with a bank account.[19] M-pesa's success, thus, lends credence to arguments highlighting how m-payments can contribute towards tackling financial exclusion.

[12]F. Hayashi, 'M-payments: What's in it for Consumers?' (2012) 1 Econ.Rev. 35, 55.
[13] J.K. Winn & L. De Koker, 'Introduction to Mobile Money in Developing Countries: Financial Inclusion and Financial Integrity (2013) 8(3) Wash. JLT & A 155, 162.
[14] P. Dupas, S. Green et al., 'Challenges in Banking the Rural Poor: Evidence from Kenya's Western Province' (2012) <https://web.stanford.edu/~pdupas/Challenges_DupasEtAl2011.pdf> accessed 17 November 2018, p.2.
[15] A. Demirguc-Kunt and L. Klapper, 'Measuring Financial Inclusion: The Global Findex Database' (The World Bank 2012) <https://openknowledge.worldbank.org/bitstream/handle/10986/6042/WPS6025.pdf?sequence=1&isAllowed=y> accessed 9 November 2018, 4.
[16] Global System for Mobile Communications Association (GSMA), 'State of the Industry Report on Mobile Money' (2017) <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/03/GSMA_State-of-the-Industry-Report-on-Mobile-Money_2016.pdf> accessed 9 April 2018, 16.
[17] R. Bollen, 'Recent Developments in Mobile Banking and Payments' (2009) 24(9) JIBLR 454, 455.
[18] 'Making Mobile Money Pay in Africa' <http://www.bbc.com/future/story/20120920-making-mobile-money-pay> accessed 23 July 2018> accessed 4 February 2019.
[19] Mobile Money Association of India (MMAI) & Global System for Mobile Communications Association (GSMA), 'Mobile Money: The Opportunity for India' (2013) <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/12/MMAI-GSMA-on-Mobile-Money-in-India-for-RBI-Financial-Inclusion-Committee_Dec13.pdf> accessed 11 February 2019, p.5.

Despite these highlighted benefits, m-payments raise several concerns which require careful regulatory attention. These concerns are highlighted in the next section of this article. The article takes as a given that the starting point in protecting consumers will be to ensure that they have access to the necessary information that will allow them to make informed decisions when using m-payments. Accordingly, the article focuses on evaluating two important information remedies (mandatory disclosures and financial consumer education) which can reduce the information asymmetry between parties and also assist consumers with informed decision-making. In evaluating these remedies, the discussion also highlights certain issues which limit the effectiveness of these regulatory techniques. In making a case for a more robust approach to protecting m-payment consumers, the article further highlights issues that do not stem purely from information asymmetries, but which require regulatory intervention nonetheless.

Consumer issues in mobile payments

There are several consumer issues associated with the adoption of m-payments. First, there is some consumer anxiety about the privacy and security implications connected with adopting m-payments. Consumer surveys confirm that data privacy and security are a source of significant concern for potential m-payment users.[20] These concerns are for good reasons. First, adopting m-payments will require that consumers store sensitive financial data on their mobile devices. The concentration of sensitive information in a single place may increase the risk of the physical theft of devices as well as the risk of information theft by cybercriminals.[21]

Indeed, most mobile payment platforms will require that consumers download a payment software application on their mobile devices. These applications can expose consumers to security risks and fraud.[22] Malicious software may be inadvertently downloaded by consumers which enable criminals to access personal and financial data to further other crimes.[23] The use

[20] Vocalink, 'The State of Pay' (2017) <https://www.vocalink.com/downloads-and-media/research/the-state-of-pay/ > accessed 7 August 2018, 16; Federal Trade Commission, 'Paper, Plastic or Mobile? An FTC Workshop on Mobile Payments' (2013) <https://www.ftc.gov/sites/default/files/documents/reports/paper-plastic-or-mobile-ftc-workshop-mobile-payments/p0124908_mobile_payments_workshop_report_02-28-13.pdf> accessed 9 December 2018, 6, 11.
[21] F. Hayashi, 'M-payments: What's in it for Consumers?' (2012) 1 Econ.Rev. 35, 54.
[22] M. Crowe, S. Pandy, et al., 'US Mobile Payments Landscape: 2 Years Later' (May 2013) <https://abnk.assembly.ca.gov/sites/abnk.assembly.ca.gov/files/mobile-payments-landscape-two-years-later.pdf> accessed 26 October 2018, p.14.
[23] S. Trites, C. Gibney, B. Levesque, 'Mobile Payments and Consumer Protection in Canada' (2013) (Canada) <https://www.canada.ca/content/dam/canada/financial-consumer-

of applications also presents other security risks which may arise from the methods used to authenticate users and to store like passwords. Owing to the lack of awareness consumers may also contribute to this problem by failing to adopt available safeguards such as personal identification numbers (PINs), passwords, device lock features or anti-virus software.[24]

The choice of technology supporting m-payments may also expose consumers to risks. The most common technologies supporting m-payments include the use of Short Message Service (SMS) where users can send a payment request to an SMS Short Code[25] to facilitate a transaction and Near Field Communication (NFC) technology which allows for wireless communication between devices over a short distance. Remote SMS-based payments are thought to be the least secure because transaction information travels in plain text.[26] Security risks arising from technology are worsened by the absence of a uniform specific security standard for processing m-payment transactions unlike the case with card transactions.[27]

The Organisation for Economic Cooperation and Development (OECD)[28] warns that the security threats attached to mobile devices may be more challenging than those attributed to personal computers. This is because owing to their size, mobile devices may be easily lost or stolen and hackers may easily intercept data through several inbuilt mobile communication technologies like Bluetooth, Radio Frequency Identification (RFID) or through infected

agency/migration/eng/resources/researchsurveys/documents/fcac_mobile_payments_consumer_protection_accessible_en.pdf> Accessed 7 October 2018, p.30.

[24] M. Crowe, S. Pandy, et al., 'US Mobile Payments Landscape: 2 Years Later' (May 2013) <https://abnk.assembly.ca.gov/sites/abnk.assembly.ca.gov/files/mobile-payments-landscape-two-years-later.pdf> accessed 26 October 2018, p.14.

[25] These are short, memorable numbers provided by m-payment service providers for receiving transaction requests.

[26] T.R. McTaggart and D.W. Freese, 'Regulation of Mobile Payments' (2010) 127 Banking Law Journal 485, 486.

[27] E. Eraker, C. Hector and C.J. Hoofnagle, 'Mobile Payments: The Challenge of Protecting Consumers and Innovation' (2011) P&S LR 212, 215; Federal Trade Commission, 'Paper, Plastic or Mobile? An FTC Workshop on Mobile Payments' (2013) <https://www.ftc.gov/sites/default/files/documents/reports/paper-plastic-or-mobile-ftc-workshop-mobile-payments/p0124908_mobile_payments_workshop_report_02-28-13.pdf> accessed 9 December 2018, p.13.

[28] Organization for Economic Cooperation and Development (OECD), 'Report on Consumer Protection in Online and Mobile Payment' (OECD Digital Economy Papers (no. 204) 2012) <https://www.oecd-ilibrary.org/docserver/5k9490gwp7f3-en.pdf?expires=1533919002&id=id&accname=guest&checksum=F3A17EF46869940A0583EB38B2A30561> Accessed 11 November 2018, p.28.

applications.[29] Additionally, mobile devices are not developed with the security of payment services in mind.[30]

Moreover, because mobile devices are used to support payment transactions, m-payments can generate data on geographic location. Mobile device users generally regard such data as private information.[31] This data may be used for practices such as profiling which affects the consumer. Profiling involves the collection and analysis of anonymous data which assists businesses in driving mobile marketing. Trites et al. explain that this strategy on its own may seem innocuous especially as profiling deals with anonymous data.[32] However, the possibility of specifically identifying consumers increases when profiling is combined with location tracking[33] data and other personal data stored on the consumer's mobile device. In effect, m-payment consumers may unknowingly allow companies to compile detailed profiles of their lives.[34] Research also reveals that many consumers are unaware that profiling may be used in m-payments services and while some may not particularly mind, they may not understand the full implications involved when profiling is combined with location tracking.[35]

There is also some ambiguity surrounding applicable liability regimes in m-payments, and this is the case for two primary reasons. First, liability rules are often inconsistent as they are mainly dependent on the underlying funding source. As stated earlier, m-payments may be funded by different payment instruments. This creates flexibility by allowing consumers to use whatever method they find most convenient at a given time. However, these diverse funding

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[29] Organisation for Economic Cooperation and Development (OECD), 'Report on Consumer Protection in Online and Mobile Payment' (OECD Digital Economy Papers (no. 204) 2012) <https://www.oecd-ilibrary.org/docserver/5k9490gwp7f3-en.pdf?expires=1533919002&id=id&accname=guest&checksum=F3A17EF46869940A0583EB38B2A30561> Accessed 11 November 2018, p.28.

[30] European Central Bank, 'Recommendations for the Security of Mobile Payments Draft Document for Public Consultation' <http://www.ecb.europa.eu/paym/cons/pdf/131120/recommendationsforthesecurityofmobilepaymentsdraftpc201311en.pdf> accessed 7 November 2018, p.10.

[31] B. Kamleitner, S. Dickert, M. Falahrastegar and H. Haddadi, 'Information Bazaar: A Contextual Evaluation' (2013) <https://haddadi.github.io/papers/HOTPLANET2013.pdf> accessed 5 December 2018, p.1.

[32] S. Trites, C. Gibney, B. Levesque, 'Mobile Payments and Consumer Protection in Canada' (2013) (Canada) <https://www.canada.ca/content/dam/canada/financial-consumer-agency/migration/eng/resources/researchsurveys/documents/fcac_mobile_payments_consumer_protection_accessible_en.pdf> Accessed 7 October 2018, p.28.

[33] Also referred to as 'geo-tracking.'

[34] M. Crowe, S. Pandy, et al., 'US Mobile Payments Landscape: 2 Years Later' (May 2013) <https://abnk.assembly.ca.gov/sites/abnk.assembly.ca.gov/files/mobile-payments-landscape-two-years-later.pdf> accessed 26 October 2018, p.24.

[35] S. Trites, C. Gibney, B. Levesque, 'Mobile Payments and Consumer Protection in Canada' (2013) (Canada) <https://www.canada.ca/content/dam/canada/financial-consumer-agency/migration/eng/resources/researchsurveys/documents/fcac_mobile_payments_consumer_protection_accessible_en.pdf> Accessed 7 October 2018, p.8.

options (credit and debit cards, direct account debits, direct mobile billing, etc.) attract different liability regimes and protections for consumers under the law.

This problem has been confirmed in a thematic review carried out by the Financial Consumer Agency of Canada.[36] This flexibility may, therefore, lead to considerable uncertainty and inconsistency in the liability regimes applying to m-payment transactions.[37] Hence, if the funding source is a credit or debit card, the consumer will likely enjoy the protections attached to the card. If a consumer opts for direct mobile billing or a prepaid fund with an MNO, there may be insufficient protections to avail them in comparison to services offered by a traditional financial institution.[38] To illustrate this, consumer "A" who makes an m-payment transaction funded by a credit card under a bank-led m-payment platform in the United Kingdom (UK) is likely to be covered by section 75 of the Consumer Credit Act (UK) 1974 which holds credit card companies jointly responsible with suppliers for breaches of contract and misrepresentations. This is in contrast to consumer "B" who performs an m-payment transaction funded by a debit card or a prepaid account under an exclusive MNO-led m-payment platform and who cannot enjoy the same protection. This inconsistency will prove complex for consumers who do not understand the implications of using different funding sources.[39]

Liability regimes are also complex because there are numerous parties involved in the transaction chain. This suggests that the provision of m-payments is often dependent on a complex web of business arrangements on the supply side. Due to the multiple parties involved in providing the service, m-payments may be structured in a way that involves multiple contracts. This suggests that a service which is perceived as a single package by consumers may, in reality, be multi-faceted from a legal perspective especially with the convergence of

[36] S. Trites, C. Gibney, B. Levesque, 'Mobile Payments and Consumer Protection in Canada' (2013) (Canada) <https://www.canada.ca/content/dam/canada/financial-consumer-agency/migration/eng/resources/researchsurveys/documents/fcac_mobile_payments_consumer_protection_accessible_en.pdf> Accessed 7 October 2018, p.10.
[37] F. Hayashi, 'M-payments: What's in it for Consumers?' (2012) 1 Econ.Rev. 35, 51.
[38] Organisation for Economic Cooperation and Development (OECD), 'Report on Consumer Protection in Online and Mobile Payment' (OECD Digital Economy Papers (no. 204) 2012) <https://www.oecd-ilibrary.org/docserver/5k9490gwp7f3-en.pdf?expires=1533919002&id=id&accname=guest&checksum=F3A17EF46869940A0583EB38B2A30561> Accessed 11 November 2018, p.21.
[39] Federal Trade Commission, 'Paper, Plastic or Mobile? An FTC Workshop on Mobile Payments' (2013) <https://www.ftc.gov/sites/default/files/documents/reports/paper-plastic-or-mobile-ftc-workshop-mobile-payments/p0124908_mobile_payments_workshop_report_02-28-13.pdf> accessed 9 December 2018, p.6.

technology and industries.[40] One consequence of this is that consumers may be subject to several separate charges and risk allocation regimes of which they are unaware.

Additionally, when disputes arise, there may be a lack of clarity as to which party bears the responsibility of providing a resolution. Even where this is clear, existing dispute resolution platforms in the financial services sector, such as ombudsmen services, may have their jurisdictions restricted to traditional financial institutions thereby excluding consumer disputes with service providers such as MNOs.

This situation will be challenging for consumers who are accustomed to dispute resolution mechanisms affiliated with other established payment methods and who may erroneously believe that these apply to m-payments. This may make it difficult for consumers to have reasonable expectations about what their redress rights are or which entity in the transaction chain is responsible for dispute resolution.[41] The fact that the different parties involved in the m-payment process are often subject to different regulators worsens this situation. Consumers may thus be confused about which regulator[42] to approach if a problem persists.[43]

For the reasons outlined in this section, it is imperative that consumers are well protected when using mobile payments. a starting point in protecting consumers is to ensure that they are aware of the risks associated with adopting m-payments.

Information as the first line of defence?

Under the market failure theory of regulation, m-payment consumers would be best protected in a perfect market. The perfect market is one in which certain conditions exist to maintain an

[40] 'Unfair Terms in Consumer Contracts: A New Approach: Which? Response' (2012) 6 <http://www.staticwhich.co.uk/documents/pdf/which-response-unfair-terms-in-consumer-contracts-a-new-approach-301590.pdf> accessed 9 January 2018, p.6.

[41] Organization for Economic Cooperation and Development (OECD), 'Report on Consumer Protection in Online and Mobile Payment' (OECD Digital Economy Papers (no. 204) 2012) <https://www.oecd-ilibrary.org/docserver/5k9490gwp7f3-en.pdf?expires=1533919002&id=id&accname=guest&checksum=F3A17EF46869940A0583EB38B2A30561> Accessed 11 November 2018, p.35; S. Trites, C. Gibney, B. Levesque, 'Mobile Payments and Consumer Protection in Canada' (2013) (Canada) <https://www.canada.ca/content/dam/canada/financial-consumer-agency/migration/eng/resources/researchsurveys/documents/fcac_mobile_payments_consumer_protection_accessible_en.pdf> Accessed 7 October 2018, p.33.

[42] These regulatory bodies may themselves be confused about their competence in respect of m-payments.

[43] Organisation for Economic Cooperation and Development (OECD), 'Report on Consumer Protection in Online and Mobile Payment' (OECD Digital Economy Papers (no. 204) 2012) <https://www.oecd-ilibrary.org/docserver/5k9490gwp7f3-en.pdf?expires=1533919002&id=id&accname=guest&checksum=F3A17EF46869940A0583EB38B2A30561> Accessed 11 November 2018, p.35.

equilibrium in the allocation of resources. In such a perfect market, there are numerous buyers and sellers such that the activity of one economic actor will have only a negligible effect on the price or output of the market. There is free entry into and exit from the market. Also, the commodity sold in the market is homogeneous and the economic actors have access to perfect information about the nature and value of the commodities being traded and of the potential substitutes or alternatives.[44]

Thus, in a perfect m-payments market, m-payment consumers ought to have access to perfect information which includes up-to-date information on the price, characteristics and quality of a service and the terms on which they are subscribing to it. Such information must also be understandable, readily available and verifiable to enable them to make informed decisions.[45] In reality, the perfect information characteristic of a perfect market is rarely found because obtaining perfect information is costly and usually impossible[46] for consumers. This means that m-payment providers and consumers will have an uneven amount of information about the service which places both parties in an unequal bargaining position.[47] This lack of perfect information may deprive consumers of the knowledge needed to make optimal economic decisions,[48] which is a significant problem since consumer choice plays a central role in the economic notion of allocative efficiency.[49]

Information failures, thus, represent a deviation from the perfect market ideal and are generally considered as one of the principal justifications for regulatory interventions in markets. Accordingly, regulatory intervention in the m-payments market can be justified, in part, by the need to reduce information asymmetry. The most apparent solution to imperfect information is to provide more information. Where consumers have access to information, they are better placed to protect their interests by selecting the services that reflect their preferences.[50]

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[44] For a detailed discussion, see J.L. Schroeder, 'The End of the Market: A Psychoanalysis of Law and Economics' (1998) 112 Harv. L. Rev. 483

[45] C Scott, J Black, *Cranston's Consumers and the Law* (3rd edn, Butterworths 2000) 30.

[46] Especially for goods/services purchased on a "credence basis" whose value only becomes apparent with the passing of time.

[47] Ramsay reports that this idea appeared in the Molony Report and the Crowther Report on Consumer Credit which eventually formed the basis of the UK Consumer Credit Act 1974; I. Ramsay, *Consumer Law and Policy* (3rd edn, Hart Publishing 2012) 41.

[48] I. Ramsay, *Consumer Law and Policy* (3rd edn, Hart Publishing 2012) 43.

[49] In economic theory, this connotes that existing resources be put to their most efficient use; U. Schwalbe and D. Zimmer, *Law and Economics in European Merger Control* (OUP 2009) 3.

[50] G. Howells, 'The Potential and Limits of Consumer Empowerment by Information' (2005) 32 J Law & Soc'y 349, 355.

Regulatory intervention aimed at protecting consumers has been described as being paternalistic because it often involves government or third-party intervention in individual decision-making.[51] The level of intervention differs and can include those perceived to be less intrusive because they are market-based interventions concerned with only correcting market failures. Others are considered more intrusive since they embrace broader goals which go beyond a mere desire to correct market failure.[52] Information remedies are perceived to be a market-based response since they only seek to support consumer decision making without interfering with consumer autonomy or substantive contractual issues like price and quality.[53] Thus, information remedies are described as asymmetrically paternalistic[54] because they interfere minimally with those consumers, who can make optimal decisions while at the same time assisting those who may make sub-optimal choices.[55] There are two principal regulatory tools which may be used to improve access to information for m-payment consumers. These include the use of mandatory disclosures and targeted financial consumer education.

As Obvious as Mandatory Disclosures?

Mandatory disclosure is a regulatory response requiring firms to supply specific standardised information.[56] This technique "requires 'the discloser' to give 'the disclosee' information which the disclosee may use to make better decisions and to keep the discloser from abusing its superior position."[57] Mandatory disclosures are usually classified as positive informational responses because they require that businesses provide specific information.[58] Since consumers

[51] J.A. Blumenthal, 'Expert Paternalism' (2012) 64 Fla.L.Rev. 721, 723.
[52] This differentiation can be controversial as there is sometimes no clear distinction between interventions with pure market-based goals and those with social objectives. P. Cartwright, *Consumer Protection and the Criminal Law: Law, Theory and Practice in the UK* (Cambridge University Press 2001) 1, 158.
[53] O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 681; C. Camerer, S. Issacharoff, G. Loewenstein, et al., 'Regulation for Conservatives: Behavioural Economics and the Case for "Asymmetric Paternalism' (2003) 151(3) U.Penn. L.Rev. 1211, 1232, 1233; G. Howells, 'The Potential and Limits of Consumer Empowerment by Information' (2005) 32 J Law & Soc'y 349, 355.
[54] As opposed to outright paternalism which interferes with consumer sovereignty by forcing or depriving consumers of certain choices supposedly for their benefit. Camerer et al. (n 76) 1212.
[55] C. Camerer, S. Issacharoff, G. Loewenstein, et al., 'Regulation for Conservatives: Behavioural Economics and the Case for "Asymmetric Paternalism' (2003) 151(3) U.Penn. L.Rev. 1211, 1212, 1211-1223.
[56] P. Latimer and P. Maume, *Promoting Information in the Marketplace for Financial Services* (Springer 2014) 28.
[57] O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 649.
[58] P. Cartwright, 'The Vulnerable Consumer of Financial Services: Law, Policy and Regulation' (Financial Services Research Forum 2011) <https://www.nottingham.ac.uk/business/businesscentres/crbfs/documents/researchreports/paper78.pdf> accessed 10 August 2018, 29.

are faced with decision making on complex transactions and services, it is reasonable to assume that more information will bolster consumer autonomy since they can make better decisions.[59] Therefore, the end goal of mandatory disclosure regimes is to provide consumers with the accurate information necessary to make informed and independent decisions.[60] Disclosures can also foster more competitive markets since consumers can access standardised information from competitors which enables them to make optimal choices based on critical comparisons.[61]

In the context of m-payments, mandatory disclosures will serve some important functions. First, they will help to ensure that consumers and competitors focus on both visible elements like fees and other less visible elements that have an enormous impact on consumers.[62] This is because disclosures cover a range of information which goes beyond price. Comprehensive disclosures cover important issues such as applicable charges, penalties, risks, liability rules, complaints/redress and termination procedures, privacy policies etc. attached to an m-payment service. Comprehensive disclosures will provide a holistic picture of the service. Moreover, where competition focuses on more observable traits like price, there is the risk that in the long run, this may lead to a fall in quality which consumers may be unable to observe.[63]

Second, disclosures ensure that consumers have a realistic appreciation of what to expect from an m-payments service. Since a service will likely conform to the expectations built around disclosed information, it is arguable that the likelihood of consumers suffering detriment may reduce.[64] For instance, disclosures will serve to increase consumer awareness of the risks involved in using m-payments. This point is particularly important in light of the security concerns discussed earlier. Consumers, due to lack of awareness, may fail to adopt

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59 O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 650.

60 United Nations Guidelines for Consumer Protection <https://unctad.org/en/PublicationsLibrary/ditccplpmisc2016d1_en.pdf> accessed 7 March 2019, paragraph 27.

61 C. Camerer, S. Issacharoff, G. Loewenstein, et al, 'Regulation for Conservatives: Behavioural Economics and the Case for "Asymmetric Paternalism" (2003) 151(3) U.Penn. L.Rev. 1211, 1232; O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 649.

62 UK OFT Investigation under the Unfair Terms in Consumer Contracts Regulations into the fairness of personal current account contract terms providing for unarranged overdraft charges (2007) cited in A. Arora, 'Unfair Contract Terms and Unauthorised Bank Charges: A Banking Lawyer's Perspective' (2012) 1 JBL 44, 54.

63 George Akerlof identified this phenomenon in his article 'The Market For "Lemons": Quality Uncertainty and the Market Mechanism' (1970) 84(3) QJE 488 where he explained that in situations where it is not possible to establish the quality of certain goods and services in advance, purchasers might be prepared to pay an average price corresponding to the average expected quality. Sellers of high-quality products will be unwilling to sell at that asking price and will withdraw from the market. The result of this is that the quality of products will decline as will the price buyers are willing to pay.

64 G. Howells, 'The Potential and Limits of Consumer Empowerment by Information' (2005) 32 J Law & Soc'y 349, 355.

available safeguards such as PINs, passwords, device lock features or anti-virus software. Crowe et al reason that these 'risky behaviours' will need to be changed if a consumer intends to add a wallet containing payment credentials to their mobile phone.[65] With access to information on risks, consumers can adjust by adopting reasonable risk-mitigating practices when using the service. Such practices, for instance, could include putting passwords on mobile devices and payment applications to reduce the risk of unauthorised use.

Furthermore, if disclosures are consistent throughout the m-payments industry, it can generate direct welfare gains for consumers since it will make it easier for consumers to compare and choose the platform that suits their needs.[66] Easing comparison between competing services will lead to a decrease in search and switching costs which should, in turn, encourage effective competition in price and quality.[67]

Mandatory disclosures will also improve clarity on how risks are allocated in m-payments enabling parties to make necessary adjustments. Van den Bergh and Visscher explain that the economic goal for liability rules is to incentivise parties who influence the size of the expected loss to ensure that they take care.[68] From this perspective, clear rules governing the allocation of risks help with increasing the efficiency of a market.[69] Thus, Weber suggests that liability ought to be placed on the party that is best able to bear it, and this may be the party with the least risk-bearing costs or the lowest insurance premium.[70] Clear disclosures on applicable liability rules will contribute towards achieving the goal of increasing market efficiency since parties can take out appropriate insurance covers for risks they have elected to bear.

[65] M. Crowe, S. Pandy, et al, 'US Mobile Payments Landscape: 2 Years Later' (May 2013) <https://abnk.assembly.ca.gov/sites/abnk.assembly.ca.gov/files/mobile-payments-landscape-two-years-later.pdf> accessed 26 October 2018, p.14.

[66] F. Dehghan and A. Haghighi, 'E-money Regulation for Consumer Protection' (2015) 57(6) International Journal of Law and Management, 610, 617; S. Trites, C. Gibney, B. Levesque, 'Mobile Payments and Consumer Protection in Canada' (2013) (Canada) <https://www.canada.ca/content/dam/canada/financial-consumer-agency/migration/eng/resources/researchsurveys/documents/fcac_mobile_payments_consumer_protection_accessible_en.pdf> Accessed 7 October 2018, p.27.

[67] K.J. Cseres, *Competition Law and Consumer Protection* (Kluwer Law International 2005) 213; S. Lumpkin, 'Consumer Protection and Financial Innovation: A few basic Propositions' (2010) 1 OECD Journal: Financial Market Trends 117, 138.

[68] R. Van den Bergh and L. Visscher, 'The Preventive Function of Collective Actions for Damages in Consumer Law' <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1101377> Accessed 6 August 2018, 142.

[69] R.D. Cooter and E.L. Rubin, 'A Theory of Loss Allocation for Consumer Payment' (1987) 66 Texas L.Rev 6370, 6370.

[70] F. Weber, *The Law and Economics of Enforcing European Law* (Ashgate Publishing 2014) 34.

Will mandatory disclosures suffice?

Significant criticisms lie against techniques like mandatory disclosures because they are thought to rest on "false assumptions about how people live, think, and make decisions."[71] Because mandatory disclosures are market-based, they seek to return the market as closely as possible to the perfect market ideal. This suggests that this technique relies on the neo-classical assumption that consumers are rational and are the best judges of their interests who maximise their utility with the limited resources available.[72]

This assumption has been called into question by behavioural research which shows that even when consumers have access to information, there is a tendency not to process such information correctly for several reasons including the susceptibility to behavioural biases. These behavioural biases often prevent rational decision-making and may be attributed to different factors. For instance, biases may be as a result of heuristics where consumers use shortcuts and rules of thumb to assess risks.[73] Accordingly, when faced with the seemingly difficult responsibility of searching and assessing the information on available m-payment services, consumers may choose to simplify and quicken decision-making by relying on mental shortcuts. In the process, they may overlook services better-suited to their needs.

Thus, mandatory disclosures may unwittingly lead to situations where consumers are overloaded with information which forces them to settle on mental shortcuts that justify the choices they make.[74] Studies suggest that humans have a low short-term memory capacity which limits their ability to process information to small chunks at a time.[75] The consequence is that too much information can be counterproductive and may result in an extreme situation where consumers reject the information disclosed entirely.[76] This creates a paradox somewhat

[71] O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 651.
[72] I. Ramsay, 'Rationales for intervention in the Consumer Marketplace' (London, Office of Fair Trading 1984) cited in I. Ramsay, *Consumer Law and Policy* (3rd edn, Hart Publishing 2012) 47. C. Camerer, S. Issacharoff, G. Loewenstein, et al, 'Regulation for Conservatives: Behavioural Economics and the Case for "Asymmetric Paternalism' (2003) 151(3) U.Penn. L.Rev. 1211, 1215.
[73] I. Ramsay, *Consumer Law and Policy* (3rd edn, Hart Publishing 2012) 59.
[74] I. Ramsay, *Consumer Law and Policy* (3rd edn, Hart Publishing 2012) 59-60.
[75] Miller estimates that humans can process about seven pieces of information at a time. See G. Miller, 'The Magical Number Seven, Plus or Minus Two: Some limits on our Capacity for Processing Information' (1956) The Psychological Review 63.; Better Regulation Executive and National Consumer Council, 'Warning: Too much Information Can Harm' (2007) <http://www.eurofinas.org/uploads/documents/policies/NCB-BRE-Report.pdf> accessed 29 January 2018.
[76] Better Regulation Executive and National Consumer Council, 'Warning: Too much Information Can Harm' (2007) <http://www.eurofinas.org/uploads/documents/policies/NCB-BRE-Report.pdf> accessed 29 January 2018, p.7.

as "incomplete disclosure leaves people ignorant, but complete disclosure creates crushing overload problems."[77]

Consumers may also evaluate transactional decisions from a particular perspective or reference point, a tendency known as anchoring. Consumer choice may thus be influenced by an available or convenient piece of information which serves as an arbitrary reference point or anchor.[78] For instance, m-payment consumers may settle on the subscription cost of a particular service as an anchor against which information about other services is interpreted. Thus, if Provider A charges X for subscribing to their service, X may be used as an anchor against which other services are assessed. Consequently, higher subscription charges offered by other providers may seem unreasonable even if the actual quality or range of the services provided differ (and even if additional hidden fees imposed by Provider A lead to aggregate costs that are higher than those offered by competitors).

Consumers also tend to be over-optimistic about their susceptibility to specific risks and are often over-confident about their own ability to avoid or control them.[79] In the context of m-payments, this may suggest that even if consumers have ample information about the security risks involved, there remains a possibility that a significant number will discount such warnings and fail to adopt mitigating practices because they believe that they will not be victims. Besides, consumers sometimes use transaction value as a proxy for risk and are less likely to pay attention to disclosures where they intend to use m-payments to cover only low transaction purchases.

Owing to the preponderance of these behavioural biases, rational decision-making cannot, therefore, be guaranteed with the provision of more information. Moreover, various consumers react differently to information[80] What consumers choose to know and what they do with knowledge acquired is heavily dependent on their intrinsic psychological attributes which result in varying outcomes.[81] Wealthier and better-educated consumers may arguably react to disclosures differently from poorer and uneducated consumers.[82] Cayne and Trebilcock

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[77] O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 688.
[78] A. Fletcher, 'Modelling Naive Consumers' in J. Mehta (eds), *Behavioural Economics in Competition and Consumer Policy* (ESRC Centre for Competition Policy 2013) 112.
[79] G. Howells, 'The Potential and Limits of Consumer Empowerment by Information' (2005) 32 J Law & Soc'y 349, 360; L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 235.
[80] Scott & Black (n 62) 374.
[81] D. De Meza, B. Irlenbusch and D. Reyniers, 'Financial Capability: A Behavioural Economics Perspective' (Consumer Research Report CPR69, UK Financial Services Authority 2008) <https://www.fca.org.uk/publication/research/fsa-crpr69.pdf> accessed 4 August 2018, 2.
[82] G. Howells, 'The Potential and Limits of Consumer Empowerment by Information' (2005) 32 J Law & Soc'y 349, 357.

submit that this may be because disclosure regimes only benefit consumers who are psychologically and intellectually equipped to apply the information provided.[83] This leads Howells to conclude that those likely to take advantage of and benefit from information initiatives tend to be the more affluent well-educated middle-class consumers.[84] Thus, there remains an argument that vulnerable less-educated consumers may benefit the least from disclosure regimes.[85] This is an issue to be considered, in particular, by regulators in developing countries where m-payments are rapidly growing but a significant percentage of consumers remain uneducated and poor.[86]

An important point which should be noted is that poor consumer decision-making may not always be the effect of behavioural biases. It may result from the content of and manner in which information is provided. As stated earlier mandatory disclosures are positive informational responses because they place an obligation on providers to disclose specific pieces of information. While being subject to mandatory disclosure regimes, m-payment providers may leave out vital information not explicitly required to be disclosed even if such information may significantly impact on consumer decision-making. In other scenarios, information may be disclosed in a way that deceives or misrepresents the true characteristics of an m-payment service. Since such practices can invariably affect how consumers make decisions, it is imperative that information remedies take on a broader scope which goes beyond merely requiring that firms provide specific information.

It will be necessary that providers are under an obligation not to withhold material information that can impact decision making and from disseminating false/misleading information. They should also be prohibited from disseminating false information. Prohibiting the use of false information is classified as a negative informational response. Cartwright argues that this is significant because rather than specifying in detail what sort of information must be disclosed, the obligation is not to omit information which an average consumer would rely on to make an informed decision.[87] A combination of positive and negative informational

[83] D. Cayne and M. Trebilcock 'Market Considerations in the Formulation of Consumer Protection Policy' (1973) 23 U.Toronto L.J 396, 406.
[84] G. Howells, 'The Potential and Limits of Consumer Empowerment by Information' (2005) 32 J Law & Soc'y 349, 357; Scott & Black (n 62) 372.
[85] O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 660.
[86] In this context, "uneducated" covers those lacking both basic education and financial education.
[87] Cartwright P, 'The Vulnerable Consumer of Financial Services: Law, Policy and Regulation' (Financial Services Research Forum 2011) <https://www.nottingham.ac.uk/business/businesscentres/crbfs/documents/researchreports/paper78.pdf> accessed 10 January 2019, p.29.

responses will arguably provide a more balanced way of providing consumers with information as it covers both ends of the information spectrum.

Consumer education to the rescue?

It has been argued that mandated disclosures will be more effective if they are supported by more general attempts to educate consumers about the area in which they must make decisions.[88] Financial education focuses on educating consumers on financial concepts "with the explicit purpose of increasing knowledge and the skills, confidence, and motivation to use it."[89] Being more specialised, financial literacy is expected to enable consumers to have an "appropriate perspective on the financial system."[90] These initiatives aim to increase critical consumer awareness and action competence.[91] Hence, financial education remains an essential part of the disclosure and informed consent paradigm.[92] Armed with information obtained through awareness campaigns, consumers are expected to be actively involved in policing businesses and ensuring that markets remain effective.[93] Being of a specialised nature, financial literacy initiatives relies on existing basic literacy and numerical skills provided under a broader consumer education framework.[94]

General financial consumer education provides the bedrock for more targeted awareness campaigns covering specific financial products. Targeted efforts are an important way of raising consumer awareness about specific financial products on offer. In the context of m-payments, targeted financial literacy initiatives will serve two broad purposes. First, like disclosure, financial literacy will help in overcoming imperfect information as it will serve as an additional way to provide information to m-payment consumers. This should, in turn, assist them in making better decisions. For instance, such initiatives will provide consumers with information on the comparable benefits of using m-payments which will allow them to decide if the service meets their needs and expectations.

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[88] O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 732.
[89] L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 202.
[90] P. Cartwright, *Banks, Consumers and Regulation* (Bloomsbury Publishing 2004) 59.
[91] J. Benn, 'Consumer Education between "Consumership" and Citizenship: Experiences from studies of young people' <http://www.mv.helsinki.fi/home/palojoki/english/nordplus/IJC_364%20Benn.pdf> accessed 13 February 2019.
[92] O. Ben-Shahar and C. Schneider, 'The Failure of Mandated Disclosure' (2011) 159 U.Penn.L.Rev. 647, 667.
[93] I. Ramsay, *Consumer Law and Policy* (3rd edn, Hart Publishing 2012) 95; L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 201.
[94] P. Cartwright, *Banks, Consumers and Regulation* (Bloomsbury Publishing 2004) 59-60.

Targeted m-payment literacy initiatives can contribute towards shaping consumer expectations about the service. It may also empower them to adopt measures to mitigate any risks attached to the service. For instance, educating consumers on the privacy and security risks as well as the best practices for reducing these risks may enable them to make reasonable adjustments to reflect what they have learned.

Literacy initiatives may also increase consumers' chances of accessing further information by providing advice about where to get it. Financial literacy initiatives can also alert consumers of the importance of shopping around for the best offerings. This will encourage m-payment consumers to compare available services and providers before settling for the service that best suits their needs.

Importantly, targeted literacy efforts may also address some of the shortcomings associated with mandatory disclosures. Mandatory disclosures operate on the premise that consumers will have the intellectual skills required to understand and to act on the information provided. However, this is not always the case. Where consumers do not have the intellectual capacity to understand the significance of information, mandatory disclosures will be of limited help to them. A consumer protection diagnostic study conducted in Kenya[95] sheds some light on the close link between disclosures and consumer education in m-payments. According to the report, Safaricom, the MNO behind a popular m-payment service in Kenya called 'M-pesa', was said to have adopted transparent pricing schedules with price tariffs being published and made available to users. To ensure that the service was affordable, this pricing schedule adopted a tiered fee model where users were charged according to the monetary value of a transaction.[96] Despite efforts made in disclosing the pricing schedule, Flaming et al. report that owing to literacy and numeracy concerns, some consumers did not fully understand the tariffs and entirely avoided transactions on the complex tariff tiers they could not understand.[97]

Consequently, most customers made transactions in the lower tariff tiers and did not transact in other tariff tiers they considered more complex. Thus, although tariffs were disclosed transparently, there was still some confusion which indirectly limited the choices

[95] M. Flaming, A. Owino, K. McKee et al., 'Consumer Protection Diagnostic Study Kenya' (2011) <http://s3-eu-central-1.amazonaws.com/fsd-circle/wp-content/uploads/2015/08/30095758/11-02-22_Consumer_diagnostic_study.pdf> accessed 13 December 2018, 12-13.

[96] International Finance Corporation, 'M-Money Chanel Distribution Case – Kenya (Safaricom M-pesa)' <http://www.ifc.org/wps/wcm/connect/4e64a80049585fd9a13ab519583b6d16/Tool%2B6.7.%2BCase%2BStudy%2B-%2BM-PESA%2BKenya%2B.pdf?MOD=AJPERES> accessed 21 May 2018, p.5.

[97] M. Flaming, A. Owino, K. McKee et al., 'Consumer Protection Diagnostic Study Kenya' (2011) <http://s3-eu-central-1.amazonaws.com/fsd-circle/wp-content/uploads/2015/08/30095758/11-02-22_Consumer_diagnostic_study.pdf> accessed 13 December 2018, 12-13.

open to uneducated consumers who could only transact on less complex tariffs. While this raises questions about the effect of complex disclosures, it also reinforces the argument that only intellectually equipped consumers will benefit from disclosure regimes.[98]

Hence, financial education can empower consumers with the knowledge, skill and confidence needed to process and act meaningfully on the information provided.[99] Educating consumers on relevant themes in m-payments can help them put information disclosed in context. Where consumers can appreciate the content and context of disclosures, it is more likely that they will act on such disclosures. For instance, a consumer who is aware that third parties can access their mobile payment applications through malicious software may pay more attention to disclosures on how to keep their device safe and how liability for unauthorised transactions will be apportioned.

Consumer education and the matters arising

Given that m-payments operate with different business models, (banks lead some models while non-banks such as MNOs drive others) there remains a question as to which stakeholder should take on the responsibility of educating consumers. Failure to clarify this may generate some confusion since the industry may not always be motivated to provide information through financial education. This is because information has some of the characteristics of a public good.

A public good is a commodity which individuals benefit from without contributing to the cost of its provision. No one can be excluded from the enjoyment of such goods, and their quality does not deteriorate the more it is used.[100] Because a person may enjoy the benefits of such goods without contributing to produce it, there is often the danger that a free rider problem may occur. As McVea explains, this means that "those who are inclined to provide such goods may decide on balance not to do so, since others will free-ride on their efforts and there will be no readily effective way of charging these users for the costs associated with providing the

[98] D. Cayne and M. Trebilcock 'Market Considerations in the Formulation of Consumer Protection Policy' (1973) 23 U.Toronto L.J 396, 406.

[99] T. Williams, 'Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services' (2007) 29 Law & Pol'y 226, 227.

[100] J. Atik, 'Complex Enterprises and Quasi-public Goods' (1995)16 U.Penn Journal of International Law 1, 5-6; D. Gartner, 'Global Public Goods and Global Health' (2012) 22 Duke J.Comp. & Int'l L. 303, 304. However, it is important to note that some organisations and businesses now monetise the supply of consumer information. E.g. Which.

good."[101] What this suggests is that there may be some under-provision of information as some m-payment providers may shirk the responsibility of educating consumers in the hope that their competitors will take the lead.

Perhaps, educating consumers may be best achieved through a collaborative effort between regulators and m-payment service providers (whether a bank or MNO). While regulators are better placed to provide general financial education (which provides the foundation for targeted initiatives), they may not be in the best position to provide in-depth information on new products. This is because regulators suffer an information lag due to the rapid changes that occur in a market which places them in a constant race to keep up with these changes.[102] This information lag can affect the regulator's ability to understand the product well enough to provide timely education to consumers.[103] Consequently, it is argued that service providers will be better positioned to provide specific education on the innovative products they offer because they will likely have more expertise with the product having been involved in developing it. On this basis, it will be appropriate to place a positive obligation on institutions introducing m-payments to make reasonable efforts towards educating intended consumers.

Beyond the problem of who bears responsibility for educating consumers, other matters abound. Preceding discussions have highlighted how consumer education can bridge the information gaps in m-payments. In a way, such financial literacy initiatives aim to alter the decisions and behaviour of consumers by equipping them with "higher standards of knowledge."[104] However, as stated earlier, consumers are still subject to cognitive biases that may affect how information gained through education is used. Literacy initiatives may even have the unintended consequence of deepening the effect of biases on decision-making.[105] For instance, combined with disclosures, targeted literacy initiatives may lead to information overload which can, in turn, reduce the quality of decision making as consumers will be forced to adopt mental shortcuts to navigate through enormous information to make decisions.[106]

[101] H McVea, 'Financial Services Regulation under the Financial Services Authority: A Reassertion of the Market Failure Thesis' (2005) 64(2) Cambridge Law Journal 413, 418-419.
[102] T.C. Henry and S. Hu, 'The Modern Process of Financial Innovation and the Vulnerability of a Regulatory Paradigm' (1989)138 U. PA. L. REV. 333, 340 cited in L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 216.
[103] T.C. Henry and S. Hu, 'The Modern Process of Financial Innovation and the Vulnerability of a Regulatory Paradigm' (1989)138 U. PA. L. REV. 333, 340 cited in L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 216.
[104] G. Pearson, 'Reconceiving Regulation: Financial Literacy' (2008) 8 MLJ 45, 52.
[105] L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 228.
[106] L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 230.

There is an argument that consumer education may raise awareness about behavioural biases thereby putting consumers in a position where they can recognise and address impediments that limit rational decision-making. This view finds support with commentators like Posner who argues that it should not be impossible to educate people out of their irrationalities.[107] However, this position is countered by others who insist that it is difficult and often unsuccessful to educate some behavioural biases away.[108]

Moreover, learning is also a complex developmental process "conditioned by the distinctive values, assumptions, and interpretive repertoires by which individuals make sense of their worlds."[109] Hence, what consumers choose to do with knowledge acquired is heavily dependent on their intrinsic psychological attributes which result in varying outcomes. Thus, while Consumer A and B may have access to the same educative resources on m-payments, their use of the knowledge acquired will vary owing to different factors such as their past experiences, socialisation, decision context, personality, cognitive abilities and values.[110] The consequence is that it is unsafe to place undue weight on the outcomes that may be achieved by educating m-payment consumers.[111]

The general expectation that financial literacy will ensure consumers know more about the m-payments and the risks/benefits involved also invites other concerns. For example, Pearson points out that the emphasis on financial consumer education involves both the responsibilisation and empowerment of the consumer.[112] Responsibilisation connotes an attempt to reconstruct the consumer as a subject of regulation rather than a beneficiary.[113] With the aid of regulatory techniques like financial literacy, this process projects the consumer as a responsible self-regulating subject who does not look to the state for more help than it is willing to provide.[114] Going by this, well-informed m-payments consumers will be expected to

[107] R.A. Posner, 'Rational Choice, Behavioural Economics, and the Law' (1998) 50 Stan. L.Rev. 1551, 1575.
[108] J.A. Blumenthal, 'Emotional Paternalism' (2007) 35 Fla. St. U. L. Rev. 1, 57-58; L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 228.
[109] T. Williams, 'Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services' (2007) 29 Law & Pol'y 226, 247.
[110] L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 252.
[111] D. De Meza, B. Irlenbusch and D. Reyniers, 'Financial Capability: A Behavioural Economics Perspective' (Consumer Research Report CPR69, UK Financial Services Authority 2008) <https://www.fca.org.uk/publication/research/fsa-crpr69.pdf> accessed 4 August 2018.
[112] Pearson argues that this is similar to industry self-regulation: G. Pearson, 'Reconceiving Regulation: Financial Literacy' (2008) 8 MLJ 45, 53.
[113] T. Williams, 'Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services' (2007) 29 Law & Pol'y 226, 232.
[114] T. Williams, 'Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services' (2007) 29 Law & Pol'y 226, 233.

exhaustively search the market, monitor and switch providers where necessary. The problem with this is that it is hinged on consumer rationality and does not take account of cognitive and emotional biases which can prevent consumers from meeting these expectations.[115]

Furthermore, since financial education aims to enhance a consumer's ability to regulate themselves and other market actors, there is the concern that this may justify the decision by regulators to commit fewer resources to patrol markets and to develop substantive regulatory responses to match products.[116] This approach may increase the risks that consumers of novel products are required to bear. For instance, practicality demands that consumers bear some responsibility in keeping their mobile device and personal security details safe when using m-payments. However, in allocating risk for security breaches, consumers may have more liability thrust on them on the basis that they have been well educated against such risks even if mitigating such risks may be outside their control. If regulators are convinced that disclosures and educative materials are available and sufficient, consumer detriment may be interpreted to be a result of poor decision-making by the consumer deflecting a need for a closer investigation into the practices of the industry or the fairness of the existing risk allocation rules.

Looking beyond information remedies

There are issues that consumers will face in adopting m-payments that cannot be attributed merely to information gaps and therefore cannot be solved by information remedies. Two simple examples can illustrate this. Let us consider Consumer A who wishes to use m-payment services because they are convenient. He approaches Service Provider X who has a comprehensive disclosure document running into several pages. Consumer A, being diligent, looks through the document and discovers a clause which states that Provider X will not be liable for transaction failures attributed to communication or network problems.

Consumer A is uncomfortable with this clause and approaches a competitor, Provider Y, but discovers that Provider Y has similar terms. With either provider, any loss resulting from a transaction failure attributed to a communication or network failure lies with Consumer A. This does not necessarily represent a fair arrangement since network and communication failures fall outside Consumer A's control. In this example, Consumer A receives clear information on the applicable liability rules and seeks out a competitor hoping to contract on more favourable terms. However, the competitor offers similar terms leaving Consumer A with

[115] G. Pearson, 'Reconceiving Regulation: Financial Literacy' (2008) 8 MLJ 45, 55.
[116] L.E. Willis, 'Against Financial-Literacy Education' (2008) 94 Iowa L. Rev. 197, 264.

limited options. As the example shows, although Consumer A has access to information on the available services, this makes no difference in a situation where liability is unfairly apportioned to him especially as competitors offer similar terms.

Let us also consider Consumer B, a retiree who walks into his bank to make enquiries about an overdraft. At the end of the meeting with a bank advisor he has known for years, he is presented with a range of new products offered by the bank. Consumer B is advised to sign up for a new m-payment service offered by the bank in collaboration with a popular mobile network. The bank advisor goes through a disclosure document with Consumer B who is overwhelmed by the information and does not have enough time to think things through. Due to the prompting of the friendly bank adviser and the enthusiastic statements describing how fantastic the service is, Consumer B feels compelled to subscribe to the service immediately. In this scenario, although information on the new service has been made available to Consumer B, the decision to sign up to the service has been due to some pressure coming from the bank advisor.

In light of both scenarios, it is clear that a broader approach is required to protect m-payment consumers. As Loewenstein et al. submit, information remedies should not be used as an alternative to more targeted regulatory responses needed to improve consumer welfare.[117] This suggests that m-payments consumers will be better protected where there are broader consumer policy initiatives which serve as a second tier of protection. For instance, Consumer A in the first example will benefit from a broad regime tackling unfair terms. Most of the liability rules applicable to an m-payment transaction will be provided under the contract agreed upon by the parties. In this context, contract terms such as exclusion and limitation clauses play a significant role in determining which party bears specific risks. Hence, the regulatory rules governing the use of unfair terms will be vital towards ensuring that risk allocation rules imposed on m-payment consumers represent an objectively fair bargain.

Consumer B has been arguably subjected to an unfair commercial practice (undue influence) which has distorted his decision making. There are other unfair practices that other consumers may face when adopting m-payments. For instance, where financial institutions provide m-payments, unfair practices may take the form of cross-selling where consumers are forced by their financial services provider to buy additional services from another provider

[117] G. Loewenstein, C.R. Sunstein and R. Golman, 'Disclosure: Psychology Changes Everything' (2014) 6 Annu.Rev.Econ 391, 405, 412.

with which it has an exclusive agreement.[118] Thus, a financial service provider in an exclusive partnership with an MNO may indirectly force a consumer to use the MNO's services. Consumers may also be compelled into acquiring insurance packages with partner firms to cover losses such as theft of mobile devices. This suggests that regulators will need to decide how commercial practices, broadly defined, will be regulated in m-payments. This will be necessary to protect consumer interests especially those consumers who may be more susceptible to certain unfair practices owing to reasons such as age, mental disability and poverty.

Additionally, regulating against unfair practices serves to promote fair competition. This is based on the premise that firms that do not get involved in such unfair practices should not be put at a disadvantage[119] Regulatory rules may prohibit commercial practices that manipulate consumer decision-making which cannot be justified in any circumstance. Such rules may also introduce broad standards against which other practices which have not been prohibited outright are evaluated. The main aim of such regulatory rules is to discourage the use of unfair practices which distorts consumer decision making and competition (Weatherill and Bernitz 2007). A good example of this approach can be found in the European Union's Unfair Commercial Practices Directive 2005.[120]

Other regulatory initiatives such as cooling off periods will also prove useful in this context. Cooling-off periods represent legally prescribed time frames within which consumers may reconsider economic decisions made. Camerer et al. explain that cooling-off periods may take two forms.[121] One form could compel consumers to delay action until after a time frame elapses[122] Another form could permit immediate decisions but render them reversible during a specific time frame. The latter initiative can be beneficial in the context of m-payments as it permits a consumer to withdraw from a subscribing to the service without incurring any

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[118] L. Poro, 'Unfair Commercial Practices in Financial Services: Is the EU legal framework sufficient to protect consumers?' (2014) 29(7) JIBLR 422, 425.

[119] A.B. Engelbrekt, 'An end to fragmentation? The Unfair Commercial Practices Directive from the perspective of new member states from Central and Eastern Europe' in S. Weatherill and U. Bernitz, *The Regulation of Unfair Commercial Practices under EC Directive 2005/29: New Rules and New Techniques* (Bloomsbury Publishing 2007) 77.

[120] Directive 2005/29/EC.

[121]C. Camerer, S. Issacharoff, G. Loewenstein, et al, 'Regulation for Conservatives: Behavioural Economics and the Case for "Asymmetric Paternalism' (2003) 151(3) U.Penn. L.Rev. 1211, 1240. For more information see "Rights of withdrawal" in G.G. Howells, R. Schulze, *Modernising and Harmonising Consumer Contract Law* (Sellier European Law Publishers 2009) 237; H. Eidenmuller, 'Why Withdrawal Rights?' (2011) 7(1), ERCL 1.

[122], e.g., where a person signs a contract to purchase a good but must wait out a specific period before they can take possession of it. C. Camerer, S. Issacharoff, G. Loewenstein, et al, 'Regulation for Conservatives: Behavioural Economics and the Case for "Asymmetric Paternalism' (2003) 151(3) U.Penn. L.Rev. 1211, 1240.

penalty. Hence, in our previous example, cooling off periods will allow Consumer B some time to reconsider the decision to sign up for the m-payment service offered. If Consumer B concludes that the service is unsuitable, they will be able to cancel the contract within the prescribed period without any penalty.

Although cooling off periods appear more intrusive than disclosures, they are still looked upon favourably by those who believe that market-based solutions are the appropriate responses to consumer detriment.[123] This is because cooling-off periods respect consumer choice and place little burden on business.[124] This approach is considered attractive as it avoids high-handed interference and requires low resource commitment to enforcement.[125] It can also incentivise providers to act more conscientiously. Knowing that consumers have a window within which they may withdraw from transactions without any penalty, providers may embrace practices that encourage consumers to carefully consider their decisions without interference.[126] However, cooling off periods are only useful where consumers are aware of them. Thus, to ensure that the benefits of cooling-off periods are not missed, regulators must insist that consumers are informed about them under mandatory disclosure regimes.

Some jurisdictions already have existing consumer protection frameworks which can address some of the issues raised above. In the EU for instance, in addition to detailed disclosure requirements under the Payment Services Directive 2015,[127] the Unfair Commercial Practices Directive 2005[128] and the Consumer Rights Directive 2011[129] regulate the use of unfair commercial practices and contract terms respectively. These statutes can easily extend to innovative services like m-payments. In the UK for instance, the Financial Conduct Authority has confirmed that consumer statutes transposing these directives will extend to the

[123] C. Camerer, S. Issacharoff, G. Loewenstein, et al, 'Regulation for Conservatives: Behavioural Economics and the Case for "Asymmetric Paternalism' (2003) 151(3) U.Penn. L.Rev. 1211, 1239.
[124] P. Cartwright, 'Understanding and Protecting Vulnerable Financial Consumers' (2015) 38(2) Journal of Consumer Policy 119, 129.
[125] G. Howells, S. Weatherill, *Consumer Protection Law* (2nd edn, Ashgate 2005) 64-5; S. Beyer, *Regulation and its Reform* (Harvard University Press, 1982) 184 cited in P. Cartwright, 'Consumer Protection in Financial Services: Putting the Law in Context' in P. Cartwright (ed), *Consumer Protection in Financial Services* (Kluwer Law Int'l 1999) 11.
[126] C. Camerer, S. Issacharoff, G. Loewenstein, et al, 'Regulation for Conservatives: Behavioural Economics and the Case for "Asymmetric Paternalism' (2003) 151(3) U.Penn. L.Rev. 1211, 1240.
[127] Directive 2015/2366/ EU.
[128] Directive 2005/29/EC.
[129] Directive 2011/83/EU.

regulation of payment services providers.[130] So, it is expected that UK consumers adopting m-payments have a relatively robust consumer protection framework to fall back on.

Conclusion

Although m-payments will potentially introduce a significant shift in the delivery of payment services, there are broader consumer issues involved in adopting them. Hence, it is essential that consumers are well protected when using the service. This article discussed the role of information remedies in protecting m-payment consumers. These remedies aid with presenting consumers with information on the risks and benefits of the service, and therefore place them in a position where they can make informed decisions. Information remedies also make it easier for consumers to compare and choose the platform that best suits their needs. These functions are particularly useful because of the relatively novel nature of the service.

While these remedies will contribute towards lessening the asymmetric gap between consumers and providers, they are subject to certain limitations which require that regulators are cautious of the outcomes that can be achieved through them. In particular, behavioural studies show that consumers are subject to cognitive biases which can affect how they process information gained through disclosures or consumer education. But beyond these limitations, there are other issues that consumers will face that are not directly linked to information asymmetries. Consumers may be subjected to a range of unfair commercial practices which cannot be addressed by information remedies. Hence, it is essential that regulators adopt a broader use of consumer protection initiatives to provide robust protection for mobile payment users.

As stated, some jurisdictions already have frameworks covering issues raised. However, the same cannot be said for many developing countries with weaker consumer protection frameworks. While m-payments are poised to be transformational in these countries, there remains the possibility that consumers will be placed at a significant disadvantage if things go wrong. This is a cause for concern because many of these consumers are already vulnerable

[130] Financial Conduct Authority, 'The FCA's role under the Payment Services Regulations 2017 and the Electronic Money Regulations 2011' (2018) <https://www.fca.org.uk/publication/finalised-guidance/fca-approach-payment-services-electronic-money-july-2018-track-changes.pdf> accessed 7 August 2018, see for instance paragraphs 8.15, 8.32 and 8.34

owing to a multitude of factors such as poverty and illiteracy. Thus, the absence of robust consumer protection frameworks suggests that losses may inevitably be borne by those who are least able to bear them. Hence, regulators in these countries must look towards fashioning holistic consumer regulatory initiatives that protect consumers who adopt m-payments.