

# LEGISLATION, TRENDS AND CASES



## Trends

# Regulatory revolution and new competition in the European Union payments industry

RORY COPELAND

*Queen's University Belfast*

Smartphone technology has increased the speed at which consumers send and receive information. However, advances in smartphone technology applications (apps) had not altered the way in which money was transferred until recent regulatory changes were introduced. The legal complexity in the traditional banking system has made it difficult for consumers to control their money or make quick transfers into and out of their bank accounts. In the European Union (EU), the solution to this problem has taken the form of a regulatory revolution designed to promote competition from alternative technologies. Traditional banks are already competing with 'e-money' providers and, following the implementation of Directive (EU) 2015/2366<sup>1</sup> (generally known as PSD2) on 13 January 2018, will soon also be competing with new entities called payment initiation service providers (PISPs). This article explains, with reference to the UK banking industry, the core problems that exist in the traditional banking system and charts the increasing adoption by consumers of alternative technologies employing e-money and PISPs, which can compete with traditional banks because of PSD2. It outlines how these alternative technologies have avoided the problems experienced by traditional banks and, informed by the effects of similar regulatory changes in the USA and China, anticipates how the consumer experience will change with increased competition for a share of the payments industry. Finally, based on evidence from the Chinese market, it argues that innovative financial technology start-ups and competitors entering the market from other data-heavy, consumer-orientated industries will be ideally placed to take advantage of the EU regulatory changes and challenge the dominance of traditional banks in the payments industry.

### The problem with the traditional banking system

A bank account is a contract of agency<sup>2</sup> in which the account holder deposits money with a bank in return for a debt falling due on demand.<sup>3</sup> Where one party – the payer – transfers money to another party – the payee – both using the services of the same bank, the bank reduces its debt to the payer by the same amount that it increases its debt to the

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1 Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market [2015] OJ L337/35.

2 *Owen v Tate* [1976] QB 402.

3 *Foley v Hill* (1848) HLC 28; *N Joachimson v Swiss Bank Corporation* [1921] 3KB 110; see David Fox, *Property Rights in Money* (Oxford University Press 2008) 43 for an explanation of the fundamental principles of banking.

payee. If the payee holds an account with a different bank, the payer's bank reduces its debt to the payer and increases its debt to the payee's bank. The payee's bank then increases its debt to the payee. All UK banks hold an account with the Bank of England, which they use to make interbank payments such as the one just described. The Bank of England in turn holds an account with the European Central Bank to facilitate cross-border transactions.<sup>4</sup> A pyramid structure is formed, the complexity of which increases as more levels are required to be created within it.

Bank payments are either slow or, if an express service such as the Clearing House Automated Payment System is used, expensive.<sup>5</sup> Some banks are eligible to use the Faster Payments system within the UK.<sup>6</sup> Whilst this system allows certain payments to be made within two hours at no direct cost to retail account holders, the fees charged to business users for sending or receiving each Faster Payment may be passed on to the consumer. It costs the payer and payee additional time and effort to initiate, verify and confirm a payment.

In response to this, consumers have begun using alternative technologies, which transfer debts in different ways. Revolut, for example, amassed 1.5 million users between July 2015 and February 2017 and claims to be signing up between 6000 and 8000 new customers per day.<sup>7</sup> Transferwise, which focuses on international money transfers, and Monzo, a mobile-only bank, boast similar rapid growth and customer bases.<sup>8</sup>

### E-money

The first alternative technology is e-money,<sup>9</sup> as employed by apps such as Revolut. Using the app, the payer buys credit from Revolut and then instructs Revolut to transfer some of that credit to another app user.<sup>10</sup> In effect, the app operator incurs a debt to the payer, and the payer assigns the debt to the other user. The other user can either transfer the value into their bank account or keep it as a debt and assign it to another user at a later stage.<sup>11</sup> The assignment of debt is instantaneous within the app, and all information required to initiate the assignment is held by the app operator. Compared to traditional banking, e-money has the advantage that users take money out of the traditional banking system and operate a separate, closed and much quicker payments system within the app.

There are currently two downsides to the e-money model. The first is that the user must remain in sufficient credit with the app operator to make any upcoming payments. The account in which the money must sit cannot, under electronic money regulation 45, bear any interest.<sup>12</sup> The second disadvantage is that e-money is not protected by the

4 Colin Bamford, *Principles of International Financial Law* (2nd edn, Oxford University Press 2015) 61.

5 Bank of England, 'CHAPS' (Bank of England, 29 May 2018) <[www.bankofengland.co.uk/payment-and-settlement/chaps](http://www.bankofengland.co.uk/payment-and-settlement/chaps)>; see *Tayeb v HSBC Bank plc* [2004] 4 ALL ER 1024 per Colman J for an explanation of CHAPS that is also largely applicable to Faster Payments.

6 Faster Payments, 'Eligibility Criteria' (*Faster Payments*, 11 July 2017) <[www.fasterpayments.org.uk/participation/access-options/direct-participation/eligibility-criteria](http://www.fasterpayments.org.uk/participation/access-options/direct-participation/eligibility-criteria)>.

7 Oscar Williams-Grut, 'Revolut Hits 1.5 Million Customers as Break-neck Growth Continues' *Evening Standard* (London, 26 February 2018) <[www.standard.co.uk/tech/revolut-fintech-startup-customers-growth-a3775626.html](http://www.standard.co.uk/tech/revolut-fintech-startup-customers-growth-a3775626.html)>.

8 Steve O'Hear, 'Digital Banking Startup Revolut Raises \$250M at a Valuation of \$1.7B' (TechCrunch, 26 April 2018) <<https://techcrunch.com/2018/04/25/revolunicorn>>.

9 Grace T Y Cheng, 'E-money: Evolution or Revolution?' [2018] 33 *Journal of International Banking Law and Regulation* 57, 60.

10 Revolut, 'General Terms of Service' (Revolut, 27 February 2018) clause 11 <[www.revolut.com/terms](http://www.revolut.com/terms)>.

11 Ibid clause 12.

12 Electronic Money Regulations 2011, SI 2011/99, reg 45.

Financial Services Compensation Scheme (FSCS).<sup>13</sup> E-money providers must either ring-fence or insure their users' funds,<sup>14</sup> but, unlike deposits in traditional banks, the risk of deposit dissipation by app operators is not covered by government insurance. These, however, are regulatory burdens which could be lifted in the future.

### Directive (EU) 2015/2366

The second alternative to traditional banking focuses on the role of the payer and payee in initiating, verifying and confirming payments. PSD2 was implemented in the UK by the Payment Services Regulations 2017,<sup>15</sup> which came into force on 13 January 2018. It succeeded a 2007 directive on payment services which standardised the regulation of payment services across Europe and set capital maintenance requirements for any institutions which execute payment transactions.<sup>16</sup> Whilst the directive allowed for the existence of non-bank payment institutions, it did nothing to affect the domination of the industry by traditional banks, and it set significant financial barriers to market access by new competitors. The objective of the new Directive is to increase competition and integration in the payments industry by requiring banks to share data with service providers who can offer better, more innovative services. PSD2 creates two additional categories of banking entity, each of which will allow consumers to control and move their money in new and exciting ways. The first new category of entity is the account information service provider (AISP).<sup>17</sup> An AISP can, with the user's permission, access data associated with the user's bank account or accounts to provide a service. AISPs may soon offer everything from savings advice tailored to several accounts held with different banks, to spending tips informed by transaction data.<sup>18</sup> The second new category of entity is the PISP.<sup>19</sup> PISPs can act as agents for the user and access relevant account data to initiate payments from the user's account. Companies in this category will have the biggest impact on the EU payments industry.

Whenever a PISP receives a payment instruction, it uses an application programming interface<sup>20</sup> to build a software 'bridge' between the payer's and payee's bank accounts.<sup>21</sup> The payer's bank must execute the payment within one business day.<sup>22</sup> Although the balance in the payee's account will not be credited immediately when the PISP initiates a payment, the PISP will inform the payee that the payment has been executed.<sup>23</sup> PISP users can, in effect, instantly transfer money to anyone whose account details the PISP holds, or to any online or even physical retailer. Most significantly, the PSD2 text stresses that the PISP never holds the money to be transferred.<sup>24</sup> All traditional banks and e-money providers are required to comply with extensive regulations concerning capital

13 Financial Services Compensation Scheme, 'Q&As about Deposits' (Financial Security Compensation Scheme, 27 February 2018) <[www.fscs.org.uk/what-we-cover/questions-and-answers/qas-about-deposits](http://www.fscs.org.uk/what-we-cover/questions-and-answers/qas-about-deposits)>.

14 Electronic Money Regulations (n 12) regs 20–22.

15 Payment Services Regulations 2017, SI 2017/752.

16 Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market [2007] OJ L319/1.

17 Payment Services Regulations (n 15) reg 17.

18 Directive (EU) 2015/2366, recital 28.

19 Payment Services Regulations (n 15) reg 69.

20 See Open Banking, 'Glossary' (Open Banking Ltd 2018) <[www.openbanking.org.uk/about-us/glossary](http://www.openbanking.org.uk/about-us/glossary)>.

21 European Commission Press Release, 'Payment Services Directive: Frequently Asked Questions' (2018) <[www.europa.eu/rapid/press-release\\_MEMO-15-5793\\_en.htm](http://www.europa.eu/rapid/press-release_MEMO-15-5793_en.htm)>.

22 Payment Services Regulations (n 15) reg 86.

23 Ibid reg 46.

24 Ibid recital 35.

maintenance and liquidity.<sup>25</sup> PISPs will not be subject to the same rules, so it will be easier for entrepreneurs without significant investment backing to compete in the PISP market.

### Impact

The results of this payments revolution will be, firstly, an expansion in the choice of services available to consumers keen to use alternatives to traditional banking. Secondly, consumers will soon have more control over their money and financial data. Thirdly, traditional providers of payment services will face competition for a share of the payments market.

These predictions are informed by evidence of the effect of similar regulatory reforms in other jurisdictions. In the USA, the Dodd-Frank Wall Street Reform and Consumer Protection Act 2010 created the Consumer Financial Protection Bureau (CFPB) to engage with and regulate consumer financial services.<sup>26</sup> Apps similar to Revolut, regulated by CFPB through updates in 2016 to regulations E and Z of the Electronic Funds Transfer Act 1978,<sup>27</sup> have become extremely popular among young people looking for an alternative to cash and cheques. Venmo, for example, was originally only a service for splitting bills and making payments between friends, but it is now also being accepted as a payment method by millions of retailers.<sup>28</sup> Services such as Apple Pay and Samsung Pay combine e-money and near-field communication in mobile phones to facilitate contactless payments at shop check-outs.<sup>29</sup> A recent *China Daily* survey found that 14 per cent of people in China carry no cash and that 74 per cent of people could spend fewer than 100 yuan (approximately £11) in cash per month.<sup>30</sup> A special regime, similar to PSD2, has applied to 'non-financial institutions', including e-money providers, in China since 2010.<sup>31</sup> The Chinese model for instant payments uses printed quick response codes because of their low cost and low infrastructure requirements.<sup>32</sup> It appears that today's consumers enjoy a choice of payment options afforded by recent regulatory liberalisation.

The governor of the Bank of England, Mark Carney, shared his prediction about the increased control that consumers are likely to gain over their money and financial data in the near future: 'FinTech will change the nature of money, shake the foundations of central banking and deliver nothing less than a democratic revolution for all who use

25 See Bank of England, 'Capital Requirements Directive IV' (Bank of England, 22 May 2018) <[www.bankofengland.co.uk/prudential-regulation/key-initiatives/capital-requirements-directive-iv](http://www.bankofengland.co.uk/prudential-regulation/key-initiatives/capital-requirements-directive-iv)>.

26 *Financial Report of the Consumer Financial Protection Bureau, Fiscal Year 2017* (Consumer Financial Protection Bureau, 15 November 2017) 7 <[https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/cfpb\\_financial-report\\_fy17.pdf](https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/cfpb_financial-report_fy17.pdf)>.

27 Ibid 16.

28 Anna Irrera, 'PayPal rolls out Venmo Payments to its US Retailers' (Reuters, 17 October 2017) <[uk.reuters.com/article/us-paypal-hldg-venmo/paypal-rolls-out-venmo-payments-to-its-u-s-retailers-idUKKBN1CMI6H](http://uk.reuters.com/article/us-paypal-hldg-venmo/paypal-rolls-out-venmo-payments-to-its-u-s-retailers-idUKKBN1CMI6H)>.

29 Apple, 'Near Field Communication' (Apple, 27 February 2018) <<https://developer.apple.com/ios/human-interface-guidelines/user-interaction/near-field-communication/>>.

30 Chinadaily.com.cn, 'About 14% People Carry No Cash in China' (Chinadaily.com.cn, 6 September 2017) <[www.chinadaily.com.cn/bizchina/tech/2017-09/06/content\\_31633683.htm](http://www.chinadaily.com.cn/bizchina/tech/2017-09/06/content_31633683.htm)>.

31 Decree of the People's Bank of China No 2 (2010), 'Administrative Measures on Payment Services Provided by Non-Financial Institutions' (People's Republic of China, 14 June 2010); Jing Bian and Frank Marchione, 'The New Battle Field: An Analysis of the Payment Systems in China' [2014] 29 33 *Journal of International Banking Law and Regulation* 641.

32 Lerong Lu, 'Decoding Alipay: Mobile Payments, a Cashless Society and Regulatory Challenges' [2018] 33 *Butterworths Journal of International Banking and Financial Law* 40, 40.

financial services.<sup>33</sup> As a result of compulsory data sharing, consumers will be able to use new and accessible payment apps without having to change their current account or give up the financial security of an FSCS-insured bank. Traditional banks will therefore face competition from start-ups, which would not previously have been able to access the payments industry. This competition will increase both the quality of banking services and the ease with which consumers can switch from one service to another.

It follows from the predictions above that the EU regulatory reforms will bring unequal benefits to the different competitors in the payments industry. For example, whilst traditional banks retain the advantage of consumer trust, their legacy computer systems cannot deliver the user experience offered by newer competitors.<sup>34</sup> As a result, some banks are already partnering with payment apps to provide the full range of retail banking services.<sup>35</sup> Competition from e-money providers and PISPs will be significant in general, but the evolution of the payments industry in other jurisdictions suggests that payment service providers who enter the market from another data-heavy or user-orientated industry will be put at a particular advantage by regulations such as PSD2. The result of such an advantage is already evident in China, where the market is dominated by AliPay and WeChat Pay.<sup>36</sup> AliPay is owned by Alibaba, an online retailer similar to Amazon in size, and WeChat Pay is part of the multifunction WeChat app, owned by the Tencent conglomerate. Companies with hundreds of millions of existing users, market capitalisation equal to the world's biggest lenders and whose business models are centred around the collection and control of data appear to be ideally placed to integrate personal banking into their user interfaces. Google, Apple, Facebook and Amazon look poised to enter the market in the near future, and would perhaps present the biggest competition to traditional banks.<sup>37</sup>

## Conclusion

The analysis of e-money and PSD2 demonstrates how regulation is facilitating alternatives to traditional banking in the EU payments industry. It is predicted that fierce competition among payment service providers will result and that consumers will benefit from increased control over their money and financial data as well as an expanded choice of payment service providers. Insights from the US and Chinese markets indicate the range of services from which EU consumers may benefit. Additionally, such observations suggest that payment service providers entering the market from other data-heavy or user-orientated industries will be ideally placed to take advantage of the regulatory changes in Europe. Some banks have responded by improving their services, but, given the inherent complexity of the traditional banking system and associated costs, their dominance within the payments industry to date will be difficult to sustain. Arguably, this will be the democratic revolution that Mr Carney predicted.

33 Mark Carney, 'Enabling the FinTech transformation: Revolution, Restoration, or Reformation?' (Bank of England, 16 June 2016) <[www.bankofengland.co.uk/-/media/boe/files/speech/2016/enabling-the-fintech-transformation-revolution-restoration-or-reformation.pdf?1a=en&hash=93734A70D1475F5438CBC9E8BF8C3733BDA4CF36](http://www.bankofengland.co.uk/-/media/boe/files/speech/2016/enabling-the-fintech-transformation-revolution-restoration-or-reformation.pdf?1a=en&hash=93734A70D1475F5438CBC9E8BF8C3733BDA4CF36)>.

34 Lerong Lu, 'Financial Technology and Challenger Banks in the UK: Gap Fillers or Real Challengers?' [2017] 32 *Journal of International Banking Law and Regulation* 273, 274.

35 Leo King, 'First Direct Makes It Personal with Open Banking' *The Times* (London, 28 November 2017) <[www.thetimes.co.uk/raconteur/finance/first-direct-makes-personal-open-banking/](http://www.thetimes.co.uk/raconteur/finance/first-direct-makes-personal-open-banking/)>.

36 Lu (n 32).

37 Martin Moeller, 'Ready or Not, the New Banks Are Here' (LinkedIn, 5 January 2018) <[www.linkedin.com/pulse/ready-new-banks-here-martin-moeller/?trackingId=xLQmPhiQWsenDkgSpZ%2FyFw%3D%3D](http://www.linkedin.com/pulse/ready-new-banks-here-martin-moeller/?trackingId=xLQmPhiQWsenDkgSpZ%2FyFw%3D%3D)>.

