THE FUTURE OF DIGITAL FINANCE
RUNS THROUGH PUBLIC POLICY

DECEMBER 2020

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RADIX

CENTRE FOR
BUSINESS
POLITICS
&
SOCIETY

BUILDING DIGITAL FINANCE IN EUROPE

FINTECH FOR SOCIAL VALUE

"THERE'S A WAY TO DO IT BETTER – FIND IT."

Thomas A. Edison

TO GIVE REAL SERVICE, YOU MUST ADD SOMETHING WHICH CANNOT BE BOUGHT OR MEASURED WITH MONEY, AND THAT IS SINCERITY AND INTEGRITY.

Douglas Adams

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EXECUTIVE SUMMARY

The future of digital finance in Europe runs through public policy.

While there is much excitement about technological advances and the promise they might offer, our contention is that the primary driver of the future shape of digital finance and whether it will deliver meaningful social benefit or merely reproduce, in digital form, the strengths and weaknesses of the current financial system, depends heavily on the direction of public policy and the regulatory framework.

PUBLIC POLICY WILL BE THE MAIN DRIVER OF HOW DIGITAL FINANCE WILL DEVELOP

Public policy will be the main driver of how digital finance will develop

Regulators do not simply police markets, they create and shape them. In this paper we examine how public policy has the opportunity to shape digital finance in Europe and what is needed to ensure that, as in other areas such as Big Tech, Europe does not, yet again, end up being left behind while the US and China forge ahead towards dominance.

FinTech's promise was that of disruptive digital technology that would democratise finance, increase competition, and better align the financial system with broader societal goals. It remains to be seen whether public policy in Europe will enable all, or even some, of that to happen.

FINTECH IN THE POST-COVID ERA

The Covid-19 pandemic has had positive and negative impacts on the FinTech ecosystem.

Some companies – particularly payments providers, those that provide digitization services to established players, well-capitalised start-ups and those that have adapted their business model to the new realities – have done well.

For others there have been difficulties as capital markets have taken fright and there has been a large correction in the perceived value of many FinTech companies. Some of the hype has lost its shine resulting in falling valuations, shrinkage of the amount of available capital, increased caution among regulators, and governments that have chosen the strong balance sheets and known capabilities of the existing banking sector to distribute their Covid-19 largesse rather than the digital challengers.

COVID-19 HAS HAD POSITIVE AND NEGATIVE IMPACTS ON THE DIGITAL FINANCE ECOSYSTEM

All of this has led to a re-evaluation of the sector and its promises with the injection of a dose of realism if not scepticism.

Three things have become clear:

- *First that 'FinTech' as a collective term on the back of which large amounts of money were raised at eye-watering valuations hides wide variations in business models and management capabilities.*
- *Second, that credible expertise and reliability in 'fin' is at least as important as shiny 'tech' for companies that will succeed in the long term.*
- *Third, that achieving meaningful structural change in financial services and displacing incumbents, be they big banks or big tech, is more easily promised than realised in practice.*

Frameworks to evaluate FinTech companies for valuation purposes and for regulatory purposes have already been developed. In this paper we provide a new framework for how one might evaluate FinTech from the perspective of whether it adds social value or not. Our evaluation is based both on the governance standards of companies in the FinTech space and the nature of the financial services provided.

DIGITAL FINANCE IN EUROPE

Digital finance operates at the intersection of four different areas of policy: industrial policy, competition policy, financial regulation, and social policy. Achieving a coherent policy response across all these different policy areas will be challenging.

> DIGITAL FINANCE AFFECTS FOUR DIFFERENT AREAS OF PUBLIC POLICY

Industrial Policy

Europe is in a relatively poor competitive position in digital finance compared to the US and China. Yet it also has some strengths on which it can build.

London remains the premier European centre both for 'fin' and for 'tech'. Other non-EU countries, like Switzerland, also have significant strengths. We therefore suggest that Europe follows its declared policy of 'Open Strategic Autonomy' through collaboration between some EU Member States, the UK, Switzerland and maybe others in the near vicinity to build a competitive pan-European digital finance capability. We call this approach a coalition of the willing and able, for which precedent exists.

The centrepiece of such a collaboration would be a Digital Finance Investment Fund constructed on the model of a multilateral investment institution. Such a fund would have the following characteristics:

- *Provide patient capital*
- *Focus on added social value*
- *Vet potential country participants on the quality of their financial regulation and ability to enforce*
- *Be 'independent' with its own governance structure*

Europe already has nine out of the top 10 Green Finance Centres in the world (of which two outside the Eurozone and four outside the EU). This provides a strength on which a European digital finance capability focused on added social value can be built.

Competition Policy

Pro-active competition policy is essential if digital finance is not to become dominated by incumbents in finance or Big Tech thereby abolishing much of the promise of market transformation. We have already seen how competition policy has been well behind in regulating Big Tech leading to embedded oligopolies that are now difficult to contain. We must avoid the same fate in digital finance.

We suggest:

- *The test for action on competition should be the proactive promotion of competition and consumer choice NOT traditional defensive consumer welfare considerations.*
- *Action means actively taking steps and imposing remedies to alter market structures and restore competition and consumer choice.*
- *Competition authorities have to get a lot more active and move more quickly than they are used to in order to cope with a rapidly advancing digital world.*

Financial Regulation

We suggest that there are three necessary components to a regulatory framework that can encourage the emergence of social value and market disruption in digital finance:

- *Well-constructed financial regulation with diversity*
- *Effective supervision*
- *Regulation that encourages new market structures*

The main challenge for financial regulators is to find a way to create a regulatory framework that is appropriate for the type of financial market they would like to see emerge in the future rather than regulating for the past and the present. This is a delicate and difficult task.

The use of regulatory sandboxes (not yet widespread enough in Europe) forms one element that can encourage change to emerge.

Social Policy

The promise of digital finance is that it can 'return the financial services industry to what it is supposed to be – an industry that serves people'. All the other previously mentioned policy areas therefore need to be considered within the overall envelope of social policy: what are the social goods that Europe is attempting to achieve through the digitization of finance?

WHAT SOCIAL GOODS IS EUROPE TRYING TO DELIVER THROUGH FINANCIAL DIGITIZATION?

Access to finance is, of course, the lifeblood of people's lives. While the promise of digital finance is much talked about, less has been talked about the impact of financial digitization on the digitally excluded – something that must not be forgotten in our wide-eyed fascination with new technology.

CONCLUSION

Europe is starting from a position of being well behind the US and China in digital finance. Whether Europe will succeed or fail to build its own capabilities in this area is a matter that will be determined largely by public policy.

Europe has the potential to succeed. Doing so will require a broad coalition that includes the European Commission, some EU Member States, and those European countries that can bring strength to the initiative. This is what we understand by the stated desire for Open Strategic Autonomy.

Building digital finance into something that serves people and enhances the social value delivered by finance will require coordination across multiple areas of policy as well as speed and innovation in developing policy to a clear vision of what we all want our future to look like.

1. DELIVERING FINTECH'S PROMISE

"The future of finance is digital."

So opens the European Commission's recent paper on a digital finance strategy for the European Union (EU) (European Commission, 2020).

FinTech's promise was that of disruptive digital technology that would democratise finance, increase competition, and better align the financial system with broader societal goals.

FINTECH PROMISED DEMOCRATIZATION AND DISRUPTION OF THE CURRENT FINANCIAL SYSTEM

FinTech would change the power dynamics between the owners of capital, citizens, and the public and private intermediaries that deploy those funds. Digital access and superior risk assessment technology would bring financial services to currently excluded segments of the population and to SME's poorly served by the banking system. Digital finance would be an important catalyst to make more rapid progress towards the UN Sustainable Development Goals.

FinTech was also seen as the competitive answer to the economic problem of a highly concentrated banking market as it could also serve the existing customers of traditional banks better by offering cheaper, faster, and customised financial products and advice through digital channels and methods.

The technology driven financial innovation promised by the emerging FinTech industry was presented by entrepreneurs, regulators and commentators alike as Dr Jekyll to the Mr Hyde embodied in the incumbent players.

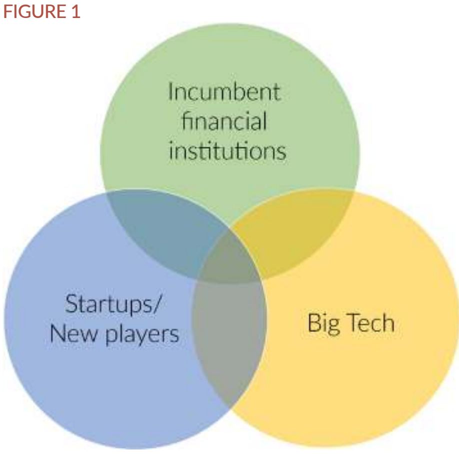
Has FinTech lived up to these promises? As always, the answer is yes and no.

This paper evaluates the current state of the FinTech market, in particular the start-up ecosystem, and makes recommendations for policy action that can help re-align the market towards achieving its initial promise. We first explore why some FinTech start-ups have not proven to be resilient under the Covid-19 crisis even while the pandemic has driven demand for digital finance solutions. How market structures are evolving in ways that are different to what many had initially imagined. We then propose a public policy framework that could drive the future development of digital finance in Europe.

Intersections

The advance of digital finance solutions has been rapid. What is becoming clear is that developments are not exclusively driven by the FinTech start-up ecosystem but rather by the intersection between three different types of market players: start-ups, incumbent financial institutions, and Big Tech – each having different strengths (Figure 1). While start-ups are strong innovators, they lack the capitalization, customer base and strong balance sheets of existing players. It is the places of intersection of these three blocs that are proving to be the most interesting market spaces.

FIGURE 1



This evolution is reflected in the multiple policy areas that the development of digital finance now touches upon.

Whereas the initial focus was on financial regulation of the emerging FinTech marketplace, it is now becoming clear that there are emergent issues that fall within the scope of competition policy and industrial policy. Particularly so for a Europe that, following the spectacular failure of Wirecard and the potential downsides of an EU that loses access to London's expertise both in finance and in tech, risks remaining well behind in an emerging market dominated by the US and China.

All of this to be taken in the context of social policy – how do we ensure that digital finance lives up to the social mission that was the basis of its initial promise rather than finding itself enveloped in the same financialised economic system it was intended to disrupt? How do we manage important intersections between digital finance and other areas of social policy such as data privacy and data ownership? (Figure 2)

How do we support appropriate financial digitization without, over a long transition period, and seduced by technological advance, ending up with another group of left behind citizens – those who are digitally excluded for one reason or another. Otherwise, digitization may generate as much exclusion as inclusion.

FIGURE 2

What would it take for Europe to build a significant presence in digital finance?

To answer that question, we start by examining the start-up FinTech ecosystem and the impact that the Covid-19 pandemic has had on early stage companies relative to incumbents. While recognising that digital finance goes beyond start-ups, the prospects of early stage companies constitute an important element since it was these start-ups that were intended to cause market disruption, challenge incumbents and provide the necessary new wave of innovation, competition, and a re-focusing of finance on social purpose.

HOW DO WE PREVENT DIGITIZATION FROM BECOMING ENVELOPED IN THE EXISTING FINANCIALIZED ECONOMIC SYSTEM?

We then put forward a framework for policy initiatives that have the potential to give Europe a meaningful place in the emerging digital finance system.

Overall, we stress that, in evaluating future opportunities, Europe needs to start from a position that reflects the real world – both in terms of its existing capabilities and in terms of the likelihood that FinTech developments will fulfil their promise. Over-hyped expectations and an overestimation of capabilities will lead to policy missteps. Realism provides a better basis for developing the policy initiatives necessary for success in this rapidly moving market space.

2. FINTECH IN THE AGE OF COVID-19

Given the narratives about FinTech companies' advantages one would have expected the Covid-19 crisis to strengthen their competitive position and to play a big role in helping to mitigate the effects of the pandemic. Some, particularly those whose business model is focused on digital payments systems, have done well. But two factors have damaged many other players in the market:

- *A large correction in market perceptions that has put access to capital and long-term solvency under strain*
- *Governments have chosen incumbent banks with strong capital adequacy and large balance sheets as partners to distribute the large amounts of money made available to citizens and SMEs.*

2.1 THE WINNERS

Within a week of the announcement of the pandemic emergency on 13 March 2020, the S&P 500 Financials Index declined by nearly 18 percent. The Info Tech Index declined by just over 15 percent (Figure 3). In other words, 'tech' did better than 'fin'.

As always, gross figures hide which players in the market prospered more than others.

In the FinTech industry, we can detect four groups that have done well during the pandemic: digital payments companies, companies providing digitisation services to the big banks, those that were well capitalised before the pandemic struck, and those that were quick to adapt their business models to the new world.

FOUR GROUPS HAVE DONE WELL DURING THE COVID-19 PANDEMIC

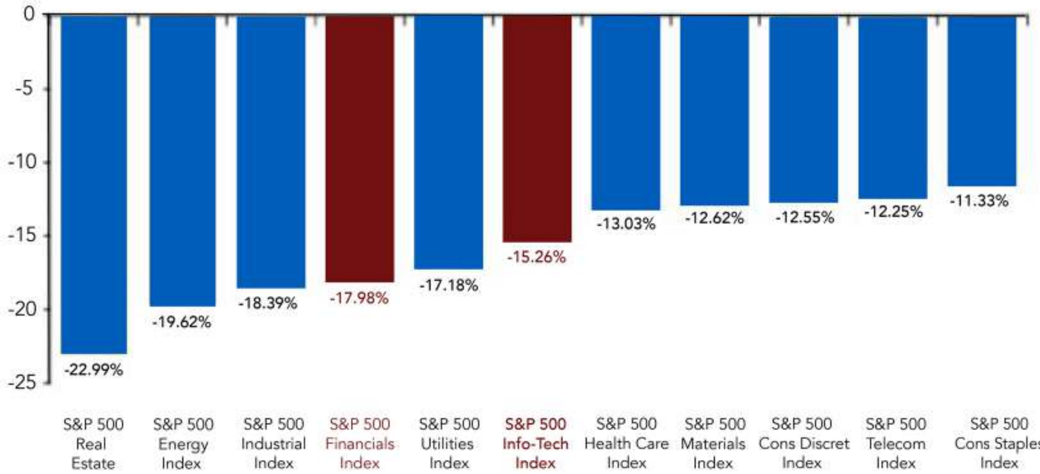
Digital payments

As much of the world under pandemic conditions moved online, both the volume and value of digital payments increased significantly to the benefit of digital payments companies and those who act as technology enhancers for banks, selling them digitisation products.

FIGURE 3

'Tech' did better than 'Fin'

S&P 500 percentage return from each sector group one week after the announcement of national emergency



Source: S&P Global

PayPal and Square in the US and Adyen in the Netherlands have seen their customer bases, and, subsequently, their valuations, jump. Adyen's value has increased 36 per cent in the early months of lockdown when the Stoxx 600 Index of major European companies has declined by 20 per cent. By the middle of April 2020, Adyen was processing almost 40 per cent more online retail transactions per week than it was in January. In the US, the stock market values of PayPal and Square have risen 33 per cent and 26 per cent respectively, when the S&P 500 was still down by a tenth (Megaw 2020). In April PayPal signed up an average of 250,000 new accounts per day (Toplin 2020).

However, it is as well to note that not all digital payments providers have profited from the pandemic. Those whose client base contains mainly traders in the hospitality and travel industries have suffered significant falls in revenues.

Digitisation service providers

Another group of winners are technology providers to the FinTech companies and banks, digital B2B intermediation platforms with specialism in data collection and analysis.

One of them, Onfido, provides AI powered online virtual identity verification technology. Another, Previse, uses machine learning technology that analyses invoices at large corporations from their SME suppliers. This product allows fast payment to SME suppliers by big companies significantly reducing working capital costs of SMEs.

Yapily is a FinTech company that uses the open banking framework to link financial and commercial firms to banks through its digital platforms. Just like Onfido and Previse it raised funds during the Covid-19 crisis and will use the funds to expand its business.

Another winner capitalising on the open banking framework is Railsbank, a digital platform that provides cheap and fast access to credit card market for other FinTech start-ups. Railsbank expanded into the U.S. during the Covid-19 crisis as the incumbent providers of credit cards reduced or cancelled their credit card limits to some customers as unemployment levels increased.

SOME COMPANIES THAT HAVE DONE WELL ARE NOT FOCUSED ON DISPLACING INCUMBENTS

These companies all seem to have good prospects. But they are not in business to dislodge incumbents. Rather their business depends on the continued success of those same incumbents. The extent to which adding their services to the incumbents' business offering will contribute to FinTech's promise to transform finance remains to be seen.

Well capitalised start-ups

Another group of winners were FinTech companies that had already raised funds before the Covid-19 crisis and could lend to businesses that had to close under the lockdown measures but still had bills to pay. Many with capital left to deploy had little option but to keep their customers afloat with new loans on new terms hoping that they can stretch their capital for as long as necessary until the effects of the pandemic play themselves out.

One such FinTech company was Konfio from Mexico. Founded in 2013 and having raised more than USD 400 million since then, Konfio has stepped in to fill the gap in the market for SME loans when big Mexican banks stopped lending to them after the Covid-19 crisis (Webber 2020). Konfio, just like Zopa in the U.K., was lucky in timing as it benefited from the hyperbolic valuations in the bull market before the Covid-19 crisis.

Another is OakNorth in the UK, a successful lender focused on plugging the gap for lending to 'microbusinesses with a few million pounds-plus of revenue'. With a business model based on its credit decision technology that, it claims, is fast, forward-looking and assesses alternative forms of collateral, OakNorth has had enough lending capital available to help its existing customers through the pandemic while assuming that things will not return to near normality until around mid-2022.

COMPANIES WELL-CAPITALISED BEFORE THE PANDEMIC HAVE TO PROVE THEIR RESILIENCE TO THE EXPECTED RISE IN DEFAULTS

For these lenders, questions remain about their resilience to the expected rise in default rates following the Covid-19 disruptions. They will need to manage deftly the credit risk associated with a bigger and growing lending portfolio throughout a difficult business cycle, a macro-economic reality for which there is no previous experience, and with curtailed access to capital markets at valuations that might be well below what they have been used to.

Adapting business models

The UK FinTech companies Starling, Funding Circle, Ultimate Finance, and ThinCats have adapted themselves to the change in credit markets and got themselves approved by the UK government to process applications for business interruption loans aimed at the SMEs.

As a result, Starling was able to add 147 net new employees on its payroll since the start of the lockdown, in sharp contrast to Monzo that laid off 285 staff and furloughed 295.

This contrasting outcome for Starling and Monzo, two well-known FinTech companies that have contributed immensely to the FinTech narrative globally, shows that management skills are as important as technological capabilities to prosper in the long-term.

Germany-based successful European FinTech bank N26 is learning this lesson the hard way. Although N26 managed to keep its valuation stable at USD 3.5 billion, raising in total USD 260 million since the Covid-19 crisis, it has not been as successful in managing its human resources. N26 employees have publicly voiced their low trust and confidence in the management in dealing with workplace issues like pay, working conditions and unionisation. The N26 founding entrepreneurs may be technologically savvy, but they may be exposing the company to the kind of reputational risk to which its specific target client segment would be very sensitive.

2.2 THE DIFFICULTIES

Capital Markets Abandon FinTech

In Europe, the immediate effect of the Covid-19 crisis was a "dash to cash" among investors who have switched from the search for high yield to a flight to safety. This led to falling valuations of many early stage companies threatening to cut off the flow of capital to fund customer acquisition, R&D, and even operational expenses.

In the U.K., one of the best known FinTech companies, digital challenger bank Monzo, a unicorn with a pre-Covid valuation of £2 billion, experienced a staggering 40% drop in its valuation when it wanted to raise £60 million in June 2020.

CAPITAL MARKETS HAVE TAKEN FRIGHT AT THE IMPACT OF COVID-19 ON FINTECH STARTUPS

The spectacular bankruptcy of Wirecard has made the rumours about expected failure of big FinTech brands more plausible and raised serious concerns about the solvency of previous FinTech stars. In its latest annual report, Monzo, which counts 4.3 million customers for its app-based current account, stated that the uncertainties created by the pandemic "cast significant doubt" on its ability to continue as a going concern.

Rumours of a Revolut insolvency that started circulating on social media in March threatened a run on the bank prompting Nikolay Storonsky, Founder and CEO, to issue a letter to all the bank's customers reassuring them of 'business as usual' following a successful $500 million fundraise the previous month.

Tide, a non-bank lending platform, was reported as struggling to secure further loans to cope with the second UK lockdown in November 2020 after it ran out of funds the previous summer. If unable to raise further funds, a significant number of its small business clients could be left in the lurch as most accredited lenders had closed their books to new clients. (Makortoff, 2020)

Neither is this sort of damage exclusively European. According to Bloomberg the US FinTech company Kabbage cut off credit lines to its SME clients without notice and furloughed hundreds of its workers as immediate reaction to the Covid-19 crisis (Faux and Surane, April 1, 2020). Similarly, LendingClub laid off one third of its employees and its market value has halved (Reuters 21 April 2020).

The drift towards negative interest rates places further strain on neo-banks that have accumulated significant retail deposits but still have thin loan books.

As the Figure 4 below shows, FinTech has underperformed both NASDAQ and the S&P 500 in the wake of the pandemic.

FIGURE 4

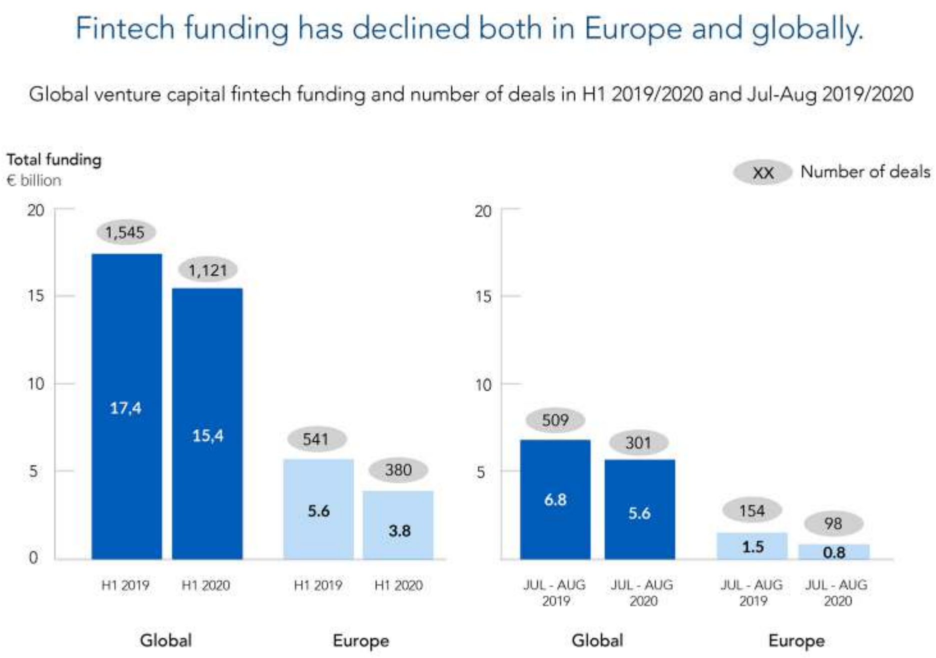
Source: NASDAQ for FinTech Index and NASDAQ Composite, Yahoo for S&P 500

Fundraising, too, has suffered significantly. The number of European FinTech start-ups, the largest start-up category in Europe since 2013, sharply declined by 40% in March 2020 (Woodford, 2020), while overall funding has declined both globally (-27%) and in Europe (-29%) (Figure 5).

Below we examine some of the reasons for these difficulties.

FINTECH FUNDING HAS BECOME MORE CAUTIOUS

FIGURE 5



Source: Dealroom.co, McKinsey & Co

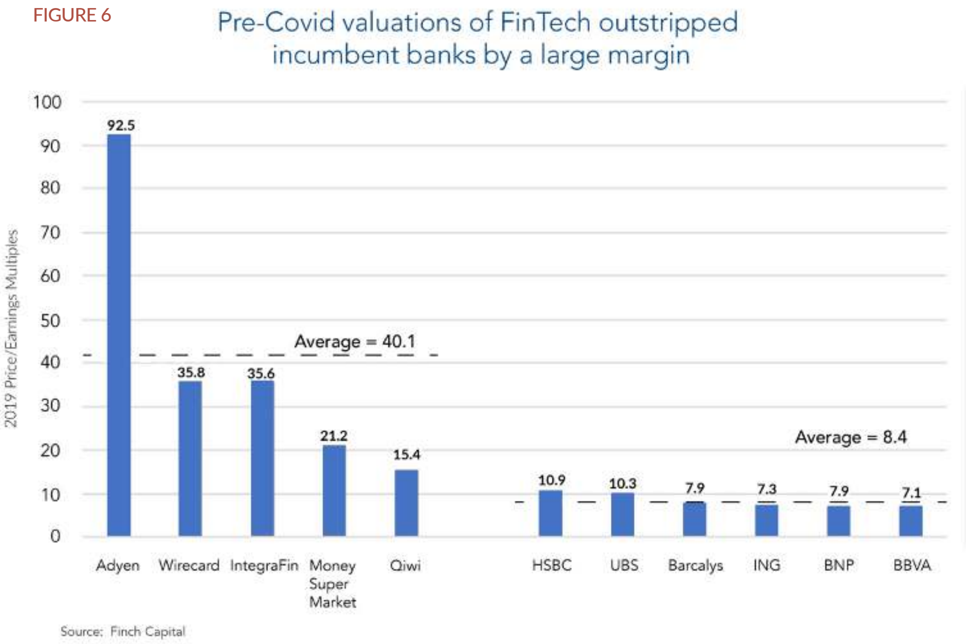
Hype that lost its shine

The Covid-19 crisis has called into question the seemingly astronomical pre-crisis valuations of FinTech companies. Investors are now questioning whether such valuations were in any way based on future product market strength or simply a product of irrational exuberance, excessive demand, the support provided by cities and countries keen to attract players in this emerging industry, and regulators keen to encourage emergence of competition to the large banks.

As the Figure 6 (page 14) shows, before the Covid-19 crisis the average price/earnings multiple of this selected group of leading FinTech companies was almost five times bigger than some of the world's leading traditional banks. Wirecard's price earnings multiple was 35.8 whereas HSBC's was a mere 10.9, reflecting the narrative that FinTech would disrupt the business models of traditional banks and put them in the dustbin of financial history.

AFTER THE HYPE, VALUATIONS HAVE BECOME MORE REALISTIC

FIGURE 6



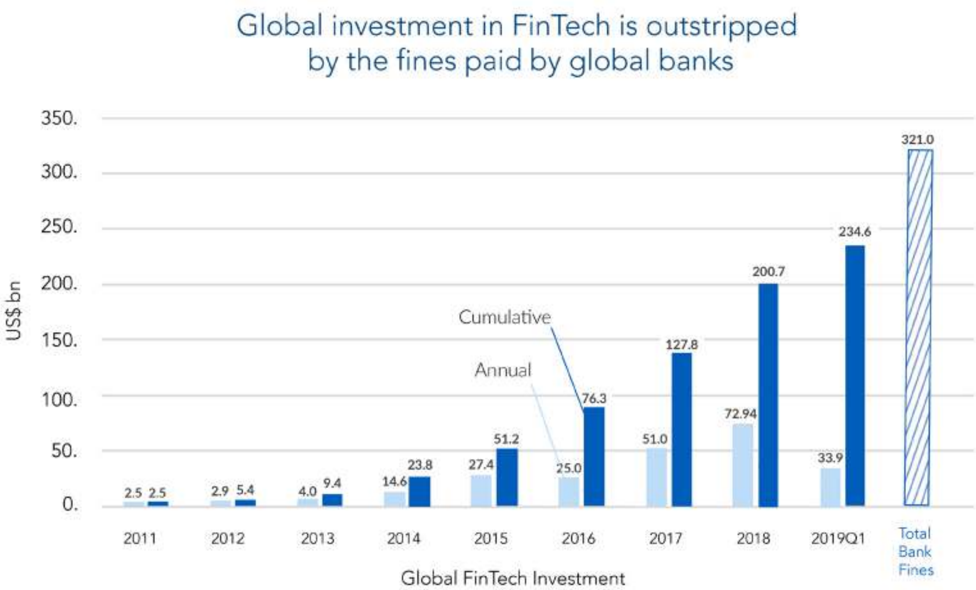
The Covid-19 crisis has injected a dose of realism, if not scepticism.

Investors are now realising that what was conveniently grouped under the universally exciting label of FinTech as an asset class consisted of a panoply of players whose businesses ranged from digital platforms of debt and equity intermediation to digitisation of mundane bank back office functions, from data analytics using artificial intelligence to assess risk to digital payments for routine e-commerce transactions, and many more.

But the term FinTech was a convenient label under which to group a large number of what were, in effect, heterogeneous start-ups.

In spite of the hype and the large amounts of money funneled into 'FinTech', the reality is that the global funds raised by FinTech companies since 2011 pales against the financial might of traditional banks that they were supposed to disrupt in a very near future. In fact, the total global investment in FinTech companies between 2011 and the first quarter of 2019 is only about two thirds of just the global fines paid by the banking sector between 2007 and 2018 (Figure 7).

FIGURE 7



Source: Statista for FinTech investment and Boston Consultancy Group for bank fines.
Bank fines data is total paid between 2007 and 2018.

Well before the current crisis, FinTech commentators like Matthew Vincent writing for the Financial Times, were pointed out the hyperbole and the gap between the narrative and the business model. Commenting on the peer-to-peer lender Funding Circle's valuation in September 2018 Vincent drew attention to the fact that the business model of Funding Circle was "fin" not "tech", generating more than 80 per cent of its revenues from loan transaction fees. However, "Its price makes it look more 'tech' than 'fin'. Its challenges, though, look more 'fin' than 'tech'." (Vincent 2018).

Regulators too have become more cautious.

Earlier this year, the Bank of England increased Monzo's capital requirements during a fundraising round. The changes were among the first actions following the central bank's commitment to boost both capital planning and governance at smaller lenders. It showed that the regulator is willing to slow expansion by fast-growing challengers (Megaw 2020).

And, spectacularly, the Chinese authorities, quoting regulatory issues, pulled the Ant Group IPO moments before what was expected to be the largest ever IPO in history.

All this is a completely new experience for the FinTech sector as far as the capital market perceptions of their value, solvency and risk are concerned.

Governments choose the big banks

Just like the investors in capital markets, governments and regulators have also changed their priorities with the Covid-19 crisis.

With the odd exception, it was not FinTech start-ups but rather the traditional incumbent banks with strong capital adequacy and big balance sheets that were mainly chosen as partners in distributing interest free loans and grants to SMEs and the self-employed. FinTech companies were digitally nimble and futuristically giant in technology but did not have the crude financial muscle in the form of capital and balance sheet to implement the massive financial operations that the governments had to carry out to save their economies.

3. FINTECH – A MORE GRANULAR EVALUATION

The above run-through of the effects of the Covid-19 pandemic teaches us lessons about the shape and nature of FinTech and raises questions about how this emergent industry can live up to its promise of transforming the financial services industry for broad social benefit.

Three things have become clear.

- ***First that 'FinTech' as a collective term on the back of which large amounts of money were raised at eye-watering valuations hides wide variations in business models and management capabilities.***
- ***Second, that credible expertise and reliability in 'fin' is at least as important as shiny 'tech' for companies that will succeed in the long term.***
- ***Third, that achieving meaningful structural change in financial services and displacing incumbents, be they big banks or big tech, is more easily promised than realised in practice.***

In distinguishing between 'tech' and 'fin', it is also as well to keep in mind a comment by author and commentator Chris Skinner that *"Tech is about digital experiences. Money is about trust."* Building trust sustainably will be a core element of success for challengers.

> TECH IS ABOUT DIGITAL EXPERIENCES. MONEY IS ABOUT TRUST.

A recent report from the Economist Intelligence Unit analyses over 10 million online conversations about finance and banking dating back to 2013. It found that Fintech start-ups are strongly associated with financial empowerment, but also twice as likely to be associated with security and privacy concerns when compared to traditional banks. Traditional banks retain strong associations with trustworthiness, a wider range of services and perks such as loyalty programmes. (The Economist Intelligence Unit, 2020).

3.1 DISRUPTION IS NOT AS EASY AS IT'S MADE OUT

On the 'fin' side of FinTech, what is now becoming clear is that the challenges associated with dislodging the dominant position of the big banks – with their financial and political strength, their integrated business models, and the fact that they, too, have been aggressively digitising their services – has been hugely underestimated. Shaving a few pennies off transaction fees is a poor basis for sustainable competitive advantage.

On the 'tech' side, Big Tech companies are also moving aggressively into this space raising questions as to whether upstarts can provide technological superiority that is practically meaningful in the marketplace, sustainable in a world where technological expertise diffuses rapidly, and that is more valuable than the massive data troves and network effects provided by Big Tech.

The lesson is that shiny technology wrapped in hype is not sufficient either as a differentiator or a disruptor in the complex world of finance. Challengers can only succeed if they offer a fundamentally different business model that adds value in a way that incumbents find difficult to match. Achieving this depends on building strengths in the understanding of finance and tapping into gaps and weaknesses, with technology as an enabler rather than the primary driver.

Nevertheless, it remains clear that the diverse and growing FinTech ecosystem still has the potential to have a significant impact – one that not only provides financial returns for investors but also wins people's trust and makes a broad positive contribution to society as a whole.

How do we get there?

In this section, we offer suggestions as to how players in the FinTech space may be evaluated in ways that are useful for investors, regulators and policy makers as they view the future direction of this emergent market.

> IT IS TIME TO MOVE ON FROM THE COLLECTIVE 'FINTECH' LABEL TO A MORE GRANULAR ASSESSMENT

It is time to move on from the collective FinTech label to more granular assessments. As we have seen, the new entrants in this space are a varied bunch with different business models and different future prospects – in terms of their ability to lead to structural disruption in the market, in their future attractiveness to investors, and in their ability to provide socially useful services that policy makers would want to encourage.

3.2 EVALUATING FOR INVESTMENT

While, pre-Covid, all who wanted to raise money at attractive valuations were keen to ensure their prospectuses carried the FinTech label in flashing lights, those with good future prospects will now be keen to distinguish themselves from the less attractive players.

The Figure 8 below represents an initial attempt at parsing the FinTech space into ten functional categories that may help for valuation purposes. In the future we should expect such categorisation of business specialisms and business models to be widely used in the FinTech sector. The genus of FinTech is likely to remain but the classification of the species under the genus is going to influence valuations, strategies and the logic for mergers and acquisitions.

FIGURE 8

Evaluating FinTech for Capital Markets

	Example	Relative valuation price to revenues	Growth impact CV-19 post-crisis	Unit economics post-crisis	Evaluation & M&A implications
Challenger Banks	N26, monzo	50x+	↔	↓ Less activity	↓ + Consolidation
Consumer Lending	ZOPA	10-30x	↑ Credit need	↑ Higher NIM	↔ + M&A
Mortgages	Trussle	10-30x	↑ Remortgage More digital	↑ Higher NIM	↔ + M&A offline Brokers
SME Lending	OakNorth Bank, Funding Circle	10-20x	↑ Credit need	↑ Higher NIM	↔
Wealth Management	LIQID	50x+	↓ De-risk	↓ Less AuM	↓ + M&A
Savings/ Deposits	raisin.	50x	↔	↔	↓ + Valuation pressure
Insurance Distribution	wefox	50x+	↔	↔	↓ + M&A with traditional
Insurance Products	alan	50x+	↔	↔	↓ + Valuation pressure
Payments/FX	moneyfarm, adyen	50x	↓ Less activity	↑ FX Spread	↓ + M&A
Enabling FinTech	Digital Insurance Group, UiPath	10-20x	↑ Demand	↑ Lower CAC	↑ + M&A by old tech

Source: Finch Capital

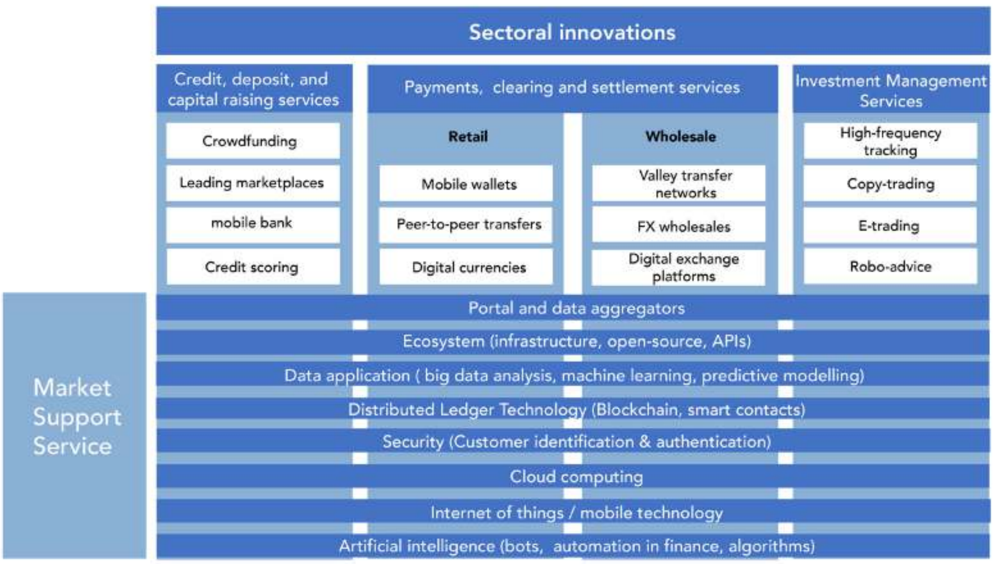
3.3 A REGULATORY PERSPECTIVE

A different approach comes from the Bank of International Settlements that provides a conceptual evaluation of FinTech companies based on function in the banking sector (Figure 9). This approach is useful for regulatory purposes.

The details of financial regulation of digital finance has been the subject of much work by regulators and lies beyond the scope of this report. But it is as well to point out, as we examine later, that the issue goes beyond the compilation of regulation focused on financial stability to building the necessary enforcement capabilities and to ensuring that the regulatory framework enables market re-structuring – if that is what is desired.

FIGURE 9

Evaluating FinTech from a Regulatory Perspective



Source: Bank for International Settlement (2018)

3.4 THE SOCIAL VALUE OF FINTECH

The real issue is how the digitisation of financial services can transform markets in a way that adds social value.

As we have seen, finance digitisation is not the sole province of the challengers. Big banks and Big Tech are also in the game – and with some big guns in their arsenal. Again, it is those among the challengers with sound, value adding business models that have good prospects.

What is still lacking is an evaluation based on the social value delivered by different players in digital finance.

FinTech's core message after the 2007 banking crisis was inclusive finance at affordable prices and with broad access made possible because of smart applications of digital technology. This message was endorsed by reputable and trusted banking authorities like Mark Carney, the ex-Governor of the Bank of England and Chair of the Financial Stability Board.

"The achievements [of FinTech] thus far are impressive, with enormous increases in financial inclusion due to the advent of digital finance." (Carney 2017, p.12).

WHAT IS LACKING IS AN EVALUATION BASED ON SOCIAL VALUE DELIVERED

The US regulator, Office of the Comptroller of the Currency, too, has introduced FinTech as socially responsible financial innovation:

"While innovation has many meanings, the OCC defines responsible innovation to mean: The use of new or improved financial products, services, and processes to meet the evolving needs of consumers, businesses, and communities in a manner that is consistent with sound risk management and is aligned with the bank's overall business strategy." (OCC 2016, p.5).

The recent previously mentioned UN sponsored task force report suggests that:

"digitalization is already making a difference, but… far more can be achieved by realising keystone, catalytic opportunities." (United Nations Task Force, 2020)

It is also worth bearing in mind that value added opportunities from financial digitization are likely fundamentally different in developed markets with well-developed banking and financial systems than in developing markets with less developed financial infrastructure. Our focus in this report is Europe. While digitization has delivered massive inclusion benefits in rural Kenya and other places, it is not quite so clear that such benefits are so readily available in Europe.

What we need to evaluate is the way in which digitization opens the door to delivering new benefits rather than simply delivering digitally services that already exist. While the latter may make for greater convenience, improved customer retention, and increased speed and efficiency that could make financial institutions more profitable, all that, in itself, may well be desirable when viewed from the firm perspective, but does not deliver much meaningful new social value.

For instance, some believe that digital finance can serve to mobilise and consolidate large sums from small individual retail consumer funds to funnel into green investments. Others argue that this is already happening with or without digitization; that large amounts of investment capital is already being funneled towards such projects and that the block is lack of investable projects rather than lack of investment funds. That, in the bigger scheme of things, the specific contribution from digitization will be marginal.

We will not know who is right for some time yet. The objective should not be to pre-judge the outcome but rather to let a million blooms flourish and see what emerges.

DOES DIGITIZATION DELIVER NEW BENEFITS, OR DOES IT DO THE SAME AS BEFORE BUT DIGITALLY?

Below we offer an initial outline for evaluating digital finance based on the opportunity to deliver social value (Figure 10 on page 20). This framework is not meant to be comprehensive and complete. This is a prototype that we would like to improve and expand with feedback and comments from the entrepreneurs, employees in the sector, consumers, regulators and all other commentators. We believe in flexible, adjustable, and democratic frameworks that will serve the achievement and realisation of social value in digital finance rather than rating tools that can be gamed or an end in themselves.

We divide our evaluation using two filters: governance and service delivered.

FIGURE 10

Evaluating The Social Value Of Digital Finance

Filter 1

GOVERNANCE	
Social mission driven	Is the company primarily driven by social or environmental mission?
ESG	Are governance standards and practices ESG compatible? Is executive pay meaningfully linked to social impact?
Financing	Do the sources of financing facilitate delivery of social mission?
Data	What are the policies for the ownership and use of customer data?
Transparency	Is overall business impact transparent – for instance through the use of Impact Adjusted Accounting?
Compliance	Where relevant, does the company have robust systems to comply with anti-money laundering and counter-terrorism financing regulations? Does it eschew transnational tax-avoidance structures?
Financial Stability	Is the company financially stable relative to its stage of development?

Filter 2

First Question: Does the company have performance metrics focused on outcomes rather than process?

SERVICE PROVIDED: Functionality / Social Value Opportunity	Improved access for the excluded	Meaningfully lower costs/less collateral	Enhanced financial security	Increased financing for social &/or environmental impact	Market transformation potential
Deposit taking	++	+			++
Consumer Lending	++	+			+
SME Lending	++	++		+	+
Wealth/Asset Management	++	++	++	++	++
Insurance	++	++	+		++
Payments	++	+/-			++
FX and remittances	+	++			+

Source: RADIX Centre for Business, Politics & Society

(i) Governance

Digital finance companies, whether start-ups or incumbents, have little chance of delivering social value, rather than only shareholder returns, if their own governance structures do not enable them to do so.

Criteria would range from whether companies in this space are social mission or "purpose" driven rather than driven primarily by shareholder returns, to whether they have strong governance structures and compensation systems in place that will allow them to deliver on such social value, to transparency and good controls on their financial flows, their use of customer data, and their overall social and environmental impact.

We recognize that the hurdles to which individual companies should be held in terms of transparency on these criteria will be different for a start-up than for an established entity. Nevertheless, it is the underlying governance philosophy, corporate culture and direction of travel that matters even if different companies are at different stages in that journey.

We also recognize that, in any complex system, some companies will end up serendipitously delivering social value even if it was not their original mission. All well and good. That does not obviate the need for mission driven companies that are focused on social value as their purpose and will find ways of delivering it.

(ii) Service Provided

Our second filter looks at the functionality and type of service delivered by digital finance.

The first question is whether companies have developed metrics that measure, as best possible, the positive social and environmental outcome.

For instance, one consumer finance company focused on financial planning recently described itself as 'mission-driven'. The CEO stated that the digital app was designed to make financial planning interesting and fun. That is fine as far as it goes. But the desired outcome of financial planning is improved financial security in the short- and long-term. Which raises the question as to whether making it more 'fun' actually achieves that desired outcome and whether the company actually had any metrics that measured that outcome.

In our suggested evaluation matrix, we attempt to highlight where we believe the greatest potential for delivering added social value might lie.

> THE SAME 'BENEFIT' CAN DELIVER DIFFERENT DEGREES OF SOCIAL VALUE

Whether that potential is real and can be delivered remains to be seen and our matrix will need to be updated over time as innovations emerge – or fail to. Nevertheless, we hope that it is a good starting point to stimulate further discussion.

It is also worth noting that the same 'benefit' may deliver different levels of social value depending on where in the financial system that benefit lies. For instance, reducing costs for customers is one of the oft-quoted benefits of digitization. When that benefit represents shaving a few cents of payment transaction costs, it is welcome but hardly transformative. On the other hand, in the field of asset management it has been calculated that the current structure of the pensions system means that, were the asset managers to charge no fees at all, eventual payouts could be up to 60% higher for some savers (Silver 2017). A substantial reduction in asset management costs through market transformation enabled by digitization therefore has the potential to deliver significant social value in the form of a more secure retirement for millions of people.

3.5 BEYOND 'FINTECH'

What should by now be clear it that the collective moniker of "FinTech" or "digital finance" has outlived its usefulness – for investors, for regulators and for policy makers. Having broken down the industry into various component parts the next question we would like to address is – how can public policy stimulate a positive future for digitizing finance in Europe? That is the subject of our next section.

4. DIGITAL FINANCE IN EUROPE

How can policy makers across Europe:

(i) ensure that Europe can build a reasonable presence in this important market space and avoid being left behind by the US and China

(ii) ensure that the structural market disruption promised by FinTech does not peter out.

At the start of this paper, we suggested that this would involve a confluence of industrial policy, competition policy, and financial regulation. These are policy areas that tend to operate in their own isolated silos and achieving confluence across all policy areas is always a challenge.

Layered on to that are broader questions about social policy and conflicting visions of what the European Union (EU) – and Europe more broadly – is and should primarily be about.

These are the questions that we will discuss next.

4.1 EUROPEAN INDUSTRIAL POLICY

The idea that, as a matter of policy, Europe will let itself become wholly dependent on the US and China for digital finance does not bear thinking about. Yet this is what is happening in so many other sectors.

Rather than focusing on building the conditions for industrial success, Europe has seemingly become obsessed with becoming a 'regulatory superpower'. We will examine whether that approach could help build its position in the FinTech space.

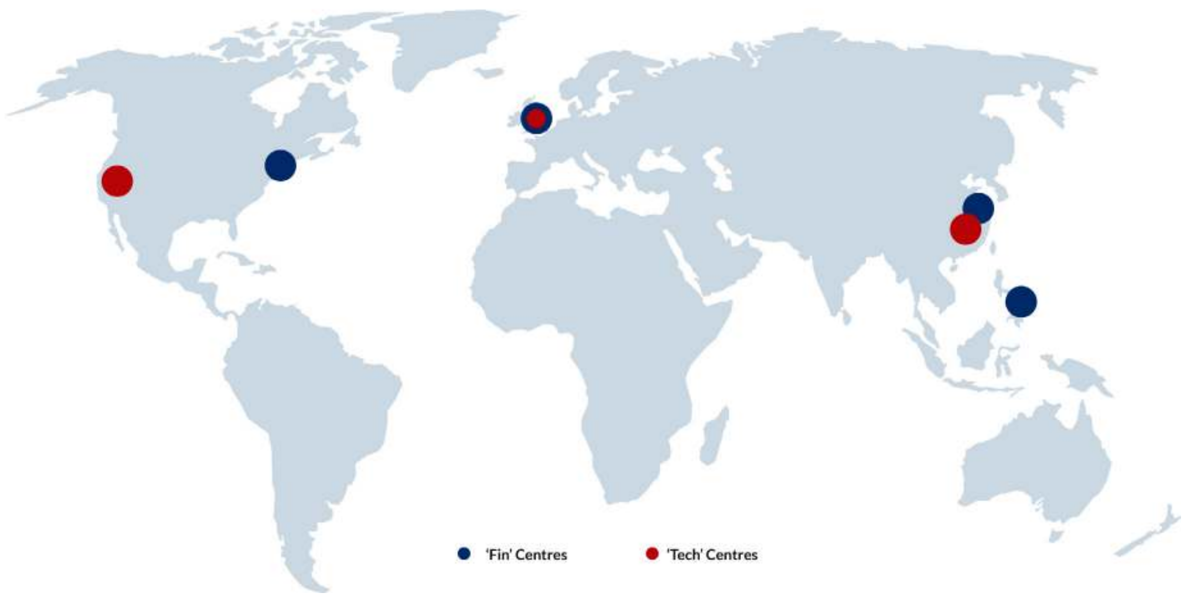
Europe's Competitive Position

Apart from London, and following the spectacular Wirecard failure, Europe remains well behind when it comes to digital finance innovation (Figure 11).

EUROPE REMAINS WELL BEHIND THE US AND CHINA IN DIGITAL FINANCE CAPABILITIES

FIGURE 11

London apart, Europe needs to catch up with other global 'fin' and 'tech' centres



New York and London remain the premier global financial centres with Hong Kong and Singapore coming in next. California, Hangzhou and London are the epicentres of FinTech innovation. Europe outside the UK is, by and large, nowhere to be seen on any reasonable scale.

The global Smart Centres Index tracks the development of technology and financial centres across the world in their support for and readiness for new technology applications. London and Zurich are the only European cities to make the top 10 (Table 1).

Stockholm, the only EU city to make it into the top 20, comes in at number 16.

These asymmetries are also visible in the amount of capital available for early stage FinTech companies (Figure 12). Once again, China and the US are dominant by some distance.

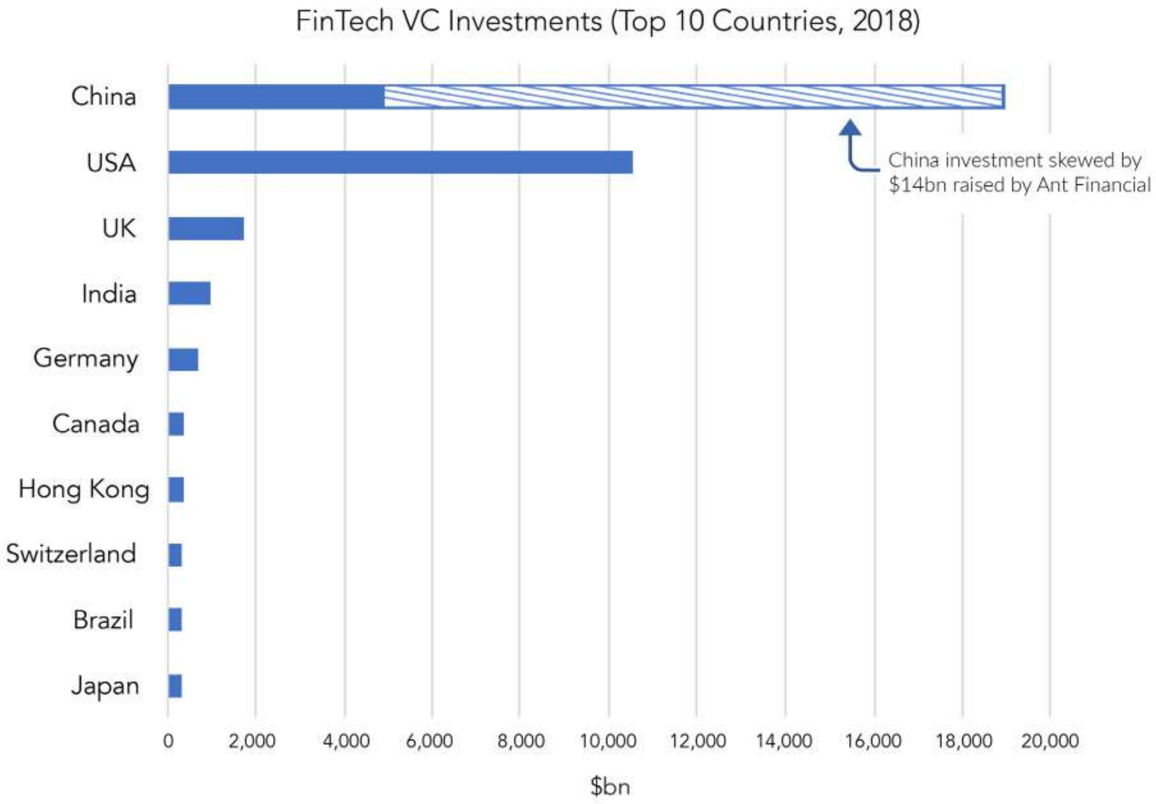
TABLE 1

SMART CENTRES RANKING (July 2020)	
1	London
2	New York
3	Singapore
4	San Francisco
5	Los Angeles
6	Chicago
7	Hong Kong
8	Tokyo
9	Boston
10	Zurich

Source: Z/Yen

FIGURE 12

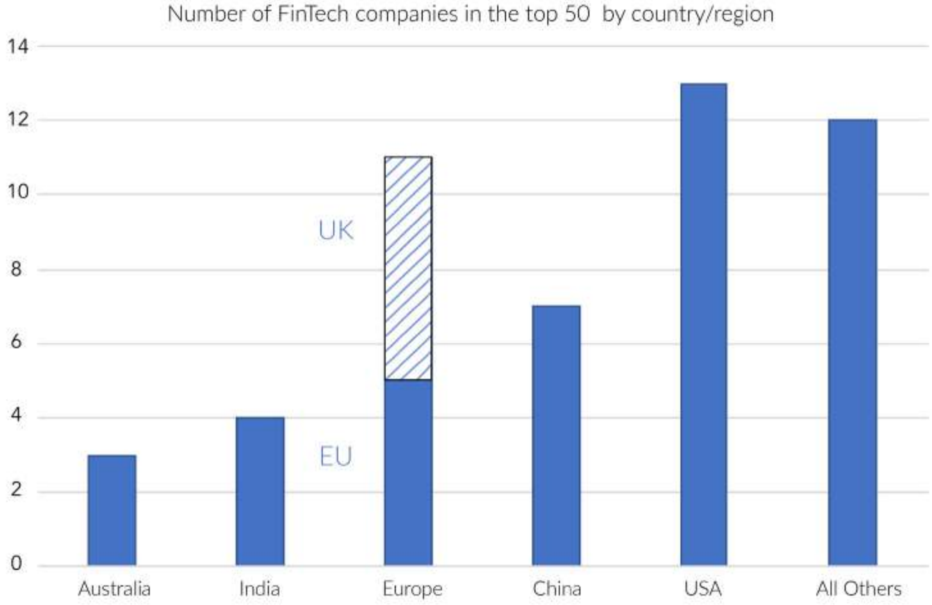
The US and China comfortably outstrip Europe in FinTech investments



The same situation is reflected in the geographical location of the top 50 FinTech companies. (Figure 13).

FIGURE 13

Europe as a whole can become competitive with the US and China



Open Strategic Autonomy

For this reason, our recommendations focus on the EU's stated objective to build 'open strategic autonomy'. We interpret strategic autonomy as meaning avoiding being wholly or significantly dependent on the US or China for its digital finance infrastructure – whether such infrastructure is visible and consumer facing or hidden from view but, in effect, underpinning the inner workings of European financial institutions.

'Open' we interpret as meaning what the European Commission declares in its digital finance strategy document: *"The Commission also remains committed to continue working closely with our international partners"* (ibid). It would also give the lie to the suggestion that *"A brutal mix of economics and geopolitics leaves the EU with little choice but to take a more protectionist line"* (The Economist, 2020) showing that the EU remains 'open' for business rather than attempting to seal its borders – an approach it has so loudly criticized for President Trump's USA.

Within that context, we suggest that close collaboration between the EC, maybe through participation via InvestEU, some Member States, the UK and Switzerland, and maybe some countries in the near vicinity such as Israel, offers the opportunity to build a truly pan-European digital finance capability that can become globally competitive. It will need to be done within a framework that is flexible, pragmatic, and able to move fast without getting bogged down in lengthy bureaucratic or political quicksand while rivals motor on.

THE FUTURE LIES IN COLLABORATION BETWEEN EU MEMBER STATES AND EUROPEAN COUNTRIES OUTSIDE THE EU

A further factor is that a number of EU Member States have not placed digital finance as a priority area for their future development. An all-or-nothing approach would suffer from having to drag these countries into an overall EU commitment to digital finance innovation when it is not high on their own list of priorities.

A coalition of the willing – and able

An alternative approach is to build a coalition of the willing and able – a set of countries that have both sufficient interest and meaningful capabilities to build Europe's competitive position in FinTech. This would signal a Europe that is open and pragmatically willing and able to establish the multi-lateral collaborations it so often praises to harness innovation and build its competitive position in key areas.

An encouraging precedent for such a coalition of the willing (albeit still exclusively within EU structures) is the latest proposal to manage refugee policy. Faced with the intractable lack of agreement between all Member States on immigration policy, a new 'solidarity á la carte' proposal has emerged – one that essentially allows different Member States to collaborate flexibly in ways that suit their own domestic imperatives. This is a welcome break from the one-size-fits-all approach that is clearly failing in immigration policy as well as in other policy areas. Adopting a similar approach and opening it up to non-EU countries would be a logical next step in industrial policy for Europe.

ONE-SIZE-FITS ALL IS DOOMED TO FAIL

Patient capital focused on social value

Success for FinTech in Europe will need a step change in the amount and type of capital available for this space.

As outlined earlier, Europe is far behind the US and China in the sheer amount of available capital. Analysts from McKinsey & Company estimate that at least €5.7 billion will be needed to sustain European FinTech through 2021.

We suggest that there is room for public policy intervention to create a large FinTech specific fund that uses public capital to leverage larger amounts of private capital. There are well-worn ways in which this can be done, and we will not rehearse them again here. But the model would be akin to a multilateral investment institution.

A MULTILATERAL INVESTMENT INSTITUTION COULD MOBILISE THE PRIVATE AND PUBLIC FINANCE NEEDED TO ACCELERATE DIGITAL FINANCE FOR SOCIAL VALUE

We suggest that such a fund should have four key characteristics.

The first is that is should hold **patient capital** that is willing and able to take FinTech companies all the way from start-up phase to the large scale necessary to disrupt the market and challenge incumbents. This is currently not happening.

Most venture capital invested in FinTech has a relatively short-term horizon and is focused on looking for appropriate exits rather than building real market challengers over the long term. This is true in Europe as much as anywhere else. Socially motivated entrepreneurs in FinTech and their regulatory supporters have been losing control of the narrative to investors and other intermediaries that derive short-term benefit from the FinTech hyperbole. The availability of reliable and patient risk capital would go a long way towards placing Europe in a stronger competitive position.

Second, we suggest that such a fund would have **added social value** as the driving force for its investments. Who controls the money controls the narrative. If funding for digital finance initiatives is driven by traditional finance, then digital finance will, rather than revolutionise, simply be absorbed into the financialized economy with little chance of focusing on added social value.

Here European initiatives are still in their infancy though Europe also has some advantages it can build on.

A recent report estimates that in Germany, a European leader in its focus on the Sustainable Development Goals (SDGs), only between three and five percent of the total FinTech landscape are delivering to the SDGs (Duscha, Hufeland and Schuster, 2020). In the Netherlands, it is the established incumbents that are taking the lead in digital sustainable finance (Ginsel, Bos and Pippo, 2019), while in Spain it is a mix of both incumbents and startups (Green Digital Finance Alliance, 2020).

The latest Global Green Finance Index shows that European financial centres dominate the top 10 (Table 2). While only three of these top ten (two of which outside the EU) make it into the top 20 world financial centres, the capabilities in green finance suggest that there may already be both the mindset and the infrastructure and skills in Europe to focus capital on socially valuable investments. Further, respondents to the Green Finance Index survey expressed the view that it is public policy above everything else that drives developments in this area.

Can Europe leverage its position in green finance to build a world-leading capability in socially valuable (and going beyond just 'green') financial digitization? We see no reason why not if public policy were to push in this direction.

Such a fund as we are recommending could also be used as a public policy vehicle to encourage the growth of FinTech co-operatives – a good way to create scale among smaller companies.

In the history of banking, co-operatives have been successful as sustainable businesses with social values. In the age of digital technology much smarter and more scalable digital co-operative forms can be imagined and created. There are already limited purpose forms of co-operation among FinTech firms. In the US, FinTech companies have established two organisations to lobby for their interests in financial regulation. Kabbage, OnDeck and another small business lender, CAN Capital formed the Innovative Lending Platform Association, and Lending Club, Funding Circle and Prosper formed the Marketplace Lending Association.

Such single purpose examples of co-operation can be expanded into more sophisticated unique forms of co-operatives that share cost bases and aggregate revenue sources and customer synergies for mutual benefit and without developing excessive dependence on incumbents – much of it enabled by the patient capital fund focused on social value creation that we are suggesting.

The creation of such co-operatives institutionally framed by public policy would also inject a new dynamic to open banking reforms that governments and regulators have so heavily invested in the past. As the figure below shows, Europe (including the UK) is well positioned in its open banking score and readiness. (Figure 14).

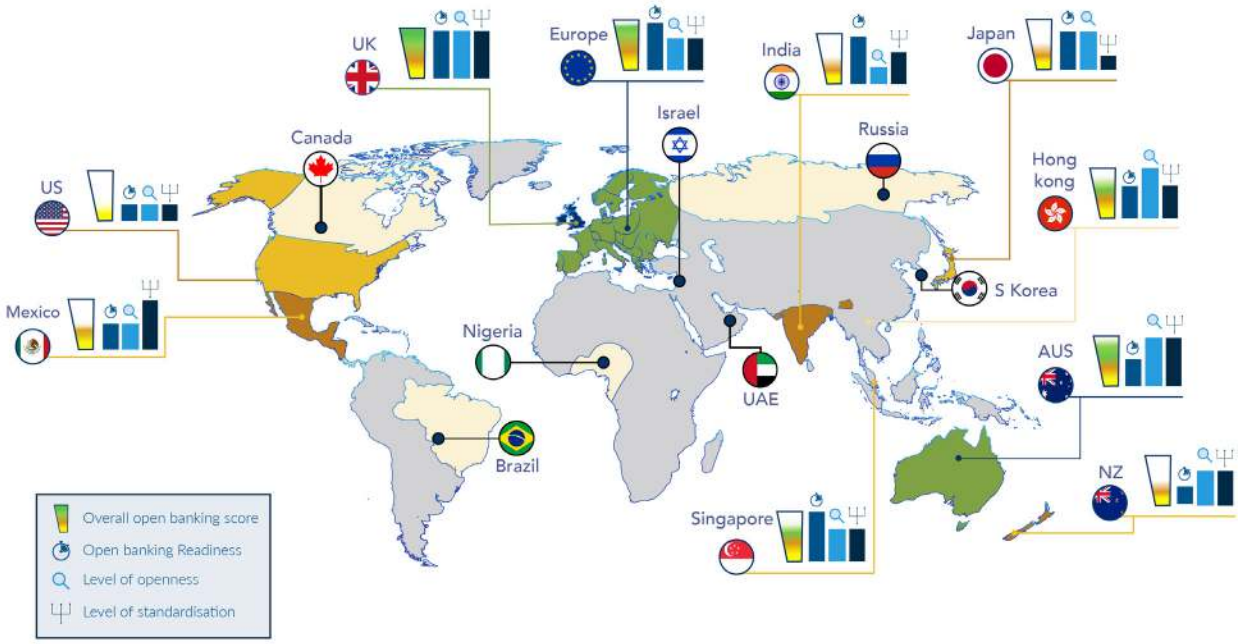
TABLE 2

Green finance ranking (depth and quality combined)		Finance centre global competitiveness ranking
1	Zurich	14
2	Amsterdam	
3	London	2
4	Luxembourg	
5	Copenhagen	
6	Oslo	
7	Stockholm	
8	Paris	17
9	Geneva	
10	San Francisco	

Eurozone EU Non-EU

Source Z/Yen, The Global Green Finance Index 6

FIGURE 14



Source: innopay

Third, we would suggest that states wishing to participate in such an initiative would be screened for their capabilities in the **supervision and enforcement of financial regulation.** We address this further in the section on financial regulation where we suggest that the approach we are promoting will act as encouragement for such states to improve their capabilities.

Again, here Europe has much to gain from collaboration between EU and non-EU nations such as the UK and Switzerland that are well advanced in this regard, without having to wait endlessly until such capabilities are reproduced – a not insignificant task.

Participating states would also need to put in place regulatory sandboxes, an issue we discuss in the section on financial regulation.

Finally, we also suggest that such a fund be **'independent'** with its own governance configuration that runs in parallel rather than within EU structures. Participating entities, whether sovereign states or private investors, would be shareholders but the fund would be run by its own independent management within an established charter.

This would minimize, even if possibly not completely eliminate, endless political interference and jockeying for local investment by participating states which further slows down progress while favouring the politically powerful over those most likely to be successful.

Such an approach would also shield investment from being perceived as inappropriate state aid.

This approach simply requires going one step further than what has already been achieved with the success of Airbus – if one were able to avoid the political jostling and illegal state aid that have bedeviled that consortium.

Such a multi-lateral fund would also be in a position to have a pan-European overview of developments in digital finance and broker cross-border collaborations and mergers where they make sense – an area that is still very far from being a reality in a Europe where national borders, language and culture still form significant barriers to cross-border collaboration for smaller companies.

4.2 COMPETITION POLICY

There are various risks that threaten the development of the start-up FinTech market into the hoped-for market disruption. (Figure 15).

The first is that FinTech upstarts will get crushed in a pincer movement between the incumbent big banks and Big Tech. Both of these benefit from a degree of financial strength and resilience that is not available to the challengers and risks getting worse as capital markets take fright.

In addition, the big banks can tap into a large existing customer base and Big Tech benefits from powerful network effects that are difficult to challenge without public policy intervention.

Second is the risk that incumbents will swoop to acquire those challengers with attractive technology and market positions, especially if they are under financial strain or lack the management skills to see them through current crisis. American Express has acquired Kabbage, Visa has acquired Plaid, Mastercard has acquired Finicity. And on it goes…

Third, B2B FinTech innovation that is targeted at improving the processes of incumbents will more likely lead to entrenching incumbent positions than disrupting them. As outlined earlier, it is noteworthy that it is these B2B FinTech companies that support incumbents that have been some of the high performing stars during the Covid-19 pandemic.

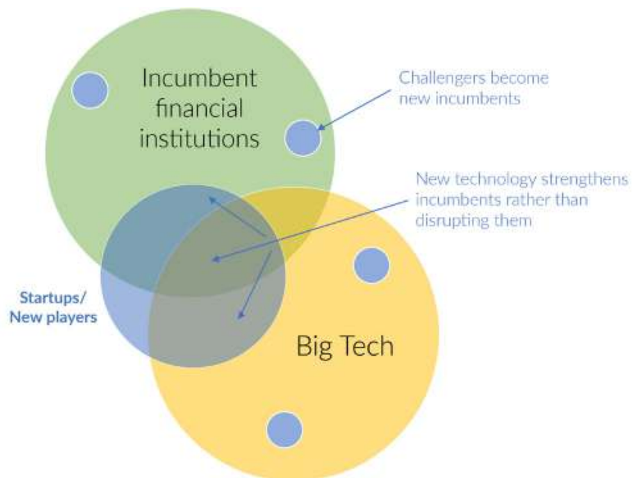
While, from an industrial policy perspective, synergistic collaboration between upstarts and incumbents is to be welcomed if it delivers improved services and pushes forward financial digitization for broad-based benefit, it does raise separate issues of competition policy. Finding the right balance will be challenging.

WHAT IS THE COMPETITION POLICY APPROACH THAT UNDERPINS THE DESIRED FINANCIAL MARKET DISRUPTION?

Finally, start-ups can, if successful, themselves become incumbents with monopolistic characteristics. In Europe, we are still a long way from having to face that issue. Some would say it's a good problem to have as it would indicate success for some players. Yet, it is as well to bear in mind that it's only a few years ago that Google and Facebook were being hailed as disruptors. They are now considered monopolistic incumbents and public policy, moving at its usual glacial pace, may well have left it too late to intervene in any meaningful way. We should not make the same mistake again.

Ant Group in China offers a salutary lesson. Drawing on the huge advantages offered by being affiliated with the Alibaba Group, Ant has become the dominant digital finance company in China. While providing valuable services to many, including expanded access to loans and quick loan approval, it has also been accused of using its market power to force loans (more profitable for Ant) on its users when they have not requested them and do not want them (McMorrow and Liu, 2020). Some analysts have described Ant as 'a parasite' on the Chinese financial system. And eventually it's growing power was curtailed when the government at the last moment pulled what was expected to be the world largest IPO citing regulatory concerns.

FIGURE 15



All of these factors could put paid to hopes of opening up and disrupting the market to increase competition, except at the margins, absent timely and proactive competition policy initiatives.

A previous RADIX paper (Cowen, 2019) made specific recommendations for competition policy initiatives that could address the issues related to many of the problems highlighted here. The general conclusion was that the traditional 'consumer welfare' approaches driven by consumer price considerations are no longer fit for purpose in a digital age where consumers pay for services through data surrender rather than through monetary payments, and where network effects make monopolies ever more valuable.

The main recommendations from that paper can be summarized as follows:

- *The test for action on competition should be the proactive promotion of competition and consumer choice NOT traditional defensive consumer welfare considerations. This would, for instance, stop kill-in-the-crib acquisitions that would reduce consumer choice but would not normally be considered material enough for intervention by competition authorities.*
- *Remedial action means actively taking steps and imposing remedies to alter market structures and restore competition and consumer choice. It may mean that businesses may need to be broken up; or that layers in the technology stack are opened-up and access remedies created to enable competition to thrive.*
- *A clear break from the past is needed; the authorities have to get a lot more active and move more quickly than they are used to in order to cope with a rapidly advancing digital world.*

More details on the practical implementation of such policies can be found in the original Cowen paper. But precedents specific to FinTech already exist. For instance, the access remedies recommended above have been put in place through open banking legislation that has given free access to bank customer data. This approach could be expanded to include data held by BigTech companies so that FinTech companies can compete on a level playing field.

BUILDING 'EUROPEAN CHAMPIONS' NEEDS TO BE APPROACHED WITH CAUTION

As regards competition policy, we also suggest that it is important to approach with caution the idea of building 'European Champions'. While building companies that can be globally competitive is a legitimate aim, the idea of 'champions' can all too readily slip into the creation of politically protected companies where a nod and a wink replaces effective oversight and regulation (Wirecard), or companies that drift into suspended animation through financial support with public funds even as their business models fail to be competitive in the market.

4.3 FINANCIAL REGULATION

We commented earlier that money is about trust. And trust can only be built on the basis of a well-functioning regulatory framework.

We suggest that there are three necessary components to a regulatory framework that can encourage the emergence of social value and market disruption in digital finance:

(i) Well-constructed financial regulation with diversity

(ii) Effective supervision

(iii) Regulation that encourages new market structures

As we shall see, some of these requirements will tend to pull in opposite directions making the job of regulators more difficult and requiring balanced judgement.

FINANCIAL REGULATION NEEDS TO ENVISION AND CREATE THE DESIRED NEW MARKET STRUCTURES RATHER THAN REGULATING FOR THE PAST *(i) Well-constructed Regulation with Diversity*

In spite of its claims to be a regulatory super-power, financial regulation in Europe has taken significant blows to its credibility. BaFin's failures in the Wirecard fiasco have dented Germany's image and cast doubt on the ability of the EU's largest member state to regulate a rapidly moving digital finance industry (Zammit-Lucia, 2020). A number of smaller EU jurisdictions have had their own issues with illicit financial flows and with trying to attract investment by competing on the basis of less stringent regulatory hurdles and/or tax shelters.

A capital markets union in the EU is still some way off. It is also debatable whether yet more regulatory centralization will make financial regulation more or less effective in an industry that has a multiplicity of emergent players and has shown itself more agile, and masterful at running much faster, than any regulator.

As stated earlier, the details of financial regulation of digital finance has been, and continues to be, the subject of much work by specialist institutions and falls beyond the scope of this paper. We would, however, suggest that moving too early towards harmonized regulation would likely be a counterproductive.

MOVING TOO EARLY TO HARMONISED REGULATION COULD BE COUNTER-PRODUCTIVE

Digital finance is a rapidly developing, diverse market and the optimal regulatory framework remains unknown – and will likely remain so for some time. Different jurisdictions trying different approaches designed to achieve the same aims using different means should be encouraged. It will provide regulators across Europe with insights into what works and what doesn't. Convergence will eventually happen but pushing it too soon will result in missed learning opportunities that will be essential as this new market develops.

(ii) Effective Supervision

Of course, well-designed regulation is, in itself, insufficient without effective supervision and enforcement mechanisms. While Europe has shown itself to be quite effective at developing well thought-out regulatory frameworks, supervision remains inadequate in many Member States. This will become increasingly challenging as digital finance spreads to states that do not have a highly developed financial services industry with the accompanying supervision and enforcement infrastructure that can be adapted to fast-moving digitization.

Here, again, a coalition of the willing and able approach may help. Countries that wish to join such a coalition, and participate in the fund, would have to show that their financial regulatory system was well structured and reliable in the outcomes delivered even if not fully harmonized in approach. Those that wish to compete on the basis of softer regulatory approaches, lax supervision and enforcement, or providing tax shelters would be free to do so while remaining outside the coalition and unable to become shareholders in the proposed fund.

This would provide a positive incentive to improve regulatory performance rather than a coercive one that only leads to States looking for loopholes through which they can drive a coach and horses – as is so painfully clear under current arrangements. Individual countries can then make a free choice as to what suits them best.

In addition, our suggested investment fund would be free to develop its own rules for participation without becoming bogged down in the political and procedural hurdles that come with statutory regulation. It would provide a more flexible and more rapid development of behavioural standards as an added layer sitting on top of statutory regulation.

(iii) New Market Structures

The regulatory approach also has to balance conflicting requirements.

It would have to be robust and enforceable enough to give consumers the confidence they need in this emerging part of the financial system. It would also have to be flexible enough not to present an insurmountable burden for start-up and early stage firms thereby killing any hope that this new industry will continue to develop.

Regulation not only controls market behaviour, it shapes markets and what happens within them. Financial regulators therefore need to tailor their regulatory framework to the future market characteristics they would like to see emerge. The risk is that regulation is constructed on the basis of current market structures rather than desired future ones – an approach that would benefit incumbents rather than disruptors, embeds the deficiencies that exist in the current financial system, and makes it much more difficult for the major social benefits of financial digitization to emerge. Balancing the need to ensure financial stability and trust in the system with what is needed to allow digitization to fix some of the flaws in the current financial system is a difficult and delicate regulatory task.

REGULATING FOR FUTURE MARKET STRUCTURES RATHER THAN EXISTING ONES IS A DIFFICULT AND DELICATE TASK

This perspective was made clear recently by Jack Ma, founder of Alibaba and the Ant Group: *"We can't use yesterday's methods to regulate the future"*, a future he envisions as relying less on big banks and more of an ecosystem of *"lakes, ponds, streams and brooks"* that carry capital into different parts of the economy. (Yuan, 2020)

For some regulators, the idea of having to regulate such a fragmented ecosystem is the stuff of nightmares. For others, it is a route to greater financial stability as it reduces dependence on systemically important financial institutions. But maybe digitization opens up opportunities in more effective, real time supervision as much as it creates opportunities for new market entrants.

We shall have to see which way Europe, with its developed and embedded financial system and its focus on the precautionary principle, ends up going – more of the same or market transformation that has the potential to unleash growth in the real economy which, some argue, the current financial system undermines rather than promotes?

In this regard, we suggest that the EC's statement that *"The Commission will, where necessary, adapt the existing conduct and prudential EU legal frameworks so as to continue safeguarding financial stability and protecting customers in line with the "same activity, same risk, same rules" principle"* (ibid) merits further discussion.

The Regulatory Sandbox

The concept of a regulatory sandbox to encourage innovation without undue regulatory burdens for early stage companies is a well-developed concept that has already been applied in the FinTech space. It is an innovative regulatory framework that creates a level playing field in regulatory costs between small FinTech firms and big incumbent banks.

REGULATORY SANDBOXES WILL FORM A CRUCIAL ELEMENT TO ENCOURAGE INNNOVATION

In Europe only the UK, Switzerland, the Netherlands, Ireland, and Denmark have regulatory sandboxes. Regulatory sandboxes support FinTech startups in developing digital finance products in a laboratory environment. These in-market trials allow financial regulators to pre-emptively protect consumers from possible financial harms of new digital products and fix the malfunctioning parts in collaboration with the FinTech provider. It also gives regulators the opportunity to see at first-hand how innovation has the potential to change market structures, how digitization may also have the potential to change how regulation is done, and to tailor their regulatory framework accordingly.

For FinTech firms, especially for those start-ups with limited capabilities and resources for compliance regarding data regulation and consumer rights, a regulatory sandbox provides cost effective compliance and legal services.

We suggest that any state that wishes to participate in our recommended multilateral fund should be required to provide a well-managed regulatory sandbox as a condition for participation. The fund should also expand the remit of the regulatory sandbox to include guidance on socially valuable business models and sound management capabilities of FinTech start-ups so that it is not just the product that is tested but also the enterprise itself as a sustainable financial firm.

4.4 PUBLIC POLICY AS A DRIVER OF INNOVATION

We believe that proactive public policy initiatives are essential if Europe is to be successful in developing a viable, globally competitive, reliable digitized financial system that delivers real social value. In fact, we would go as far as saying that it is public policy above all else that will determine where Europe will end up in this important industrial space.

SUCCESS OR FAILURE FOR DIGITAL FINANCE IN EUROPE WILL BE DETERMINED BY PUBLIC POLICY

Starting from where we now find ourselves, it is unlikely that market forces alone can prevent Europe from being marginalized by developments in the USA and China or from stopping the nascent FinTech firms and their technologies becoming largely absorbed by large incumbents in the banking and tech sectors, or being sucked in to the dominant financialized economic model rather than being a catalyst to *'return the financial services industry to what it is supposed to be – an industry that serves people'* as the IMF Managing Director Kristalina Georgieva put it in January 2020.

As outlined above, many, including some regulators and policy makers, continue to see public policy and regulation as a policing mechanism that puts the brakes on innovation rather than something that can serve to stimulate advancement and modernization. This is a fundamental misunderstanding of the potential of public policy.

For instance, it could be reasonably argued that the industrial revolution would not have happened had the Dutch not added the concept of limited liability to the already existing joint stock corporation – a public policy innovation that unleashed a huge amount of industrial investment and consequent innovation.

As the Figure 16 opposite shows, there are various combinations of collaboration between regulators and markets in developing the FinTech industry. What is constant in all these combinations is public policy as the determining factor. Investing in public policy capabilities for the growth of FinTech is already a reality for governments globally - either to lead or set a framework for the process. After the Covid-19 crisis a more pro-active public policy is needed to make open banking reforms succeed, otherwise the invaluable investments in FinTech public policy will be wasted.

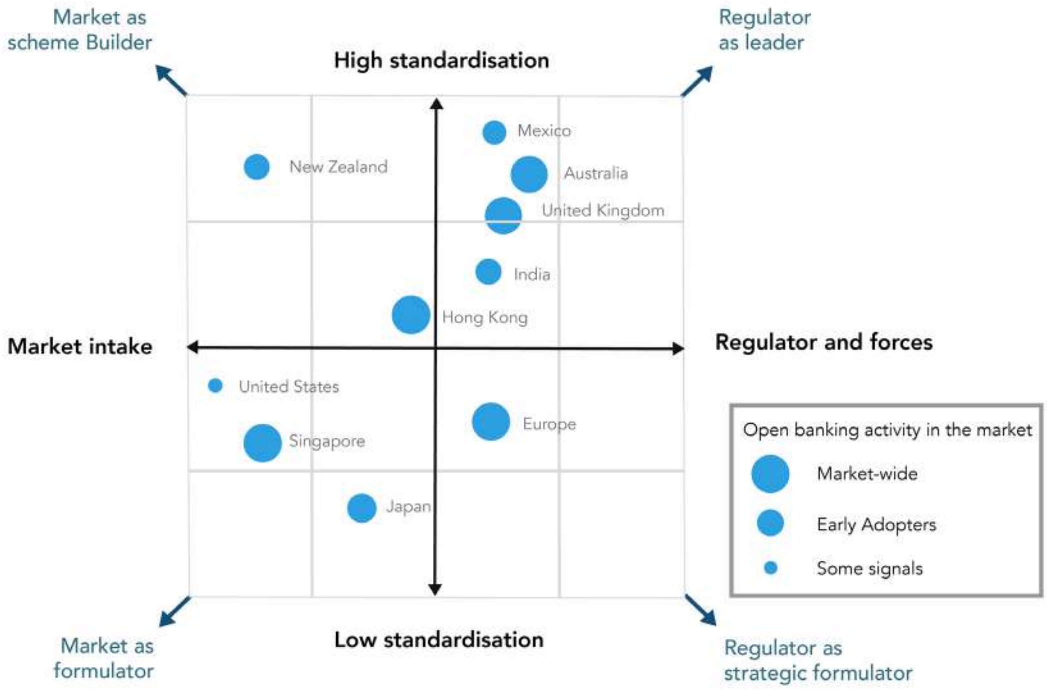
Taking the public policy initiative is particularly important for Europe where the potential for success exists but risks being overtaken by developments elsewhere. As mentioned earlier, a European future where the continent is left behind in the crucial area of digital finance in the same way as it has been left behind in Big Tech does not bear thinking about.

Of course, it is perfectly understandable that policy makers and regulators tend to be risk averse. They are all too often castigated when things go visibly wrong but not praised when they take some risks to encourage innovation. Finding the right balance for the development of digital finance will be a challenge given the risks associated both with financial instability or fraud, and with being left behind in the digital finance space.

To be successful, Europe needs to learn the lessons of the past and forge new paths to success in this rapidly emerging industry.

FIGURE 16

Role of public policy in open banking reforms and success of FinTech



Source: innopay

Unnecessary bureaucracy and a one-size-fits-all approach will lead to failure. And failure in digital finance could be disastrous for Europe's economic development as well as its heft on the world stage.

FinTech poses particular challenges in that it lies at the intersection of industrial policy, competition policy, social policy, and financial regulation. In addition, some of the strongest capabilities and players relevant to the burgeoning area of digital finance lie outside the formal structures of the EU.

EUROPE HAS THE POTENTIAL TO BECOME AN IMPORTANT PLAYER IN DIGITAL FINANCE FOR SOCIAL VALUE

We have put forward for discussion some specific initial ideas of how Europe can build on its strengths and its professed desire for open strategic autonomy in collaboration with international partners to become a relevant player in this market space.

Digital finance is not some magic bullet that will, in and of itself, be positively transformative. In spite of the excitement generated by shiny technological innovation, much of the impact of digital finance – whether positive or negative – will not be driven by technology alone, however much it is hyped, but will largely depend on the public policy framework within which innovation will operate.

It remains to be seen whether Europe has the capabilities, mindset and political will to do what it expects of the FinTech industry itself – think outside the box, don't be constrained by existing structures, and focus on delivering value to citizens as the primary aim. *Salus populi, suprema lex* (the welfare of the people is the supreme law) as Cicero put it.

We hope that Europe can use its advantages and capabilities to travel in this direction, be successful, and retain control of its own destiny in the digitization of finance. The alternative is not pretty.

ANNEX 1

H2 Ventures and KPMG Top 50 FinTech Companies in the World (published 2020)

RANK	FINTECH CO.	COUNTRY	CATEGORY	RANK	FINTECH CO.	COUNTRY	CATEGORY
1	Ant Financial	China	Multi	26	Revolut	U.K.	Multi
2	Grab	Singapore	Multi	27	Monzo	U.K.	Neobank
3	JD Digits	China	Multi	28	Banco Inter	Brazil	Neobank
4	GoJek	Indonesia	Payments	29	Toss	South Korea	Payments
5	Paytm	India	Payments	30	Wealthsimple	Canada	Asset Management
6	Du Xiaoman Financial	China	Credit	31	Affirm	U.S.A.	Credit
7	Compass	U.S.A.	Payments	32	Airwallex	Australia	Payments
8	Ola	India	Multi	33	Judo Capital	Australia	Credit
9	Opendoor	U.S.A.	Payments	34	Coinbase	U.S.A.	Payments
10	OakNorth	U.K.	Credit	35	WeLab	China	Neobank
11	Lufax	China	Asset Management	36	MoMo	Vietnam	Payments
12	Klarna	Sweden	Payments	37	Kreditech	Germany	Credit
13	N26	Germany	Neobank	38	Liquid	Japan	Brokerage
14	Robinhood	U.S.A.	Brokerage	39	Neyber	U.K.	Asset Management
15	SoFi	U.S.A.	Credit	40	Singlife	Singapore	Insurance
16	Nubank	Brazil	Multi	41	Creditas	Brazil	Credit
17	TransferWise	U.K.	Payments	42	Bankera	Lithuania	Neobank
18	OneConnnect	China	Multi	43	Kabbage	U.S.A.	Credit
19	Clover Health	U.S.A.	Insurance	44	Raisin	Germany	Asset Management
20	Oscar Health	U.S.A.	Insurance	45	Metromile	U.S.A.	Insurance
21	PolicyBazaar	India	Insurance	46	OurCrowd	Israel	Asset Management
22	Atom Bank	U.K.	Neobank	47	AfterPay Touch	Australia	Payments
23	Lendingkart	India	Credit	48	Collective Health	U.S.A.	Insurance
24	Stripe	U.S.A.	Payments	49	Folio	Japan	Asset Management
25	Lemonade	U.S.A.	Insurance	50	ZhongAn	China	Insurance

Notes:
a) Criteria used in ranking the FinTech companies: 1. Average annual capital raised, 2. Rate of recent capital raising, 3. Geographic diversity, 4. Sectoral diversity

b) Neobanks are known as Challenger Banks with or without a recently granted banking license. They have digital as the only or predominant channel for engaging with customers and challenge either the products, the user experience, or the business models of traditional banks and other financial services organisations.

c) Multi's are FinTech firms providing a diversified range of financial services products to customers.

BIBLIOGRAPHY

Bank for International Settlement (February 2018) Implications of fintech developments for banks and bank supervisors, available at: https://fintechreport.perkinscoieblogs.com/wp-content/uploads/sites/16/2018/02/Implications-of-Fintech-Developments-for-Banks-and-Bank-Supervisors.pdf

Carney, M. (25 January 2017) “The Promise of FinTech – Something New Under the Sun?” Speech given by Mark Carney Governor of the Bank of England Chair of the Financial Stability Board, at Deutsche Bundesbank G20 conference on “Digitising finance, financial inclusion and financial literacy”, Wiesbaden. Available at: www.bankofengland.co.uk/speeches

Cowen, Tim (June 2019) "Freedom to Choose: Why Competition Policy Affects Us All". Radix Policy Paper, June 2019. Accessible at https://radixuk.org/wp-content/uploads/2019/08/Freedom-to-Choose-Report-June-2019_EMAIL.pdf

Duscha, M., Hufeland, S., and Schuster, L. (January 2020). Focus Note Series on FinTech For Sustainability: Current Landscape and Key Opportunities. Country Report #2: Germany. Available here: https://greendigitalfinancealliance.org/wp-content/uploads/2020/04/CurentLandscapes-KeyOpportunities.pdf

The Economist Intelligence Unit, 2020. Customer Experience: learning from online personal finance conversations. Available here: https://www.temenos.com/insights/white-papers-reports/breach-proofing-digital-account-opening/European Commission. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a Digital Finance Strategy for the EU. Brussels, 24.9.2020. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/TML/?uri=CELEX:52020DC0591&from=EN

Ertürk, I., Froud, J., Johal, S., Leaver, A., Williams, K. (2008) Financialization at Work: Key Texts and Commentary, Routledge, London

Ertürk, I. (2020) “Shareholder Primacy and Corporate Financialization” in Mader P., Mertens, D. and van der Zwan, N. eds. (2020) International Handbook of Financialization, Routledge, Oxon, London

Faux, Z. and Surane, J. (April 1, 2020), “SoftBank-Backed Lender Kabbage Cuts Off Businesses as Cash Needs Mount”, available at:

https://www.bloomberg.com/news/articles/2020-04-01/softbank-backed-lender-cuts-off-businesses-as-cash-needs-mount?sref=zNmRQ0gk

Findexable (2019) The Global Fintech Index 2020, available at: https://findexable.com/wp-content/uploads/2019/12/Findexable_Global-Fintech-Rankings-2020exSFA.pdf

Ginsel, D., Bos, M., and Pippo, G (2019). A Green and Sustainable Digital Finance Landscape: Market Analysis for the Netherlands. Available here: https://greendigitalfinancealliance.org/wp-content/uploads/2019/11/Green-and-Sustainable-Landscape.pdf

Green Digital Finance Alliance (August 2020). Focus Note Series on FinTech for Sustainability: Current Landscape and Key Opportunities. Country Report #3: Spain. Available here: https://greendigitalfinancealliance.org/wp-content/uploads/2020/08/GDFA_Spain-Report_Final.pdf

Kruppa, M. and Armstrong, R. (May 18, 2020) “Kabbage rebounds after accessing US loan programme”, Financial Times, available at: https://www.ft.com/content/0ff34de6-ee54-4107-9bbc-9ffe1315cd5a

London Assembly Economy Committee (January 2018) “Short changed: the financial health of Londoners”

Makortoff, K. (8 November 2020) "UK firms fear losing access to bounce back loans after lender Tide runs dry". The Guardian. Available at: https://www.theguardian.com/business/2020/nov/08/firms-fear-losing-access-to-top-up-loans-after-lender-tide-runs-dry

McKinsey & Company (March 24, 2020) “Leading a consumer bank through the coronavirus pandemic”available at: https://www.mckinsey.com/industries/financial-services/our-insights/leading-a-consumer-bank-through-the-coronavirus-pandemic

McMorrow, Ryan and Liu, Nian. (October 2, 2020) "Ant's huge lending business powers $30bn IPO." Financial Times, available at: https://www.ft.com/content/935401f8-a374-4c15-ba8a-12c600ac3443

Megaw, N. (May 19, 2020) “Boom for payments companies as crisis forces shoppers online”, Financial Times available at: https://www.ft.com/content/c19421d3-f286-49c4-862d-f2b1ca6be94e

Office of the Comptroller of the Currency (March 2016) “Supporting Responsible Innovation in the Federal Banking System: An OCC Perspective”,

Reuters (April 21, 2020) “LendingClub to lay off about a third of employees due to coronavirus” available at: https://uk.reuters.com/article/us-lendingclub-layoffs/lendingclub-to-lay-off-about-a-third-of-employees-due-to-coronavirus-idUKKCN223368

Shiller, R. J. (2019). Narrative economics: How stories go viral and drive major economic events. Princeton University Press.

Silver, N (2017). "Finance, Society and Sustainability: How to Make the Financial System Work for the Economy, People and Planet. First Edition. London, Palgrave Macmillan.

The Economist. (October 3rd, 2020). The Revenge of Strategic Yoghurt. Available here: https://www.economist.com/europe/2020/10/03/the-revenge-of-strategic-yogurt

Toplin, J. (May 8, 2020) “PayPal's slowdown began to improve in April as stay-at-home orders tick up e-commerce usage”, Business Insider, available at: https://www.businessinsider.com/paypal-thrives-on-new-account-growth-2020-5

United Nations Secretary General's Task Force on Digital Financing of the Sustainable Development Goals. "People's Money: Harnessing Digitalization to Finance a Sustainable Future." August 2020. Available at: https://www.un.org/sites/un2.un.org/files/df_task_force_-_full_report_-_aug_2020.pdf

Vincent, M. (September 19, 2018) “Funding Circle's float price should be more fin than tech”, Financial Times, available at https://www.ft.com/content/2ef282b2-bc17-11e8-8274-55b72926558f

Vincent, M. (June 8, 2020) “Fintechs eye life outside the sandbox”, Financial Times, available at: https://www.ft.com/content/c4944d94-141e-4760-ac6a-c18ac471a166

Webber, J. (May 12, 2020) “Fintech offers lifeline for crisis-hit Mexican businesses” Financial Times, available at: https://www.ft.com/content/0e0c1692-83d2-11ea-b872-8db45d5f6714

Woodford, I. (20 April 2020) “Inside the fintech funding drop” available at: https://sifted.eu/articles/fintech-funding-data-corona/

Yuan Yang (October 25, 2020). "Jack Ma rails against global financial rules ahead of $30bn Ant Group IPO". Financial Times, available at: https://www.ft.com/content/66808017-59fd-49d1-9016-34684001c978

Zammit-Lucia, Joe (24 August 2020) "The Wirecard scandal is a warning to the EU to think twice before cutting itself off from London's financial expertise." CityAM, available at https://www.cityam.com/the-wirecard-scandal-is-a-warning-to-the-eu-to-think-twice-before-cutting-itself-off-from-londons-financial-expertise/

"ALL MONEY IS A MATTER OF BELIEF."

Adam Smith

"FINANCE IS NOT MERELY ABOUT MAKING MONEY. IT'S ABOUT ACHIEVING OUR DEEP GOALS AND PROTECTING THE FRUITS OF OUR LABOR. IT'S ABOUT STEWARDSHIP AND, THEREFORE, ABOUT ACHIEVING THE GOOD SOCIETY."

Robert J. Shiller

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