





## Fintech and the Future of Retail Banking

Report on a conference jointly organised by the Belgian Financial Forum, SUERF and Eggsplore

Auditorium National Bank of Belgium

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## **Conference Report**

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The conference was organised to celebrate the 80th anniversary of the journals *Revue bancaire et financière/Bank- en Financiewezen* and *Revue de Droit bancaire et financier/Bank- en Financieel Recht*, edited by the Belgian Financial Forum (BFF) with the help of the Larcier Group.

Fintech means financial technology. The words refer to new applications, processes, products and business models, which are transforming the financial services industry in rather disruptive ways. The organisers of the Brussels conference had invited experts from Fintech start-ups, financial regulators, bankers, insurers, consultants and lawyers to present to the audience their very different

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perspectives on the impact of Fintech in particular on retail banking. The very high attendance at the conference reflected probably the deep concerns in the financial industry about the implications of Fintech for the future of payment systems and other fee based financial services. Managers of traditional financial services providers understand that they need to learn about Fintech and to transform their products and their business models.

After the welcome remarks by **Jean Hilgers**, President of the BFF and Executive Director of the NBB, and by **Frank Lierman**, Vice-President of SUERF and Chairman of the Editorial Board of the *Revue bancaire et financière/Bank- en Financiewezen*, **Jan Smets**, Governor of the NBB presented the 23<sup>rd</sup> SUERF Annual Lecture on "Fintech and Central Banks". His starting point was the distributed ledger technology (DLT) which











offers a decentralised electronic transaction database, distributed and shared by members of the network, thereby providing a tool to process and record asset transactions without any trusted parties, but with complete transparency and immutability and without necessarily revealing identity. The promise of improved efficiency seems the central interest for commercial banks, which seek central banks (CB) support due to their crucial role in the management of interbank settlement. For CB's the DLT offers the potential of exchanging CB money more efficiently and to launch the central bank digital currency (CBDC). But DLT helps also to further underpin trust in the monetary system, which is crucial in a fiduciary system. Is CBDC a solution for the zero lower bound (ZLB) problem? The likelihood of the ZLB becoming binding has increased due to the structural components of the roots of the ZLB constraint and the higher macro-economic volatility since the financial crisis. How to slacken the ZLB constraint? Abolishing cash? A CBDC implies holding an account at the CB and DLT permits anonymity. A CBDC could provide competition for deposits. It could limit the practice of fractional reserve banking and make for a safer financial system with less scope for impairments in the monetary policy transmission. At first sight a desirable outcome. But is this indeed the case? Are banks ready to step up an alternative funding? If not, we could expect a tightening of the credit market and at least an increase in lending rates. Or should the CB step in, for instance as provider of alternative bank funding? Moreover the adoption of a CBDC could make credit supply more volatile. To conclude there are more questions than answers about a CBDC and how exactly it should be designed. We should always think before we act. If new insights originate from thinking they can only progress by discussion.

Session 1 - The threats and opportunities of Fintech: Is Fintech an enabler or a disruptor?, was chaired by Frank Lierman, SUERF and BFF. Jürgen Ingels, Managing Director of Smartfin Capital developed the theme "Fintech or Fin 4 Tech?". There are ten differences between the dot.com hype (2000) and the Fintech situation (2016). Between 2000 and 2016 we moved from an expensive server infrastructure towards cheap cloud solutions, from USSR style development towards a trial and error development, from standalone solution towards end-to-end solution, from in house development towards third party development, from product centric approach towards customer centric approach, from perpetual license towards subscription model, from in your own neighbourhood towards anywhere in the world, from improve towards focus on talent, from knowledge is power towards sharing knowledge is power and from proprietary towards open source.

Banks need to lean towards an open platform. However they don't have enough money, people and time to rebuild the infrastructure and the current infrastructure does not allow for open source, sharing, usage of data, real time interaction. Three ingredients of the solution are:

- The platform has to move from silos and multiplication of data to layered monoliths, which are dynamically reconfigurable. They remove chaos and are easy to govern apps. Open platforms will allow banks to participate in API-ecosystems, to shield back end systems, to become customer centric, to create and change rich services faster, to scale cheaper and to collaborate with each other and with Fintechs.
- The ecosystem in Belgium is in place thanks to the headquarters of Swift, Euroclear and BNY Mellon, the presence of the EU and good education and











cheap housing. Others such as Clear2Pay, Vasco, Capco, Ogone, Finarch paved the way. Up to now it is mainly B2B. It is still small but is fuelled by powerful partners such as the four largest banks, the largest telecom company, and others. A new Fintech Valley in Brussels is built up.

- The money is available thanks to venture companies and finance, such as Smart fin.
- All in all, Fintech improves the original financial system with technology. Tech 4 Fin rebuilds the system using technology.

Marc Niederkorn, Senior Partner, McKinsey Company expressed his views on "The impact of Fintech on the Retail Banking". The key message is that thanks to Fintech we are moving towards an ecosystem of services covering all sectors provided by a large group of partners offered via a B2C/B2B platform with deep intelligence, accessible, omni-channel, fully personalized, embedded into everyday life 24/7. The global investment in Fintech jumped from 2,4 billion USD in 2011 to 19,1 billion USD in 2015. 52% of the Fintech investments focus on retail banking. The EU 27 represents 9% of the global Fintech investments. There are at least thirty areas emerging as new norm in banking, such as mobile payments, P2P lending and investment, mPos devices, new digital lending, robo-advisory, crowdfunding, trade finance, collateral management, cash management, etc. Most of them are still in the hype phase. Only the B2C payments, P2P lending and robo advisory are already in the bust phase. The majority of B2B ideas are already in the so called enlightenment phase.

It is clear that Fintechs shape customer expectations. Take the payments example. Between 2000 and now we moved from card-entry over one-click check-out towards omni-device and the future could be an auto-purchase. It is not only limited to consumer facing space, but also rapidly creeping up to SME and corporate payments. We identify 690 mobile payments Fintech attackers across the globe. Players with large customer base (e.g. GAFA) are formidable competitors. The battle for new payment solutions will not be fought over technology, but over solutions. Banks should not set on one hype technology as solution space. The offer is fragmented and no winner has yet emerged. At the same time broader innovations in commerce are likely to influence the nature of future payments solutions. Successful solutions follow six

winning markers: guaranteed satisfaction of goods to buyers, targeted marketing for merchants, digital offers, payments mechanism for niche markets, established infrastructure, market context (e.g. online remittances via account to account and cash pick-up), adjacent revenues such as prepaid cards for the unbanked by leveraging revenue from store traffic.

The impact on sector economics shows us that customer disintermediation targets the most profitable activity in banking. Origination and sales account for some 60% of global banking profits and give a ROE of 22% in 2014. The traditional balance sheet activities generate a ROE of only 6%. We know that digital attackers enjoy substantial cost advantages: for operating expense only 2% of outstanding loan balance against 5 to 7% for traditional banks. Another example: customer acquisition cost only 5 USD per customer against 300 USD. The fee based businesses are likely to experience the largest margin reductions. For the Eurozone the most vulnerable activities are payments and asset wealth management (minus 10 to 20%), followed by term deposits, mortgages and consumer finance (minus 3 to 10%).

Bank profits in 2020 are at risk due to the low interest rates and the digitalisation. The 2015 profit of Eurozone of 88 billion USD could drop to only 15-33 bn USD. The cost gap is estimated at some 50 bn USD of 13% of OPEX. Banks are drastically cutting costs. The announced cost and headcount reduction between 2015 and 2020 for the Eurozone are resp. 21 bn USD and 45.000 FTEs, which is resp 12% of total costs and 14% of total FTEs.

Partnerships are necessary to survive. Already 52% of the top 100 banks are active in partnerships with Fintechs while the share of Fintechs having a B2B business model has increased from 34% in 2011 to 47% in 2015.

In session 2, chaired by **Wim De Waele**, CEO Eggsplore, testimonials were given by five Fintech companies.

QOVER, represented by **Jean-Charles Velge** and **Quentin Colmant**, Co-founders and Directors, is building the first ever B2B2C Sliced On-Demand Digital insurance infrastructure, aiming to change the way insurance is designed, managed and distributed. Qover's unique digital library of sliced coverage allows consumer







businesses to increase their revenues by adding complementary insurance solutions to their product offering. Qover's easy-to-use and robust APIs are designed to seamless integration within any ecosystem, website or app. Qover digitally manages the whole stack of insurance: product design, pricing, risk and claims. Qover is headquartered in Brussels and operates in Europe. Customers are e-commerce firms, banks, motor retailers, insurance brokers willing to open a digital distribution channel.

THE GLUE, represented by **Stefan Dierckx**, Cofounder, is a contemporary, new solution which enables financial services providers to quickly develop innovative digital products and services for today's online consumers. These are delivered by creating a customer centric environment, connected with and communicating to core legacy processing systems. The approach helps to significantly reduce costs and accelerates time to revenue. The Glue is a unique, non-disruptive, enabling solution which helps to protect and prolong the lifespan of existing infrastructure investments. The Glue is established in Diegem and operates in Europe. Customers are retail banks, wealth management firms, private banks, non-life insurance providers and other consumer finance organisations.

EASYVEST, represented by Matthieu Remy, Cofounder and CEO, is a fast growing online financial advisor that offers highly efficient investment solutions. This implies delivering higher return to customers through a sound investment approach designed around the core conviction that "nobody beats the market". Efficiency means also providing a delightful customer experience. This includes opening of an account within 15 minutes and being able to chat or talk to a human financial advisor at any time. Efficiency means affordable. Easyvest opens accounts as of 5.000 euro and charges a unique fee as low as 0,5% per year. Easyvest is settled in Brussels and operates in Europe. Customers are mainly younger generations, but half of its customers are above 40 and represent two thirds of the assets.

RATEPAY, represented by **Miriam Wohlfahrt**, Founder and CEO, offers online payment solutions with real-time credit decision and 100 percent payment guarantee. Ratepay provides an easy and frictionless access to the

most popular online payment methods in the DACH region such as instalments, check-out lending, invoice payment and SEPA direct debit. Ratepay is based in Berlin and operates in Europe. Customers are companies such as Eurowings, myToys, Aboutyou, Secret Escapes, Casper, 123tv, Heizöl 24.

XPENDITURE, represented by **Wim Derkinderen**, Co-founder, is a leading expense management solution that helps you save time managing your expenses. Xpenditure has reinvented the entire expense management process by focusing on digitizing receipts and on eliminating the need for expense reports. Xpenditure is settled in Mechelen and works in over 150 countries worldwide. Customers are corporates from 500 to 5000 employees such as consulting (Deloitte, ...), FMCG (Pernod-Ricard, ...), manufacturing (Kone, Miele, ...), automotive (BMW, Jaguar, Scania, ...), but also small and medium businesses and independents.

**Peter Kerstens**, Head of Financial Technology Task force and Advisor on Cybersecurity, European Commission DG for Financial Stability, Financial Services and Capital Markets Union, developed the theme "Does Technological Innovation require Policy and Regulatory Innovation?".

His starting point is that the financial sector represents 700 bn USD or 20% of global IT expenditure. A big part is spent on maintaining legacy systems and regulatory issues. Finance has become an anytime, anyplace, any device proposition, and in fact finance has become fun. This technological revolution offers new opportunities for all stakeholders. Business models are adapted. We have a change of era. The whole value chain is on the move. Finance is about money, but also increasingly about data and technology. Regulatory and policy innovation are needed. DG FISMA follows four principles: Fintech is a continuum, need of multidisciplinary approach, need for a single technology policy and the embracement of innovation. New methods of regulation and supervision are unavoidable: more diversity of financial institutions implies more specialized licensing regimes. Innovation in finance is tested via the sandbox approach. It looks to innovations not via traditional compliance reports and ticking the box, but by having a dialogue with regulators and seeing how one can establish the merits of and issues with







innovative operations, and seeing what requires regulatory control and intervention. A modernisation of outsourcing requirements is also needed.

The second big area the task force is looking at is blockchain technology. The centralised approach must be replaced by decentralisation. Furthermore the existing representational system - your bank account does not hold any money, it just says that you have some money in the bank - could be replaced by distributed ledgers on which you hold the assets themselves in tokenized form. Cyber security must be fine-tuned, even if the financial sector is by far the best aware and prepared for cyber incidents and attacks. Integrity is guaranteed. Operational risk management is primarily quantitative but more capital is not a buffer against cyber-attack. Finally a review of the data policy is required. Not all data hold in the financial sector is private. Standardized data facilitate reporting-ownership of data and location of data.

The future will be a function of which technological innovation is capable of what the economy and economic powers will allow for and the values which we hold for ourselves on the way we want financial markets to be regulated.

The third session, chaired by Ernest Gnan, Secretary General of SUERF, focussed on "The Economic and Legal Vision on Fintech". Geert Gielens, Chief Economist of Belfius Bank and Insurance, looked at "The impact of Technology on the Economy". There is a clear link between technology and growth. The higher the GDP/capita the higher the global innovation index. R&D expenses are crucial. Of course productivity benefits of this investment, shown by an increased output which goes hand in hand with a decrease of employment. Nevertheless a lot of forecasts are quite precise on the number of jobs which could be eliminated but the expectation on new jobs is not yet quite clear. Flexibility of labour markets is crucial and of course also a permanent training. Technology leads towards a consumer surplus: greater choice of products and lower prices, also for software, computers and IT applications. Technology contributes to growth and consumer wellbeing. But it needs to be embedded in a fertile system. It is not a Pareto improvement. Mitigation via demand and supply side measures are needed. The benefits outweigh the disadvantages.

Alvaro Martin, Chief Economist on Digital Regulation of BVVA looked at "The Economic Impact of Fintech". Banks are facing the emergence of Fintech at a moment that interest rates are historical low, growth expectations are mitigated and regulatory pressure on capital requirements and consumer's privacy increased. At the same time banks are asked to be more innovative and to be resilient in terms of cyber security. Mobile, internet cloud computing are exponential growth technologies. Most of the venture capital of banks is used for Fintech. Regulators use their sand boxes and innovation hubs to enter the ecosystem. Global investments in Fintech grew sharply, but recently some slowing is observed. Efficiency gains, lower transactional costs, better risk management, new products, new value propositions, customized offering are the expected impact of Fintech on the financial ecosystem. Disruption is in the air, but in fact it is the arrival of new business models which is crucial. There is no conclusive evidence concerning the positive or negative impact of automation of jobs, artificial intelligence, etc, on the economy. Regulators have to find a balance between the new customer value propositions and the protection of the customers. The digital platforms offering great service for free could be the new internet giants. The Spotify model could be the example by excellence.

Tanguy Van Overstraeten, Partner at Linklaters, presented "The impact of the General Data Protection Regulation (GDPR) on Fintech". The regulation has already been published in the Official Journal and will apply by 25th of May 2018. The actual data protection rules focus on the processing of personal data. The GDPR introduces an increased enforceability and higher administrative fines. The fundamental principles for data controller, data processor, processing conditions remain, but some new elements are added. What will be stricter? Content requirements on data which could also include genetic and biometric data, transparency, data processing agreement. What will be new? Accountability, private by design or by default, data breach notification, new rights for data subjects. Security is crucial. Data transfers are limited to the EU (EEA) but some derogations and safeguards are possible. GDPR will









impact Fintech because Fintech is full of data and Big data technologies are used. The goal is to strengthen trust. Compliance with GDPR could be an opportunity to enhance the branding of Fintech companies.

In the fourth session representatives of well-established financial institutions debated the topic on how they evaluate the challenge of Fintech. Rik Vandenberghe, CEO of INF Belgium and President of Febelfin, chaired the session. The panel was composed of the following persons: Michael Anseeuw (MA), CEO of Hello Bank, subsidiary of BNPParibas Group, Jörg Hessenmüller (JH), Head of Group Strategy & Development of Commerzbank, Frederik Meheus (FM), Global ex-US Head of Retail Technology of Blackrock, Rudi Peeters (RP), CIO of KBC Group, Gunter Uytterhoeven (GU), Chief Customer & Data Officer of AXA. Different themes have been debated. For each of them please find here the most relevant statements of the panel members.

#### Customer behaviour

- RP: The share economy will pop-up and the ondemand economy will be huger.
- MA: The bank evolves towards an open-sourced and transparent platform.
- JH: The customer has the power and data will be the game-changer.
- FM: Not all people trust technology so there will be still need for a financial advisor.
- GU: Customers that consume cars in-stead of buying them and self-driving cars change the risk management strongly.

#### - Customer experience

- MA: Biometrics with nanotechnology enable banks to do things much better than today.
- RP: Regulations and security are not blocking banks from being digital even data privacy is



not an issue any more from a customer point of view.

FM: Aggregation of banks data and a European regulation create a very competitive space.

#### - Less regulation for Fintechs

- JH: Fintechs target those sweet spots in the value chain of banks, characterized by a maximum of customer interaction and the least amount of regulation. Cloud computing in combination of the huge database of customers could lead to a better business model for the banks.
- GU: The customer looking for a lot of relevant information and an easy use of services is hammered by regulation. The creation of companies receiving the mandate of customers to manage all privacy elements could be a solution.
- MA: We have to find an equilibrium between strict regulation and the wider scope of finance. Regulation has been up to now a major reason why disintermediation of finance is not yet pronounced.
- Flexibility of the actual players in banking and insurance
  - GU: The IT legacy is a serious handicap, but IT investments are already huge.
  - RP: It is not an IT, but a business issue. We have the best people and good technology in house and this is not a legacy. New developments are there but a better organisation and governance are welcome.
  - FM: Most players are not ready due to the legacy of thirty, even forty years of IT systems; others are aware of the challenge and consider that the head of innovation has to be the head of business.







- JH: A change of the culture of the firm is necessary. A good understanding of the customer needs and the development of endto-end goals are for the change of the IT systems to create a modern bank which provides a superior customer experience.
- MA: The biggest challenge is how to steer your people and how to interact as an organisation. Digitalisation of banks is on the way and they are not missing the train. But how to manage the speed of the observed exponential growth of digital services to the customers?

#### - The change of the culture

- RP: It starts already with the hiring of people, with the engagement of the CEO and the executive committee. IT is part of the business, like payments or asset management of life, etc.
- MA: Put the customer in the middle of your three year business plan and be flexible to adapt it as fast as needed
- RP: Planning and budgeting are needed to move forward. Taking the risk: if you empower somebody, without feeling uncomfortable, you probably haven't empowered enough
- MA: We need to focus on, even in the non-IT, digital thinking and way of working and interacting, which must be embedded in the DNA of every employee in front- and back-office
- JH: React fast is the opposite to how the bank sector developed in the past, due to regulations, control in command, sweet sign offs on every policy.
- Financial sector lagging or frontrunner?
  - FM: Regulation change is the main driver together with a bit of a culture spirit. North Europe is more flexible than South Europe
  - RP: Belgium is lagging in e-commerce but is a frontrunner for e-banking. We also need e-governance to be successful
  - MA: Sweden could be an example because there is a generation of entrepreneurs which is strong in IT and Fintech, trained during the last 25 years already. Digitalisation goes beyond

- banking and influence the whole society. Looking to the infrastructure, the e-banking and the available technology we can be proud of what has been done and of what is done today.
- GU: Belgians are less good in some kind of gadget innovation, but we are better in some fundamentals streams like customer journey designer, like big data.
- Collaboration and exchanging of knowledge as key factors of success
  - JH: The creation of an ecosystem which eases the lives of entrepreneurs and SMEs is easier and better when we combine the strengths of the traditional banks and those of the Fintech newcomers
  - FM: Open APIs are standards for the financial institutions to have a smoother dialogue with Fintech companies. Unfortunately not many institutions have an open API
  - RP: We will be forced to work with Fintech, doing things much better than we are doing. Different ways are open: copy, joint venture, acquisition? You need a clear strategy about which part of your value chain you take them for and how you do integrate them
  - MA: Bancontact and Isabel are nice examples of collaboration between Belgian banks.

    Working with Fintech in that domain is recommended
  - GU: As incumbents we add value to Fintech. We have the customers and volume, and we can deal with regulation
  - RP: Three big banks and Eggsplore launched recently a new mobile payment system.
- Marketing of the added value for customers
  - JH: We should be convinced what we really deliver and that much by what we promote via newspaper or whatever
  - FM: Everybody must understand that we can use technology to our advantage to serve the customer in a proper way
  - MA: Actions speak louder than words
  - GU: how to move via digitalisation our value to other levels beyond our balance sheet?







- Blockchain: threat or opportunity?
  - RP: For sure both. The trade finance application in KBC has proven: lower price, easier infrastructure, new business opportunities (e.g. SMEs), bigger market, smaller fee. Experimenting is essential, but technology is still changing and legislation is not adapted. I am a strong believer.
  - JH: Don't use blockchain to replicate your existing flows. One of the biggest values of banks is to inject trust into the system. Part of it can be digitalized. Not thinking about it, is not an option.
  - RP: The combination of blockchain with "know your customer (KYC)" can lead to one of the biggest in-depth changes in the whole market. Linking this with the internet of things is certainly a major step.
  - JH: KYC can become a service because there are many other players not familiar with that.
  - MA: It is a business process optimisation for instance in the custody business.
  - GU: In insurance it gives the possibility to develop peer to peer insurance models at a cheap cost.
  - RP: The knowledge is the most blocking factor and of course the reluctance to start experiments.
- Ultimate key to success concerning digitalisation
  - GU: Culture and people.
  - RP: Learn outside, organisational agility which is more than technology, so it means governance, planning, budgeting, hiring, a new way of working and also top level support.
  - JH: It is a chance, an opportunity. If we see it as a threat, we will lose.
  - FM: Disrupt your own thinking and the way you organise yourself.

To **summarize** Fintech presents important threats and opportunities for people and institutions involved in

retail banking. The entrepreneurs from the Fintech startups focused in their presentations at the conference on the opportunities created by financial innovation in a digital world. From their perspective, the word disruption has a positive ring. Fintech opens new business opportunities, when for instance e payments, asset management and other financial transactions and exchange of investor information can be carried out much smarter and cheaper than before. In particular young customers are becoming more sophisticated and expect their bank to be digitally sophisticated as well. In today's world and in the years to come, the ability to innovate determines the competitiveness of financial services suppliers. Some of the start-ups act as independent financial services providers in competition with traditional suppliers, while others provide Fintech based advice and software to existing banks, asset management companies and insurance companies. Regulators admitted during the conference that technological innovation requires policy and regulatory innovation. Cybersecurity, operational risk and protection of data are serious regulatory concerns. In the contributions by banks and insurers there was a different balance between the discussions of threats and opportunities. Several of the speakers described the digital revolution as a challenge because it meant stronger competition and pressure on the profitability of traditional financial services. Financial institutions are forced to reduce their costs, to modernize their ITsystems, to develop digital platforms and to improve their products according to new customer needs. Traditional bank functions are being replaced by digital solutions. It is a great challenge for employees, bank managers and bank board members to keep themselves up to date with Fintech trends and their implications for business opportunities. Business plans must be adapted currently. Partnerships between financial institutions and Fintech start-ups may be part of the solution. Employees with digital skills will gradually replace bankers with a traditional education in accounting, management of cash, credit and security investments.

Conference presentations are available online at:

### www.suerf.org/fintech2016