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# FINTECH

## S T R A T E G Y

MAGYAR NEMZETI BANK

THE CENTRAL BANK OF HUNGARY



*“It would appear that we have reached the limits  
of what it is possible to achieve with computer technology,  
although one should be careful with such statements,  
as they tend to sound pretty silly in 5 years.”*

*(1949)*

*John von Neumann*

**FINANCIAL INNOVATION AND STABILITY**

**FINTECH STRATEGY OF THE MAGYAR NEMZETI BANK**

The strategy was prepared under the direction of Anikó Szombati, Executive Director for Digitalization and Chief Digital Officer, in the coordination of Digitalization Directorate. The Report was prepared by staff at the MNB's Digitalization Directorate, Directorate Insurance, Pension Funds and Intermediaries Supervision, Directorate Credit Institutions Supervision, Executive Directorate Financial Infrastructures and Banking Operations, Directorate for Capital Markets and Market Supervision, Prudential Modelling and IT Supervision Directorate and Directorate Financial System Analysis.

The Report was approved for publication by Dr. Mihály Patai, Deputy Governor.

The Report incorporates valuable input from other areas of the MNB and the comments of the Financial Stability Council and the Digitalization and FinTech Advisory Board.

The strategy is based on information available for the period ending 18 October 2019.



## Foreword

### **Dr. Mihály Patai**

Deputy Governor of the Magyar Nemzeti Bank

An increasing number of central banks and supervisory authorities take a particular interest in digitalisation, financial innovation and the impacts of the FinTech phenomenon on the financial system. Being at the forefront of the international process, the Magyar Nemzeti Bank, is continuously improving its financial innovation toolkit, and it set up a dedicated executive directorate in charge of the digitalisation of the financial system and the development of the FinTech sector in May 2019. This new organizational unit within the central bank is responsible for analysing the possibilities of future developments in financial innovations and digitalisation, encouraging financial innovation and digitalisation by central bank instruments, and preparing comprehensive proposals for the possible ways forward.

The MNB considers it especially important to develop the digitalisation of the financial system and support the market introduction of innovative financial services in a secure way, as in addition to creating value for consumers, it also strengthens the financial sector and contributes to supporting economic growth in a sustainable way. The MNB's FinTech strategy has been drawn up with a view to providing an overarching framework for the directions and initiatives relating to digitalisation objectives, in order to keep inevitable changes expected in the financial sector on a controlled and regulated track.

In this context, the MNB has identified its key priorities, which include increasing the competitiveness of financial services offered to consumers, improving the efficiency and stability of the financial system, supporting the creation of an advanced and active domestic FinTech ecosystem, promoting overall financial awareness and developing professional training. In pursuit of the objectives considered relevant and specified by the MNB, 24 initiatives and proposals are put forward in the strategy. Some of these can be implemented within the MNB's competence, and the others are proposals addressed to the Hungarian Government and the domestic FinTech community.

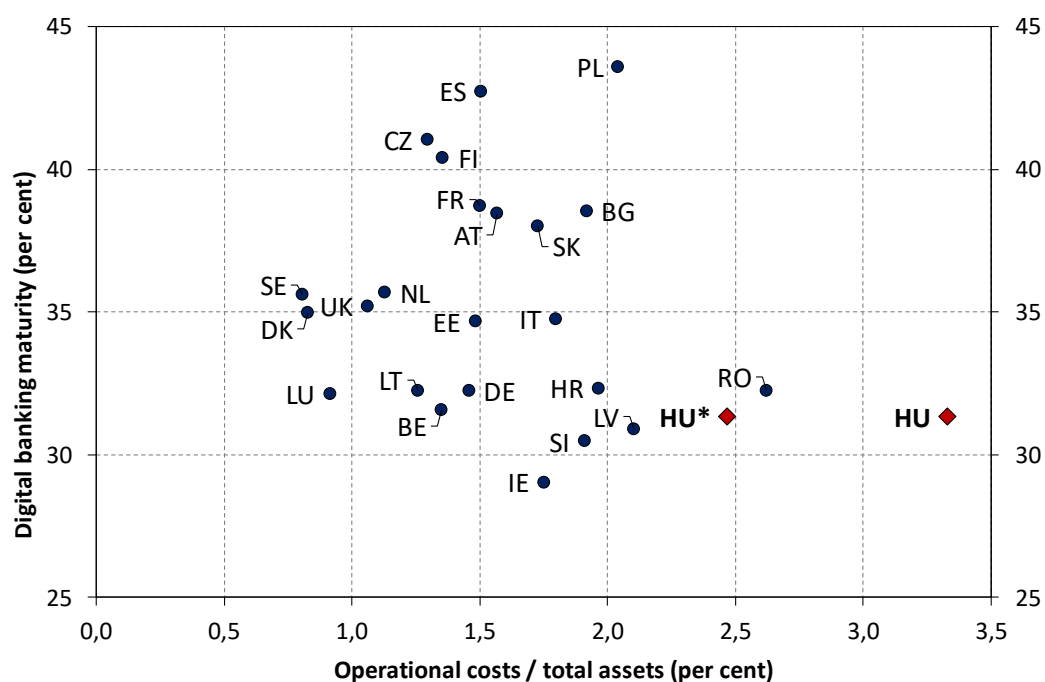
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## INTRODUCTION

**High-level digitalisation supports maintaining the stability of the financial system and ensures its sustainable contribution to economic growth.** The widespread use of innovative FinTech solutions enhances the resilience of the financial system through increased cost efficiency and proactive operations, and allows more flexible adaptation to unexpected shocks, while ensuring efficient support for the growth of the real economy through optimal use of resources. In contrast, due to the lack of digital solutions, the operation of the financial system at high cost levels may be a source of systemic risks. In addition, excessive penetration of financial services in non-regulated sectors may also pose significant stability and consumer protection risks.

**Chart 1: Digital maturity of banks and operational costs of banking systems in EU member states**



Note: Digital banking maturity data for 2018 based on Deloitte research and banking cost data for 2018. Digital banking maturity is a cumulative indicator made from a three-pillar survey with the following sub-pillars: variety of banking services available in the digital space, the level of user experience measurable on digital interfaces, and the consistency between consumer expectations and digital developments. Operational costs in some countries may include some or all of the bank's levy in that country. Based on IFRS consolidated banking data. HU \* Shows the value excluding foreign subsidiaries and also bank levies and transaction levies included in operational expenses.

Source: Deloitte, ECB, MNB.

**In the case of the domestic financial system, there is a significant opportunity to stimulate digitalisation and the proliferation of FinTech solutions, in which the Magyar Nemzeti Bank could take on a key role.** The level of digitalisation of the Hungarian banking system is considered to be low by international standards and significantly below the leading Polish, Spanish and Czech banking systems according to Deloitte's 2018 Banking Maturity Survey (Chart 1). The inadequate level of digitalisation of the domestic banking system may also jeopardise prospects of long-term financial stability and sufficiently balanced support of the growth of the real economy to reach its potential enabled by the banking system, therefore regulatory support is necessary for the promotion of digital development laying the groundwork for a rapid, leapfrog development in the financial system. The MNB, as an integrated central bank with an independent regulatory function with mandates for financial stability, payment services, supervision and consumer protection and with a complex system wide perspective is committed to developing the digitalisation of the

Hungarian financial system and is capable of efficiently supporting the further promotion of financial innovation within a safe, regulated framework.

The following describes the vision, mission and strategic objectives of the MNB in relation to the digitalisation of the domestic financial system and the development of the FinTech ecosystem (i). We then outline the key principles and cornerstones that the MNB takes into account when implementing its FinTech strategy (ii). In the third part, we provide an overview of the trends affecting the digitalisation of the global and domestic financial systems and the current state of the FinTech sector (iii). We then identify the strengths that support the implementation of the strategy, as well as the difficulties that could potentially pose a challenge in this regard (iv). We outline the strategic pillars that provide continuous guidance in determining the directions to follow, to achieve the strategic goals (v). Finally, we present specific initiatives that the MNB can implement to support the digital transformation of the domestic financial sector and the development of the FinTech ecosystem. In addition, we formulate proposals to the Government and to the domestic FinTech community, the implementation of which supports the above objectives, but which fall beyond the competence of the MNB (vi). The central bank will review its FinTech strategy every two years.



## 1. VISION, MISSION AND STRATEGIC AIMS

### 1.1. Vision

The MNB favours a financial intermediary system that offers competitive and safe financial services to domestic consumers. To this end, the central bank is actively involved in developing an efficient incumbent segment that implements advanced technologies, a vibrant FinTech ecosystem, a supportive environment and a modern regulatory background, while maintaining market integrity.

### 1.2. Mission

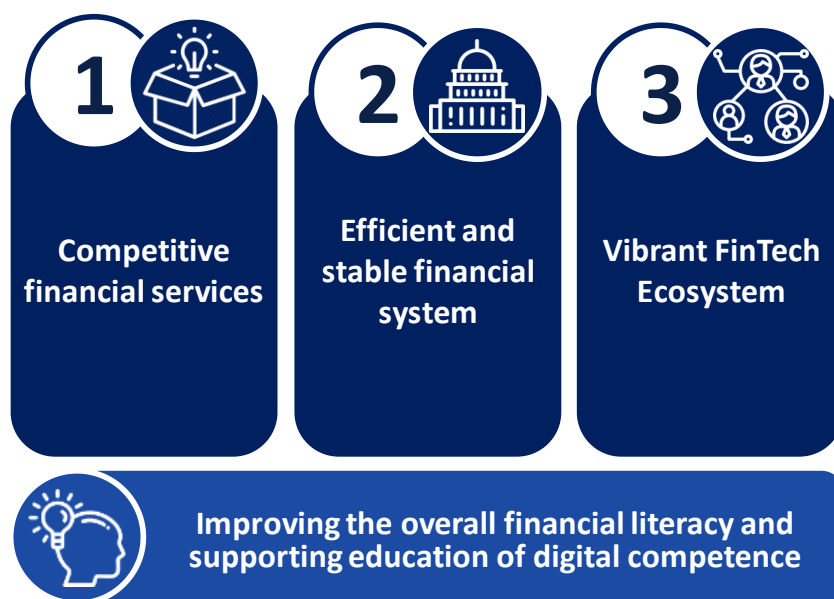
The MNB supports the introduction of efficiency-enhancing, competitiveness-improving and value-adding developments and innovations into the domestic market. It endeavours to carefully modernise those regulatory tools within the central bank competence that affect FinTech innovations. Furthermore, it supports and initiates the process of modernizing financial regulation outside its competence.

### 1.3. Strategic aims

The MNB's FinTech strategy focuses on 3 + 1 priority areas, within which it formulates its strategic aims (*Chart 2*):

- **Supporting the proliferation of competitive financial services:** It is desirable to encourage the development of personalised financial services that are accessible to a wide range of customers, easily and conveniently available, and which are reasonably priced and can be used within a secure environment.
- **Increasing the efficiency and stability of the financial intermediary system:** Promoting the rapid digital transformation of the incumbent segment will also support cost-effectiveness as well as proactive operation, and through these, the stability of the domestic financial system. The aim of encouraging innovative solutions and the widespread implementation of state-of-the-art, cutting edge technologies is to significantly reduce the operating costs of financial institutions, to manage risks more effectively, and to improve the quality of their services. Developments made by financial institutions may also act as a catalyst for the emergence and acceleration of digital developments in other sectors, thus having an additional positive impact on sustainable economic development.

Chart 2: Aims of the MNB's FinTech strategy



Source: MNB.

- **Boosting the domestic FinTech ecosystem:** In order to strengthen the FinTech community, it is desirable to provide a regulatory environment that supports the growth and entry of the domestic FinTech sector into the

global market, and simultaneously makes Hungary an attractive destination for international FinTech companies. Regulatory support is also aimed at fostering partnerships between incumbent institutions and FinTech firms and developing the capability of the domestic financial system to attract technological talent. A strong and well-developed FinTech sector could act as a catalyst for the development of the financial system that could become the engine of sustainable economic growth.

- **Improving the overall financial literacy and supporting education of digital competence:** In addition to the proliferation of innovative services, the aim is to further increase consumers' financial awareness and strengthen their control over innovative services, as well as to encourage ethical behaviour by financial service providers. Another important aim is to support financial and technological education, which will help reap the benefits of digitalisation and facilitate accessibility to financial services thus further boosting the level of financial inclusion.

## 2. MAIN PRINCIPLES AND CORNERSTONES

The MNB seeks to achieve the aims of its FinTech strategy, taking into account the following principles:

- **Security**

As the regulatory and supervisory authority, the MNB intends to play an important role in promoting the safe proliferation of innovative financial solutions. If the financial intermediary system is capable of adapting to FinTech developments properly, this will benefit both the customers and the institutions. To facilitate this, the MNB places particular emphasis on the controlled introduction of new products and services, without jeopardizing the stability of the financial system. Moreover, in certain cases FinTech solutions could also support regulatory compliance (RegTech). Upon request, the MNB offers guidance to providers of innovative financial solutions, to enable them to operate in a prudent manner in accordance with legal requirements. The MNB treats consumer protection as one of the key priorities in supporting the safe proliferation of FinTech innovations, in which context it identifies potential risks associated with innovation and actively participates in raising the risk awareness of the stakeholders. The MNB also pays special attention to reducing cybersecurity risks in relation to FinTech developments, bearing in mind that disruptions in the IT infrastructures and possible outages in the course of business could cause significant, even systemic damage, endangering trust in the financial system.

- **A proactive, pro-innovation mindset**

The diffusion and widespread application of innovative digital solutions can significantly improve the cost-effectiveness and competitiveness of the financial system. Supporting FinTech innovations by providing a transparent regulatory environment can accelerate this process, however, during its realization, a level playing field should be ensured among the providers of the same products or services and it is essential to strive to achieve a unified regulation for the same activities on a Europe-wide and global scale. The MNB is committed to promoting an innovation-friendly, progressive regulatory environment. As part of its active supportive approach, the MNB involves market participants and other stakeholders in the preparation of decision-making, thereby enabling the implementation of a regulatory environment that is resonant on market needs and is able to meaningfully promote the market penetration of FinTech developments, increase efficiency and dismantle obsolete business models. The central bank is actively investigating how it could promote and accelerate the development of the domestic FinTech market and is acting within its competence. Furthermore, it is making proposals that reflect an innovative approach in order to prioritize the realization of high value-added but fast-paced, inspiring projects.

- **Commitment**

The MNB is strongly committed to supporting digital developments and innovative market players. To support the rapid but secure digital transformation of the financial intermediary system, the central bank has declared its intention to act as a catalyst for innovation. The MNB strives to continuously improve and update its knowledge base on innovative technologies and to continuously monitor international good practices, regulatory approaches, and adapt them while respecting the specialities of the domestic market. As a result of these endeavours, it was one of the first central banks in the region to launch an Innovation Hub to promote development, as well as its Regulatory Sandbox.

- **Professional diligence**

The MNB strives to ensure that decisions aimed at supporting innovative financial solutions are based on high-quality decision preparation. To this end, dedicated areas within the central bank have been established to communicate with innovators, analyse technological trends, learn about international regulatory practice and modernise the domestic regulatory environment. On the one hand, the executive director in charge of this area, the Chief Digital Officer of the MNB responsible for Digitalisation and FinTech Development, with the support of the departments under her management, elaborates approaches to stimulate financial innovation and digitalisation by the tools of the central bank. On the other, under the direction of the deputy governor responsible

for the supervision of the financial institutions and for consumer protection the Financial Innovations Supervisory Lab initiates and contributes to the development of regulatory and supervisory procedures applicable for the newly established FinTechs that fall under the MNB's supervisory responsibility. The Financial Infrastructures Directorate is primarily responsible for proposing innovation and regulatory changes regarding instant payments and other payment services. In order to be able to develop and implement professionally sound proposals, the preparation work for decisions is carried out by a team of well-prepared, committed staff with professional integrity, with active cooperation among the individual functional areas. The MNB constantly updates and develops its knowledge base, relying on domestic and international experience, while actively participating in international working groups, and analysing and developing regulatory proposals for the FinTech sector.

- **Cooperation and openness**

Close collaboration between FinTech ecosystem members is essential for accelerating the proliferation of digital solutions and financial innovation. Recognizing the benefits of cooperation, the MNB strives to deepen dialogue and encourages – to foster the establishment of partnerships between FinTech companies – incumbent institutions and other stakeholders such as venture capital funds and consultancy firms. Through its systematic and constructive communication with market participants, the central bank aims to contribute to the transparency and responsiveness of supervisory requirements and to the emergence of new technologies, thereby facilitating the smooth implementation of financial innovations on the market. By working closely with market participants, the central bank also contributes to channelling market needs and professional opinions into decision-making.

- **Trust and integrity**

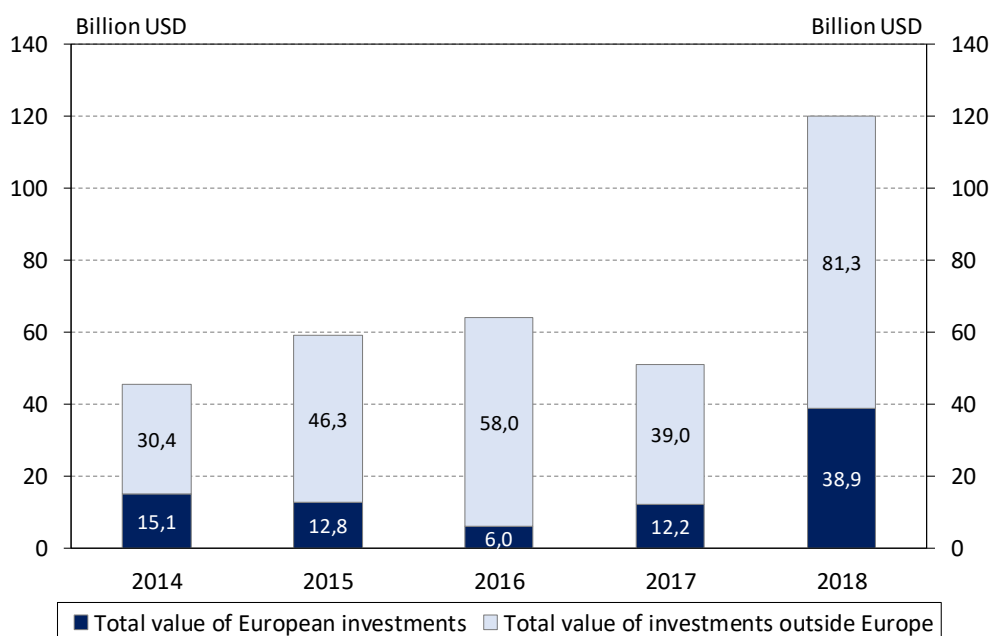
The MNB considers it to be of the utmost importance that the digital transformation of the financial intermediary system is carried out without compromising consumer confidence in institutions offering financial services. The central bank pays special attention to ensuring that consumers are aware of the potential risks of innovative solutions and that they should make their decisions in an informed way as possible. In addition, with the tools at its disposal, it exercises its best efforts to ensure that financial service providers, while adopting digital solutions, are committed to conducting business under ethical principles, especially while interacting with their clients in the online space as well.

### 3. A GLOBAL AND DOMESTIC OUTLOOK

#### 3.1. An overview of the global FinTech sector

In recent years, many new, innovative players have entered the financial services market, and the attractiveness of these FinTech companies has continued to grow. The MNB monitors the impact that international trends entailing the proliferation of innovative solutions may have on the domestic financial system. Over the last ten years, the number of financial service providers<sup>1</sup> that have emerged in the market as a complement or even an alternative to incumbents, has increased significantly. FinTech companies are coming to prominence in a wide variety of financial fields: payment services, banking, insurance, capital markets, and wealth management, of which currently we find the highest number of players in the field of payment services.<sup>2</sup> The ability of these disruptive providers to raise capital has also increased rapidly; significant investments have flowed into the segment through venture capital or direct equity investments, and through mergers and acquisitions. By comparison, FinTech's global investment in 2018 more than doubled compared to 2017 (in Europe the value of these investments nearly tripled)<sup>3</sup> (Chart 3).

Chart 3: Changes in investments in FinTech companies globally



Source: KPMG

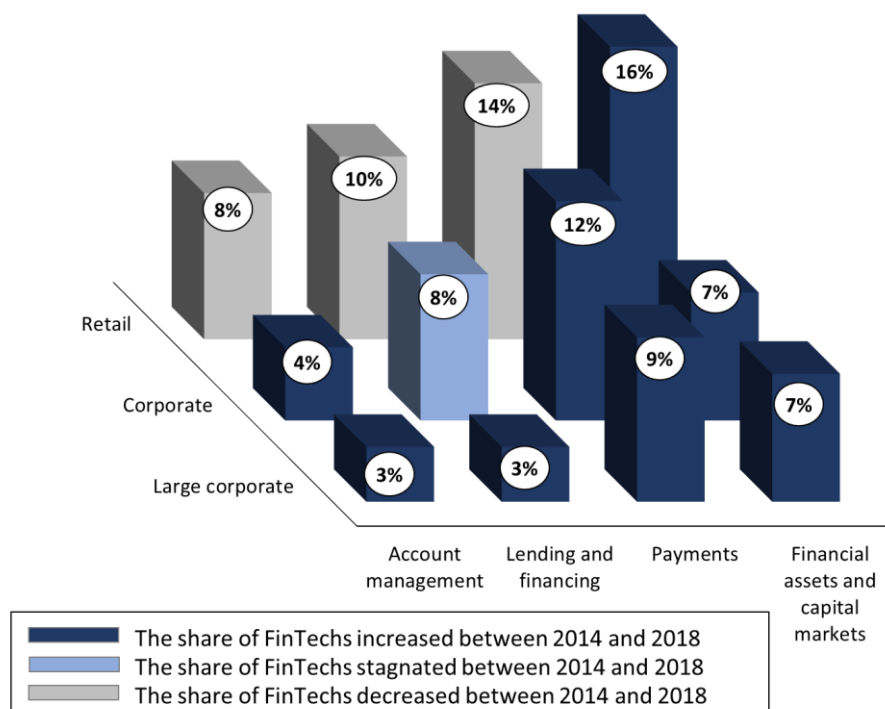
**The FinTech sector offers a wide range of innovative services.** As a result, they are not only considered as competitors by incumbents, but also as potential partners or suppliers for mutually beneficial relationships, helping both the digitalisation and innovation of incumbent companies and the integration of new service providers into the global financial circulation. The major trends in digital transformation are the increasing share of paperless administration and internal process management, the application of distributed ledger technology (DLT/blockchain), Big Data methods, and the improving security of data processing and storage of collected data.

<sup>1</sup>Deloitte: Fintech by the numbers (2017)

<sup>2</sup>Deloitte: Fintech by the numbers (2017)

<sup>3</sup>KPMG: The Pulse of Fintech (2018)

**Chart 4: The share of FinTech innovations and its change in each customer segment by product type globally (2018)**



Note: The columns represent the share within a given user and product segment, taking into account the globally leading FinTech companies. The category of financial assets and capital markets includes securities and other investment services and insurance products.

Source: McKinsey Panorama FinTech database, Panorama Global Banking Pools.

- Banking and payment services**

**FinTech providers have primarily made progress in the distribution and development of payment services in recent years (Chart 4).** The emergence of new players has forced traditional financial institutions to pay special attention to the opportunities inherent in digitalisation and the improvement of customer experience. Related developments and competition could be boosted by the fact that after the United States, in 2019, following the entry into force of PSD2, the EU markets will also be accessible to third-party payment service providers, allowing consumers to pick services better tailored to their needs. In addition, the proliferation of companies offering non-banking payment platform has significantly increased access to online payment methods for those customers who have no access to traditional banking or live in areas with an underdeveloped banking system. New innovative businesses in Africa have seen increased use of payments on different mobile platforms, but Asia has also seen leaps and bounds in the transition from cash to digital channels.<sup>45</sup> Although payment by mobile phone is starting to spread in Europe and the United States as well, these areas are still dominated by debit or credit card payments, due to strong banking relationships.

**Although it is not anticipated that bank branches will cease to exist, their function will nevertheless become significantly different.** While in the past visits to the branch of a bank were characterised by waiting and lengthy paper-based administration, the future is much more likely to provide a community living space where customers can receive personalised services. In addition, it is planned that all administrative processes

<sup>4</sup>GSMA: State of the Industry Report on Mobile Money (2018)

<sup>5</sup>McKinsey: Mobile financial services in Africa: Winning the battle for the customer (2017)

will take place on a digitised interface, even without the involvement of a bank clerk. Instructional videos and informational documents, accessible faster and more conveniently due to digitalisation, will be able to support transforming personal visits from an administrative process into an advisory service.

- **Insurers**

**Investor support for InsurTech companies has grown significantly in the last five years, globally last year this sector received more than six times the investments received in 2014, exceeding USD 3 billion.** Platform-based services are at the focus of attention for both new companies and incumbents, as a shared network and payment service enable the implementation of a higher proportion of innovative ideas. In addition, in order to improve customer experience, additional emphasis is placed on gathering as much data as possible and effectively analysing this data in order to provide customers with more personalised offers. However, this also requires the strengthening of consumer confidence, which may be supported both by appropriate regulation and the development of systems appropriately managing cyber threats (e.g. data theft).

- **Capital market and wealth management**

**Due to the complexity of capital market proceedings, traditional solutions are increasingly being discarded when investment decisions are made.** Technologies such as algorithmic trading - which executes security trades at a high volume without any human intervention - have gradually proliferated among advanced capital market players since the 2000s, following those market movements that traditional analytical techniques and trading mechanisms cannot handle quickly enough. According to surveys in some market segments, such as US money markets and forward/futures markets, the number of automatized trades constitutes up to 50-80 per cent of the total amount.<sup>6</sup> Traditional capital market services, such as investment advice and equity trading are available to an expanding community of clients through digitalisation and automation. The proliferation of various digital investment platforms improves clients' access to capital market instruments and through these solutions enables them to manage their investments at lower fees. Of particular interest are robo-advisory solutions that provide their services without intermediaries, directly to the customers, providing automated and algorithmic financial planning services with minimal human intervention. In addition, crowdfunding has become widely available, especially for small and medium-sized enterprises, enabling private individuals to finance corporate projects through digital platforms by the investment of small amounts of money, offering an alternative to traditional equity and bond issues for enterprises. In addition, business models based on new technologies have also appeared in the market with the advent of virtual assets or tokens. Virtual assets can be acquired mainly through initial offers or auctions, and then in the secondary market. They have different functions and features in terms of the user benefits they confer: they make available the services of the platform operated by the issuing company, ensure shareholding and provide financial asset functions.

### 3.2. An overview of the domestic FinTech sector

**Despite many successful companies in Hungary, the FinTech sector is still at the beginning of its growth trajectory.** Domestic FinTech solutions that are already on the market or are being tested are related to a wide range of financial services, with mobile payment and payment solutions being the most common of them. The MNB estimates that approximately 100 FinTech companies are already active in the market in Hungary with one or more products and services, and numerous start-ups offering financial innovations are gaining regional recognition among foreign consumers and investors. According to market feedback, domestic start-ups implementing innovative solutions have many progressive ideas for the entire financial sector, but the domestic FinTech sector is still in an early stage of development, as the domestic market structure or regulatory inflexibility often prevent the independent market entry and growth of these FinTech companies, and in numerous cases we also see the immaturity of business models. These features may motivate innovative players to develop collaboration with incumbents.

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<sup>6</sup>The Economist: The stock market is now run by computers, algorithms and passive managers (2019)

**The proliferation of FinTech solutions can be supported by a constantly evolving ecosystem.** Domestic incumbents and the investor community are increasingly recognizing the potential in companies applying financial innovations and are open to cooperation with them. In the expanding and developing FinTech ecosystem, innovation labs set up by incumbent institutions play a key role in establishing close partnerships with innovative companies in the form of infrastructural, professional and sometimes financial support. In addition, the central bank's initiatives already in progress may also facilitate market co-operation and the market entry of innovative solutions. Although the total value of venture capital investments in FinTech solutions in Hungary between 2008 and 2018 was lower than the regional average,<sup>7</sup> the increasing openness of venture capital funds to FinTechs suggests significant growth potential. Government support and regulatory modernisation can further encourage the development of the sector.

**The demand side also attributes significant potential for the future proliferation of FinTech innovations.** For domestic consumers, access to fast and easy processing is a priority when it comes to financial services, which is why digital solutions, including FinTech innovations, are experiencing strong growth potential in several market segments. Surveys among domestic consumers confirm that there is significant consumer demand for simplifying the process of borrowing and opening a bank account, among others. In addition, in every age group, there are already users of innovative expense tracker, savings and insurance products, and the expectations concerning additional functions and services are also high. By regional comparison, domestic retail customers are the most interested in digital technologies.<sup>8</sup>

**Despite the favourable supply and demand factors, the digital maturity of incumbent institutions is still low.** The adaptation of FinTech innovations, and the digitalisation and automation of processes seem to be a necessary development for the institutions. Recognizing that, many have already developed their own dedicated digital strategies, or have integrated digitalisation into their institutional strategies, and some innovative product development projects have already been implemented. Nevertheless, digital transformation is progressing slowly, and market pressures for a higher level of digitalisation are still moderate.<sup>9</sup> Although institutions are increasingly willing to form partnerships with new, innovative players, we can still see only a small number of actual cooperation schemes in the market. It should be noted, however, that some institutions have begun making efforts to adopt a flexible, agile mindset that could enable effective customer-oriented innovation and catalyse the proliferation of innovative solutions ensuring a rapid catch-up with the digitally mature banking systems of the EU.

- **Banking and payment services**

**In payment services, more and more FinTech innovations are becoming available for domestic users.** The domestic and international FinTech solutions available in the domestic market are primarily aimed at the development of online payment services. The penetration rate of mobile wallets and that of solutions enabling mobile payments as well as fast and simple money transfer are constantly growing, and start-up companies offering digital payment services have a widening customer base. In addition, more than 80 per cent of banks have already implemented or are planning to implement mobile payment solutions and payment initiation services.<sup>10</sup> With the entry into force of PSD2 and the launch of the instant payment system, both incumbents and third-party payment service providers will have new opportunities opening up to them for the distribution of additional innovative services.

**Domestic banks are increasingly offering their services to their customers through digital and online platforms.** Over the last few years, there has been convergence at all domestic institutions regarding the availability of on-line and mobile banking services. Moreover, the majority of domestic institutions are meaningfully responding to the legislative changes supporting digitalisation efforts (e.g. on-line customer

<sup>7</sup>Raiffeisen Bank (2018): CEE Fintech Atlas 2018

<sup>8</sup>Deloitte (2018): EMEA Digital Banking Maturity

<sup>9</sup>Deloitte (2018): EMEA Digital Banking Maturity

<sup>10</sup>Magyar Nemzeti Bank (2018): Growth Report



identification, simplification of signing conditions), as a result, the application for and use of certain banking products, such as payment accounts, personal loans, is increasingly taking place on on-line surfaces and could even be fully processed on-line. In addition, the branch office network is being streamlined and adapted to the needs of the digital age among domestic banks, which may provide additional space for the proliferation of digital processing.

**However, the domestic banking system is hindered by the fact that the level of digitalisation of internal operations is not yet sufficient.** By international standards, the Hungarian banking system operates with low cost efficiency. This low efficiency is due, among other things, to the low degree of digitalisation of internal banking operations. Digital transformation is further hindered by the fact that in some cases, the core systems used by banks are typically outdated, or the versions in use are no longer supported by the developers. Given the frequent outages affecting these systems, in terms of both maintenance and opportunities to develop modern services it could be a progressive measure to replace or upgrade obsolete system components. It is also recommended that efforts be made to implement of state-of-the-art technology solutions, to improve the efficiency of IT systems and institutional operations.

- **Insurers**

**Although few international InsurTech solutions are presently available in Hungary, companies with a business model based on on-line and digital services are increasingly successful.** Online brokers have been operating successfully for a long time in Hungary, and subsidiaries founded by incumbents in recent years have been offering insurance products with an innovative, digital approach. In addition, some non-life insurance products are available in the packages of some of the leading, internationally active service providers performing universal activities and also active in Hungary. However, despite the favourable market developments, the size of the domestic market can be regarded as small for the widespread adoption of InsurTech solutions capable of replacing the business model, and so far, few innovative companies with a primary focus on insurance have entered the Hungarian market.

**Domestic insurers are typically in the early stages of digitalisation by international comparison,** digitalisation efforts are focused on the introduction of paperless operations (e.g.: chatbot solutions), furthermore, some processes related to product sales, customer contacts and claim settlements are being digitalised (e.g. risk assessment, support online onboarding). Similar to the banks, insurers are also focusing on improving the customer and sales experience in the short term, as well as making those processes more efficient and making better use of those periods in which the customer and the insurer have not been in connection before. In terms of areas of innovation applications, processing data on daily activities and health related applications are surfacing on the market. With respect to these points of connection, on-line and digital channels can provide an appropriate interface, developments are in progress accordingly, and large-scale implementation of state-of-the-art payment solutions is expected in the short term.

**However, digitalisation, automation and the re-design of internal operations in the case of insurers can also be expected only over the longer term.** Although several institutions have begun testing innovations that bring about a more radical change in the business model (e.g. telematics, P2P insurance, DLT, RPA, robo-advisory), not all institutions have achieved the desired results so far through these innovations. Institutions therefore need to create the appropriate technological foundations to implement innovative solutions for digital transformation, while the coordination and optimisation of typically multiple core systems operated within one insurer, is also essential for establishing a regime of more efficient and competitive operation. However, transformation can be supported by the close cooperation of domestic institutions with their parent companies in digitalisation. Many groups have established common platforms through which efficient information flow is ensured between group members. The MNB is preparing for the development of a blockchain-based registry for home insurances linked to mortgages.

- **Capital market and wealth management**

**There are many developments still in their early stages, but the penetration of innovative solutions is low.** The highest level of uncertainty is also registered in Hungary, as in the international, and mainly in European practice, in respect to the market entry of capital market innovations. This market segment has the highest

number of innovative developments that are difficult to implement in the currently applicable legislative and supervisory framework. High entry barriers, not necessarily commensurate with the risks of the activity, prevent the proliferation of innovative business models. Although in Hungary many services, such as robo-advisory have seen some progress, and developments, co-operation schemes with incumbents and disruptive innovations are nevertheless expected to appear on the market in the medium term.

**The future growth potential of the domestic FinTech sector is also influenced by how smooth the foundation process of innovative financial services companies is.** The foundation or registration of these types of businesses is preceded by a regulatory approval process involving the provision of financial services, which includes an examination of the existence of the required share capital depending on the form of the business. Domestic regulation currently does not allow for entrepreneurs who do not have a significant amount of equity or investor support prior to the start of their business to use alternative forms of financing. In addition, the often lengthy licensing process, the limited accessibility of the current test environment and the limited scope of regulatory exemptions available make it difficult to start a business and validate innovative financial solutions. Reducing these entry barriers could support the development of the sector.

## 4. STRENGTHS AND CHALLENGES

When formulating strategy, we take into consideration the strengths of the domestic financial markets, the corporate environment, the infrastructural conditions and regulatory background that foster the realisation of the strategic goals, as well as the challenges that pose difficulties in this respect and may be improved by the regulator, if necessary (*Chart 5*).

### 4.1. Strengths

Favourable conditions in terms of the wide-ranging proliferation of innovative financial solutions on the household market:

- **Increasing demand for competitive digital services:** A large proportion of Hungarian retail customers, i.e. 15-20 per cent of them, are extremely open to simpler and more convenient financial solutions and would even be ready to change service provider for the purpose of a fully online administration<sup>11</sup>. Together with the consumers that are actually not ready to change service providers but who are open to the regular or casual use of FinTech solutions there are almost 4 million potential retail customers accessible on the domestic market. The positive opinion of consumers with regard to innovative solutions characterises younger people, and this will therefore presumably intensify further in the future.
- **Customer confidence in regulated financial services:** Hungarian retail customers have a high degree of confidence in the domestic financial system, which is materially supported by the fact that it is strongly regulated. According to surveys, customers also give preference to proper regulatory frameworks for new, innovative solutions<sup>12</sup>.

Special features fostering the stimulation of the Hungarian FinTech ecosystem and attraction of international FinTech companies to Hungary in the area of the corporate environment and operating conditions:

- **Highly educated digitalisation experts:** In Hungary, 4.3 per cent of university graduates earned their higher education degree in information technology, which substantially outstrips the EU average of 3.5 per cent. The high ratio of these experts may represent an advantage for the Hungarian or international FinTech companies that also operate in Hungary when recruiting potential employees<sup>13</sup>.
- **Active presence of global financial and technological companies:** In terms of developing potential business relations, it represents an advantage that globally important financial institutions, as well as technological companies have a major presence in Hungary.
- **Major market players with domestic decision-making:** The potential market of the Hungarian FinTech sector is enlarged by the fact that dominant actors of the financial system have their central offices – and thereby independent decision-making powers – in Hungary, and thus there is substantial room for building supplier relations in this area.
- **Favourable tax environment:** The record low – even by European standards – i.e. 9 per cent corporate income tax rate and the also favourable flat-rate personal income tax rate of 15 per cent make Hungary an attractive location for enterprises.

Favourable infrastructural conditions:

- **High internet penetration:** In Hungary, the internet penetration, exceeding the EU average, and the improving quality of interconnectedness facilitate wide-ranging availability of online, innovative financial

<sup>11</sup>Magyar Nemzeti Bank (2019), Századvég consumer survey

<sup>12</sup>Magyar Nemzeti Bank (2017): Innovation and Stability - Overview of FinTech in Hungary

<sup>13</sup>European Commission: International Digital Economy and Society Index (2019), Hungary

solutions. 96 per cent of Hungarian households have access to 4G, while 82 per cent of them also have access to superfast broadband internet connection<sup>14</sup>.

- **Budapest, as an attractive and developed location:** The capital, in its capacity as the centre of Hungarian business life and a metropolitan “island” with advanced infrastructure and universities (even in a country-wide perspective), providing high quality education in the heart of Central and Eastern Europe, is a favourable location for domestic start-up companies and also for international FinTech companies planning to enter the regional markets

Supportive regulatory environment, open to the strengthening of digitalisation and innovative financial solutions:

- **Proactive central bank approach:** The MNB is committed to fostering the wide-ranging expansion of innovative financial solutions and digitalisation. The central bank supports the safe penetration of FinTech solutions by operating the I Innovation Hub and the Regulatory Sandbox; by implementing instant payments it initiates the developments aimed at the modernisation of the domestic financial system and it intends to take an active role in promoting the utilisation of innovative technologies in the area of finance in the future as well. It is also supported by the top-class EU-level, modern and mature framework of IT supervisory regulations and recommendations.
- **The Government’s commitment to strengthening digitalisation:** The Government is also strongly committed to fostering the digitalisation of the Hungarian economy and financial system. Accordingly, the Digital Welfare Programme contains those directives in which the Government formulates strategic proposals and action plans for digitalisation. In addition to this, a number of progressive initiatives, such as the introduction of the Digital Welfare Programme’s FinTech strategy, the Digital Welfare Financial Trademark, the adoption of the Strategy for the safety of network and information systems’, and the foundation of the Artificial Intelligence (AI) Coalition, are aimed at deepening knowledge and expanding the secure application of technological innovations. In addition, in its action plan the AI Coalition has initiated the development of social studies on artificial intelligence, the institutional framework for the domestic data market and AI ecosystem, as well as the legal and infrastructural framework for data asset management.

## 4.2. Challenges

Factors representing challenges for the wide-ranging penetration of innovative financial solutions on the household market:

- **Limited market size constrained by customer demand:** Roughly 6 million potential customers can be reached on the Hungarian retail market of various financial services. The limited size of the market could represent an obstacle for the international FinTech companies in respect to entering the Hungarian market.
- **Low digital activity of customers and high cash usage:** 75 per cent of Hungarian retail customers use the Internet at least weekly, while the EU average in this respect is 83 per cent, and a similar lag can also be observed in the ratio of users of online banking<sup>15</sup>. Payments are also dominated by the utilisation of cash; more than 80 per cent of Hungarian payments are cash transactions<sup>16</sup>.
- **Low financial awareness and willingness to switch providers:** By international comparison, there is a substantial lag in the financial awareness of Hungarian customers in the area of household budget and budget planning, savings and the active management thereof, including savings for retirement<sup>17</sup>. In addition, the

<sup>14</sup>European Commission: International Digital Economy and Society Index (2019), Hungary

<sup>15</sup>European Commission: International Digital Economy and Society Index (2019), Hungary

<sup>16</sup>MNB Payment Systems Report 2019

<sup>17</sup>OECD: International Survey of Adult Financial Literacy Competencies, 2016

mobility on the market of the banking and insurance services is also low due to the moderate willingness to change service providers.

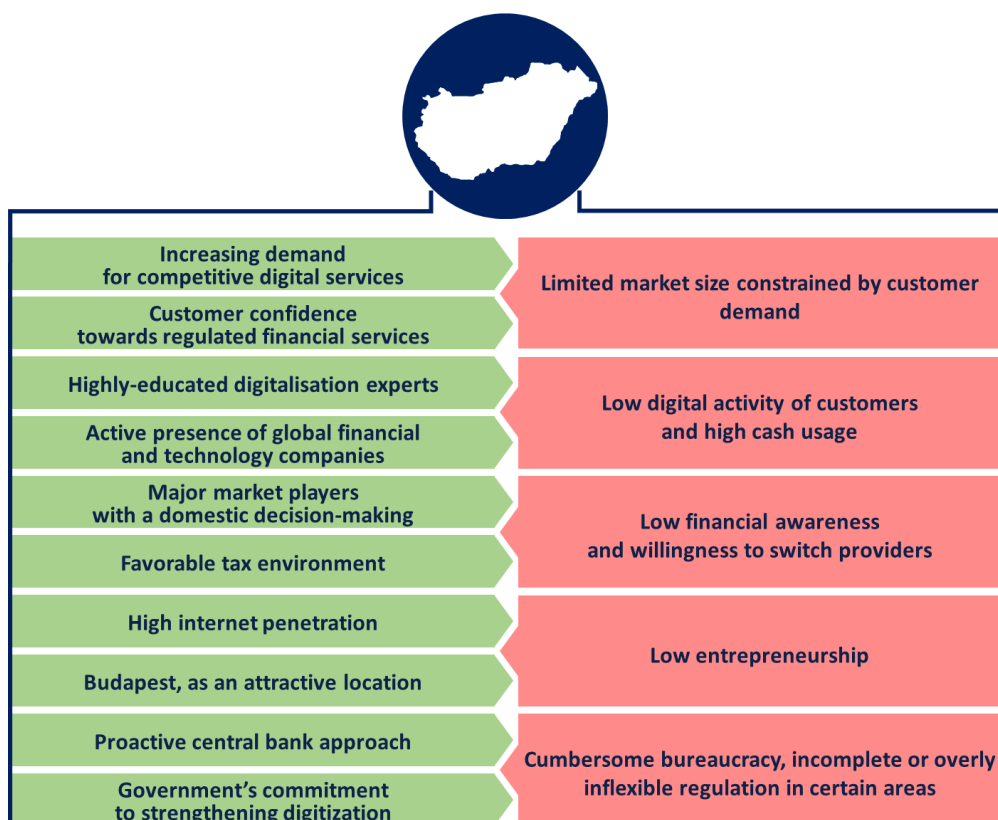
Special features in the corporate environment hindering the stimulation of the Hungarian FinTech ecosystem:

- **Low entrepreneurship:** There is little willingness in the Hungarian population to launch their own independent business, which is also reflected by the lag in GEI's entrepreneurship approach sub-index by international comparison<sup>18</sup>.

Regulatory factors hindering the strengthening of digitalisation and the penetration of innovative financial solutions:

- **Cumbersome bureaucracy, incomplete or overly inflexible regulation in certain areas:** Although the administrative burdens linked to the launching of new business and business administration have somewhat eased in Hungary recently, they are still relatively high, mostly due to the dominance of paper-based administration<sup>19</sup>. In addition, there is also room for improvement in certain elements of the regulatory requirements affecting the financial sector, and thus also the activity of the FinTech Companies. There are no regulations in place for many of the newly introduced innovative service types, thus the monitoring of these services still needs to be formed.

**Chart 5: Hungary's strengths and challenges in light of strategic goals**



Source: MNB

<sup>18</sup>The Global Entrepreneurship and Development Institute: Global Entrepreneurship Index 2018

<sup>19</sup>European Commission: International Digital Economy and Society Index (2019), Hungary

## 5. STRATEGIC PILLARS

The MNB has specified the key pillars that provide continuous guidance in determining the directions to be followed during the specific steps required for attaining the strategic goals, and which need to be developed to achieve the goals set.

- **Supportive physical and intellectual infrastructure**

It is the MNB's goal to establish a strong FinTech Hub in Hungary, outstanding at regional level, and to ensure that the digitalisation of the financial sector is implemented as efficiently and dynamically as possible. The realisation is conditional upon the development of a sufficiently stable foundation both in terms of the infrastructure and the legislative environment. To this end, relying on the available set of instruments, the MNB makes continuous efforts to establish these pillars and, by fulfilling its supervisory and regulatory duties, to contributing to the establishment of an advanced and supportive infrastructure in Hungary which promotes electronic payment methods and fosters the proliferation of a data-focused organisational culture open to digitalisation among the domestic actors. In this spirit, it should be supported that advanced state-of-the-art technologies (e.g. Artificial Intelligence, Blockchain, Cloud-based Solutions, RPA) are implemented in the short term by domestic market players, which could be supported by the Artificial Intelligence Coalition. Attractive and profitable conditions must be created not only for Hungarian companies, but also for the international innovative enterprises to ensure that Hungary takes the lead in the region in the area of financial digitalisation. For those existing businesses, which are part of a foreign-based financial group, an organizational culture open to digitalisation could help the group to have innovative solutions tested by a domestic subsidiary, which of course would take maximum consumer protection into account.

- **Modernisation of the regulatory framework**

The development of a proper regulatory environment is essential for the improvement of the financial system, which supports innovations useful and valuable for society, and at the same time takes efficient and firm action against overly risky, unethical or harmful conduct. As regards the instruments falling within its competence, the MNB does its utmost to achieve an optimal balance. In addition, through a survey of international practices and active consultation with the innovative sector, it identifies the key regulatory obstacles that may hinder the safe penetration of new solutions. Furthermore, it formulates proposals for the Hungarian and international regulatory and decision-making bodies for the elimination of such regulatory obstacles.

- **Domestic and international cooperation**

The progress of financial digitalisation and FinTech companies has been a global trend in recent years, which yielded a number of cross-border solutions and ideas. In order to make the Hungarian market an important factor in the global financial circulation, the MNB supports enhanced cooperation with both the international and domestic institutions, and universities. In international relations the focus is on the strengthening of existing relationships and establishing new ones, both with countries at the forefront of digitalisation and with the most advanced regions or cities - the so-called FinTech Islands - to create an allied network system. The goal is to ensure that the MNB can monitor the technological innovations appearing on the market, analyse their potential impact, and find a way to integrate them into the domestic system as soon as possible.

- **Creation of consumer benefit and ethical conduct**

Digitalisation and innovation should primarily serve the convenience and needs of consumers. The essence of consumer-friendly innovation is to provide as simple, secure and broad access to services as possible. It is important to ensure that service providers also earn consumers' trust in impersonal, remote online space and that they act ethically, which also includes the safe processing and storage of consumer data. In its activity supporting digital transformation, the MNB always makes special efforts to give priority to the enforcement of consumer protection.

- **Maintenance of IT security**

Higher exposure to various cyber-attacks is inherent in the wide-ranging penetration and application of digitalisation, which may as well entail an increase in the vulnerability of the financial system. Due to the digitalisation of banks, the financial sector may also become a top target of data theft and other IT-security events. Financial digitalisation serves the interests of consumers and the entire economy only if the IT infrastructure required for this is able to fend off external attacks on a continuous basis and also to store the collected data adequately. Considering the aforementioned criteria, the MNB does its utmost, relying on the available instruments, to ensure that only such IT developments and ideas are implemented that satisfy all conditions so that financial digitalisation and the FinTech sector are not only competitive, but also safe for both service providers and customers.

- **Education**

With the progress of modern financial services, the improvement of financial awareness is the number one challenge for ensuring that users can always make responsible decisions on the selection of the appropriate service provider or in applying for certain products at the given price appraised of all the payment methods available. In order to support strategic conduct open to financial digitalisation, the MNB takes the necessary steps to transmit the knowledge and information required for this through as many channels as possible to every group of society. In addition, the central bank can contribute to the improvement of the service providers by supporting the education of experts knowledgeable both in business and technology.

## 6. ROADMAP – INITIATIVES AND PROPOSALS FOR THE DEVELOPMENT OF THE FINTECH SECTOR

In order to achieve the goals set forth in the strategy, we have formulated 14+10 specific initiatives, recommendations along the strategic pillars (*Chart 6*). Some of these initiatives can be implemented within the competence of the MNB, while others are recommendations to the Government and to the Hungarian FinTech community.

### 6.1. Initiatives belonging to the competence of the MNB

Fostering the introduction of new services to the market:

#### 1 Fostering services built on instant payment

By fostering the development of innovative payment services relying on the underlying infrastructure, additional opportunities inherent in the instant payment system can be utilised. By issuing design sprints, standards and guidelines supporting the application of the technology, the MNB could support the implementation and rapid penetration of innovative solutions built on the system.

#### 2 Unification of the regulation applicable to digital identification

The regular assessment of the conditions applicable to digital identification requirements and the amendment of those as necessary may make access to financial services simpler and more convenient. In addition, the development of a uniform framework of digital identification processes for private individuals as well as SMEs may contribute to simplifying the process of getting into contact with the service providers and to the wide-ranging penetration of innovative financial solutions.

#### 3 Providing fast track in licensing

By accelerating the general licensing process and providing consultative supervisory support, faster processing of simpler licensing applications and improving communication between the involved parties, the MNB will be able to foster the introduction of innovative financial solutions to the market. Making available all laws, information and guidelines relevant for licensing in English, may contribute to the international FinTech companies entering the Hungarian market and thereby to an expansion in the range of services.

Supporting the digitalisation of incumbent market participants through cooperation with innovators:

#### 4 MNB's expectations with regard to the digital transformation strategy

The digital changeover of incumbent market participants could be encouraged by the issuance of a central bank recommendation related to the development of digital transformation strategy. Based on the action plan and schedule formulated in the strategy, it would be possible to assess the commitment of incumbent institutions to digitalisation and to monitor the realisation of the set goals.

#### 5 Creation of digital standards

The development of digital technology standards could support the wide penetration of services built on the IT infrastructure of incumbent institutions and developed by FinTech companies. The standardized solutions (e.g. NFC standards, and other standardized procedures) could foster the cooperation between incumbents and FinTechs, and therefore the proliferation of innovative financial services.

#### 6 Creating a Technology Sandbox

In order to validate innovative IT solutions and ensure their use in a safe environment, the setting up of a technological and IT test environment supervised centrally by the regulator should be considered. In the technological test environment, it would also be possible to test developments arising from the cooperation of incumbent market participants and FinTech companies.



Developing and deepening the FinTech relationship network:

### **7 Expansion of partnerships with universities**

The organisation of business and technological courses and participation in joint research projects related to digitalisation, financial innovation and technological development could deepen existing partnerships with universities and facilitate the establishment of new Hungarian or international cooperation.

### **8 Cooperation with institutions responsible for cyber- and data security**

In order to introduce innovative financial products to the market and use them in a safe manner, as well as to protect the data of customers, special attention should be paid to cyber security considerations. The establishment of the financial service providers' cyber security level and data protection, its monitoring and the enhancement of cyber security could be supported through cooperation with the National Cyber Security Authority and the National Data Protection Authority. During this cooperation, the MNB's knowledge accumulated in this area could also be improved and its expertise in trends in digital technological progress including threats could also be enhanced.

### **9 FinTech Bridges – Development of international regulatory cooperation**

Development of firm, bilateral cooperation with the foreign supervisory authorities, which may as well rely on the Global Financial Innovation Network framework, could facilitate the testing of the innovative solutions within a cross-border Regulatory Sandbox framework. Furthermore, stronger relations could mutually support the licensing and market entry of companies that are already licensed in another country.

### **10 Development of MNB Support Programme**

The establishment of an MNB incubator programme where innovative companies develop innovative so-called CBTech/SupTech solutions dedicated to the functions of central banks could contribute to the digitalisation of the MNB's operation. The successful operation of the programme and continuous application of interested companies could also be supported by publishing a continuously updated list of potential project areas.

### **11 Establishment of a FinTech Club**

For the domestic FinTech ecosystem, the establishment of a meeting place, a FinTech Club, operating in a permanent manner and modern in design, could be a step forward. This place could be used to host FinTech events on a regular basis, with co-working spaces for companies participating in the MNB Support Programme.

Enhancement of financial and technological education:

### **12 Electronic payment training, directed campaigns**

It may be useful to develop targeted training programmes and dissemination initiatives to help users understand the various options for electronic payment. Within the framework of these, it is expedient to introduce the use of electronic payment methods, as well as to emphasize their advantages and savings potential. The dissemination process could be substantially supported by the development of digital and public education as well as SME e-learning courses (e.g.: with BIB or ITM). The communication strategy adopted within the framework of the nation project is shown within the central bank's communication related to instant payment, which promotes the wider dissemination of the benefits of the service to users. These campaigns and training courses could help to gradually reduce the proportion of cash transactions in domestic payment transactions, thus approaching the EU average.

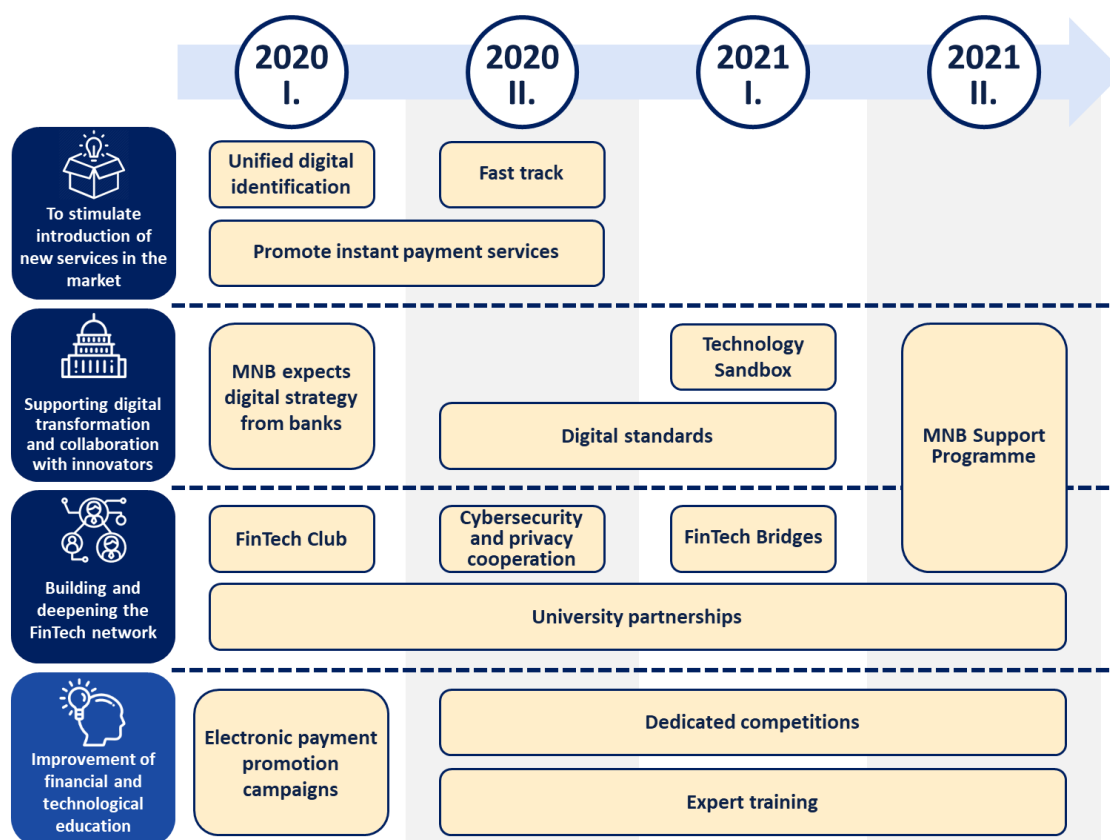
### 13 Organisation of dedicated competitions

The knowledge related to financial innovations and the support of talented individuals in the area of technology could be improved by organising dedicated competitions with the participation of market participants and university students. Design sprints could provide an opportunity for the professional communities to share their innovative ideas and knowledge, while hackathons could provide innovative solutions for practical digitalisation problems as a result of the cooperation of students with business and technological skills.

### 14 Launching expert courses

The broadening of innovation and technological knowledge would take place in the form of expert courses. The cooperation with universities could facilitate the launching of PhD and MBA courses focusing on the technological aspects of FinTech innovations; in addition, specialised courses with a narrower curriculum could also be organised by the Budapest Institute of Banking (BIB).

Chart 6: MNB initiatives for the FinTech sector development



Source: MNB.

## 6.2. Recommendations to the Hungarian Government and the domestic FinTech community

The MNB's Competitiveness Programme contains a number of proposals that could contribute to the digitalisation of financial services and make them more competitive through targeted tools<sup>20</sup>. Based on these suggestions, we would

<sup>20</sup>Magyar Nemzeti Bank (2019): Competitiveness Programme in 330 Points

like to highlight the following 10 points for the Hungarian Government and the domestic FinTech community to assist them in achieving their strategic goals.

The safe, controlled market introduction of the innovative business models, and supporting the transformation of incumbents:

## **15 Regulatory Sandbox with statutory authorisation**

The purpose of a Regulatory Sandbox – used for the testing of innovative technologies within a defined framework and providing, if required, temporary exemption from the regulatory requirements – is to enable the financial organisations to prepare and test solutions qualifying as innovative on the Hungarian market and aimed at reforming the use of services while giving priority to enhanced efficiency, under low investment and proper management of the potential risks. In order to ensure sufficiently wide-ranging applicability – which may cover both the types of institutions eligible for testing and the range of the respective laws – it is recommended that the present framework of MNB decrees be raised to the level of laws.

## **16 Granting preliminary licences within the Regulatory Sandbox framework**

Prior to obtaining a licence, which usually entails major administrative burdens, a yet unlicensed financial service provider, intending to introduce innovative solutions to the market, has limited opportunity to perform a preliminary survey on the viability of and the return on the innovation, while the information base of the potential investors related to these solutions is also small. By involving real clients, the Regulatory Sandbox framework could ensure efficient pre-filtering under proper controls for all innovators, and thus it would be desirable to formulate a statutory regulation for entities not yet holding a licence that would permit the issuance of preliminary activity licences. Throughout the whole administrative process, communicating in English would also be of the utmost importance.

## **17 Developing the regulation of ICO/STO and crowd funding business models**

In Hungary the regulation of alternative funding solutions, making headway globally, has not been solved, and thus the allocation of these platforms and enterprises to specific financial activity categories and the supervisory treatment of them has not been regulated either. Accordingly, we propose that a specific regulatory background should be framed for crowd funding<sup>21</sup>, Initial Coin Offering (ICO) and Security Token Offering (STO) to support these new types of business models and expand the financing opportunities of start-up companies and SMEs, under the strategic management and mitigation of risks.

## **18 Tax incentives to foster digitalisation**

Tax incentives should be employed in order to support the digital transformation of institutions and efficiency-improving investments. On the one hand, it could be justified to provide incentives (even within the framework of the banking and financial transaction taxes) for the heavily burdensome comprehensive development of banking/insurance IT architectures to extend their functionality. On the other hand, taking into consideration the further development of applications based on the instant payment system and other mobile payment solutions during the calibration of banking levies could also foster the reform of institutions.

## **19 Simpler and faster online contracting and e-signature**

The existence of an electronic signature form that satisfies all the legal criteria for one in written form is not widespread among individuals, so the current legal conditions need to be reconsidered. Simplifying and expanding the range of online financial services is a key consideration in the revision of the written regulation, which may be supported by the widespread use of the Client Gateway system and e-IDs for this purpose. In addition, there is a need for a set of regulatory requirements to support the deployment of a broad range of

<sup>21</sup>The EU regulatory framework is already in motion for this.

technology solutions for remote customer identification. The Client Gateway system could also provide a viable alternative to remote client authentication by ensuring compliance with anti-money laundering rules and by enforcing cyber security considerations, so it won't be necessary for the banks to identify clients who have already been identified during Client Gateway registration and the due diligence process could be simplified by using central registers.

## **20 Publishing state project lists related to potential digital needs and plans**

Domestic ministries and government agencies that may be potentially involved in the application and use of innovative solutions could, in the same way as in the US, publish future project lists that, subject to national security constraints, itemize specific needs for potential digital developments and plans. On the one hand, this could help in the targeting of market players' developments and, on the other hand, it could also help to increase the efficiency of the government agencies if these developments are realized.

## **21 Ensure the accessibility of structured central databases**

The efficiency of economic activity can be significantly enhanced if financial market participants can access the records required for the provision of financial services (e.g.: National Tax and Custom Administration income data, land registry) through a centralized single database on behalf of their clients. The existence and widespread availability of databases accessible through a structured online platform could foster access to financial services more quickly, at lower costs, and with less resources. Of course, when designing these solutions, it is also necessary to address privacy and data security challenges in an appropriate manner.

## **22 Wider access for new market entrants to existing information sources**

In order to create a level playing field, it is crucial to remove information asymmetry between market players. To this end, all market participants should have equal access to central data registers. Currently, access to a Central Credit Information system could facilitate the operation of new market players that are not reference data providers, but in the future as access to other central databases, for example related to property valuation or income data, while developing equal provision for access to those may be necessary.

Supporting the activity of the FinTech community:

## **23 Establishment of a coordination forum with the governmental export-import agencies**

In order to support the regional presence of the Hungarian FinTech companies, a permanent coordination forum should be set up between the Hungarian stakeholders and the governmental export-import agencies. Within the scope of this, the MNB's extensive international relationship network may help assess the target markets favourable in terms of growth and may provide efficient support for the presentation of the Hungarian innovation achievements abroad.

## **24 Establishment of a FinTech Association**

We recommend creating a sector-level representation with dedicated leadership. The activity of the FinTech Association – based on the model of the Banking Association and the Association of Hungarian Insurance Companies (MABISZ) – could cover the representation of the related member organisations and it would coordinate and represent the official position of the community on professional issues. In addition, it could also play an active role in the standardised presentation and promotion of the FinTech activity in Hungary and abroad.

#### PROPOSALS OF THE MNB'S COMPETITIVENESS PROGRAMME TO SUPPORT FINTECH SECTOR DEVELOPMENT

The MNB's Competitiveness Programme sets out 330 proposals in 12 areas in order to fully develop the country's growth potential and catch up with the most advanced economies in a sustainable manner<sup>22</sup>. Encouraging the widespread adoption of financial innovations and facilitating the digitalisation of the domestic financial system is also an integral part of developing a new financial model.

In addition to the abovementioned themes the Competitiveness Programme makes a number of concrete proposals that could contribute to achieving the objectives of the MNB's FinTech strategy:

- Optimize the bank branch network
- Improve coverage of POS terminals and other electronic payment methods
- Tax incentives from the financial transactional levy to upgrade or replace the deprecated IT systems along with the development of the instant payment system
- Promote the development of mobile payment applications with tax discounts
- Support digitalisation developments coordinated with the instant payment system
- Ensure the creditability of credit reports available at National Tax and Custom Administration to credit institutions
- Replace notarial certification with a central digital platform
- Complete online administration of unsecured loans
- Create a central valuation database
- Automation of Land Registry Information (TakarNet) with continuous availability
- Increase the share of mortgage and consumer loans sold through digital channels
- Administrative and operational requirements proportionate to the risks
- Promote close collaboration between innovators and regulators through the Innovation Hub
- Provide prior authorization within the Regulatory Sandbox Framework
- Expand the Regulatory Sandbox, which can provide exemptions from regulatory requirements
- Improve accessibility of digital platforms
- Develop a digital network between the insurance and banking sectors

<sup>22</sup>Magyar Nemzeti Bank (2019): Competitiveness Programme in 330 Points

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