Achieving European Policy Objectives through Financial Technology
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Abstract
This ECRI Commentary argues that ‘FinTech’ (newly emerging Financial Technologies) can play a crucial role in achieving European policy objectives in the area of financial markets. These notably include increasing access by smaller firms to trade credit and other forms of external finance and completing the banking and capital markets union. Accomplishing these objectives, however, will require a coordinated European policy response, focused especially on promoting common business processes and the adoption of shared technology and data standards.

1. The growing interest in FinTech
Something is stirring in the world of financial technology, at least if we are to believe the hype and the money now surrounding ‘FinTech’. Examples of these new technologies include crypto-currencies such as Bitcoin and Ripple, the use of big data for risk analytics, new peer-to-peer and other platforms, distributed ledgers for supporting transaction efficiency, computerised trading and a host of technical solutions developed for online and micropayments and reliable financial security.

The US remains the hotbed of activity. Accenture reports some $9.9 billion of venture capital funding for US financial technology start-ups in 2014, compared with $3.4 billion in 2013 and only $2 billion in 2012.1 Forbes reports that global funding in the first half of 2015 reached $8 billion, with 26 individual funding rounds of over $50 million each.2

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2 www.forbes.com/sites/samanthasharf/2015/06/15/the-biggest-fintech-funding-rounds-so-far-this-year-26-over-50-million/
The UK (alert to the implications for London as a global financial centre) is making a considerable effort to catch up, with the publication earlier in the year of a government review of FinTech and a recent speech by Chancellor George Osborne emphasising the goal of becoming a world leader in FinTech. Although well behind the US, London is the leading European centre for FinTech, with according to London Partners more than half of all European FinTech funding and some £343 million in 2014 and a further £312 million in the first half of 2015. Major European financial institutions are also now paying close attention to developments in financial technologies, including UBS, ING, Barclays, Santander and Deutsche Bank.

What does all this mean for Europe? This commentary argues that Europe can and should grasp the opportunities offered by this new wave of innovations in financial technology. Europe has been slower than the US in developing and supporting FinTech, but coordinated European approaches can deliver a crucial lead in this emerging field and provide critical support for policy goals such as the financing of small- and medium-sized enterprises and delivering EU capital market and banking unions.

2. FinTech and borderless European markets

Financial technology has a key but not always sufficiently appreciated role to play in furthering the goal of seamless and borderless European markets.

- A major priority must be the further development of a European-wide efficient digital supply chain and supporting supply-chain finance for both smaller and larger companies. The European Banking Association is already working with the European Commission to support the development of ‘e-invoicing’, replacing costly paper-based processes with automated digital messaging and payments. They envisage that the majority of European invoicing will be digitalised by 2020, supporting seamless cross-border trade without relying on human language processing. There is still a lot more to be achieved, however, both through the use of ‘smart contracts’ (embedded e-invoice software) that remove much of the manual processing from the supply chain and from the standardisation of supply chain data in order to make it accessible to both bank and non-bank lenders.

- Another crucial policy area is the development of online and mobile commerce. The Single European Payments Area SEPA has been successful in harmonising card and bank-to-bank payments, but mobile and online payments remain relatively fragmented across Europe. They continue to be hampered by the variation in standards and relatively limited cooperation between banks, telecoms companies and other stakeholders to overcome these barriers.

- Risk finance – for innovative small companies – is a central plank of EU policy for growth. The 2016-17 Horizon 2020 programme for access to risk finance has budgeted the provision of some €751.89 million for debt, equity and mezzanine funding of European Research and Innovation (R&I) alongside the COSME loan guarantees and equity facilities for smaller companies. While public sector support is crucial for innovation, it can be leveraged

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5 The COSME Loan Guarantee Facility (LGF) is a window of the Single EU Debt Financial Instrument, implemented by the European Investment Fund (EIF), which supports European enterprises' growth
further through crowd-funding and peer-to-peer lending platforms. This in turn needs to be supported by standardisation of credit, accounting and other financial data and the development of automated programming interfaces (APIs) and other forms of standardisation to support the interoperability of systems for credit and portfolio risk analysis.

These are only three of the most immediate potential payoffs from FinTech. Financial services are information industries. Ultimately digital technologies can be expected to transform almost every aspect of banking, insurance and asset management and deliver a very wide range of benefits to investors, customers and other stakeholders. But a successful start, exploiting fully these first ‘early bird’ opportunities, will be critical to setting Europe on the path to reaching the frontier in the development and application of financial technologies.

3. The role of policy

As these and other examples make clear, new financial technologies can play a major role in supporting the development of the European single market. But can something this important be safely left to entrepreneurial activity? The answer is no; this is not enough. Policy-makers also have a crucial role to play especially in encouraging coordination on common business processes and standards and their adoption across the industry; and in addressing barriers to entry (including financial regulation), which may prevent new technology-based entrants from competing effectively with incumbent firms.

There is a parallel here between financial services and the telecommunications industry. The European Telecommunications Standards Institute (ETSI) has played a key role in developing GSM, 3G, 4G and other standards, which have then been adopted not just in Europe but worldwide.\(^6\) As described by the European Commission in its 2020 Digital Agenda for Europe, the EU has developed a regulatory framework for telecommunications encouraging competition, improving the functioning of the market and guaranteeing basic user rights.\(^7\) This has helped the price of telecoms services to fall by around 30% in the past decade.

Two examples can illustrate this parallel. A first example is the required cooperation and standardisation needed to ensure transparency in savings vehicles (the parallel is with access regulation in telecommunications). Financial technology should be employed to ensure the maximum possible transparency of fees and the tradeoffs of risk and return in UCITS and other savings vehicles, to ensure that European savers can make the best possible provision for retirement. Individual providers, however, have only limited incentives to switch to common reporting standards that will support this transparency.

A second example is the potential for ensuring that financial regulation does not excessively inhibit the use of financial technology for addressing the challenges of financial inclusion (the parallel here is with the application of telecommunications regulation at EU level to support effective pan-European competition). Former prisoners, migrants and those challenged by chronic illness, disability or poverty can all benefit from the use of financial technology to support basic banking functions, for example payments to and from mobile phones and access to cash, without the need for full banking services. One of the main barriers, however, is regulatory, with the requirement of KYC (know your customer) and AML (anti-money

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\(^6\) See [http://www.etsi.org/about](http://www.etsi.org/about).

laundering) compliance placing substantial obstacles in the way of providing such services to disadvantaged groups.

A balanced regulatory treatment of financial innovation is required, taking proper account of the need to promote competition from new business models and innovative forms of financial intermediation as well as protecting individuals from financial cyber crime, misconduct and prudential and system risks. There is a danger that fears about ‘shadow banking’, off balance sheet risks or the disruptive impact of technological innovation on incumbent firms, may lead to an excessively conservative regulatory response.

One other area where public action will be appropriate is agreement on and – to a lesser extent public investment in – shared digital infrastructures, for example supporting payments, or the ownership and registration of physical and financial assets. Euro area T2 and T2S payments and settlement infrastructures can serve as a model, but more can be done at national and EU levels.

Another is full use of public-sector digital procurement, across the EU, in order to provide the critical mass for the uptake of efficient financial technologies. For example, all public-sector invoicing should be carried out using fully standardised digital processes. In addition (in support of the Single European Financial Data Area described below) all financial and regulatory reporting should be based on the principle of always using the most granular possible structure of data, to minimise duplication and maximise the opportunities for flexible re-use of reported information.

4. A Single European Financial Data Area (SEFDA)

European policy-makers should also consider the creation of common standards for financial data – i.e. a Single European Financial Data Area or SEFDA. This will not only support the role of FinTech in breaking down barriers to the single European market, it will also assist in achieving other priority European policy objectives:

- **Banking union.** The implementation of banking union is limited by variations in data between institutions and across member states. These inconsistencies in data make it difficult to conduct reliable and credible stress tests or to ensure orderly resolution of troubled institutions.

- **Capital market union.** While larger firms can access European securities markets, the ability of smaller firms to issue equity and debt securities is hampered by continuing differences in corporate information between firms (even under IFRS) and by limited availability of market data and variations in regulatory reporting requirements that inhibit trading. The European policy goal of supporting European securitisation markets, with transparent and appropriate risk allocations, relies on the ability to access and process standardised underlying data.

- **Financial stability.** Limited access to standardised granular data weakens the ability of the European Central Bank, the European Systemic Risk Board and national authorities to monitor either exposures between financial institutions or common exposures to shared sources of risk.

While some steps towards data standardisation of this kind have already been taken (for example, in the development of the global legal entity identifier, an initiative that has had strong European support), much remains to be done. While it will take a long time to fully bear fruit, Europe has every incentive and opportunity to develop a concerted and coordinated effort at developing EU-wide standards for all financial data.
5. Conclusions: Hitting several birds with one stone

While there is growing awareness of the potential of financial technologies for achieving many European policy objectives, doing so requires vision in conjunction with appropriate and focused policy action.

There is evident commercial potential in innovations such as the employment of big data for risk analytics, mobile and online payments technology, the use of distributed ledger (blockchain) to promote transaction efficiency, or the development of alternative funding platforms for small- and medium-sized enterprises. These opportunities are immense. At the same time there is a danger of getting carried away by the excitement surrounding FinTech. One can see parallels with the first big wave of usage on the internet in the late 1990s and the dot.com bubble. While financial technologies will profoundly change payments, credit markets and other banking and financial services, it is impossible to predict exactly which particular technologies will succeed.

The key to exploiting the opportunities of FinTech for improving the functioning of financial markets is therefore cooperation. This is Europe’s strength and why Europe can still be the global leader in financial technologies.

There are two key challenges. The first is ensuring common European policies in priority areas where the application of information and communications technologies can overcome barriers to the single market in financial services (three – digital supply chain finance, e-commerce and mobile payments – are highlighted here, but others may also merit attention). The second challenge then is making vigorous efforts to promote and enforce the underpinning of technological and data standardisation, across the industry, including the use by public-sector bodies to achieve critical mass, so that the opportunities of financial technologies can be fully exploited.

These two steps will go a long way towards the creation of borderless European financial markets, as open as possible to all participants and as effective as possible in the sharing of risk and the allocation of savings to the most productive possible purposes.
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