

# THE FINTECH MARKET IN THE CZECH REPUBLIC

THE CURRENT STATE OF THE FINTECH SECTOR
AND ITS POTENTIAL TO CONTRIBUTE TO
FINANCIAL INCLUSION AND HEALTH



## FINANCIAL INCLUSION, HEALTH AND LITERACY IN THE CZECH REPUBLIC

GLOBALLY, ADVANCES IN TECHNOLOGY ARE CONTRIBUTING TO AN INCREASE IN FINANCIAL INCLUSION. BETWEEN 2014 AND 2017, OVER HALF A BILLION ADULTS WORLDWIDE OPENED A BANK ACCOUNT, EITHER AT A TRADITIONAL FINANCIAL INSTITUTION OR THROUGH A MOBILE MONEY SERVICE. ALTHOUGH AROUND 70 PER CENT OF THE WORLD'S ADULTS NOW HAVE AN ACCOUNT, THAT LEAVES 1.7 BILLION STILL UNBANKED.<sup>1</sup>

In the Czech Republic, the proportion of unbanked population is high compared to other EU economies, although this trend is being driven by older generations (those over the age of 65) who do not have an account.<sup>2</sup> Also financially underserved are small and medium enterprises (SMEs), whose cash flow makes them ineligible for standard bank loans, or whose ventures are deemed too risky to be financed by traditional institutions.

The fintech landscape, and thus technology-driven financial inclusion, health and literacy, is shaped by several features:

- Higher mobile data prices than in other high-income economies
- Lack of a complex and technology-based financial education strategy
- Underdeveloped capital market: the Czech financial system is bank-centric, with banks holding 74 per cent of the financial system's assets<sup>3</sup>
- Incumbents were not, until recently, motivated to provide innovative financial services because they had monopoly on the market and did perceive competition from fintechs.

## **BANKING SERVICES**

Over the last decade, statistics on bank account ownership remain relatively unchanged, at 80 per cent for population older than 15,4 placing the country among the three worst-scoring members of the EU. A breakdown into categories however, gives us better picture. Nine out of ten Czech households have a bank account, and the percentage is even higher for households of people under 65, where almost every single one has an account. The number drops to 63.4 per cent for single people above the age of 65.5 Among unbanked individuals, reasons given for not using bank services are: cost (40 per cent), and a lack of financial resources (39 per cent). Interestingly, 25 per cent of unbanked people note a lack of trust in the financial system.

Unlike most high-income economies, in the Czech Republic there is a big class gap in financial inclusion. The difference in bank account ownership between the richest 60 per cent and the poorest 40 per cent households is 17 percentage points. The gender gap in account ownership is very low, accounting only to 5 percentage points.<sup>6</sup>

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- THE GLOBAL FINDEX DATABASE 2017
- 2. IBIE
- 3. CZECH MINISTRY OF FINANCE, 2019
- 4. THE GLOBAL FINDEX DATABASE 2017
- 5. CZECH STATISTICAL OFFICE, 2017
- 6. THE GLOBAL FINDEX DATABASE 2017

FINANCIAL INCLUSION: INDIVIDUALS AND BUSINESSES HAVE ACCESS TO USEFUL AND AFFORDABLE FINANCIAL PRODUCTS AND SERVICES THAT MEET THEIR NEEDS FOR TRANSACTIONS, PAYMENTS, SAVINGS, CREDIT AND INSURANCE. IT INCLUDES ACCESS TO FINANCIAL SERVICES, USAGE OF THOSE SERVICES, AND QUALITY OF PRODUCTS AND SERVICE DELIVERY.

FINANCIAL HEALTH: HAVING DAILY FINANCIAL SYSTEMS THAT HELP INDIVIDUALS AND BUSINESSES BUILD RESILIENCE FROM SHOCKS AND PROVIDE THE ABILITY TO PURSUE LONG-TERM FINANCIAL GOALS.

FINANCIAL LITERACY: HAVING THE SKILLS AND KNOWLEDGE THAT ALLOW AN INDIVIDUAL OR BUSINESS TO MAKE INFORMED AND EFFECTIVE DECISIONS WITH FINANCIAL RESOURCES.

## **SAVINGS**

One of the characteristics of the Czech financial market is that households tend to hold their resources in current or instant-access savings accounts (over 75 per cent have on-demand deposits). At the end of 2018, deposits totalled 4,445bn Czech crowns, exceeding consumer credit by almost 34 per cent. This is being driven by a lack of a well-developed capital market, and a population that is not used to investing their savings due to perceived risk.

According to a recent study of the Czech Banking Association on financial literacy, the majority of the population has savings, and the most frequent monthly amount of savings (34 per cent) is between €40-100 (1,000-2,500 Czech crowns). This amount, however, is not enough to cover long-term or costly emergencies. In cases of a loss of income, 20 per cent of Czechs could maintain their current living standard for only one month, 29 per cent for three months, and 23 per cent for half a year. At the same time, savings are the main source of emergency funds for 61 per cent of population.

An analysis of savings by income level is more stark: less than half (47.9 per cent) of low-income households saves something on a monthly basis, with single parents being the most vulnerable category (47.2 per cent). Conversely, 80 per cent of higher-income households can afford to save.

As for saving goals, the majority of the population creates a reserve fund for unexpected expenditure (70 per cent) and old-age savings (59 per cent), almost half puts aside money for holidays and pleasures, and 30 per cent is saving for a mortgage.

When saving, 45 per cent of adults (over the age of 15) saves at a financial institution, while only 37 per cent of the poorest households do.

## LOANS AND CORPORATE FINANCING

Borrowing and credit card use is not prevalent among the Czech population. In 2017, only 29 per cent of all adults had a credit card, while 37 per cent of those aged 35–59 did. Twenty per cent of households, including those with the lowest incomes, had a loan. Families are the most frequent borrowers, while

7. EUROPEAN BANKING FEDERATION, 2019

among those older 65 the number of borrowers is close to zero.8

The year 2018 saw a rise in individual bank loans (an 8 per cent increase), and a 5.7 per cent increase among corporate sector. The demand for corporate loans can be explained by an increased need to invest into automation and robotization, especially by manufacturing companies, who struggle with the lack of a skilled labour force. Yet following the introduction (by the Czech National Bank) of a maximum allowable debt-to-income and debt-service-to-net-monthly-income ratios, the number of new mortgage transactions fell in the last quarter of 2018.

On a positive note, the Czech financial market boasts one of the lowest ratios of non-performing loans in the EU, which in 2018 stood at 1.4 per cent. 10 Despite this, the country still has significant problem in its high number of seizures. The number of people with seizure proceedings in 2018 was 0.8m. An average number of seizure proceedings per person is 5, while there are over 100 thousand people with over 10. The problem is more acute in regions with higher unemployment, and in the northern and north-eastern parts of the country. This situation has partly been driven by the activity of unregulated loan providers and legislation that make seizure proceedings good business (e.g. high procedural fees that increase debt by hundreds of percent).

Enterprises typically finance their activities through bank loans. According to the Ministry of Finance data, in 2016, bank loans accounted for 25.5 per cent of business capital by volume, far above listed shares (4.2 per cent) and bonds (3.6 per cent), putting the Czech Republic at half of the EU average and one-third compared to Germany and the UK. The

predominance of bank loans in the structure of corporate financing in the Czech Republic poses certain limitations to microenterprises and SMEs. First, the cost of financing is higher for SMEs due to high interest rates that reflect the estimated risk of the venture. Second, bank loans are typically only available to companies with at least a two-year credit history. Analysis conducted by the Association of Small and Medium Enterprises and Crafts CZ11 shows that 61 per cent of SMEs receive external financing after commencing their business activities, while only 31 per cent have external funds during the start-up phase.

The situation is a different for the self-employed: a quarter of them take a loan to commence business activity, and a fifth do so in the first months of operations. Interestingly, 34 per cent of self-employed people use retail loans to cover business operations. The average loan amount for self-employed entrepreneurs has remained virtually unchanged over the last five years, around 38 thousand Czech crowns or approximately €1,500.12 The same study reveals that entrepreneurs taking out loans criticize complicated administrative procedures and harsh collateral requirements. For SMEs, the average loan in 2017 was 643 thousand Czech crowns (slightly over €25K). There is little awareness about alternative sources of financing, and the possibility of external financing in general among SMEs.13

According to the 2018 edition of the SAFE Survey,<sup>14</sup> access to external financing is the main problem for 6 per cent of SMEs (a rate comparable with other EU countries); this figure has been fairly stable over the years. There is a perception that the availability of bank loans and credit lines has improved

- 8. CSO, 2017
- 9. EUROPEAN BANKING FEDERATION, 2019
- 10. WWW.EBF.EU/CZECH-REPUBLIC
- 11. AMSP, 2018
- 12. MIT, 2018
- 13 MF 2019
- 14. SURVEY ON THE ACCESS TO FINANCE OF ENTERPRISES (SAFE). ANALYTICAL REPORT 2018. EUROPEAN COMMISSION, NOVEMBER 2018

and will remain at that level. However, financing conditions are deteriorating. Interest rates and collateral requirements increased in 2018. Insufficient collateral and high interest rates are seen as the largest obstacles to obtaining external financing (by 12 per cent and 11 per cent of SMEs, respectively).

Bank loans and credit lines are two main sources of external financing (used by 18 per cent and 28 per cent of SMEs, respectively). While credit line use is on par with other EU countries, bank loan use is below the EU28 average.

## **FINANCIAL LITERACY**

Knowledge of financial services, products and possibilities is a consistent weakness, as seen in the Financial Literacy Index prepared each year the Czech Banking Association. For 2019, the country scored 57 out of 100, a negligible increase (by one percentage point) from last year.

Three quarters of population think their financial skills are sufficient, but in specific cases they would either ask for advice or look for the desired information online. Interestingly, half of respondents found it difficult to understand recommendations received from financial advisor and experts.

Almost half gain their financial knowledge from their own experience, which explains the highest literacy among those aged 50–64. People with higher education also score slightly better than average (66/100). People feel most comfortable with managing household budget and least with investing options.

## **PUBLIC POLICY**

Comparatively low levels of financial inclusion (for the EU), easy access to consumer loans, underdeveloped capital markets and a lower financial literacy are the drivers shaping public policy. The National Strategy for Financial Education was launched in 2010, and is currently under revision by the Ministry of Finance. Recognizing that the capital market in the Czech Republic fails to "sufficiently fulfil its main function - the efficient allocation of unutilised financial resources from savers and investors (households) towards enterprises who need to fund their development", the government adopted a new strategy: National Strategy for the Development of the Capital Market in the Czech Republic 2019–2023.

The current situation is due to "conservative distribution of household assets, low savings for retirement, low awareness of enterprises about the possibility of financing business and research through the capital market and an inadequate supply of domestic financial instruments available to retail investors". The main objective of the strategy is to improve the amount of household savings (general and pension savings), to diversify sources used for external financing, and create alternatives to bank financing and EU subsidies among SMEs.

## THE FINTECH SECTOR IN THE CZECH REPUBLIC

## CONDITIONS FOR THE DEVELOPMENT OF THE FINTECH SECTOR IN THE CZECH REPUBLIC

## **TECHNOLOGICAL MATURITY**

Czech society is well-equipped for the adoption of fintech services. Internet usage among adults is among one of the highest in the EU (84 per cent) and has risen by 7 percentage points since 2016. Fixed broadband is the more common type of connection; virtually all households are located in a place with access to fixed broadband, and three-quarters have a subscription. However, mobile data subscription (which is even more important for the consumption of online financial services), is one of the lowest in the EU (82 per cent). This is due to the high cost of mobile data, despite the fact that all (99.1 per cent) of households are within 4G coverage and the penetration of SIM cards is above 135 per cent.15 Moreover, majority of mobile phones (70 per cent) on the Czech market are smartphones.

Electronic banking services are a strong prerequisite for fintech development, and the numbers highlight an positive trend in the Czech Republic. Recent years have seen an abrupt increase in online banking use, which rose from 48 per cent in 2012, to 67 per cent in 2015, and to 95 per cent in 2019. In 2018, 62 per cent of individuals aged 16–74 used online banking, far above the EU average (54 per cent). Today, 35 per cent of all account holders

also use mobile banking, whereas for those aged 19-28 this figure rises to 50 per cent. 16 Quality of online banking is an important factor for choosing a financial service provider, and one in four users would even change their bank to obtain a better online experience. Online banking is primarily used for wire transfers (96 per cent), balance checks (92 per cent), and transactions (91 per cent). Only 14 per cent use it to borrow money. 17 Cashless transactions are less common in the poorest 40 per cent of households, where only 58 per cent of these received wages or governmental transfers in 2017, as opposed to the national average of 67 per cent.

While digitalization of basic banking services is prevalent, using internet to acquire other financial services is lower than the EU average. In 2017, only 11 per cent consumers bought investment instruments, insurance or loans online, compared to the average of 15 per cent in the EU.<sup>18</sup>

## **CASHLESS ECONOMY**

Cashless payments account for more than a third of all retail payments, thanks to the 200K terminals available to Czech customers who carry over 12m payment cards. Almost all cards and terminals enable contactless payments, which constitute over 70 per cent of all transactions. The volume of cashless payments in 2018 was 700m Czech crowns; this



<sup>16.</sup> CBA, 2019

<sup>17.</sup> IBID.

<sup>18.</sup> DELOITTE, 2017

<sup>19.</sup> BANK CARD ASSOCIATION, 2019



figure rose by a stunning 22 per cent from the previous year. The introduction of Google Pay in 2017 and Apple Pay in 2018 launched a mobile payment mania. According to a 2019 survey by Mastercard, 31 per cent of customers use their phone to pay; smart watches are also popular.

As the number of cashless payments in the Czech Republic is still lower than in other EU member states, commercial companies are eager to cooperate with the government to improve this. In 2019, a group of professional associations and Mastercard signed an agreement with the Czech government to develop a cashless society. One of its pillars is the creation of a dedicated fund to release 100–200K card terminals free of charge to small enterprises and the self-employed.

E-commerce is also growing. Since 2015, online shopping rose by 13 percentage points to 67 per cent in 2019 (by volume). The percentage of SMEs selling online is the fifth largest in the EU (23 per cent) and Czech companies in this category derive 18 per cent of their total turnover from online sales, placing them third in the EU. On the other hand, e-government services leave much room for improvement, especially on the supply side, as only half of the population used internet to send a form to a public authority (although this is similar to other EU countries).

## REGULATORY ENVIRONMENT

There has been little regulatory activity directly aimed at fintech in the Czech Republic. The country is one of few in the European Union with no specific program (such as an innovation hub or sandbox), dedicated to financial technology. The establishment of a division for Regulation

and Financial Innovations at the Czech National Bank at the end of 2018 is clearly a first step towards recognizing the importance of public policy to the development of the sector.

A certain amount of regulatory relief was brought by the launch of the Payment Services Directive that came into force in 2009. It created two new categories of regulated entities: small payment service providers and small electronic money issuers, who enjoy waivers such as no specific requirements for entry capital or proving technical and personal qualifications to offer services.

## **FINTECH SECTOR OVERVIEW**

## THE LANDSCAPE

The diversity and maturity of fintech services reflect the state of financial sector in the Czech economy and the financial literacy of the society. Even though the Czech financial sector is growing, its share in the economy remains relatively low. In 2017, total assets of financial institutions amounted to 145 per cent of GDP, whereas in the Euro area it was 272 per cent. Moreover, as described, capital market products are much less popular than in other EU countries.

For example, the activities on the Prague Stock Exchange are much lower than in the neighbouring Poland. Another constraining factor is that banks, which until recently, had little incentive to invest in financial innovation or cooperation with fintechs, as their dividends remained high even during the financial crisis, and competition has always been meagre.

The situation is changing, however. Interest rates have fallen, and traditional

financial services (such as bank accounts and retail loans), which make up most of the financial sector, underwent commoditization and their fees dropped. Thus, to attract or retain customers, financial service providers have to refurbish their products. Combined with the onset of mobile payments and an increase in e-commerce activities (through which consumers become accustomed to financial technology), the entire sector is expected to grow in the years to come. Increase in cashless transactions, a decent share of ICT specialists and graduates (3.6 per cent and 4 per cent of the population, respectively), high penetration of both broadband and mobile Internet access, and the eventual decrease of mobile data prices seen in the last quarter of 2019, can only accelerate the trend.

## **INCUMBENTS' APPROACH**

In terms of investment, the Czech Republic ranks second in Central and Eastern Europe; by volume, 27 per cent of all fintech investments in the region were made in the Czech Republic.<sup>20</sup> These rarely, however, come from the domestic banking sector, which prefers to support in-house innovation, or, more recently, the integration of services developed by fintech companies into existing bank infrastructure. In 2018, the Czech Savings Bank (Česká spořitelna), part of the Erste Group, launched FintechCloud, a cloud project that allows fintech startups to create a solution that may be later embedded into the bank's online banking.

## **ENABLING ENVIRONMENT**

Ecosystem builders are entities that either create fintech projects commissioned by corporations and banks (e.g. CreativeDock) or are part of an incubator/child companies established by a corporation to support fintech startups both financially and in-kind through mentorship or infrastructure access (e.g. O2 Bolt, KB Smart Solutions).

Besides incubating new financial

technology projects or providing smaller companies access to infrastructure to test new ideas, cooperation between banks and non-banking financial service providers in the Czech Republic is similar to that in other countries. Some maintain B2B (business to business) relations in which smaller companies provide technology solutions to banks (e.g. Zentity, Crif, Monet+). Others incorporate their solutions into banks' offers (e.g. Fakturoid, Wultra). Some banks provide vital infrastructure, liquidity or regulatory support to fintech projects (e.g. MutuMutu, Zonky).

Other fintech companies need banking infrastructure to provide their services (such as payments and money transfers), in which case most, but not all, banks perceive such fintech companies more as competitors. Following the launch of the second Payment Services Directive (the purpose of which was to increase participation in the payments industry from non-banks, and level the playing field by harmonizing consumer protection and the rights and obligations for payment providers and users), collaboration amongst incumbents and fintechs has increased.

Not only are banks now legally bound to open their infrastructure and data to licensed third-party providers, but the creation of a Czech Open Banking Standard led to more frequent communication between banks and fintech companies and their associations. The standard, even though not legally binding, is an attempt to create a level playing field for all payment services providers. If major banks comply with it, the standard could generate more fintech solutions, bringing better and cheaper services for customers. While the legal obligation exists, however, not all Czech banks are equally willing to grant trouble-free access to third-party service providers in a way that would allow fintech companies to offer smooth, seamless and customer-friendly services.

20. DELOITTE, 2017

In 2017, the fintech sector generated a combined revenue of between 400 and 800m Czech crowns (€16–32m), of which approximately 80 per cent was generated by selling products to end customers, with the rest by B2B sales.<sup>21</sup> The same study envisages the potential growth of fintech revenue in the coming years to between 2.9 and 7.8 bn Czech crowns (€0.1b–0.3b), potentially giving fintech a 0.9–2.3 per cent share in the entire financial sector of the Czech Republic.

Currently, there are around 120–150 Czech fintech companies (i.e. non-bank financial institutions) that use technology to provide financial services both in business to business (B2B) and business to customer (B2C) models. This number includes foreign fintech companies with an established presence in the Czech Republic. Among these are start-ups, scale-ups, and well-established medium size companies. They operate in all areas of financial sector, including:

## **PAYMENTS**

Fintechs in this varied and strong group either offer:

- Alternative payment methods (such as delayed payments by Twisto)
- Technology solutions, such as payment gateways (e.g. Comgate, GoPay), payment apps and online point of sale (e.g. Trisbee, Red Eggs) or prepaid card (e.g Kličenka, a multipurpose card for students by Mastercard) or electronic meal ticket (e.g Gusto, Edenred).

## **DIGITAL FINANCING**

Digital financing is a significant area in the Czech fintech landscape. These companies primarily operate in the alternative retail and corporate lending, often conducted via peer-to-peer (P2P) platforms connecting individual borrowers with lenders/investors. A significant number of these focus on SMEs and self-employed financing, as these are

the by far the most underserved part of the population. This category does not include reward-based crowdfunding platforms, as they do not provide financial services per se.

It does include:

- P2P retail lending platforms are less common due to recent regulation of retail loans, but one of the biggest fintech companies, Zonky, is in the sector.
- Corporate financing is a rapidly growing area, providing factoring or working capital for SMEs, either using its own capital (e.g. Cashbot, Lidya) or via P2P platforms (e.g. Roger platební instituce).
- Investment crowdfunding offers retail investors the opportunity to provide capital to SMEs by buying shares (e.g. Crowdberry), securities (e.g. Fundlift) or to invest in secured loans (e.g. Bondster).

## **INSURANCE**

Insurtech is not a well-developed segment, but some interesting companies are emerging, including MutuMutu, which combines insurance products with motivational content to encourage healthy lifestyles. Another example, První klubova, includes a P2P platform.

## **FOREX**

Foreign exchange fintechs tackle the challenge of high exchange rates and long processing times for cross-border payments by offering cheaper and more accessible services to not only retail customers but also SMEs. Among the several that operate in the Czech market-place are EasyChange and RoklenFX.

## **FINANCIAL MANAGEMENT**

Financial management fintechs offer software, tools, solutions and platforms, automating traditional processes to help individuals and SMEs; often they include algorithms and big data analysis or behavioural economics to provide tailor-made management solutions:

21. DELOITTE, 2018

ALTHOUGH MOST FINTECH COMPANIES DO NOT SELF-IDENTIFY AS DRIVERS OF FINANCIAL INCLUSION AND HEALTH, THEY DEVELOP MORE AFFORDABLE AND MORE USER-FRIENDLY FINANCIAL SERVICES, WHICH UNDOUBTEDLY IMPACT ON BOTH FINANCIAL INCLUSION AND HEALTH.

FOR THIS STUDY, WE CONDUCTED 12 INTERVIEWS WITH COMPANIES REPRESENTING DIFFERENT BUSINESS MODELS AND SEGMENTS. INPUT FROM THESE INTERVIEWS WERE AGGREGATED TO CONSIDER KEY ASPECTS OF THE CZECH MARKET. THE INSIGHTS THAT FOLLOW ARE SYNTHESISED FROM THESE CONVERSATIONS, AND SHOULD NOT BE READ AS THE PERSPECTIVE OF ANY ONE PARTICIPANT IN PARTICULAR.

- Corporate finance management: online tools for accounting and cash flow management (e.g. Fakturoid, Rossum)
- Personal finance management:
   easy-to-use financial management tools for individuals that
   don't know much about finance;
   services include budget and
   spending management as well
   as saving targets. This category
   includes two strong companies
   that serve customers beyond
   Czech market (Spendee and
   BudgetBakers), as well as comparison site and financial advisory
   sites (e.g. Chytry Honza).

## SOFTWARE/SDK/CYBERSECURITY/DATA ANALYSIS<sup>22</sup>

This is a broad category of B2B financial technology companies that cater directly to traditional financial services providers (i.e. banks). These include infrastructure builders for API and online identification (e.g. Monet+, Zentity, Wultra, Trask); cybersecurity solutions (including BulletproofAI, a company using AI to protect financial infrastructure against AI attacks); and technology-enabled credit

scoring solutions (e.g. Nikita by Twisto, or CRIF).

## **CRYPTOASSETS**

Cryptoasset fintechs is a varied and robust group of companies offering services related to virtual currencies, utility tokens and asset tokens. These range from trading platforms to buy and sell using cryptocurrency (e.g. ccShop), ATMs for cryptocurrencies (e.g. Bitcomat) and banking-like services (e.g. Bitstick). Currently, these assets are used for highrisk investments, a store of value for those who either believe in the decentralization of the financial system, or by experienced investors who want to experiment with new asset classes. However, due to recent misleading and/or fraudulent advertisements for cryptocurrencies, the need for immediate proper customer protection measures is clear—and in the longer term, to regulate this new emerging market and its instruments.

22. SDK: SOFTWARE DEVELOPMENT KIT

## FINANCIAL INCLUSION, HEALTH AND LITERACY IN THE CZECH REPUBLIC<sup>23</sup>

## FINTECH AND FINANCIAL INCLUSION

## ACCESS TO FINANCIAL SERVICES FOR THE EXCLUDED OR **UNDERSERVED**

The unbanked, in Czech society, fall mainly into two groups: people aged above 65 (constituting the majority of people without a bank account), and low-income people, who view bank accounts as being prohibitively costly. No fintech companies specifically target older people (who are usually not tech savvy), while solutions for lower-income people are not seen as attractive business opportunity for fintechs.

Czech fintechs, however, develop solutions for the "underserved"-solutions that can be classified in three major groups: (i) more affordable products that are an alternative to traditional services (ii) easy-to-use technological solutions that reach new groups, especially younger generations that would otherwise not use financial services, or (iii) entirely new products not available from traditional banks.

Twisto, for example, offers a credit line via a mobile app to younger customers (age 20-30), who are uninterested in taking a traditional consumer loan because of the paperwork, or are unable to obtain one due to a lack of credit history or stable income. It does so by providing a delayed payment (buy now, pay later) used when shopping online. To do so, the company uses a special algorithmic credit scoring method (Nikita), which uses not only data from debtor registers but also an array of other sources such as social networks or demographic and geographic inputs. Among other target groups are consumers who want to do online crossborder shopping but are wary of cybersecurity concerns and prefer not to use their debit or credit card.

A significant number of Czech fintechs create new sources of capital or cash flow to SMEs. Roger shortens invoice payment times to 3 days, thus providing necessary liquidity to smaller companies—especially those who sell to large companies with accounts payable timescales. The platform is connected to invoicing systems, making financing seamless and hassle free. The SME sends an invoice to Roger and receives a partial payment instantly. The remaining part of the payment (minus the fee) is sent by Roger to SME after recovering the amount from the invoice payer. Roger does not use its own money to pay for the initial invoice payment, it raises money from investors. The risk is low if the invoice payer is a large company, such as a supermarket.

These same motivations and drawbacks on the Czech market led the owners of Cashbot to create their solution. Their main target groups are SMEs and self-employed people, who usually issue only a few invoices per annum—this negatively

23. AS PART OF OUR RESEARCH, WE INTERVIEWED THE FOLLOWING FINTECHS: CASHBOT CROWDBERRY ČESKÁ SPOŘITELNA FASYCHANGE FAKTUROID FUNDLIFT, MUTUMUTU, RED EGGS/ KLÍČENKA BY MASTERCARD, ROGER, SPENDEE, TWISTO, ZENTITY, ZONKY. THE FOLLOWING INSIGHTS SHOULD BE UNDERSTOOD AS A SYNTHESIS OF ALL OUR CONVERSATIONS, AND SHOULD NOT BE INTERPRETED AS THE OFFICIAL POINT OF VIEW OF ANY OF THE INDIVIDUAL PARTICIPANTS.

affects their cash flow and means they can't afford a loan at a traditional institution, or the loan amount available would not cover their financial needs. As an alternative to factoring, Cashbot lends its own funds to companies that are growing, operating in industries with long maturity of invoices (health, construction, public sector) or influenced by seasonality (such as wholesale and agriculture). The business model relies on the fact that B2B lending is not a regulated activity in the Czech Republic, as it is in other countries (e.g. Austria, Germany), which may hinder its expansion. Similar to Roger, the process is fully automated, with invoices uploaded to the app, online scoring, real time disbursement for approved customers. For customers who prefer personal meetings, Cashbot offers this service as well.

## **IMPROVED ACCESS TO FINANCE**

Rather than tackling daily cash flow concerns, some fintechs create new sources of growth financing and provide an alternative to institutional investors (who demand equity and a board seat), or banks (who are unwilling to support riskier ventures in the start-up or scale-up phases). Private debt provides financing more quickly than banks and can offer financing terms unavailable in the standardized banking products.

Fundlift is another example of corporate financing for SMEs. Companies that pass a vetting process run a crowdfunding campaign on the platform that is aimed at retail investors, and if successful, the company issues those investors securities (bonds). Due to complex regulatory environment, Fundlift (a regulated entity) functions as an intermediary, yet their platform makes it easier to allocate capital. A new entrant on the Czech landscape, Crowdberry, is another investment marketplace which, instead of debt-financing, offers shares in startups or SMEs. The company operates on the Czech and Slovak markets, but its portfolio includes companies from the entire Central and Eastern European region

(expanding their potential base of investors and investments). As with Fundlift, its investment process is done primarily online.

### MORE AFFORDABLE SOLUTIONS

In the retail financing area, Zonky is by far the biggest P2P consumer loan operator. It targets the standard banking population (with no previous delinquency and reasonable income) and aims to lower the cost of lending. In 2019, its products were on average one percentage point lower than bank loans (8.37 versus 7.16 per cent). At the outset, Zonky also offered loans to unemployed people, and those with financial problems, however bad experience these customer categories led to them being dropped. Automatic connections between debtors and investors on the platform enable cheaper processing, which leads to lower cuts for customers. Despite its less-expensive offer, the company had to invest a lot into marketing to convince potential clients switch from traditional banks, which Czech customers are more accustomed to.

In the payment area, Red Eggs provides infrastructure to self-employed people and small companies, especially those who are obligated to keep electronic records of cash sales for goods and services. The company developed a lean payment gateway (based on a QR code or a link) that does not require robust infrastructure and can be used on mobile devices, PCs or even sent by SMS. The portability of the solution means it can be used by merchants selling in various physical environments (festivals, fairs, sidewalks, etc.)

Yet another technology-enabled value proposition is forex, which offers a better exchange rate and helps those sending remittances or SMEs conducting business abroad. EasyChange allows for low-cost and fee-free conversion of selected foreign currencies (Euro, US dollars and British pounds) to and from Czech crowns in clients' own bank accounts. EasyChange customers save 3–5 per cent

when paying invoices, salaries, pensions, dividends, or savings issued in foreign currency compared to the average bank exchange rate.

## FINTECH AND FINANCIAL HEALTH

## LOWER OPERATIONAL EXPENSES

Fakturoid is one of many online tools available (predominantly for self-employed people) who cannot afford to buy accounting software or hire an in-house accountant/financial manager. online solution helps them manage their cash flow and comply with accounting and basic tax regulations—saving both time and money for thousands of SMEs and self-employed. It also facilitates the cooperation with external accounting consultants by allowing the SME to export their accounting data to bigger systems.

Due to the complexity of accounting systems, which are not harmonized, Fakturoid caters to Czech-based customers, but also supports invoices in nine other languages. In addition to offering traditional accounting functions, Fakturoid offers basic financial support in the form of accounting rules embedded in the application, tracking VAT registrations or checking the validity of data entered against public registries. Fakturoid offers integration with the internet banking of one bank (Komerční banka) and has technical integration with one Czech payment gateway, which allows its customers to accept online payments.

## **IMPROVING FINANCIAL BEHAVIOUR**

The Czech fintech sector has generated two strong personal finance management applications, both operating globally. Spendee, which has a stronger presence on the Czech market, enables customers to manage and understand their personal finances in one single place by enabling them to connect all their bank accounts, e-wallets, crypto wallets, all other financial products and manually add cash spending figures. The app primarily targets millennials (aged 23-38), and divides users into four main

categories based on needs: people with life-changing issues, people who like being in control of their finances, those who "want" to save, and those who "need" to save. The app combines ideas from behavioural economics with the Hook model (concerning habit-forming product design) to deliver variable rewards to users in the form of highly personalized financial advice and daily insights.

As with similar solutions, the user experience depends strongly on the openness of banks, and the extent to which their APIs enable easy access to their customer data. Although datasharing is compulsory for banks, not all of them make access easy. For that reason, Spendee is also an energetic supporter of the development of a harmonized open banking standard. The other app, Wallet by BudgetBakers, focuses more on markets beyond Europe, but offers the same functionality; it aggregates transaction data across multiple accounts, groups spending by category, allows users to create a budget, shopping lists, and saving goals.

On the insurance scene, one interesting product combines affordable userfriendly services with healthy lifestyle motivation. MutuMutu provides online life and income protection insurance, which reduced the number of excludable conditions from around 40 to 8. This means it covers people with illnesses that other companies won't, including psychological disorders, back problems, lifestyle diseases (e.g. type II diabetes), hepatitis or HIV. MutuMutu also aims to make their offer more transparent, as seen in its insurance contract that is written not in legalese but customer-friendly language. A third of their customer base are those that are self-employed, who are attracted by the company's offer for insurance against temporary income shortfalls. The technological innovation comes in the form of motivating customers' behaviour by rewarding health-enhancing activities. With customer's consent, the MutuMutu app tracks their activities

MOBILE AND DESKTOP APPS FOR FINANCIAL MANAGEMENT ARE **GAINING POPULARITY. ESPECIALLY IN THE** SME SECTOR, WHICH **CONSTITUTES 99** PER CENT OF **BUSINESSES** NATIONWIDE. (walking, cycling, jogging) and offers up to 30 per cent cashback on insurance plus a 10 per cent extra annual discount for non-smokers and annual check-ups.

## SUPPORTING FINANCIAL LITERACY

Unlike fintech companies that lack the resources needed to support financial literacy, all the biggest banks on the Czech market have developed such tools. In 2017, Česká spořitelna launched a comprehensive program (called Alphabet of Money) for elementary schools pupils, expanding to high school students and people aged 55+ two years later. The program includes an interactive online game, educational materials with virtual reality components, and special digital literacy courses for older people. People aged 55+ can also make an appointment for a crash course digital literacy in a bank branch.

A similar approach has recently been taken by another big bank, Komerční banka (part of Societé General). In autumn 2019, it organized a number of meetings for older people to give them a better understanding of modern technology-based financial services.

### **INCREASED REVENUES**

Technology solutions can also lead to better economic outcomes for non-financial companies. For instance, several Czech e-commerce companies have adopted Nikita, a credit scoring solution developed by Twisto. Reliable online scoring enables them to quickly onboard new customers and introduce new products. E-commerce giant Alza uses this to enable customers to acquire a new mobile handset each year, repaid in instalments rather than in an upfront lump sum. Thanks to Nikita, there's no need for the customer to apply for a consumer loan, and with a positive score they can receive the product or service almost immediately.



## **FUTURE OPPORTUNITIES FOR FINTECH** IN PROMOTING FINANCIAL INCLUSION AND HEALTH

Thanks to recent positive changes in the regulatory landscape, especially the second Payment Services Directive (which steadily pushes traditional players to embed digital solutions into their offer and lifts obstacles to startups in the financial market), the Czech market should see real growth in the coming years.

Increasing numbers of fintech companies are obtaining a licence from the regulator, while banks are starting to perceive them as partners that can enrich their offer. Demand for digital solutions is strong, as seen in the quick uptake of mobile payments (Google and Apple Pay), and is clear from the fact that half of all smartphone owners has at least one financial app installed.

Whereas some segments of the Czech market are already well covered (such as payments or financial technology infrastructure), there is plenty of room for improvement as well as business opportunity for new technology-based financial services and products.

We forsee that the Czech financial sector the following areas will experience more competition and might yield interesting business opportunities in the years to come:

## **OUTREACH TO THE UNDERBANKED**

The underbanked comprise 18 per cent of the adult population, although the majority of these are aged 65+ and may

be unwilling to change their habits. More promising would be a focus on low-income customers, who perceive traditional services as too costly.

## **WORKING CAPITAL FOR SMES**

SMEs constitute 99 per cent of Czech companies, and although there are already several companies providing such services (Roger, Cashbot, Lidyia) they are not yet widely known or used, especially by smaller companies. Small companies, supplying to bigger enterprises or corporations, are often forced to accept prolonged accounts payable terms, or grapple with the reality that almost one-third of invoices are paid in arrears. When banks cannot provide working capital loans to SMEs, one option is to refer would-be customers to alternative products (as happens in the UK, where banks are obliged to inform rejected loan applicants on alternative possibilities, such as non-bank lenders or P2P).

## FURTHER DECREASE OF CORPORATE DEPENDENCE ON BANK LOANS TO FINANCE SME GROWTH OR R&D

As elaborated in EU policies devoted to SME growth (e.g. Capital Market Union) and called out in the Czech strategy for capital market development (based World Bank recommendations), "Dependence of enterprises on self-financing or bank lending can negatively affect managerial decisions and

subsequent business development... when companies are dependent on bank financing, banks often impose higher risk management requirements. This means that a borrower often adapts their business plans in accordance with the wishes of the bank, or curbs growth ambitions, and limits high-yield risky investments". For Czech and European SMEs to grow, they need capital injections, which they often cannot obtain from banks due to a lack of credit history or collateral. Moreover, capital market instruments (such as bonds or shares) may offer a cheaper means to obtain growth capital. Access to new sources of corporate financing is necessary in light of the growing need for automation and digitization, which will help Czech companies remain competitive regionally and globally.

## DEVELOPMENT OF AFFORDABLE AND UNDERSTANDABLE CAPITAL MARKET INSTRUMENTS TO ASSIST CZECHS IN **YIELDING HIGHER RETURNS ON THEIR SAVINGS**

Czech households are very cautious when allocating their savings, which are mainly kept on savings and current accounts. Owing to that, the wealth of Czech households lags behind their Western neighbours. Therefore, technology-based investment instruments that are more liquid and accessible, combined with proper customer protections and information campaigns, can address this gap in the Czech market.

## CREDIT PRODUCTS FOR RETAIL CUSTOMERS

Credit card use is not widespread among Czech consumers, signalling a business opportunity for companies such as Twisto or its competitors. This is especially relevant for younger consumers with no credit history, those with irregular income, and low-income households. This is especially relevant for younger consumers with no credit history, those with irregular income or low-income households. Accessible, transparent and cheaper credit solutions enable them to bridge periods of decreased income or cover for unexpected needs, and thus contribute to the overall well-being of the society and a healthy economy. Most of the interviewed Czech companies emphasized transparency of their services, where their customers are comprehensible and are informed in simple terms on the final price of the financial product. Apart from technological edge, the focus on clarity and no hidden fees is seen by fintech companies as their main advantage over traditional institutions.

## **OPEN BANKING**

When it comes to financial health, the regulator should focus on the creation of a truly open banking environment. Only through well-functioning open banking APIs, compliance of traditional players with the philosophy of open finance, and supervision of the cybersecurity of financial services, will consumers benefit from personal finance management services and multi-banking offers that allow them to fully grasp their financial flows.

## ANNEX 1: FINANCIAL INCLUSION INDICATORS FOR THE CZECH REPUBLIC

Europe & Central Asia: Czech Republic, 2017 year	High Income	
Population, age 15+ (millions) 9.0 GN	l per capita (\$) 17,530	
	Czech Rep.	Europe & Central Asia
Account (per centage 15+)		ASIa
	1 1	
All adults, 2017	81.0	65.3
All adults, 2014	82.2	57.8
All adults, 2011	80.7	44.8
Financial Institution account (per cent age 15+)		
All adults, 2017	81.0	65.1
All adults. 2014	82.2	57.8
All adults, 2011	80.7	44.8
Mobile money account (per cent age 15+)		
All adults, 2017		3.2
All adults, 2014		0.2
Account, by individual characteristics (per cent age 15+)		
Women	78.6	62.5
Adults belonging to the poorest 40 per cent	70.6	56.3
Adults out of the labour force	58.7	52.8
Adults living in rural areas	78.9	61.7
Digital payments in the past year (per cent age 15+)		
	79.6	60.4
Made or received digital payments, 2017  Made or received digital payments, 2014	79.6	46.1
Used an account to pay utility bills	55.9	23.0
Used an account to receive private sector wages	37.1	21.2
Used an account to receive government payments	35.3	28.8
Used the internet to pay bills or to buy something online	66.1	30.6
Used a mobile phone or the internet to access an account	52.5	23.1
Used a debit or credit card to make a purchase	66.5	38.5
Inactive account In the past year (per cent age 15+)	<u> </u>	
No deposit and no withdrawal from an account	1.0	6.6
No deposit and no withdrawal from a financial institution acco		6.7
Domestic remittances In the past year (per cent age 15+)		
Sent or received domestic remittances through an account	11.6	12.8
Sent or received domestic remittances through an OTC service		7.0
Sent or received domestic remittances through cash only	13.2	8.0
Saving In the past year (per cent age 15+)		
Saved at a financial institution, 2017	45.3	14.4
Saved at a financial institution, 2017	37.6	11.0
Saved using a savings club or person outside the family	5.7	5.0
Saved any money	67.3	37.0
Saved for old age	41.0	15.0
Credit In the past year (per centage 15+)		
Borrowed from a financial institution or used a credit card, 20	17 29.5	24.2
Borrowed from a financial institution or used a credit card, 20		22.3
Borrowed from family or friends	13.5	24.5
Borrowed any money	39.3	44.0
Outstanding housing loan	19.6	11.6

**SOURCE**: THE LITTLE DATA **BOOK ON FINANCIAL** 





## THE MICROFINANCE CENTRE IS A SOCIAL FINANCE NETWORK THAT PROMOTES FAIRNESS, INCLUSION, EQUALITY AND RESPONSIBLE SERVICE.

We unite 113 organisations (including 77 microfinance institutions) across 36 countries of Europe, Central Asia and beyond, who together deliver responsible microfinance services to almost 2,000,000 low-income clients.

Our mission is to empower individuals and sustain communities through innovative social finance and microfinance.

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