

# **DIGITAL BANKING IN ITALY**

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**THE CASE OF A FRACTIONED AND CASH-CENTRIC  
FINANCIAL ENVIRONMENT: TINABA CASE STUDY**

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### Abstract:

Fintech is a relatively new term and it describes a series of financial products, usually available via smartphone Apps, that became widespread and accepted by the general public in the 2010s. Nowadays, almost a day does not go by without a news headline regarding Fintech, may that be for through-the-roof fundraising rounds or money laundering scandals. This divergence is typical of the banking world, that Fintech is now an integral part of, and where any action is defined as either a top or a flop, but this world is decisively not just black or white. Instead, it is highly complicated, and being a top player within it means keeping up with innovation standards while being compliant to a very stringent set of regulations. This case study considers a bank-Fintech partnership in a highly cash-centric and traditionalist society, Italy. It considers the path Tinaba, a financial “ecosystem” App, had to take to become a renowned player within the Italian Fintech market, what effect partnership with Banca Profilo had on that journey and what the future may hold for the pair.

### Keywords:

Banking, Business model, Fintech, Payments, Personal Finance, System integration

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# 1. Introduction

## 1.1. Purpose

The purpose of this thesis is to make a deep dive into the world of Fintech, as it has had an increasingly strong impact on the financial world throughout the last decade, and we realized that it has not been given much attention in the academic world as some other topics regarding PE and M&A activity, for example. Furthermore, we seek to present a market diametrically opposite to the Swedish one, that has historically been considered as open and innovative, as we hold that Fintech is not as challenged in such an environment as in bureaucratically burdened Italian system. Italy is a very particular market as its society is highly cash-centric and has a rather difficult relationship with its banking system that has got worse in the aftermath of the Financial and Euro crisis, that saw many Italian banking giants stumble and some fall.

We consider the regulatory and legal differences among markets throughout the world, as well as particularities of different cultures and societies that influence modes in which banking systems operate and velocity and process of their development. Moreover, following on these lines, we cover a broad range of Tinaba's historical and geographical competitors, that propose solutions based on market inefficiencies revealed or in-house competencies to be leveraged on, making the final product palette offered quite diverse.

Our case study considers the differences in business model and strategic approach between Tinaba and its competitors. We seek to understand benefits and drawbacks inherent to Tinaba's financial "ecosystem" approach to product offering, with respect to a more prevalent strategy of its competitors that is based on the proposition of a single financial product. Additionally, we look at the partnership between Tinaba and Banca Profilo, its value to Tinaba's final product and compare it to both stand-alone Fintechs and solutions that bigger, traditional retail banks have come up with in order to face the changes implicit to the new Digital Age.

## 1.2. Contribution

We stated that "not a lot of attention" has been given to Fintech in the eye of some other finance-related topics within the academic world, but we certainly had enough Fintech-related papers to consult within the scope of our research. However, what we noted is that many of these papers we reference have taken a Venture Capital perspective towards this market, concentrating mainly on valuation problems inherent to it. While we give this topic some consideration, we decided to put the spotlight elsewhere and consider the causes and effects of Fintech development within the banking world, with a focus on the Italian market and Tinaba as one of the players within it. We take a deep dive into the diversity of Fintechs' business models and products offered worldwide, and, with an

inductive approach, we seek to determine what this diversity implies in terms of preceding financial market inefficiencies in different parts of the world.

Furthermore, we consider regulatory drawbacks that are distinctive of the banking industry and relatively state-specific, even within the EU borders, making international competition relatively unfair for companies operating in states with comparably more stringent regulations.

Moreover, we decided to perform a research focalized on a banking environment fundamentally different with respect to the Swedish equivalent, as we hold that such research could be of use for future students of Stockholm School of Economics in order to understand inherent diversities within the European markets.

Largely due to the specificity of Tinaba's business model, that requires a close relationship to a traditional bank, we research into differences between both business strategies and solutions proposed by traditional banks and Fintechs and reasons why banks may be reluctant to implement digital solutions even if more equipped in terms of know-how and experience than an average start-up.

Finally, we note that books and papers on Fintechs and innovation become obsolete in very short time periods as new technologies come along and new products take over the market. However, we believe that a paper focused on roots of various and diverse changes taking place in the financial environment worldwide, rather than on products that were consequences of the change process, can prove a point of reference in more years to come, for research focused on a market other than Italy and companies distinct from Tinaba.

### 1.3. Outline

Following this introductory *Chapter 1*, and as a start to the case study, the development of banking and payment methods throughout history is briefly covered in *Chapter 2*, with a focus on the central role of Italy within this market. Focus is shifted towards Fintechs, digital banking and the relationship banks have with Fintechs generally, and in Italy specifically in *Chapter 3*. In *Chapter 4*, current Fintech trends in various geographical areas of the world are covered, with the aim of pinpointing root causes of diverse directions and velocities of development of new financial technologies throughout the world. *Chapter 4* concludes with considerations of specificities of the Italian market and *Chapter 5* follows up on that with considerations of the competitive environment in the Italian market, outlining three competitive clusters: Italian Fintechs, Italian traditional banks going digital and International Fintechs. Various business models among these clusters are described, with focus on differences inherent to the choice between financial "ecosystem" and single-product focused model, along with respective strengths and weaknesses that define the companies that implement them. In *Chapter 6*, organizational structure, history and connective ties between of Tinaba and Banca Profilo are described,

along with a discussion of why Tinaba chose Banca Profilo as a partner and what added value this partnership brings to each of the parties. Additionally, Tinaba's market strategy and associated products are defined. Issues regarding different regulatory requirements in different markets are outlined in *Chapter 7*, along with specific provisions inherent to the Italian case. In *Chapter 8* we take a more quantitative approach, presenting a market research run on general knowledge, use and brand recognition of Fintech products in Italy. Additionally, some statistical data regarding customer base and potential is presented. Finally, in *Chapter 9*, we give a brief consideration to valuation process in this very specific, cash-burning industry, outlining frameworks used by VC and verifying the impact of subjectivity in performing analysis in this specific market constituted of a number of unique and difficult-to-compare companies.

## 2. Historical Perspective

### 2.1. Banks in History

The first concept of banking dates back to ancient Babylonia, where the concept of collateral was born, and developed during time in Europe (especially Greece and Roman Empire) and Asia (China and India), always as a solution provider for merchants.

Modern banking, though, is said to be born in Italy in the 14th century in the main commercial hubs of the period: the Maritime Republics of Genoa and Venice, and Tuscany.

There, given the demand for swift value exchange, the concept of “Banchiere”, or Banker, emerged. They were the “entrepreneurs” of the time, who got their name as they positioned themselves behind a “banco” - a small table in front of which they welcomed customers. They acted as intermediaries of the transactions, giving out letters of warrant to merchants and governors, and allowing their customers to trade while not actually paying up for their purchases in valuable metals, which were an excessive liability during dangerous journeys. At that time, banks also bore a more political role: loans and collateral were given based on the degree of “closeness”, political or another partnership, between the bank and the borrower, and not on the repayment ability or the expected value of the operation.

The most successful bank at the time was the Banco dei Medici, founded by the Medici family in 1397, at the time the unofficial rulers of Florence. Following a rapid expansion in the biggest European commercial cities (London, Bruges, Venice, Lyon, Geneva, Naples, etc.), with the aim to provide local merchants with loans for their businesses, the bank suffered a series of defaults. These were mostly connected to the political scope of the bank (Lorenzo de' Medici, the head of the family and ruler of Florence, used the bank as a tool to create political connections), and was forced to cease operations in 1494.

Another example was the Banco di San Giorgio, founded in Genoa in 1407 by the Republic of Genoa, that financed both trade expeditions (with a significant stake, in the 17th century, in the Dutch and English East India Companies) and military expeditions (of the Republic, but also of monarchs like Ferdinand of Castilla and Emperor Charles V). Despite some negative outcomes from trades and military expeditions and some defaults, the Banco di San Giorgio survived until the end of the Republic of Genoa in 1807.

These banks marked the birth of the concept of Fiat Money<sup>1</sup> in the western part of the world, and together with the shift of banks' customer focus from only monarchs and merchants to the broader scope of the society, it slowly allowed for the development and

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<sup>1</sup> Defined as an intrinsically useless object that serves as a medium of exchange.

widespread use of more sophisticated means of payment, like cheques and banknotes. Since then, the bankers kept their payment systems up to date with technology: with the invention of faster means of communications like the telegraph and telephone, new modes of value transfer were made possible (i.e. wire transfers, invented by Western Union in 1872), and new ones were developed (credit, debit and prepaid cards, developed in the 1950s by American Express and Diners). Even with the birth of the internet, banks rode the wave of change: bankers developed and enabled new systems that made it possible for their customers to check account statements and to execute online payments from the comfort of their home.

Nowadays, further developments in internet and mobile technology are pushing the banking industry towards a complete digitalization. This presents a two-fold problem for the bankers: one is a complete break from traditional, meaning no more need for physical branches and physical money or cheques; other is a new kind of competition that technological developments gave birth to: Fintechs.

## 2.2. Changes in the traditional financial landscape

It is impossible to predict what the future holds for the banking world, but in the recent past, there has been a high degree of collaboration both between established institutions and Fintechs and among established institutions, in order to reduce possible threats coming from new entrants in the financial market.

Implications of the aforementioned partnerships are two-fold: from one side, know-how sharing between market players is beneficial to the quality of products of both parties, but from the other, banks have to consider regulatory implications of partnering up with Fintechs and adopting some of their solutions. At the present moment, regulations are not keeping up with the market's technological developments, rendering many innovative financial products potentially risky from a regulatory perspective, especially regarding the way the products are sold and presented to the clients.

It is clear that partnership is going to be more and more important in future years, but only if it proves to be less risky than internal innovation, generally slower in development and more attentive to regulating concerns. It takes years to build a reputation, and destroying it to simplify user's experience through a potentially non-compliant software is not an option established players would like to take.

## 2.3. Developments in different parts of the world: focus on China and Italy

While our focus is narrowed down to Italy and somehow Europe, we hold that comparison to China can be useful in order to understand whether Alipay-like ecosystem app could

function as well in Italy and Europe as it does in China, and what are the inherent differences and similarities between the two economies.

### 2.3.1. History

As discussed before, Italy has a very rich banking history, and has been the birthplace of banking in Europe as it was the main trade destination for merchants coming to its ports from around the world. However, as the development of means of economic exchange was necessary for Italy, it was so for its trade partners as well, and China, with its Silk Road, was one of the forerunners of trading innovation. We find proof for this in the fact that the first known banknote was developed in China during the Tang and Song dynasties, starting in the 7th century. Its roots were in merchant receipts of deposit during the Tang dynasty (618–907), as merchants and wholesalers desired to avoid the heavy bulk of copper coinage in large commercial transactions.

### 2.3.2. Development of new banking solutions

Throughout the 20th and at the beginning of the 21st century, both countries were seen as traditionalist and reluctant to change their ideals, even though distant in geographical and political terms. In terms of what interests us for the scope of this thesis research, both countries were reluctant to accept forms of payments different from cash. This has to do with another similarity between these, generally diverse countries: their respective economies are based on family-run SMEs. For these small merchants, it is rather inconvenient to implement a settlement system in order to accept credit card payments. To understand why, we provide a small explanation of how the settlement system functions:

It starts when merchants close their business (for the day) and their collection of transactions are sent to a bank. The merchant's bank sends this data to a payment processor (like MasterCard), which identifies the bank of the consumer and forwards the purchase data to this bank. The bank of the consumer transfers the amount of purchase out of the account of the consumer and sends this to the payment network. The payment network transfers this money to the merchant's bank, and the merchant gets paid by their bank.

Apart from receiving revenues slower with respect to cash payments, given that it takes a couple of days for the process to be completed, it is also more expensive: many service providers and banks in Italy ask for a fixed commission of €0.10 per transaction, which becomes quite costly for a merchant whose business is based on low-value transactions (it amounts to 1% fee for a transaction of 10€, for example).

While in China this problem of merchants being reluctant to accept non-cash payments has been solved by introducing new digital payment solutions by Alibaba (Alipay) and Tencent (WeChat Pay), Italy has opted for maintaining status quo and accepting that cash is preferred means of payment. We believe that one reason for this might be the different

composition of respective populations and the fact that an average Italian is older than an average Chinese (45.5 and 37.4, respectively, according to the CIA World Factbook 2017), meaning that the society, as a whole, is more conservative and change-reluctant, especially when it comes to digital technologies.

### 3. Fintech development and relationship with the banks

The definition of Fintech is straightforward: Fintech is a business that aims at providing financial services by making use of software and modern technology. The main fields of development are concentrated into three macro-areas: Lending, Payments, and Personal Finance.

Digging deeper into Fintech and its developments, however, may prove more complicated, for two main reasons:

- 1) the complexity of evolving a well-functioning, well-established and strictly regulated market, that has historically proved to be highly resistant to innovation;
- 2) the vastity of financial products available in the market.

As a consequence of these issues, Fintech wave has developed in different stages. At first, Fintechs targeted those services that were easier to “attack” and take over from non-digital providers, either due to the traditional players’ difficulties to offer a state-of-the-art service to their customers or due to the possibility to implement relatively simple technological solutions in order to optimize such a service. Historically, modern Fintech’s evolution can be divided into 4 steps:

- 1) **Fintech 1.0 (2006-2010)**: In this period, the first Fintechs were born, creating those services that are now core to the biggest Fintech companies: P2P transfers, P2P lending, the very first payment solutions and Robo-Advisors. Moreover, Bitcoin appeared in 2009, paving the way for future development in the area of digital currencies. This period is mainly characterized by the lack of collaboration among Fintechs, that made the threat to “brick and mortar” financial institutions minimal.
- 2) **Fintech 2.0 (2010-2014)**: The period is characterized by the birth of two other branches related to Fintech: Insurtech, coping with the complexity of the insurance world; and Regtech, that is providing for a technological approach to all the regulations related to financial and insurance industries, both for the start-ups and for the more traditional institutions. Additionally, the ideas of Blockchain and the development of cloud-based solutions started to be implemented at a commercial level. It is the first time Fintechs start to partner up with well-known players in the financial industry, starting to pose a threat to those players not yet involved in such a development.
- 3) **Fintech 3.0 (2014-2018)**: Integration between Fintechs and the banking industry became ever more widespread, together with Cloud-based and Blockchain-based solutions. The services offered up to this moment are improved and refined, so to include new technologies and to offer a wider service spectrum to the consumers. Moreover, the industry moved away from a more conservative approach, characterized by full control over the access to proprietary platforms, towards more

innovative solutions, that allowed third parties to connect to the platforms through APIs. This new approach, followed by a new set of regulations (namely the PSD2 in the EU), allowed third-party Fintechs to integrate “traditional” products provided by the banks and offer them within their platforms, favouring the creation of innovative solutions that render banking experience more pleasant and efficient.

- 4) **Fintech 4.0 (2018-now)**: Fintechs are either being completely integrated into their partner organizations or are following a more independent approach, establishing themselves as “formal” players in the industry, asking for full-fledged banking licenses at the local central banks. The willingness to shift towards more innovative solutions is growing stronger both for the customers and for established players themselves, paving the way for Fintechs to easily approach both groups. A stronger demand by regulators (and customers) with regards to transparency is driving the industry, allowing Fintechs, traditionally more attentive on the subject, to have an edge on rivals.

This Fintech trend, at the moment, has reached different stages of development in different regions of the world: being subject to different regulations<sup>2</sup>, different currencies, different approaches to the networks and different degrees of technological development, it is strongly subject to geographical and cultural divides.

A big difference between banks and Fintechs that emerged up to now is that, while bank offerings are quite similar in all the markets of the world (physical branches and similar products offered: mainly current and savings accounts), Fintechs are concentrating on solving geographically- and culture- specific problems posed in different markets. Examples can be found everywhere: M-Pesa, the SMS-based payment system that is widely used in rural areas of Kenya, is highly unlikely to have success in a market like China, where internet connection is widespread and where customers are used to having payment solutions integrated into bigger ecosystems, like Alipay and WeChat. On the other hand, Alipay and WeChat are less likely to have success in Europe, mainly due to the different cultural and regulatory framework and of the presence of strong, specialized competitors for almost each and every part of their ecosystem. For an overview of the different user interfaces, representative of the different systems, please see Exhibit 1 in the Appendix.

It is interesting to note that the three markets cited, while co-existing, are at different levels of the previously presented Fintech development scale.

The move towards the digitalization of finance, and therefore the birth of Fintech, although in different shapes and forms, is happening throughout the world, and banks are facing (or will soon face) a fight or flight choice: leave parts of their market share to new

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<sup>2</sup> Mainly based on the problem encountered and activities run by the traditional banks.

players, concentrating on certain products only, or “fight” the new entrants by developing or integrating new technologies in order to create proprietary digital solutions.

Banks are not all of the same opinion when it comes to this choice: from those who think that Fintechs are a major threat, over those who see them as just another competitor characterized by the push towards industry innovation, to those who see them as a (relatively) cheap acquisition target that will solve the “innovation problem” once and for all.

Innovation through acquisition is interesting but rather difficult to implement: banks tend to offer a 360° service to their customers, from bank accounts to money transfers, investments, lending, card payments, etc.. Fintechs, on the other hand, tend to be much more limited and focused in terms of services provided (with notable exceptions, such as Alipay), usually offering just a couple of instruments as to make them work perfectly and to serve an impeccable product to their customer. While the relatively small dimension combined with the functionality of the product may make traditional financial institutions eager to acquire these digital financial service providers, the integration of such services into the acquirer’s organization may prove difficult. This is because of both the technicalities inherent to the integration of the two operational systems (or more in case of multiple acquisitions) that were built as stand-alone entities, possibly lowering the overall quality of the service provided; and the cultural clash between a start-up mentality and the traditional banking mentality, more conservative and close-minded, especially in less tech-prone countries. Despite these issues, according to the Financial Stability Board, the worldwide trend is that established financial players are opting for consolidation with Fintechs, rather than competition, mainly in order to avoid the so-called BigTechs<sup>3</sup> to strongly erode their customer base.

As inferred from above, Fintech is strictly related to the banking business, with the goal of simplification and modernization of the usual financial products. The union of the three macro-areas is the core of the so-called Digital Bank, a bank that offers the whole catalogue of its services online, without the need for interaction between the customer and any bank employee. Digital Banks are being developed to benefit the end customer: once the banking products are digitalized and new financial system is implemented the cost structure of the “new” bank, and therefore the costs charged to the end customer, are less onerous with respect to the traditional banks, due to the scalability and automatization of software and processes. Revenue derives from a pricing structure that is almost identical between the traditional and the “new” banks, but varies strongly in terms of the scale of fees charged.

As for payments, fees are quite similar to those charged by traditional players, while fees on Robo-Advisors tend to be lower than those offered by traditional wealth managers (up

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<sup>3</sup> BigTech firms are large technology companies that expand into the direct provision of financial services or of products very similar to financial products.

to 2-3% lower, with fees ranging from 0.15% of AuM to 1% of AuM). Finally, interest rates charged on loans tend to be higher among Fintechs, due both to the higher speed of delivery and the lower level of knowledge lender possesses with respect to the traditional players.

### 3.1. Comparison to banks: a threat or an opportunity?

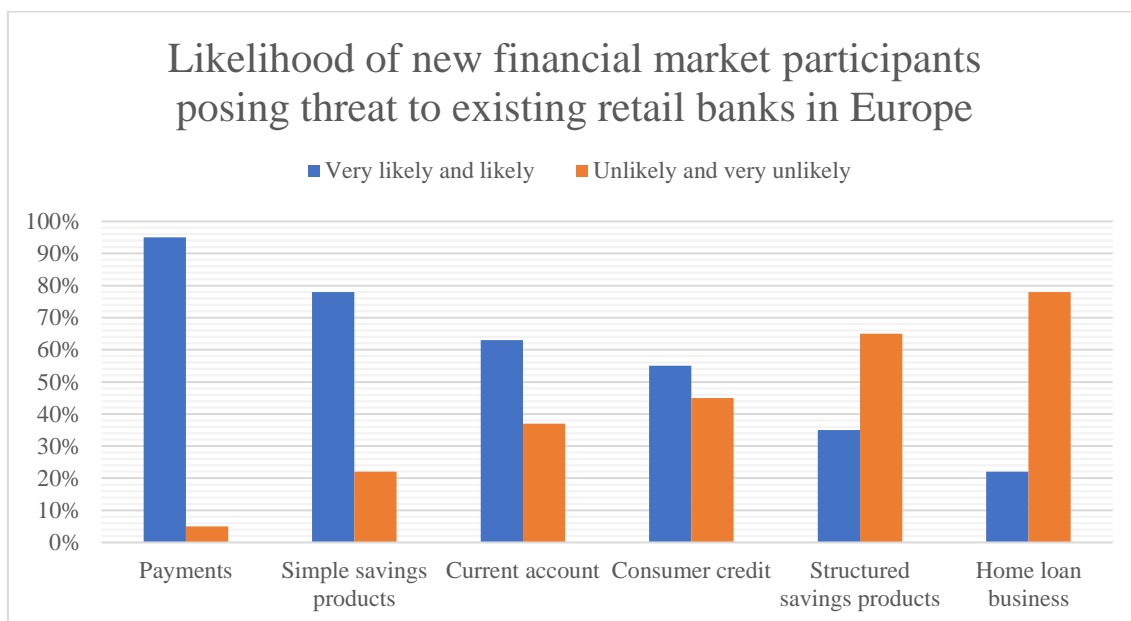
Banking, until digitalization, was a simpler business. The product menu was more-or-less equal between the banks and pricing, on average, was not a diversification point. Banks got their customers in one, simple way: by opening up branches in residential and suburban areas as well as in the more central locations, in order to offer financial services within comfortable reach for their clients.

Comfortable banking is the concept we will mention repeatedly, as the lack of it within the traditional banking sector was the opportunity initial financial start-ups took on. The branch of the bank might be close by, but would it not be more comfortable to finish off with your banking business while relaxing at home or while taking the metro to work, with no need to queue? Fintechs were born out of this idea and banks got a different set of competitors; opening up branches was not fruitful anymore.

At this point, another question arises and that is whether the banks should see these new players as a threat, or should they consider their technological advancements as an opportunity to improve quality and security of its own operations.

Fact is that Fintechs are expanding and receiving ever more funding, both from traditional financial institutions and from tech companies, according to Romanova and Kundinska (2017). We see the intensive funding from financial institutions as the sign that banks are embracing, rather than fighting the new trend. According to the same paper, banks are starting to integrate services offered by third-party providers into their own systems, either by purchasing a start-up along with its technology or, for more innovative and smaller start-ups, becoming a majority shareholder but not a full owner of the product, as the inherent risk smaller start-ups bring about is perceived to be higher. We believe that this trend has a positive impact for both sides as it provides more financing options for the start-ups and thus more incentives for new ideas, and more efficient and modern service for the banks to offer their clients.

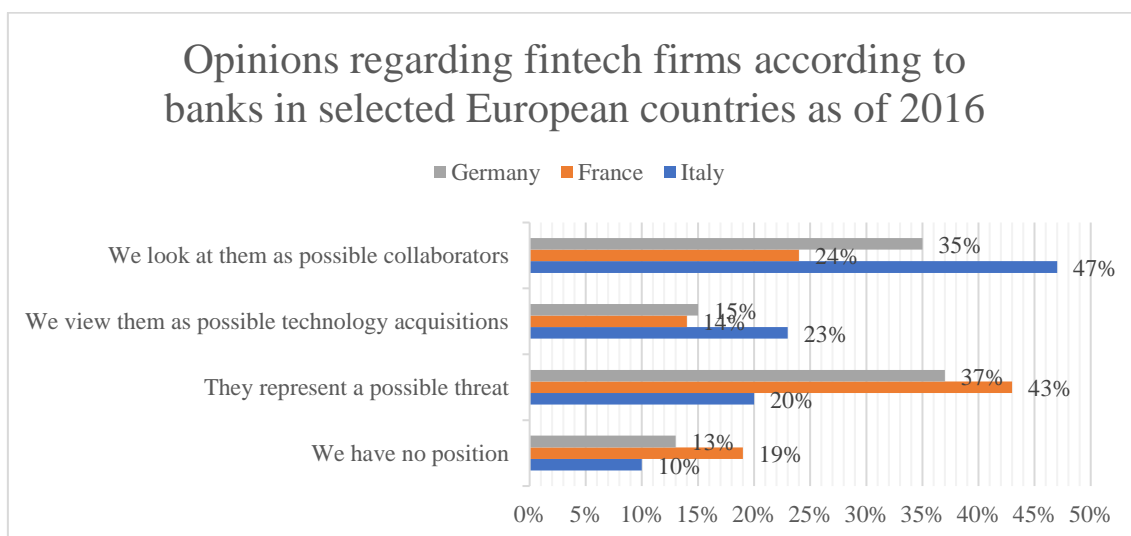
**Figure 1.** Likelihood of new financial market participants posing threat to existing retail banks in Europe



Source: Romanova & Kundinska (2017)

However, narrowing the sample down to European market and avoiding world-wide generalizations, opinions have been diverse among bank CEOs, which are deemed to echo the opinion of the banks as institutions: in Germany and France, the Fintechs are condemned as a threat, while in Italy they are perceived as bringing in tools for operational improvements.

**Figure 2.** Opinions regarding Fintech firms according to banks in selected European countries as of 2016



Source: Statista, Business Insider

These views, however, could be skewed as a result of the degrees of development of Fintechs in these countries: Germany, for example, is home to N26, that having a banking license since 2015 is at all effects a bank and a competitor, rather than just a resourceful start-up. In Italy, on the other hand, Fintechs are less advanced and banks are managing to keep up by developing in-house solutions following know-how acquisition. Considering this market situation, it is only natural that banks in Italy see Fintechs as seeds of ideas rather than as threats to their very existence.

### 3.2. Regulatory perspective

Although this topic will be covered more in depth later on<sup>4</sup>, it is useful to make some considerations now in order to understand how come Fintechs have developed at different speeds throughout the world, and even within borders of the EU. To start with, in Italy Fintechs have to comply with same regulations banks do, regardless of what area of finance they operate in and whether or not they have a banking license; their regulator is Bank of Italy that has the right and obligation to scrutinize their work as often as it sees fit and is legally bound and allowed to. On the other hand, regulations governing Fintech in Germany are much lighter in comparison, as they are made to spur innovation, rather than scrutinize operations in search of possibly suspicious behaviours. This makes the product offered by the Italian start-ups more bank-like, with heavier onboarding process than that of, for example, N26, but also more secure in terms of prevention of fraudulent transactions, money-laundering schemes, and identity fraud.

The regulatory aspect of the “battle” between Fintechs and banks for market share is one of the rare aspects brought up in this case study that has already been researched quite well. The paper by Buchak et al (2018), “Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks” provides for a good reflection point. In this paper, the authors discuss the impacts of tightening regulations on banks in terms of lending and issuing of mortgages, but conclusions they reach can be applied to other areas of Fintech as well.

The authors hold that having all financial services offered by same entity is convenient for the customers as it does not involve search costs when looking for a new product, and provides for the benefit of linked accounts. Although this usually benefits traditional banks with respect to Fintechs concentrated on a single financial product, financial “ecosystems” like Tinaba provide for the same convenience and could potentially reap the same benefits in terms of customer loyalty. Furthermore, the authors find that Fintech is gaining market share in recent years, at the expense of traditional banks due to increased quality of services provided, the convenience of providing services online and regulatory restrictions faced by traditional banks in post-crisis years. Banks are facing more restrictive regulations than do Fintechs, as they are depository institutions and Fintechs

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<sup>4</sup> The Italian case is covered more in detail in Chapter 7 – Risks and Regulations.

are financial institutions usually dependent on private investments, making them less “core” to the economy of a society.

On the other hand, according to Arner (2015), Fintechs helped rationalise and improve the efficiency of banking services in general. However, it has been noted by the author that Fintech wave has been met with different degrees of regulatory resistance throughout the world: China has embraced it, while Europe and US seem to decide on a case to case basis. Some countries, like Italy, go with “one size fits all” approach and try to impose banking regulation on Fintechs, while others, like the UK, US and Germany try to expand their banking regulations in order to build a new legal framework, that is to be marked as forward-looking instead of retrospective. The new approach is hoped to bring more flexibility, embrace different approaches and allow best practices to spread, at the benefit of the end consumer. The problem is that having different regulations for different markets, as written and implemented by each state’s legislature, is proving a difficult concept to carry out for a product that is international in its reach and available across “legislative” borders.

Changing perspective, it is worthy to point out that some of the banking areas that have recently been succumbing “takeover” by Fintechs, such as Payments and Personal Finance, had already been externalised by banks. Any innovation in these fields calls for a response, but not necessarily from the banks as much as from their collaborators. Banks themselves do not need to decide whether to integrate or fight the new solutions, but rather if they need to change the collaborator.

Finally, competition between banks and start-ups is not the only rivalry present in the new digital banking market: there is an ongoing battle between the start-ups as well. A wave of consolidation between the start-ups is already on the way: more successful and better-financed start-ups shop around for smaller ones with ideas beyond their size or those with geographical reach diverse from one’s own. Examples of Fintechs acquiring other start-ups include Klarna, that in 2014 acquired the German Bank-Transfers Fintech Sofort, so to include its products in Klarna’s portfolio and to expand Klarna’s presence in Germany; and Moneyfarm, that purchased Vaamo, one of the very first German Robo-Advisors, in order to enter Europe’s biggest Personal Finance market.

### **3.3. Organizational structure and operational management differences between Fintechs and banks**

We have already dug deep into the rivalry between Fintechs and banks, and how they can integrate their final products and improve respective offerings. However, there are structural and operational differences between these entities that are to be explored in order to uncover where the inherent differences between these two players come from, what the best practices are and whether there is know-how to be shared between them.

Considering the organizational structure, it is usually said that Fintechs have a “flat” structure, compared to the highly “hierarchical” structure of the banks. However, the intrinsic source of this divergence and its operational implications remain to be defined.

To define the conceptual differences between the organizational models, we distinguish the following roles, in decreasing order of responsibilities handled: “Board”, “Top Management”, “Mid Management”, “Operatives”.

What we note observing banks is that the larger the organization is, the slower the change management and the more complicated operational procedures are. To understand why, we present a decision process comparison between banks and Fintechs, to pinpoint the essential differences.

In traditional banks, of any size, almost no tasks are automated, but are executed by “Operatives”. This raises the first issue, and that is that these, usually highly-educated people that aspire for management roles in the future, are using their time running mundane tasks that could easily be automated, both in order to save resources and to improve team morale. In “digital” banks of today, these tasks are usually connected to fraud prevention and anti-money-laundering checks, covered more in detail later on, that apart from being automatable are also less precise if executed by humans as mistakes are probable and damaging to the bank’s image.

Another issue is that the “Mid Management” spend their days in various “alignment” meetings among various departments. This presents a problem for the banks as the more experienced employees are excluded from day-to-day operations that in turn are executed by the newest members of the team, rendering bank’s products of lower quality from the start, as compared to those of Fintechs.

This is because Fintechs benefit from the flat structure and “everyone does everything” approach: new ideas are come-up-with during whole-team brainstorming sessions and approved by the “Board” and “Top Managers”, who are usually the founders. Whole company teams generally share an open workspace, which simplifies communication, both between the various “Operatives” and between “Operatives” and “Mid Managers” of different departments.

On the other hand, any change in the banks takes more time to approve as it comes strictly from the “Board”, and is slowly communicated to the lower levels, losing some bits of information on the way; almost as in a game of Chinese Whispers. Eventually, the “Operatives” start working, reporting to respective “Mid Managers”, who then report to each other. Once this process is over (this usually entails that the above-mentioned loop was repeated several times until all the “Mid Managers” had their initial expectations met), the final product is sent to the “Board”. It often happens however that the “Board” flatly refuses the proposed project plan as it does not meet their expectations, meaning that the whole process has to repeat.

The bigger the bank is, the more “Mid management” levels there are and the longer the process is.

The differences in organizational structures are also reflected in the compensation schemes: while banks award responsibility one carries, Fintechs award productivity.

This whole discussion serves to show that the change management process is much longer, more complicated and expensive for the banks than for the Fintechs, whose systems are built ex-novo specifically to meet future market needs. It is obvious why they are as willing as banks are reluctant to implement new and innovative solutions.

What banks need is a systematic restructuring and digitalization, but executing these bottom-up internally takes time and resources, and is not a priority yet. Another option would be to acquire a start-up and its know-how, its higher degree of technological development and flat organizational structure and implement the new solutions throughout the bank and its departments. However, there are many examples that show that, from the early stages of these merges, it was Fintech that succumbed to bank’s organizational structure and processes, not the other way around.

The question of whether these two entities can co-exist, or is it up to the banks to change and adapt to new market conditions still persists.

As we see in other instances and other subject matters it is hard to believe that such a change will start from Italy, a country that has strong political influence in pretty much every sphere of life and where traditions, due to rich and glorious history, count much more than innovations. However, there were instances in the past from which Italians emerged as innovators of Europe, like Marconi with the invention of the radio and Meucci with the invention of the telephone. It remains to see if they can lead the way with innovations in banking, and one of the possible players that could do so is Tinaba, with support of Banca Profilo, as a perfect example of Fintech-bank merge.

Banca Profilo is an old, traditional Italian bank, that is operating in Private Banking and Wealth Management and is relatively small in size, which helps in the tug-of-war with Tinaba, the Fintech, as the distribution of power is not as imbalanced as in a textbook Fintech-and-bank merge case.

### 3.4. Customer reaction: hopes and issues

Fintechs make a wide spectrum of financial products, that used to be reserved for medium-upper classes only, available to pretty much anyone, thanks to the distribution of their products through smartphone apps. They are making the banking experience more fun, more efficient and more comfortable, available on-the-go and safer than ever before. However, as is the case with every innovation, there are negatives that go hand-in-hand with positives, and we should discuss both.

First of all, an average customer has more possibilities than ever before: P2P payments, C2B transactions, micro-loans, P2P lending, Robo-Advisory, Cryptocurrency investments, etc., it certainly feels like anything that comes to one's mind has been done and is readily available for download on the smartphone. Furthermore, almost everything connected to personal wealth can be overseen, controlled and used via one's smartphone, making wallets, cash, and cards nearly obsolete.

However, having everything related to one's personal finance always close and readily available is certainly handy, but it can reduce security of one's assets to a certain extent, namely if the smartphone gets misplaced or misappropriated: in the best case scenario it becomes more difficult to recover the funds, in the worst case they can get stolen.

On the other hand, cashless and cardless payments mean that there is no need to carry around anything other than a phone, and transactions generally become faster and more comfortable. Nonetheless, if there are technical glitches on either payer or payee side the whole change-of-money operation can be compromised.

This brings around another issue, and that is that majority of Fintech apps need a network to function well, meaning that they need to fight to onboard as many customers (both private and business) as possible. Given that the market is becoming saturated and it is increasingly difficult to differentiate but also to be appealing to a diverse spectrum of potential customers, it is very hard if not nearly impossible to get a whole society to know and use a specific App. Unless there is a country-wide banking system solution like Swish in Sweden, stand-alone Fintechs are struggling to get to such a broad customer base.

Finally, it is becoming evident to banks, Fintechs and regulators alike that some new technologies are not clear to an elevated percentage of population: from the NFC payments over syncing of all of one's bank accounts in a single app all the way to Blockchain. Lack of comprehension leads to lack of trust, and many customers knowingly decide not to use the new financial technologies and digital solutions.

## 4. Trends in Fintech

In this section, we will focus on the principal solutions used in some of the most important geographical areas for Fintech, discussing the different solutions implemented and the market responses provoked.

### 4.1. Africa

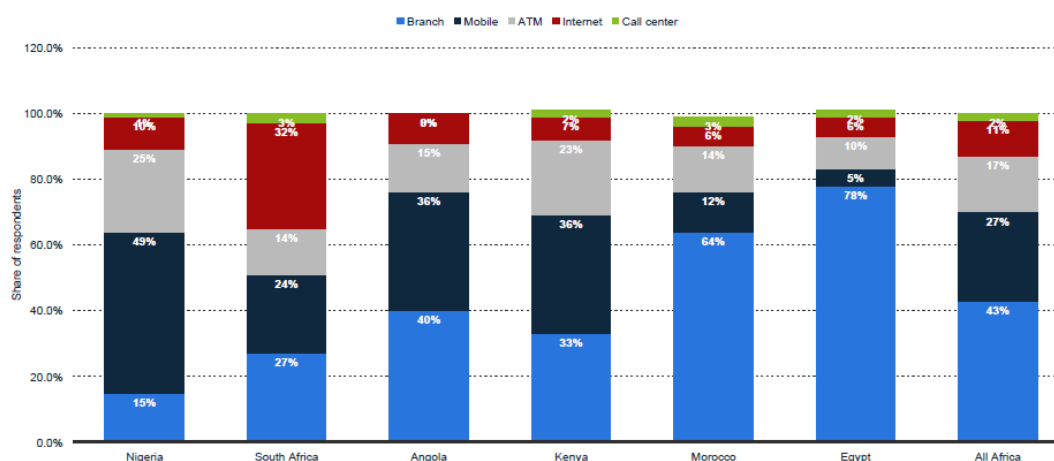
When compared to other geographical areas covered, Africa presents a peculiar story. This is due to the inferior degree of both economic and infrastructural development with respect to Europe and North America.

First of all, the majority of the population in Sub-Saharan Africa could be considered as non-banked, at least in the traditional sense of the word. According to a survey run by Statista on banking usage and habits, only 15% of Nigerians use bank branches, 10% rely on internet banking, while 49% use mobile banking solutions. The situation is similar in Kenya, where 33% of respondents use bank branches, only 7% rely on internet banking and 36% use mobile banking. For a sense of comparison, in Egypt, which is much more similar to Europe and America when it comes to banking habits, 78% of respondents use bank branches, only 6% use internet banking and only 7% rely on mobile solutions.

**Figure 3.** Leading Banking transaction channels in Africa

#### Leading banking transaction channels in Africa 2016, by country

Preferred banking channels in Africa 2016, by country

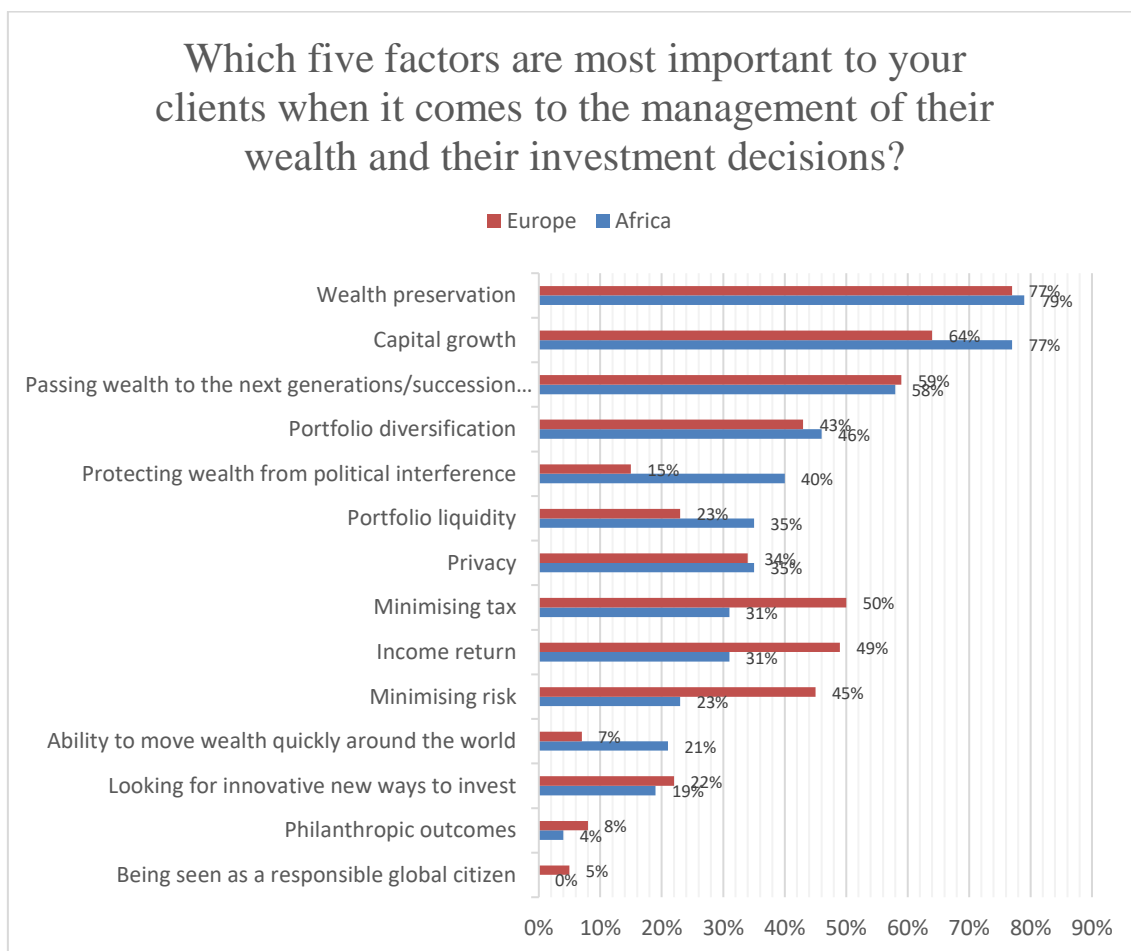


Source: Statista, McKinsey

In the same research, respondents were asked to name the most important factors they consider when deciding whether, and where, to open a bank account. 79% of respondents across all states in Africa declared that wealth preservation is the most important factor (as compared to 77% of respondents in equivalent research in Europe) and 77% stated

that wealth growth is the most important factor (compared to 64% in Europe). It is interesting to note that Africans consider the protection of their wealth from political interference as highly important (40% of respondents declared so), while Europeans do not seem to consider it as a significant factor (only 15% of respondents hold it as important).

**Figure 4.** Factors affecting investment decisions of UHNWIs globally 2016, by country



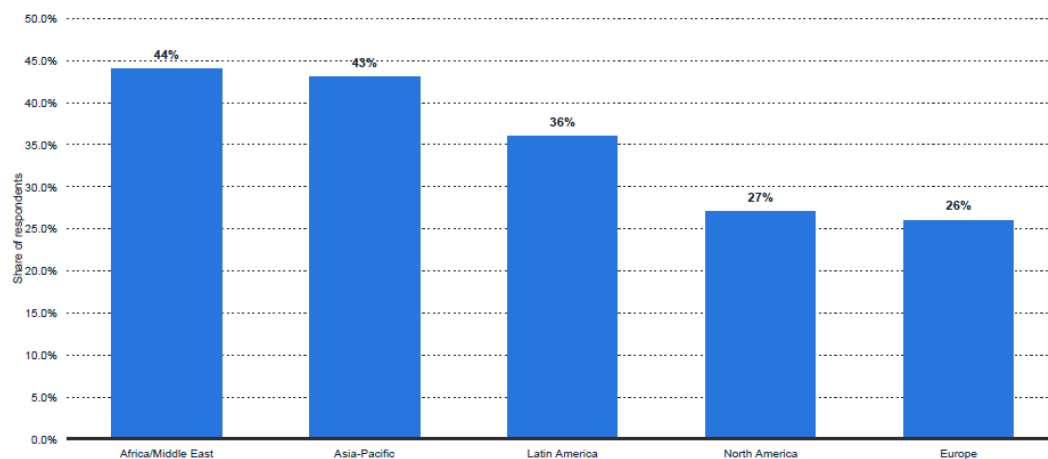
Source: Statista

Combining these statistics with the previous acknowledgement that bank branches are unreachable for a vast percentage of population in African countries, due to poor infrastructure and lack of convenient connections between cities (where banks are) and rural areas (where majority of population lives), it is understandable that mobile banking solutions found a more fertile ground in Africa than more developed areas of the world. Thus, it does not come as a surprise that 44% of mobile device users in Africa declare that they are willing to perform bank transfers via mobile apps, while only 26% of Europeans do so.

**Figure 5.** Share of users willing to use mobile devices to perform payments by region

Share of mobile device users willing to have the ability to perform bank transfers in future mobile banking apps in 2016, by region

Mobile users willing to use bank transfer options in banking app 2016, by region



Source: Statista, Nielsen

On the other hand, Adam (2019) in her paper titled “The Digital Revolution in Africa: Opportunities and Hurdles” discusses the incidence of internet, computer and mobile phone usage in Africa. Based on her research, there are only 0.4 wired broadband subscriptions per 100 inhabitants in Africa, as compared to 12.39 on average in the whole world and only 9.6% of households possess a computer (world average is 46.61%).

However, when it comes to mobile phone subscriptions, Africa is keeping up with the world much better, and there are 74.6 mobile phones per 100 inhabitants, while in the world that figure stands at 101.53 per 100 inhabitants.

The different base point in terms of banking sector development meant that the Fintech’s response had to be an “out-of-the-box” solution as well. The best example of a successful Fintech in Africa is to be found in Kenya: M-Pesa (M for mobile, Pesa is Swahili for “money”) is the SMS-based payment system that is widely used in rural areas of Kenya.

M-Pesa is a mobile money product of Safaricom, telecom provider, which was launched in cooperation with Vodafone in 2007. In under five years, payments made through the platform surpassed 43% of Kenya’s GDP (48.76% as of 2017) and the central bank is now supervising the telecom provider as if it was a bank, as the payments made through the platform have become systemically significant.

An interesting fact is that M-Pesa is not an app and it does not necessitate an internet connection, but just a basic mobile network to function. It repurposes SIM cards and phone accounts into bank accounts for virtual currency: sending money is like sending SMS.

At the present moment in time, 93% of Kenyans have access to M-Pesa's mobile payments, and there are over 120,000 M-Pesa's outlets and reseller agencies around Kenya. This means that M-Pesa outstrips the top four banks' reach by more than ten to one.

After becoming highly successful in Kenya, M-Pesa expanded abroad, most notably to the UK. Safaricom launched it through household-name European money-transfer services, such as Western Union. While there are some anti-money-laundering restrictions on the usage of M-Pesa for transfers by a single individual, the system still allows Kenyan expats working in the UK to deposit Pounds or Euros with a remittance agent, and have their family and associates collect that money in Kenyan Shillings back in the home country using their mobile phone.

## 4.2. China

China is currently the biggest Fintech market in the world, and we want to look into causes and effects of this phenomena on the Chinese economy.

According to Porto and Xiao (2017), China has a typical urban-rural dual economy structure, and the urban areas are significantly more developed than the rural: per capita disposable income of urban households triples that of their rural counterparts.

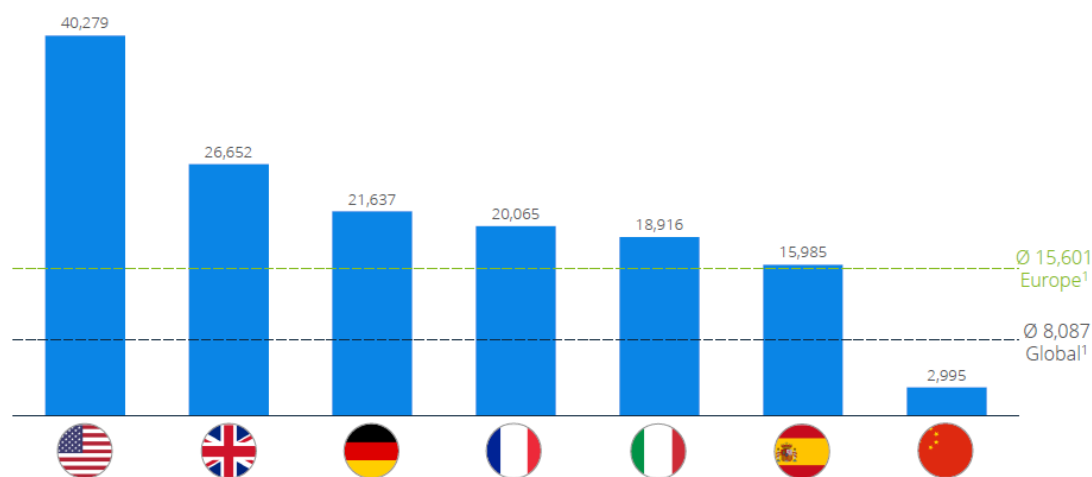
Furthermore, according to these authors, the average distance from rural households to the county centre is 25 kilometres, and due to inadequate connections and lack of appropriate means of transport, an average citizen of the rural area would need approximately 4.5 hours to travel this distance. This means that bank branches, found in county centres, are largely unavailable to the "rural" population, which accounts for around 45% of the total Chinese population as of 2015. However, as recently as of 2010, the rural population accounted for 51% of the total, meaning that it is safe to say that just 10 years ago most of the Chinese population was basically unbanked.

The scenario was similar to that of Africa at present, but technologically speaking, the situation was slightly different. Mobile internet coverage was already well-spread in China, with over 60% of the population having access to mobile internet. Thus, Fintech solution to the problem of unbanked was different as well: Alibaba presented Alipay, a banking "ecosystem" that has allowed its users to send money to other users, to merchants, to ask for credit or to borrow money to other platform participants. Later on, Tencent joined the game presenting WeChat pay, a similar solution embedded in its highly popular social network, WeChat.

Nowadays China is perceived as a mobile-first country and it sets the standards for mobile Commerce shopping as well as mobile POS solutions very high.

According to a report on Fintech 2019 presented by Statista, the Chinese Digital Payment transaction value amounted to \$1,269.8B in 2018, followed by the U.S. with \$884.5B, and Europe with \$633.6B. These numbers are highly impressive especially when considering that per-head annual consumption expenditure in the U.S. is more than 13 times higher than in China (\$40,000 vs \$3,000).

**Figure 6.** Consumer spending per capita in 2018 in selected countries in US Dollars

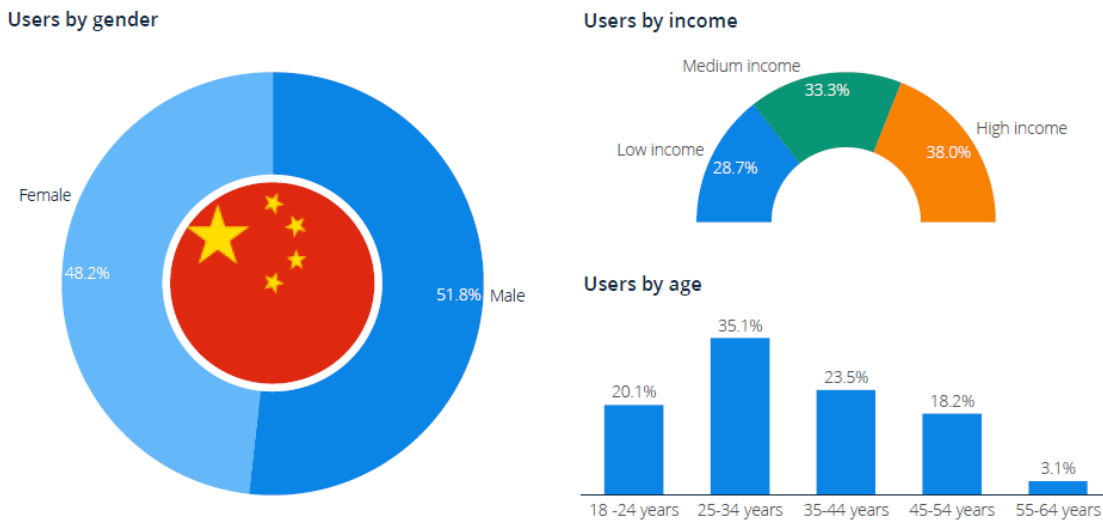


Source: Striapunina (2018)

Furthermore, it is interesting to point out that China accounts for 91% of the global Alternative Lending (P2P lending) transaction value in 2018. This serves to prove that Chinese Fintechs have implemented high levels of trust among its clients. Alipay, as a market maker, has put trust at the base of its business model from the very beginning, acting as a guarantor of all transactions made through its C2B platform by deducting funds from the client’s account only when they have explicitly declared they are satisfied with merchandise received.

Finally, Statista’s report shows that Fintech users in China are relatively equally distributed in terms gender and of income, but there are more low-income users than in other geographical markets: 28.7% of Fintech users in China are perceived as having low income, compared to 13.4% in Italy. Implicitly, Fintech users in China seem to use the new digital solutions out of the need to do so, rather than out of interest in trying out new financial solutions.

**Figure 7. Chinese market segmentation**



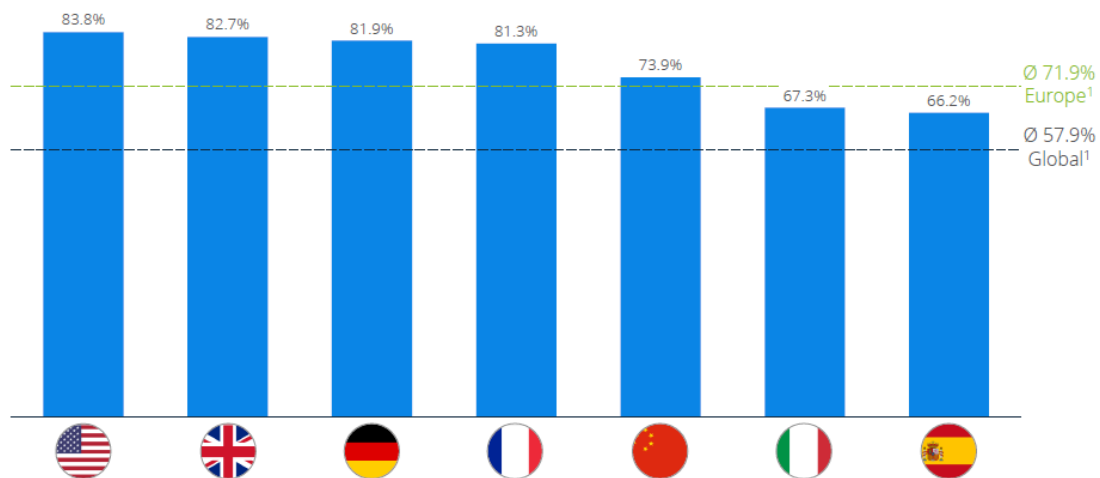
Source: Striapunina (2018)

For more detailed statistical data from Striapunina (2018), please see Appendix, Exhibits 2-7.

### 4.3. The United States

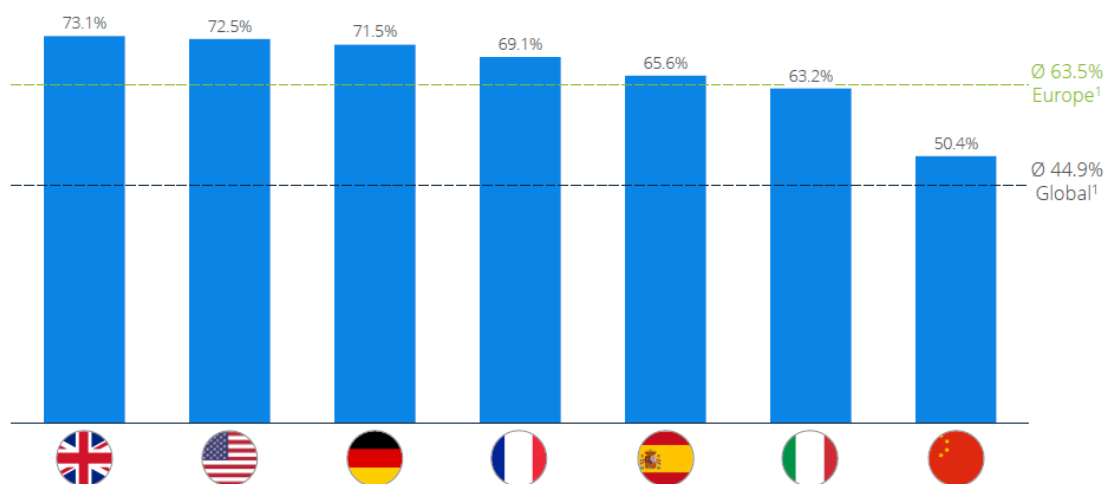
The United States was among the first implementers of Fintech solutions due to various reasons, ranging from high relative penetration of internet connection (83.8% of households, compared to a global average of 57.9%), over widespread use of smartphones (72.5% of residents vs 44.9% global), and higher GDP per capita (\$62,002 vs \$14,404 global and \$28,550 in Europe) and finally to historical higher propensity to invest in innovation.

**Figure 8. Internet Penetration in 2018 in selected countries**



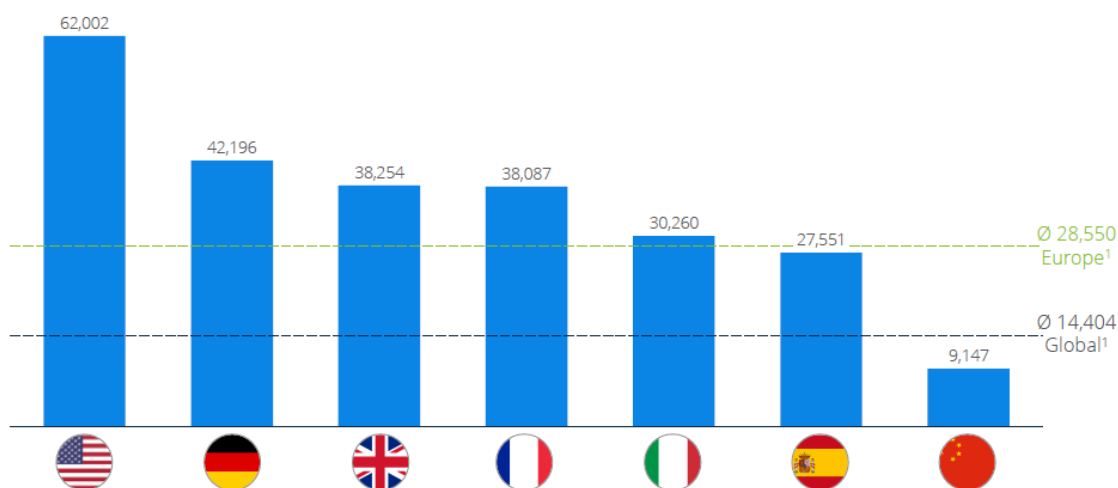
Source: Striapunina (2018)

**Figure 9.** Smartphone penetration in 2018 in selected countries



Source: Striapunina (2018)

**Figure 10.** GDP Per Capita in 2018 in selected countries



Source: Striapunina (2018)

The presented facts have a strong impact on Fintech figures, making the US second biggest market for Fintechs in general, and the first one in terms of figures per capita.

Payments constitute the biggest Fintech segment, accounting for \$885B in transaction value in 2018, that is spread over roughly 260M users (79.5% of US population). This segment is divided into two main areas: Digital Commerce payments (payments for online purchases of goods and services), and Mobile POS Payments (payments in physical stores through apps on mobile phones).

The use of Digital Commerce payment solutions is generally more widespread than that of the Mobile Payments: Digital Commerce payment transactions in the US account for \$820B, or 92.7% of the total digital payments market, with 258.5M users. The value of transactions within this segment is expected to grow at 6% per year in the next 5 years up

to \$1,096M, executed by 271.6M users. We believe that the overwhelming acceptance of the Digital Commerce payment solutions is due to the specificity of action required: the whole process of e-commerce is to be done completely online, and digital payments are inherent to the system. Thus, with the increase of online purchases, the incidence of use of the Digital Commerce payment solutions has increased as well.

On the other hand, Mobile POS Payments are lagging behind Digital Commerce payments in terms of both transaction volumes (reaching \$64M as of 2018) and number of users (25.9M in 2018). This is due to the relatively recent development of the mobile payment solutions, and technical difficulties consequential to lack of compatibility with older devices, both for consumers (lack of NFC system, essential for mobile payments execution on older phones) and for merchants (lack of contactless POS or of internet-connected POS). Despite the current relative underdevelopment when compared to Digital Commerce payments, Mobile POS payment solutions are expected to grow in the next 5 years by a staggering 31% per year, reaching \$247B in transactions, made by 37.9M users. Given that the user base is expected to expand by approximately 50% while transaction value is expected to quadruple, the growth expectations are leveraged mainly on already existing users, rather than expansion towards new ones.

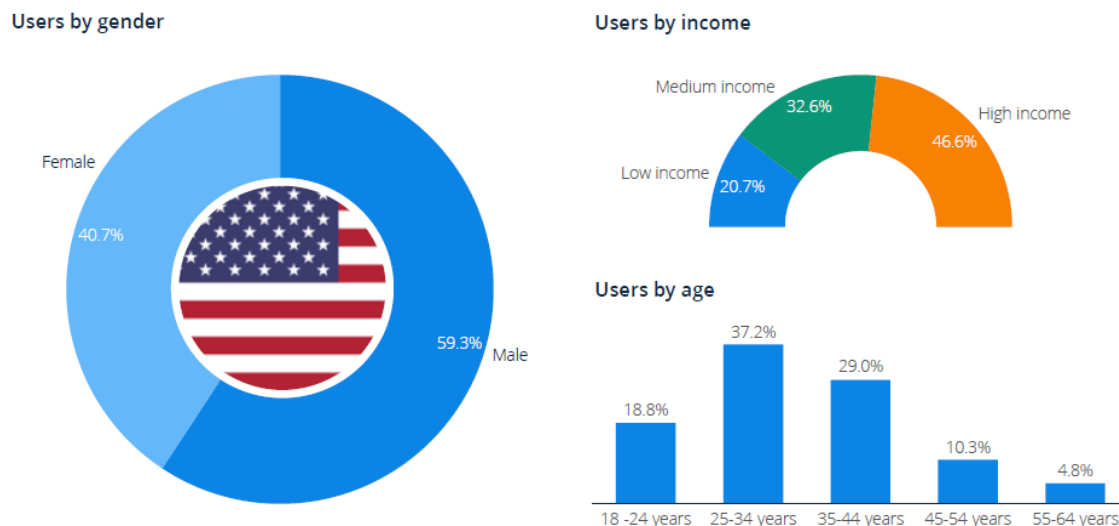
Other segments are, in order of importance, Personal Finance and Lending, respectively accounting for \$441B and \$8.2B in transaction value. The US Personal Finance market is by far the biggest in the world, almost 4 times bigger than the Chinese and European counterparts combined. This is both because of general high trust and familiarity with innovative products and because of the higher availability of money due to higher GDP per capita. Thanks to this, the market is expected to grow by 28% YoY, and is expected to reach a total of \$1,516B of assets invested through Robo-Advisors and other innovative investment platforms in 2023. This would make the Personal Finance segment bigger than the Payment segment for the first time.

The expected growth should strongly affect the number of users as well (they are expected to grow by more than 100%, from 6.6M to 13.8M). This is due to the expected shift of already established banks towards digitalization, and therefore the move of part of their assets under management to automatically-managed portfolios. For the same reason, the average portfolio dimension of automatically managed portfolios is expected to pass from \$65,000 to a staggering \$108,000, almost the double.

Fintech Lending, on the other side, “suffers” due to fast and easy access to traditional credit lines in the US. In this field, Fintechs are not able to overperform the classic brick and mortar loan providers, therefore, the market is small and will remain small, growing at a very low 1.9% YoY rate and reaching \$9B in granted loan value in 2023, passing from 8.2B\$ in 2018. Loan dimension is expected to increase slightly as well, from \$72.570 in 2018 to \$76.270 in 2023.

On average, Fintech solutions are mostly used by high-income customers (46.6%), in general males (59.3%) below 44 years old (85%), showing that Fintech industry is perceived as an alternative to traditional finance more than a mean of financial inclusion, as is case in China, for example.

**Figure 11. US Market Segmentation**



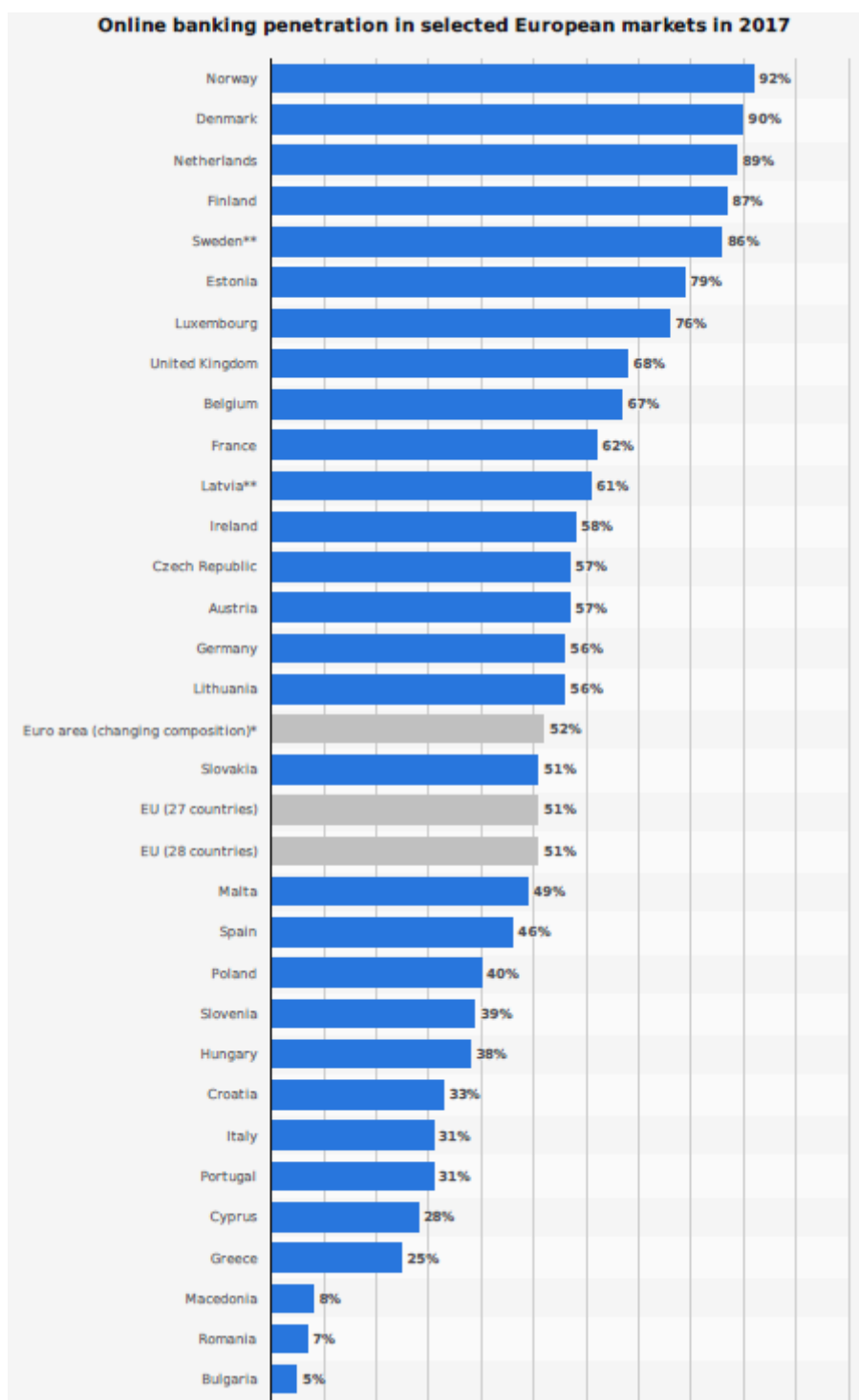
Source: Striapunina (2018)

For more detailed statistical data from Striapunina (2018), please see Appendix, Exhibits 2-7.

#### 4.4. Europe

Europe, specifically the European Union, is a very fragmented market when it comes to Fintech development, mainly because of the regulations that differ across member countries, but also because of the cultural and technological differences between the states and local areas. These differences are quite evident when looking at the digital approach towards traditional banking: while the EU average penetration of online banking over banks' customers is 51%, the number strongly varies from country to country, passing from the 90% penetration in Denmark to a minimal 5% penetration in Bulgaria.

**Figure 12.** Online banking penetration in selected European markets in 2017



Source: Statista, Eurostat

In any case, there are many companies that opted to provide their service without local “personalizations” throughout the EU, with limited regards when it comes to regional peculiarities. It is worth noticing that the peculiarities of the EU market lead to Fintechs

clustering in certain markets, such as the UK and the Baltics, where many are “established” (i.e. regulated by respective authorities).

The UK is by far the biggest Fintech market in Europe (the third in the world) and therefore it made sense for Fintechs to go where the demand was. Due to Brexit, many Fintechs “established” in the UK, but operating in other EU markets as well, are moving their “global” headquarters to other EU countries, in order not to have regulatory (passporting) issues when it comes to serving their European customers, while retaining “local” headquarters in the UK. This is unfortunate, because the decentralization of these companies may bring to a slower pace of the development of European Fintech solutions due to reduced competition and know-how sharing.

Baltics, on the other hand, are chosen as “establishing” destination due to local regulations that are perceived to be more open and more focused on Fintech needs. As a result, a high concentration of Fintechs is regulated by the central authorities of Lithuania, Latvia, and Estonia, even if they are based elsewhere (one of the most notable cases is Revolut, based in the UK, that opened a subsidiary in Lithuania to obtain a banking license).

European Fintechs are currently focused predominantly on Payments, although there is a considerable stake in Personal Finance as well, and a growing stake in the Lending segment.

Roughly 445.7M Europeans (60.1% of the population) use some kind of Fintech Payment solution, either in the form of Digital Commerce or Mobile POS Payments.

As is the case in the US, Digital Commerce payments solutions are by far the biggest area in Europe, accounting for 96.4% of overall Fintech payments in terms of transaction value. Percentages are similar to those of the US, mainly because of certain similarities in terms of culture and banking products already on the market, but in absolute numbers, there are fewer Fintech users in Europe. This is due to lower levels of trust when it comes to technology and data and wealth protection online, as well as to weaker push from established players that in the US, on the contrary, is quite strong. Anyhow, the Digital Commerce payment market is expected to grow along with e-commerce, passing from \$611B in 2018 to \$838B in 2023 in terms of annual transaction value, an average 6.5% YoY growth, slightly higher than what is expected in the US. The user base is expected to increase from current 445.7M to 470.6M users in 2023. Average per-user expenditure is expected to increase in the next 5 years, and that from \$1,370/person to \$1,780. The relative improvement expected is quite impressive but still low compared to the \$3,180/person in the US in 2018.

On the other hand, Mobile POS payments have a minor share of the Payment segment, but this area is growing much faster. The growth is spurred by cheap and simple technological improvements required for the implementation of the new payment system, as well as by the increase in consumers’ ability to use and trust their mobile devices for

personal finance. Surprisingly, 35.1M people used Mobile POS Payments in Europe in 2018, more than 10M more than in the US. Transaction value stood at almost \$23B, equating to around \$655/person, which was still much lower than the US figure which stood at \$2,470/person in 2018.

In the next 5 years, Mobile POS transaction value is expected to increase up to \$98B (quadruple of the 2018 figure, 33.6% YoY growth), and the user base is expected to expand to a total of 53.4M Europeans. This implies an increase in per-person transaction value to \$1,835, getting very close to the US 2018 equivalent figure, but very far away from the impressive 2023 US figure that is expected to stand at 6,520\$/person.

The European Personal Finance segment is almost insignificant when compared to the American counterpart (accounting for less than 10% of the same). When compared to China, the situation is slightly better but not optimal, as European Personal Finance transaction value equals half of that reached in China. A plausible explanation for staggering differences could be the smaller dimensions of the single markets within EU, and difficulty for a single Fintech to operate in more than a couple of countries due to different regulations and central bank requirements.

These restrictions strongly limit Fintechs operating in Europe in their quest to reach sustainable customer levels, raising entry barriers to the market. Nonetheless, European customers are getting more and more interested in the new solutions, and Personal Finance transaction values are expected to grow from \$43B in 2018 to \$180B in 2023, a good 33.2% YoY growth, followed by an increase in customer base from 0.9M to 3.7M. Portfolio dimension, on the other hand, is expected to remain roughly equal throughout this five-year period (47.780\$/person vs 48.650\$/person).

Furthermore, while access to credit in Europe is not as facilitated as in the US, regulations present are very strict when it comes to lending, that therefore remains a minor segment for Fintech. Overall, it is expected to grow from the actual \$7.3B to \$10.2B in 2023, a 7% YoY growth with a similar increase in terms of the number of loans issued, that is expected to be slightly above 1.2M. The average loan value is expected to remain constant, (\$7.570 in 2018 and \$8.060 in 2023), more or less a tenth of the average value in the US. The differences are easier to interpret when one considers that an average borrower in the US is an enterprise, while in Europe the prototype of borrower is a physical person.

For more detailed statistical data from Striapunina (2018), please see Appendix, Exhibits 2-7.

## 4.5. Italy

Italian Fintech landscape is in some ways very similar, while in others radically different with respect to the European market as a whole. According to Statista, it is very similar

in terms of market background, with internet and smartphone penetration rates around the European average (67.3% vs 71.9% for internet and 63.2% vs 63.5% for smartphones) and a similar GDP per capita, \$30,260 compared to the European average of \$28,550. Also, the distribution between Payments, Personal Finance and Lending is similar to that discussed for Europe. There is a high focus on Payments while Lending lags behind, and the number of users over total population is slightly lower, but not significantly. Here, similarities stop.

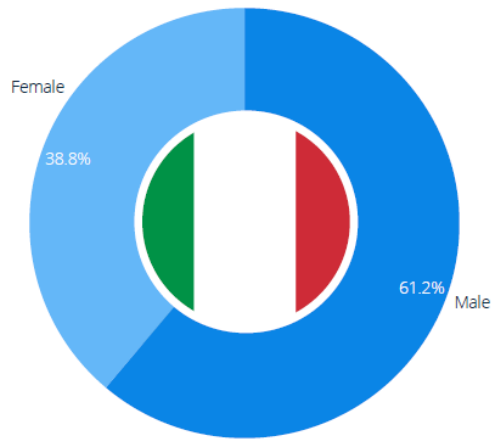
The differences are visible when considering the per capita figures for the different segments, where Italy is positioned on the lower end of the five big European markets (UK, Germany, France, Italy, and Spain). When it comes to Digital Commerce payments, the average amount spent by an Italian in 2018 stands at \$891 (35% below European average), while in Mobile POS payments average per-user transaction value is \$524 (20% below European average).

Expected yearly growth levels are in line with the European ones, standing at 7.6% and 33% respectively. This leads us to believe that it is highly unlikely that the Italian market is going to catch up with overall European average values. Similar data can be found for Personal Finance, where the average investment per person is around \$24,000, 49.8% lower than the European average and with a similar expected growth both in terms of total amount and user base, while, surprisingly, things change in the Lending segment. Here, the Italian market adapts to the peculiarity of its economy, mainly based on small and medium enterprises (99.9% of total enterprises, according to the Italian Chamber of Commerce) with limited access to traditional credit lines, for reasons ranging from the riskiness of the business and its geographical location, to speed of lending operations and complexity of disclosing the required information. This made Fintech Lending platforms very attractive to the corporate environment, much more than its consumer counterpart, traditionally less prone to taking on debt to finance day-to-day activities. The difference is striking in the average loan amount, that in Italy in 2018 stood at \$110,000, even above the American average of \$72,570, leaving the European average of \$7,570 far behind.

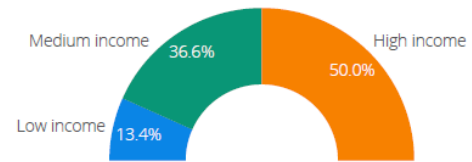
The average Italian Fintech user is a male (61.2%), high-income individual (50%), between 25 and 54 years of age (72.6%). These statistics are in line with the prototype of the Italian entrepreneur, showing a correlation between the usage of Fintech solutions for personal and professional reasons. Moreover, as was in the case of the United States, Fintech is not perceived as a way to bring the unbanked in the financial segment, but more as an alternative allocation of resources with respect to traditional channels.

**Figure 13.** Italian Market Segmentation

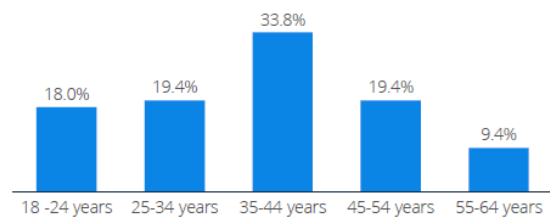
Users by gender



Users by income



Users by age



Source: Striapunina (2018)

For more detailed statistical data from Striapunina (2018), please see Appendix, Exhibits 8-13.

## 5. Tinaba's Competitive Environment

Following up on general considerations regarding Italian Fintech market, further description of competitive environment Tinaba is facing is needed in order to better understand the problems and opportunities inherent to the industry. In the following sections, we will discuss both Italian and some European competitors, as Fintech solutions in the EU can be exported due to the single market premise, even though state banking regulations are to some extent different<sup>5</sup>. Different user interfaces, possible account-accompanying cards, and company logos are to be found in the Appendix.

### 5.1. Italian Fintech Competitors

#### 5.1.1. Satispay

Satispay was founded in 2013 in Milan and from the start was incorporated in London, UK, even though it ran all its operations in Italy. In April 2019 Satispay moved its legal headquarters to Luxembourg, in the wake of Brexit and its implication for operations of UK-incorporated companies in the rest of the EU. Satispay has chosen this “legal internationalization” due to lower legal and fiscal requirements imposed in the aforementioned countries with respect to Italy.

Satispay offers its users a digital wallet via a smartphone App. The Satispay wallet has to be connected to an Italian bank account and is automatically topped-up from this account on weekly basis and up to the amount set up by the user as her weekly budget.

Satispay's network has grown to be quite broad, with over 500,000 users as of 2018, and around 1,000 new ones that join daily. However, these numbers have to be considered with caution as they do not represent the number of active users: account deactivation cases are rare, but there are “customers” that are at all effects inactive and last used the App years ago.

On the other side, the popularity of Satispay among consumers is attracting ever more merchants into its network, and recently it has “acquired” quite big names such as Esselunga (the most popular supermarket chain in Northern Italy), Coop, Benetton, Total Erg, Trenord (train operating company), etc..

Apart from P2P transfers and C2B payments that can be executed within the network, Satispay offers its consumers opportunity to make payments towards “Public Administration” (such as taxes and other payments towards public sector), pay for utility bills and even at vending machines.

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<sup>5</sup> apart those covered by overruling EU directives of course.

Their main customer target consists of individuals belonging to the 18-40 age group, and Satispay teams, especially in the beginning, used to go around Italian universities running promotions and gathering first-hand feedback. Their main channel for acquiring customers has been the member-get-member approach: each new member signed up following an invite gets a bonus for both parties.

Even though this “word of mouth” marketing has functioned pretty well up until now, they have recently (since January 2019) decided to run some “guerilla marketing” campaigns. The most fruitful one has been to “paint the trams red” (Satispay’s main color) in Italy’s biggest cities such as Milan and Rome, with catchy marketing slogans on trams’ sides.

**Famous for...** Satispay earned its fame offering “cashbacks” to its customers, that is, “giving back” a certain percentage of the shopping value to the customer right after the purchase has been made. These percentages range from 1% to 25%, depending on parameters like the regularity of use of the App.

**Pricing.** Consumers pay no fees, and all profit for Satispay comes from fees charged to merchants. These are fixed for brick-and-mortar stores (€0.2 per transaction over €10, 0 otherwise), and variable for e-commerce stores (0.5% for transactions under €10 and €0.2+0.5% for those over €10).

### 5.1.2. Hype

Hype was created in 2013 in Biella by Gruppo Sella, the ultimate owner of Banca Sella, a historic Italian commercial bank founded in 1886. Gruppo Sella, and particularly Banca Sella, has always been attentive to the development of new technologies: it was the very first groups to bring Prepaid cards in Italy, the first one to bring ATMs and among the first to create a website with a proper home banking section. In 2017, in Milan, Gruppo Sella opened the “Fintech District”, an innovative start-up incubator and co-working space meant to enhance the digitalization of the Italian market and to provide the Group with interesting investment opportunities.

Hype is seen by the Gruppo Sella as the forefront of digital banking, a sort of test of functions that traditional commercial banks will have to implement in the future.

Hype offers two types of accounts:

- Hype Start: a free account, based on a prepaid card, that allows the user to do cash withdrawals from ATMs all around the world and payments in forms of card transactions, even with third-party products like Apple Pay and Google Pay; in-network transactions, both P2P and C2B payments with other “Hyper” consumers and businesses; bank transfers, to any other SEPA bank account; and bill payments. This

account can be recharged from another card, a bank transfer or from Banca Sella ATMs, but has a recharge limit of € 2,500/year.

- Hype Plus: a premium account that costs €1/month, but it strongly improves the scope of the Hype Start account. On top of the Hype Start features, Hype Plus gives its users the possibility to recharge the account up to €50,000/year, to directly deposit the user's wage on the account and to use other features of the app, such as Smartphone instant insurance (in partnership with the German Insurtech Simpleurance) and Instant lending (powered by Sella Credit) of up to €2,000.

Hype managed to reach roughly 600,000 customers in 6 years between the two types of accounts, leveraging on the fact that a normal bank account generally costs more than €12/year, but it is difficult to say how many of those accounts are active on monthly basis.

**Famous for...** Everyone older than 12 can open an account. Every other Fintech competitor in the Italian market, due to high due diligence requirements regarding contracts for minors, allows accounts to be opened only by individuals that are at least 18 years old.

**Pricing.** Hype revenue model is mainly based on fees received from card transactions and from premium account fees, and with the new Hype Plus features, on fees received from insurance and interests from lending.

### 5.1.3. Oval Money

Oval Money was founded in Turin, Italy and incorporated in the UK (following the same logic of Satispay) in 2017. It is a bank-account aggregation App, and as a base function allows its users to see all money movements they make through all the bank accounts they chose to synchronize. This business model has been helped by the introduction of PSD2 regulation, that permits third parties (mainly Fintechs) to access bank data of their customers if the latter allows them to. In June 2018, Intesa Sanpaolo<sup>6</sup> acquired a stake in the company, in order to improve its digital banking offer.

Currently, Oval Money has more than 200,000 customers.

As having a bank-account aggregation App is not very exciting per se, Oval Money allows its customers to make P2P transfers within the "Oval" network, and to save "the change" for every purchase they make. "The change" is the amount that would render the price paid a whole number: for example, if one makes a purchase of €2.10, Oval Money puts €0.90 to the savings account.

In fact, Oval started with an idea of stimulating saving habits among the young Italians: the founders came up with the idea of this App after reading a S&P report that stated that

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<sup>6</sup> The biggest Italian Commercial Bank by capitalization as of 2019.

less than 50% of European under-30s saved more than €1000 a year, and that financial knowledge of Italian youth is among the lowest in Europe, with only 37% of the total reaching a sufficient grade in basic financial knowledge test. Their “save the change” strategy functioned quite well, and an average Oval Money user passed from saving €63 a month (before App) to €130 after they started using the App.

Recently (April 2019), Oval Money issued a debit card to be connected to the account and that is meant to facilitate and speed up the App’s functions. As a part of the same product upgrade, they are now offering Robo-Advisor for their customers to invest their savings in order to earn on them, potentially making personal finance prudence even more popular among the young.

***Famous for...*** Short, funny marketing campaign videos made for the “young” as defined before, that are publicized mainly on YouTube.

***Pricing.*** Before the birth of Robo-Advisor within Oval Money, users did not earn on their savings, they just put their own money away as a deposit. Oval, however, always re-invested these funds in very liquid and low-risk securities, earning some interest on those, around 1-2% of the invested amount. With the Robo-Advisor, Oval Money is able to collect money management fees as well.

#### 5.1.4. Moneyfarm

Moneyfarm was created in 2011 in Milan, but was first incorporated in Cagliari, in order to provide a benefit to its investors stemming from the incentives of Sardinia’s “Depressed Area” status, and then in London, where taxation is lighter and there is a more Fintech-focused regulatory environment. Due to Brexit, Moneyfarm, that is present in Italy, UK and, thanks to the new acquisition of Vaamo, Germany, applied for a license in Luxembourg, where it is likely to bring its headquarters in case of a Hard Brexit.

Moneyfarm works within the Personal Finance segment of Fintech, particularly in the Robo-Advisory area, offering a broad choice of automatically rebalancing investment strategies, with a wide range of ETFs, stocks, and bonds available.

The declared scope of Moneyfarm is to democratize and to make the investment process more transparent for its customers, and in order to show their strong belief in these statements, Moneyfarm took specific actions.

The first was to exclude funds from the offered products, because in the company’s opinion funds’ fees are generally too high, with the fees being split between the fund issuer and the purchaser bank. This generates a conflict of interest that penalizes the customer, because banks have a stronger incentive to sell fund products instead of other, possibly better performing or more fitting products for their customers’ needs.

The second action undertaken by Moneyfarm was to file a complaint at Consob, one of the Italian regulators of the financial sector, denouncing the slow response of traditional financial players to MiFID II request of “clear and transparent prices for the customers”. Although the allegation was true, it later came to light that it was not the traditional banks that kept information from their customers but the most widely used “core banking platform”, CSE, that did not update its system to meet MiFID II directive requirements in the prescribed times.

Moneyfarm currently has around 50,000 customers in the Italian market. Its customers can reach a consultant via phone or by going to one of the two offices on the territory, in Milan and Cagliari. The Robo-Advisor, though, is thought to work without any expert consultancy, and it is specifically marketed as an investment tool that enhances customer’s financial knowledge and independence.

***Famous for...*** Implementing a €2M marketing campaign broadcasted via the most popular Italian TV channels, Rai and Mediaset, where it questions the honesty of financial consultants: “Does your consultant mind your businesses... or his?”. This generated outrage in the Financial Consultants Association, that filed a complaint to Consob, further boosting the popularity of Moneyfarm.

***Pricing.*** Moneyfarm accepts investments starting from €5,000, and the pricing is flexible and ranging from 1.33% to 0.63% of the AuM, with all costs included and pricing inversely correlated to the level of AuM.

## 5.2. Italian banks’ digital solutions

Italian banks, in the last few years, opted for offering some digital solutions for their clients. Lots of them created specific brands with mixed digital/physical channels through which to offer their own products: UniCredit<sup>7</sup> created BuddyBank, UBI<sup>8</sup> created IW Bank, Gruppo BPM<sup>9</sup> created WeBank, etc.. We decided to focus only on two of them, CheBanca! (by Mediobanca) and Widiba (by Monte dei Paschi di Siena), because in our opinion they are the best examples of the “non-complete digitalization” of banks, a system that has proven to be very well accepted by the customers in Italy.

### 5.2.1. CheBanca!

CheBanca! is a digital bank, designed to be a next-generation banking service provider by the Mediobanca Banking Group, one of Italy’s major investment banks. It is an

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<sup>7</sup> The second biggest Italian Commercial Bank by capitalization as of 2019.

<sup>8</sup> The fifth biggest Italian Commercial Bank by capitalization as of 2019.

<sup>9</sup> The sixth biggest Italian Commercial Bank by capitalization as of 2019.

interesting case study for understanding the Italian banking market and customers' requirements and needs, as it presents a merge between a digital and a traditional bank.

CheBanca! was inaugurated in 2008, and it presented a very simple product line, supported by an aggressive marketing campaign with simple messages and a transparent communication program. As of today, CheBanca! has more than 500,000 customers, more than €14B in total assets, and is officially recognised as being the “Best Digital Bank” in Italy for customer satisfaction.

The most interesting thing about CheBanca! is that it operates across multiple channels, as compared to other players in the market who all communicate with their clients via apps only. The fundamental reason for this difference lies in the fact that CheBanca! entered the market much earlier than its current competitors: in 2008 not even the first iPhone had reached the Italian market, and an App-based product was simply not an option. CheBanca! is nowadays offering its services via computer-based home-banking, branches, and a proprietary app as well.

Another interesting thing about CheBanca! is that it is a digital bank in the essence, but it also operates some branches, mainly in large Italian cities. Although it might seem counterintuitive, this business model has been quite successful, as Italians are much more likely to trust a “physical” bank with their personal information and funds. For example, asset holdings in areas with a branch are 2.5 times more than those areas that are unbranched. According to Skinner's case study on CheBanca!, it is gaining 4,000 new customers per month with 45% from branches and 37% from remote contact (30% of that 37% is generated by home-banking portals, not mobile). The remaining balance of 18% is generated by third-party physical channels, implying that 63% of customers have been acquired via direct physical contact. This demonstrates the increased trust in the branch services as well as the strength of the branch in building the brand.

However, according to the same case study, 63% of the customers declared that they are handling their transactions exclusively via digital channels, implying that when it comes to operations, Italians prefer convenience over “security” of the physical branch.

Finally, when Roberto Ferrari, CheBanca!'s CEO was asked whether start-ups are an opportunity or a threat in the banking industry, he responded in the following manner:

Start-ups are the lifeblood of every sector. Challenging the market, bringing innovation, forcing incumbents to move, nourishing the competition and, thus, in the final analysis, favoring the improvement of the ecosystem. If someone sees them as a threat, they are making a mistake. Those who wall themselves in are destined for extinction, it is just a question of time. We work with Fintech start-ups, we develop services. It is very good for us. And we help them grow and get stronger.

### 5.2.2. Widiba

Widiba is the digital bank of Gruppo MPS, head organization of the oldest bank still active in the world, Monte dei Paschi di Siena. Widiba was created by the group in 2014, and its main aim was to provide a fresher image to Monte dei Paschi di Siena, given turbulent times it has passed in the aftermath of the financial crisis and the barely-escaped bankruptcy due to liquidity issues.

Widiba's goal is to provide its customers with an innovative approach to managing their money, allowing them to access all the functions provided in Monte dei Paschi branches with just a few clicks. The home banking page is highly customizable: customers can change it as they need and wish to do.

An interesting fact is that Widiba was the first Italian bank to offer paperless mortgages to its customers, demonstrating that the passage towards digital banking can be done even by most traditional banks.

Furthermore, Widiba's platform offers Private Banking functions, although not in the usual form of a Robo-Advisor: customers can contact one of more than 600 experienced financial advisors, serving both Monte dei Paschi and Widiba's clients. This feature is highly appreciated by customers, especially those that are older, more affluent, and prefer to have some "human" control over their investments.

Interestingly, Widiba has had a troublesome beginning: Monte dei Paschi, in order to test and market its new product, "moved" some of its own users' accounts, mainly those most active on the home banking portal, to Widiba's platform. Expectedly, this move was not appreciated by many of its clients, as the interface was completely modified with respect to the previous MPS home banking, and at the beginning a wave of confusion was created among the "unwilling" customers. Fortunately for Widiba, the story had a happy ending: new platform proved to be faster and more efficient due to the new software architecture and IT systems that substituted the outdated MPS' alternative. At the moment, Widiba has 240,000 customers all around Italy, and it plans to grow by attracting young clientele due to the ease of use and the almost completely digital offer.

## 5.3. International pure Fintech competitors

### 5.3.1. Revolut

Revolut was founded in 2015 in London by two Investment bankers, who decided to offer a product that allowed its users to shop in different currencies without the need to pay astronomical exchange rate fees, that are usually typical of such transactions. The services offered radically increased since then: a card was added to the base offering along with the possibility to have wallets denominated in different currencies, to have a savings account, to buy instant insurance and to invest in the hottest Cryptocurrencies. Revolut

applied for and received an e-banking license from the Bank of Lithuania, that, as mentioned before, has regulations that are more open and focused on Fintech solutions.

In 2018 Revolut became a so-called Unicorn, reaching a valuation superior to \$1B and, according to CB Insights, raised more than \$250M between crowdfunding and Institutional investors. At the same time, it reached more than 3M customers in their market area, consisting of the European Economic Space, Switzerland and Australia. Plans to open up to other markets are already on their way, as Revolut has opened up offices in the US, Russia, Canada, South America, and Asia.

In recent period Revolut suffered from allegations of fraud prevention misconduct and a general lack of compliance to regulatory requirements. Such allegations were also boosted by the resignation of Revolut CFO in March 2019, but the CEO (Nikolay Storonsky), in a press statement that followed affirmed that Revolut never failed to meet regulatory requirements and that the CFO resignation was agreed well before such voices broke out.

Revolut offers 4 different kinds of accounts, one for Businesses and three for Consumers.

While business account permits its users to receive payments and pay their suppliers in a broad range of different currencies (29, to be exact) both offline and online, Consumer accounts allow their users to pay in the same currencies, both via the app and the connected debit card. Unlike some other providers, Tinaba included, Revolut does not have its own “network”, but completely relies on VISA’s payment network, much like many banks.

Revolut’s Customer accounts differ in limits on free transactions (both in terms of fees charged and exchange rate used, when paying in different currencies) and services offered. Standard Consumer account gives users basic Revolut functions, like P2P transfers, e-wallet in Pounds and/or Euros and fee-free transactions of up to €6,000/month. The Premium account adds onto this, providing for elevated limits, access to Insurtech products (in collaboration with Simpleurance) and possibility to invest in up to 5 cryptocurrencies. Finally, top-of-the-line product, the Metal account, apart from adding on a fashionable metal card to the package, provides for a 1% cashback on all purchases and a set of special perks such as concierge service and access to VIP lounges at airports around the world.

***Famous for...*** Offering a wide range of currency wallets for free and charging no currency exchange fees. Moreover, the iconic multi-coloured, glittery card is easily recognizable and an important brand asset. Being the first payment Fintech in Europe to open up to easy investment in Cryptocurrencies also helped in boosting a positive image of the brand.

**Pricing.** The business account costs from £25 to £1.000 per month, based on the monthly sales of the company. The consumer accounts have a price of €0/month for the Standard, €7.99/month for the Premium and €13.99/month for the Metal.

### 5.3.2. N26

N26 was founded in Berlin in 2013, and at first, it served as a user interface for the German financial services provider Wirecard, until it received a banking licence from BaFin in 2016. The idea of N26 was to allow its customers to have a regular German current account fast and for free, with all basic bank account features available: a debit card, a savings account and a possibility to make P2P and bank transfers. Other services, labelled as premium, are subject to additional fees.

The core markets for N26 are the European Economic Area countries, where in 2018 it reached 2M customers. Thanks to such a staggering expansion, it also became a unicorn, and as of January 2019 it was valued at \$2.7B. However, this growth did not come for free: N26 was accused of having loose and non-compliant Know-Your-Customer (KYC) policies. Subsequently and consequently, issues regarding the management of its accounts arose: numerous reports and complaints were filed towards BaFin regarding miscommunications to customers concerning numerous account blocks and closures. N26 promptly responded to these allegations stating that its KYC procedures are legally compliant and that they will improve their communication towards customers. Despite these issues, N26 declared that it is going to open an American branch in 2019 in an attempt to keep up with and possibly get a head start on competitors like Revolut.

N26 offers two different types of accounts for businesses, intended for freelancers and self-employed; and three for consumers. Business accounts are called N26 Business and N26 Business Black and offer a current account with all basic features mentioned before, along with a cashback of 0.1% on all purchases made. Additionally to this, the Black account charges no fees on foreign currency transactions or cash withdrawals and provides access to health, travel and phone insurance, offered in partnership with Allianz.

Consumer accounts are called N26, N26 Black and N26 Metal. N26 and N26 Black are equivalent to their Business counterparts, apart from the cashback feature, while N26 Metal is no different from N26 Black in terms of product offering, but it provides customers with a fashionable black metal card that establishes it as “top of the line” product.

**Famous for...** The design of the “base” card, that is completely transparent, as well as the design of the site and the app, with colours chosen to provide a feeling of simplicity and high quality.

**Pricing.** The basic accounts, both Consumer and Business, are free, while the N26 Black accounts cost €9.90/month in both variants. N26 Metal costs €16.90/month.

## 6. Tinaba Overview

### 6.1. Tinaba Partners and Corporate Structure

Sator is an Italian PE firm, founded in 2006 by Matteo Arpe, former CEO of Capitalia (now part of UniCredit) and previous Head of Investment Banking of Mediobanca. Mr. Arpe also remains the major shareholder of the fund, although some high-calibre Italian companies like Gruppo Monte dei Paschi and API Holdings, the second biggest oil company on the territory, have acquired significant stakes in the fund since its initiation.

Sator operates a single fund, SPEF (Sator Private Equity Fund), that has diversified by investing in a broad range of industries, from e-commerce (ePrice) to real estate (Aedes SIIQ); from luxury (L'Autre Chose) to media and biotech (News 3.0 and 99 Technology). On top of these, Sator SPEF has big investments in the banking industry: it owns a minority stake in Extrabanca, a commercial bank that mainly focuses on serving foreigners living in Italy, as well as a majority stake in Banca Profilo, a private wealth managing bank based in Milan that serves high-net-worth individuals and with offices throughout North and Central Italy.

Banca Profilo, as a great majority of Italian banks, was hit hard by the Great Financial Crisis of 2008, and by 2009 it was on a verge of bankruptcy. In the same year, it got acquired by Sator SPEF: this was the first and only private buyout of an Italian bank during the last Financial and Euro crisis. Since then, the bank grew to an AuM value of €8.4B (as of March 2019, according to Banca Profilo's Q1 financial statements), becoming a significant player within the private banking sector in Italy. However, its relatively small size compared to other players in the industry is at times burdensome, namely in terms of cost-to-income ratio: according to Banca Profilo financial statements, it stood at 82% in 2018 and it was among the highest in the sector.

Tinaba was founded in 2015 as an idea of Matteo Arpe. Initially, it was imagined as a substitute to a traditional bank; in fact, Tinaba is a funny yet witty acronym for "This Is Not A BANk". Tinaba started operating in 2016, and since the beginning it offered an e-wallet and possibility to do P2P and C2B transactions within its network. Along with these, a prepaid card was issued with every account, enabling "out of network" transactions as well. During this period, Sator SPEF owned 100% of Tinaba's equity.

**Figure 14.** Tinaba’s Logo Evolution



Source: Tinaba

In 2016, and simultaneously with the beginning of the operations, a partnership was established between Tinaba and Banca Profilo, allowing the Fintech to operate and to expand its product offering while respecting regulatory requirements. The product expansion, since then, ranged from a non-interest-earning savings account, similar to the one offered by Oval Money described before (developed in 2017), over a Robo-Advisor (2018) and finally to an interest-earning savings account (2019).

The partnership also entailed a change in Tinaba’s ownership structure, with Banca Profilo acquiring around 4.6% of the total equity stake, in order to evade possible asymmetry issues and align interests. At the same time, Sator, the General Partner of Sator SPEF, gradually increased its direct equity stake in Tinaba, reaching roughly 13.3% at the beginning of 2019.

Considering this partnership from Banca Profilo’s point of view, the Fintech business is potentially extremely profitable as it is inherently scalable. Capex is limited as it mainly pertains to customer services provided by a call-centre, and variable costs represent the bulk of expenses. This factor is of crucial importance for Banca Profilo, considering that the asset gathering business has historically been burdened by high costs stemming from hiring and remunerating financial advisors leading to its elevated cost-to-income ratio cited before. Eventually, partnership with Tinaba is expected to provide for improvements in this sphere.

## 6.2. Products and services offered: the importance of having Banca Profilo as a partner

To better understand the importance of the partnership between Tinaba and Banca Profilo for both parties we present a very short overview of the operative functions of the bank, along with ways in which the partnership has changed Tinaba’s offering.

Banca Profilo is a listed Italian bank mainly focused on tailor-made private banking solutions and capital markets. The bank serves approximately 3,000 clients through 6

branches and 201 employees (of which 46 are private bankers). It primarily serves Italian clients, but also operates in Switzerland through its affiliate, Banque Profil de Gestion.

The principal offering of Banca Profilo consists of advisory investment services pertaining both to traditional and sophisticated financial opportunities.

The traditional offering consists of administration and management of financial assets, while the “sophisticated” opportunities are selected by a team financial professionals out of a range of club deals originated by primary financial institutions and pertaining to a wide spectrum of industries (financial, biotech and digital start-ups, as well as real estate projects). These investment opportunities are then sold to the bank’s clients (e.g. family offices) and demand higher fees than usual advisory services — up to 3% upfront and 1.5% running. The bank does not only promote those deals, but also takes a direct commitment with an average investment ticket ranging between €5-30M. Around €150M has been invested in club deals so far, and the bank plans to further expand this area of expertise in the next future.

Banca Profilo is currently aiming at integrating innovative digital solutions specifically devoted to younger clients in with its high-end private banking services.

Such attempts to balance these two diametrically opposite areas of banking represent an interesting case, and this clear positioning equips the company to successfully cope with future challenges in the industry.

The solutions for younger clients are offered through Tinaba, with whom Banca Profilo shares the same parent organization, Sator Private Equity Group. The cooperation started in 2017, but it was not until October 2018 that all Tinaba’s newly registered customers got a free current account with Banca Profilo. In the meantime, users could choose to be “Level B” and have just an anonymous e-wallet or “Level A” and have a proper banking contract.

Operatively, the difference between the two accounts is that “Level B” clients could have just made transfers within the Tinaba network or through the prepaid card associated, that had very low recharge and withdrawal limits due to regulatory drawbacks of “anonymity” of the account. On the other hand, the “Level A” customers have a standard bank account offered by Banca Profilo (that can be used to make bank transfers both within Italy and internationally and is accompanied by a prepaid card with much higher operational limits), along with the possibility to interact within Tinaba’s network. Both account types have always been free of charge, and since October 2018 Tinaba decided to terminate new subscriptions to “Level B” accounts.

Partnership with Banca Profilo is allowing Tinaba to operate within the Italian banking sector without having to ask for a banking license (a €20M+ investment) and establishes it as a modular platform that can eventually be exported by changing modules offered on the platform based on necessities of its potential international banking (or other) partners.

Additionally, partnership with Banca Profilo renders Tinaba very strong within the investment sphere, as Tinaba's Robo-Advisory product is completely backed by Banca Profilo's decade-long successful experience within the sector.

Banca Profilo is, via Tinaba, entering a new and still vastly unexplored market by bridging the advisory gap - i.e., providing investment advisory services to people with limited wealth (minimum investment in Robo-Advisor is €2,000). Such a market presents distinctive features, and the risk of cannibalizing high-end advisory services already offered by the bank to affluent and private clients is very low.

### 6.3. Focus on Tinaba and its Business Model

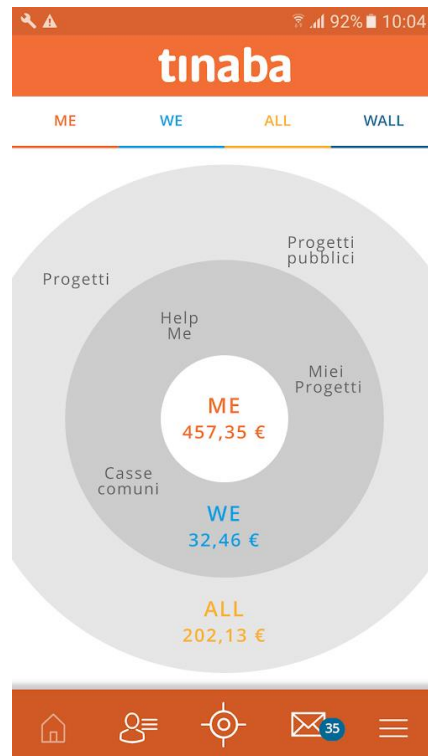
#### 6.3.1. Values and Culture

Tinaba is strongly customer-oriented, as is common for start-ups. Obviously, its core values have evolved with time due to the newly established partnerships and the development of new products offered through the platform, but at the moment they can be summarized as follows:

- **Customer integration:** a core value of Tinaba and one of the pillars of its business model is to make the customer feel part of a greater environment, showing the concept that even when talking about something private as personal wealth, a person is always part of a greater community. As we found out in conversations with Tinaba's management, this value was clearly presented in one of the first App releases, where the customers could have seen three main operative areas, the so-called "Me, We, All" structure, presented as concentric circles in the order cited. The "Me" area presented all transactions made for purchases and e-wallet recharges, the "We" area showed all transactions and e-wallets shared with friends and family, while the "All" area showed all transactions done with "external" entities, such as local associations or charity foundations. The structure changed slightly to provide for a more comprehensive App interface, but the three areas of operations are still clear and present on the landing page.
- **Product integration:** Tinaba, since the very beginning, seeks to offer its customers a broad range of products, following a business model blueprint similar to that of Alipay, but restricting the services "only" to the financial environment. This value proposition grew stronger after the integration with Banca Profilo, allowing for more products to be served through the "ecosystem" platform. One of the main selling points of Tinaba at the moment is: "Why having a thousand apps when you can have only one?"
- **Ease of use:** Tinaba's products should be available to all its customers in a few taps, and customers' requests should be fulfilled as soon as possible, as to guarantee a positive customer experience. Personal experience is highly valuable, given the high

conversion rate through the so-called “Member get Member” policy. Following this value proposition, another selling point for Tinaba is the slogan: “Get Things Done”.

**Figure 15.** Me-We-All user interface



Source: Tinaba

**Figure 16.** Tinaba’s Ecosystem Slogan



Source: Tinaba

Tinaba’s culture is very start-up-like, as structure within the team is relatively flat, the whole team shares a single co-working space, and from what we experienced the atmosphere is rather relaxed. However, close ties with a classical high-end private bank are felt in the execution of tasks that are strongly compliance - related; both because these tasks cannot be taken easy and because Compliance team is “shared” with Banca Profilo. Furthermore, both Tinaba’s offices, in the city centre of Milan, are shared with Sator and Banca Profilo. While this close proximity could have negatively affected both the

cultures, due to their inherent differences, Tinaba's employees managed to merge the precision and diligence of a traditional bank with the openness and friendliness of a start-up.

### 6.3.2. Strategy and marketing positioning

Following up on the research on what Tinaba is now, what it offers, market strategy and positioning for future endeavours is to be discussed next.

First of all, apprehending its actions and reasoning inductively we came up with the conclusion that the ultimate goal of Tinaba is to offer the most comprehensive Fintech App on the market with the broadest network of users. Our conclusions were confirmed by Mariano Carozzi, former CEO of Tinaba, and other Tinaba's managers, who also added that the "market", which is currently defined to be just Italy, is to be expanded in the future, exporting the modular platform to other EU countries.

The strategic key for achieving these goals is to expand the network, in terms of both accredited merchants and end-consumers. In order to attract both, Tinaba has to make its product appealing, but to achieve appeal, the product has to be rendered understandable before. Although this may seem to be an easy task, after spending 6 months working with Tinaba we noticed it is not necessarily so.

As briefly mentioned before, Tinaba offers a broad range of financial products: P2P and C2B payments, connected prepaid card, Robo-Advisory, savings accounts, collective accounts, and crowdfunding. All these products are offered together and as a part of the same account (there are no "Basic"/"Premium" offerings), and it is quite a challenge to present all the parts as integrated functions without creating confusion among users who seem to feel that if they do not understand one product or do not plan to use it, then the whole App is just not for them. It feels slightly counterintuitive, but it appears that the lack of "Premium" options and full offer at no cost and with a "Basic" tag is pushing the usual "Basic" users away.

A big problem Tinaba is facing in terms of strategic and market positioning has to do with the lack of comprehension within the targeted customer base(s): Tinaba has to "speak" to a broad range of customers and present itself in an optimal way to all of them. Many efforts to try and tackle this issue have been made with increasing intensity within the Marketing department in the last couple of years, and these will be described more in detail further on.

Another issue Tinaba is facing concerns the way in which it addresses its competitors: given the broadness of Tinaba's product offering, all the companies listed in the competitive landscape before are competitors to some of its products but none is a competitor to the whole "ecosystem". The fundamental difference in Tinaba's approach to the market with respect to its Fintech counterparts is that Tinaba did not choose one

aspect of the financial system that can be improved by implementing a technological solution, as others did, be Lending, Payments or Personal Finance segments. Tinaba proposes that making these “small fixes” to a “broken” system is like fixing leaky faucets in a burning building, and what it proposes instead is a brand new financial “ecosystem” adapted to the digital age we live in.

When it comes to the security of obtaining financing, Tinaba has an upper hand over other Fintech start-ups, as it is a part of a PE fund and not subject to oscillations in investors’ sentiments during multiple funding rounds, where the “next big thing” is always expected. At the bottom line, due to the secure financing line, Tinaba can afford a slower, healthier growth than any of its Fintech start-up competitors cited. Alongside, having the same parent organization as Banca Profilo has allowed Tinaba to partner up with a bank without a lot of media coverage and potential subsequent polemics, and be able to execute all banking operations without “spoiling” its brand with negative image carried by banks in Italy in the last decade.

As a final consideration, Tinaba can hypothetically “beat” all the other Apps on the market already, simply by making them obsolete and ineffective given all their functionalities are integrated within Tinaba’s App already.

However, during our conversations with Tinaba’s managers, it became obvious that this is not the case and according to them, this is due to Tinaba not being the first player on the market. As a consequence, it was faced with a difficult task of convincing customers who are already part of different networks to leave those and join something else, even if more convenient and efficient. The network effect within these P2P-transfer based Apps is strong, as is the case with social networks: for example, almost no one would agree to leave Facebook for a different network no matter how good it might be if all their friends decide to stay locked-in to Facebook. The situation is the same within the Fintech App market and to establish a functioning network, groups of people have to be onboarded contemporarily. This is the underlying reason why the member-get-member approach functioned better than any marketing campaign so far in boosting Download numbers. To have this approach function all you need is to convince one group member, the so-called “first mover” and have him or her invite friends and family, offering a cash-bonus both to the “first movers” and to their invitees. Almost everyone would “waste” 10 minutes to download and register for another App if they are promised a €5 award at the end of the process. After all, recent research run by App Annie in European market showed that an average European citizen has around 90 apps installed on their smartphone: one more makes no difference.

Tinaba’s strategy at the moment is to expand its network this way and along with the new marketing campaign cited before raise awareness and understanding of the App and its integrated products within different customer groups.

### 6.3.3. Customer relations and marketing approach

Unlike some other Fintechs in Italy, like Satispay, who communicate with their clients via App only and who are reachable to clients only by “feedback” function within the App, Tinaba has a broad range of communication channels: the App, email, phone, and social networks.

The “base” communications regarding generic messages like activation of account or some of the products and promotional emails are modular and sent by an outsourced call-centre. The call-centre also has some degree of autonomy when it comes to replying to customers’ queries received via email or phone, as Tinaba and Banca Profilo have provided them with procedures to be followed and answers to be provided to common questions.

In the case of more particular inquiries, social media comments (and direct messages) or service complaints, Tinaba CRM (Customer Relationship Management) team contacts clients in question directly. In the very remote case of official service complaint, it is Banca Profilo’s Digital Channels and Legal teams that handle the case along with Tinaba’s CRM team.

When it comes to marketing efforts, Tinaba, as all digitally-based companies, reaches towards (potential) clients utilizing an omnichannel strategy focused on attracting, helping and retaining customers on the platform. This is not an easy job: the variety of products offered within the Tinaba’s “ecosystem” is so broad that it is difficult to identify a single customer prototype to target.

For example, the typical Robo-Advisor customer is a person with at least €2,000 to invest, much different from a student that would like to divide the cost of a pizza with friends, or a person that wants to save few euros weekly through the savings account to afford a new bike or TV.

Furthermore, geographical scope is of high importance when it comes to marketing approach: while the target customers for the basic current and savings account are usually those that have restricted access to traditional banks due to the distance from the nearest branch, the target customer for the Robo-Advisor is a person living in a city with a multitude of bank branches, but with a relatively low amount of savings to invest, as well as a rich person with plenty of bank accounts that wants to try out a new investment method.

As of now, Tinaba’s average customer is from the Southern part of Italy, within the age range of 18 to 35, and with middle to low income. This “portrait” reflects the relatively early stage of development of products such as the Robo-Advisor and interest-bearing savings accounts, that, despite the links with an established bank like Banca Profilo, have still not managed to attract a great number of customers, that remains an important goal for the future.

In order to target all the customer groups cited before, Tinaba opted for a broad and vague marketing campaign, as to increase general brand awareness and present the product to a diverse customer base.

The preferred way of sharing updates and presenting new marketing campaigns and promotional offers is through the App itself or through online channels, using banners and targeted ads aimed towards those that showed interest in Tinaba or its competitors. This is a common practice among all Fintechs, for whom acquiring the “first movers” as customers are often fundamental for attracting their peers too, and ultimately for expanding their customer network. Online marketing is generally cost-efficient, as it is paid for at a per-click or per-view base, and entails high conversion rates.

Another important channel, especially for “older” clientele, is the mainstream media, namely TV, radio and newspapers. In 2017, Tinaba aired a commercial on Mediaset, the second most important Italian TV company. The commercial suggested using “physical” wallets for cleaning dishes, playing with dogs and as a “stabilizing object” for a rickety table, while the new Tinaba e-wallets substitute them as tools for cash conservation and distribution. Commercials on radio and newspaper are aimed towards wealthier and “older” clientele and are focused on the Robo-Advisory product. Both the chosen radio and newspaper are part of the “Il Sole 24 Ore” group, one of the most prominent Italian media companies for business-related news. The aforementioned commercial was simple and straightforward, pointing out the possibility of investing money through an innovative, easy-to-use solution like an App, powered by Tinaba and Banca Profilo. In this case, the presence of Banca Profilo is fundamental in informing knowledgeable customers that the platform is solid.

Last but not least, physical marketing campaigns on the territory have always been important to attract determinate categories of customers and to get some “free” press coverage about new launches or partnerships. For example, to celebrate the Chinese New Year, Tinaba rented a shop in Milan’s Chinatown where consumers could buy products inspired by Chinese culture using both Tinaba and Alipay Apps, giving a practical example of what the recently established partnership between the two companies represents in terms of integration between the two systems.

Once a customer decides to try out Tinaba, before getting to use it, she needs to pass the onboarding process and all related procedures of the so-called “Know Your Customer” process. This process, required by state regulations, consists in filling an identification form and proving one’s identity, that is generally done by presenting photography of the front and back of one’s ID, along with a “selfie” with the document in question to prove that one is its legitimate owner. Finally, Italian regulations impose that bank accounts of any type can be opened only for fiscal residents in Italy, so all potential Tinaba clients have to present proof of the so-called “codice fiscale”, a fiscal code that is equivalent of the Swedish Personnummer.

For “Consumer” (i.e. end-user) customers, this process is completed by sending, through the App, photographic proofs required. It is important to note that accepted IDs are the Italian ID card, driving licence and passport, implying that Tinaba’s customers have to be not only fiscal but also physical residents in Italy. Although this is not strictly required by regulations, supervision requirements for residents in Italy with respect to non-residents are much lower, and for the sake of operational efficiency Tinaba, at the moment, opted for having resident customers only.

For “Merchant” customers, the same rules apply to the legal representative of the firm, who has to send the same personal documents a “Consumer” does, and consequently has to be both fiscal and physical resident in Italy. However, the new partnership with Alipay is expected to attract Chinese merchants, who have their companies registered in Italy, are fiscal residents in Italy, but are at times physical residents in China. Hence, Tinaba has recently entered in talks with Banca Profilo considering the plausibility of allowing exceptions to the “physical residents only” rule for Merchants, presenting forecasts of expected revenues and confronting them with costs of additional supervisory efforts required, as is required by change management procedures established by the two parties. It remains to be seen whether developments of sort are possible and appropriate at the time, but this example serves to show constant changes inherent to the Fintech sector and fundamental importance of change management processes in a bank - Fintech partnership.

In conclusion, the KYC process is fundamental for getting to know the company’s customers, as it is the only moment throughout the whole “relationship” where personal data is shared and where the bank can assess the trustability of the customer. The “trustability” and potential fraud risks are detected in cooperation with Compliance department who check for potential criminal history in all suspicious cases. Finally, in case of issues related to the documents, like the upload of unreadable pictures or issues in filling out the form, Tinaba gives its customers a “benefit of the doubt” and has the outsourced call-centre contact them via phone or email to try and solve the issue for both parties and finalize the onboarding.

#### 6.3.4. Outsourcing and in-house solutions

Tinaba established some well-defined policies regarding service externalization, outsourcing a good number of non-core functions while maintaining close relationships with outsourcers in case they encounter more delicate and important tasks.

According to Mr. Carozzi, Tinaba has outsourced functions falling in one of the following two categories:

- Functions not core to Tinaba’s business model and/or those for which internal solutions would be too technically demanding or costly to implement. This is the case of prepaid card production and management, at the moment outsourced to an Italian market-leader provider of credit card solutions;

- Functions for which constant personnel retraining is required or those requesting frequent and costly alterations in order for the final product to be adherent to constantly evolving industry standards. This is the case of the platform development team, that would be costly to retrain in case fundamental changes of software architecture are necessary to keep up with the competition, and is relatively easy to hire externally whenever needed.

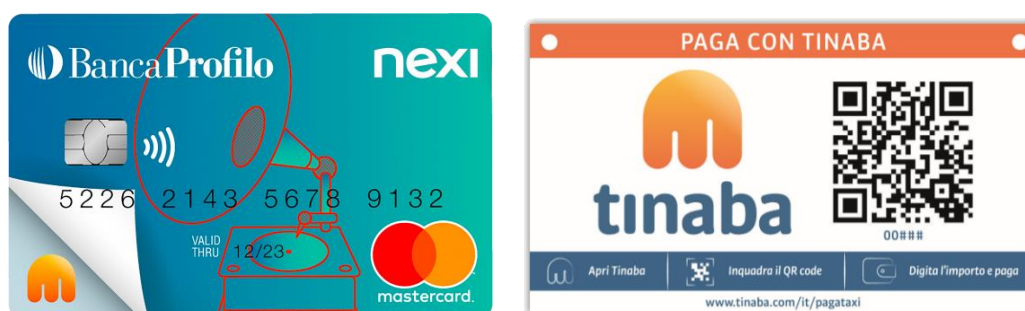
Apart from those categories, all other functions are internal to Tinaba or Banca Profilo to some degree. Some functions, like customer management processes, are partially outsourced, but still closely monitored on a daily basis. The outsourcer employed is in close and constant contact with Tinaba’s CRM and Banca Profilo’s Digital Channels team, as to provide both parties with a complete picture of customers’ problems and needs. The mentioned externalized solutions such as the call-centre are those that, while adding value to the product, are not crucial for the functioning of the whole process and can easily be taken over by internal teams with relatively short notice if the need shall emerge.

## 6.4. Tinaba’s Product Offering

### 6.4.1. Payments, P2P and e-wallets

Payments, P2P transactions, and e-wallets are the core of Tinaba’s offer. The base is the nominal e-wallet, connected to an IBAN code, that allows customers to execute a bank transfer towards any Italian account and to receive transfers from anywhere in the SEPA area. Money in the e-wallet can be used to finance all the products described below, or otherwise to recharge the connected prepaid card or do digital money transfers in form of C2B payments and P2P transfers through the App and within the Tinaba’s network.

**Figure 17.** Tinaba’s Prepaid Card and QR code



Source: Tinaba

P2P transfers are thought for customers that do not want to use cash at all, but still need to send small amounts of money to friends and family members for various reasons. This feature is quite common among digital banks, and while in some countries like Sweden those transfers can be done even between accounts based in different banks (via Swish),

in countries like Italy that is impossible, and such transactions can be done only within the same “ecosystems”, but not between different ones. P2P transactions can be made at distance, by using Tinaba’s contact list, synchronized with the phone’s contact list, or in person, thanks to a unique QR code each customer has and that, when scanned, allows the other network participants to send money to the “owner” of the code.

C2B payments are done through the same system as P2Ps, utilizing the QR code. This solution was chosen because it entails no possibility of error due to the wrong selection of a merchant (as it can happen with systems like Satispay, where one has to select the right merchant from an extensive list) and no need for specific hardware requests (such as those of Google and Apple Pay, that need NFC-enabled phones). The QR code is usually easy to notice in shops, therefore tempting customers to use Tinaba, and allows for easy integration with other important market players like Alipay, as discussed later.

#### 6.4.2. Shared savings accounts and crowdfunding

As described before, Tinaba’s platform is in its base defined around three concentric circles: the “Me”, “We” and “All” areas. When it comes to savings accounts, there exist three types, one per category: “Me” has a basic “vault” where customers can put away savings when and as they please, “We” has a shared “vault” between a chosen group of people, and “All” offers a sort of crowdfunding platform where all Tinaba users can deposit sums of money in support of a marketed cause.

The shared savings accounts are usually initiated among family members or friend groups in order to collect funds for a common holiday or a birthday present for a non-participating group member. These have proved to be another good way of attracting customers, a complement to the member-get-member promotion: non-client members of participating groups are “peer-pressured” to join the network and their friends’ or family’s initiatives.

The crowdfunding platform is operationally very similar; it is a sort of “open to all” shared savings account, usually initiated to support a positive social cause and is meant to give a feeling of “inclusion” within local communities or broader networks through Tinaba’s “ecosystem”.

#### 6.4.3. Remunerated savings account: “You%g” promotion

As described, the basic savings accounts are not interest-bearing, but are just means to “put money away” for personal endeavours, group projects or as a support for a chosen initiative. These savings products were offered since the first version of the App and even for the “Level B” customers who could only operate within Tinaba’s network. At the initiation of the partnership with Banca Profilo an idea for remunerated savings account was born, but to date has not been fully implemented as other products, such as Robo-Advisor were prioritized in the pipeline due to their higher potential marketability.

However, a promotional remunerated savings product under the name of “You%g” has been initiated in March 2019. As can be inferred from the name, it is a product aimed towards young adults: interest rate earned is established based on one’s age, and is calculated as

$$\left(20 - \frac{age}{2}\right) \%$$

The target group for the product is composed of customers in the age range between 18 (as minors cannot become clients due to different regulatory requirements) and 40 (highest “age” number for which the interest rate equation is viable). Obviously, the younger one is, the higher the interest rate earned will be, and this product is marketed as a mean to induce saving habits among the young adult population.

It is important to point out that this is a promotional offer with well-defined limits: it lasts for 3 months and maximum “investment” amount is €1,000. Nonetheless, the offer can be extended for further 3 months if the client benefiting from it executes 3 out of 5 actions suggested (invite a friend, recharge the account, pay at an accredited shop, participate in a shared savings account, or participate in a crowdfunding initiative). The goal is to engage members of the network benefiting from the promotional offer to discover other Tinaba’s functions and get their friends and family to join the network as well.

You%g initiative is marketed through social networks and search engine optimized ads, assuming that the under-40s are active on the Internet. Additionally, Tinaba has initiated its new marketing campaign by making a deal with a couple of famous Italian YouTubers, named “The Show”, who published a short, funny video starring people from the sub-product target group that were to calculate interests they would earn on €1,000 invested under their age-specific interest rate in 3-month investment period in under 2 minutes. Those who guessed correctly were given cash-awards of the same value of the potential interest.

**Figure 18.** You%g campaign marketing banner



Source: Tinaba

#### 6.4.4. Robo-Advisor

Tinaba's Robo-Advisor offers sixteen investment strategies defined according to four risk profiles, three instruments (cash, ETFs, and ETCs) and up to 10 asset classes. The amount of money kept as cash in the current account is not remunerated, and the average fee charged for the ETFs employed is 20bps. Clients are segmented on the basis of the minimum investments required.

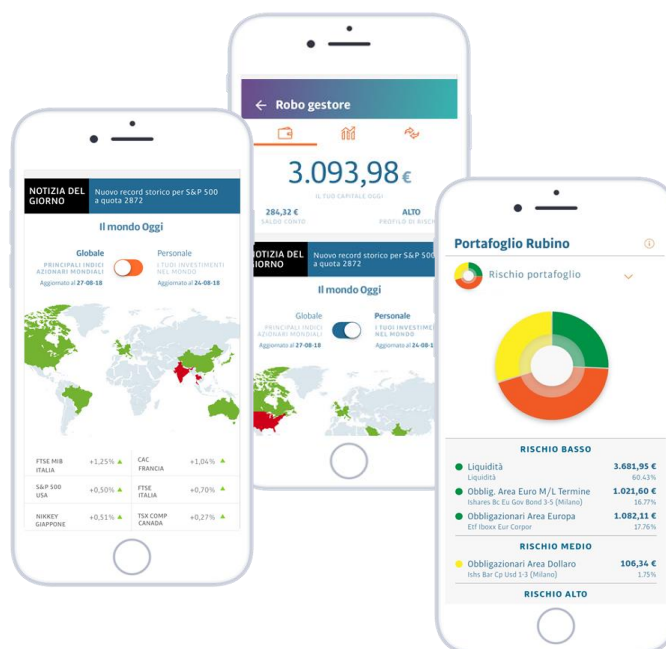
The Basic profile requires at least €2,000, whereas the Advance profile can be used only if a minimum of €10,000 is invested. There are no performance fees, and management fees decrease as the entrusted amount increases, varying from 1.0% to 0.4% of the customer's AuM. Furthermore, clients can change the asset allocations of their portfolios (switch from one of the investment strategies to another) according to market conditions and investment preferences up to five times each year, without incurring any cost. Further changes of portfolios bear a fixed cost of €10. In order to attract first movers, in the first year of the product launch, Tinaba is offering its clients the opportunity to pay management fees only if they achieve a positive return on their investment.

We find that market positioning of this Robo-Advisor is rather different from those of the competitors as it is highly concentrated on attracting a relatively young clientele. According to a report by Mediobanca, this is reflected through the fact that:

- 1) it is offered through a mobile application;
- 2) it entails low costs;
- 3) it requires affordable minimum amounts;
- 4) it is flexible in terms of entering and exiting the investment.

This product is where Tinaba can fully exploit the advantages of having a Private Bank as a partner. Banca Profilo has decades of experience in money management, but these services have been largely unavailable to the "average" citizen before the partnership with Tinaba. Looking at this product from a customers' angle, it is attractive as they are convinced that they are leaving their savings to market professionals, bridging the gap that is usually posed when new Fintech companies, run by straight-out-of-college managers offer innovative financial solutions - customer base simply does not trust them, making it hard to start off well.

**Figure 19.** Tinaba’s Robo-Advisor example



Source: Tinaba

#### 6.4.5. Tinabalike

Tinabalike is an innovative product that transforms the digital likes from readers into a monetary reward for the authors of blog posts or magazine articles, following a simple formula: 1 like = 1€cent.

The product is thought to bridge the omni-existent gap between reaching a great number of readers by making high-quality content and the possibility to live off that work. Blog authors usually write solely to follow their passion, combining their writing with a “real job”, and not dedicating much time to the blog. However, as is shown in recent past, many of these blog writers are very good in what they do, attracting a vast number of readers and generating interest in topics that might otherwise seem boring to an average person. The path that these bloggers follow is either to dedicate as much time as possible to the blog, taking some financial hits from the side, in order to generate the high-quality content and attract many readers so to be able to publish books and have consumer base ready and waiting. The other option is to publish sponsored content after reaching a certain customer-pool, like many video-bloggers on YouTube do these days, but this can lead to deterioration of the consumer base that sees the author as “sold out”.

A system such as Tinabalike would allow authors to earn directly from their readers, who can express their appreciation of the post by “donating” 1€cent - a ridicule amount for a reader, but not for a blogger that collects 1,000+ likes per blog post. Furthermore, this

would serve as an initiative for the author to produce high-quality content that would bring about as many likes as possible so to make blogging their source of earnings.

The product is already on the market, but it has been ill-accepted by authors themselves, as explained by Mr. Carozzi:

The bloggers feel like asking for a small amount of money as a sign of appreciation for their effort is degrading and would in effect lower value of their content in the eyes of readers.

Even though pre-product surveys showed this, the product was still launched as the founder of Tinaba had a strong belief in it. However, it does seem like the market is not ready to accept Tinabalike yet, even though some innovators in the field have applauded it as something extraordinary and ground-breaking.

**Figure 20.** Example of Tinabalike embedded in the title of a newspaper article

## Atlantia ha escluso di impegnarsi in Alitalia

L'ad Castellucci: «Non possiamo pensare di impegnarci su un altro fronte così complesso». Di Maio: «Ci sono il Mef, Delta e Fs, il 15% della newco è ancora scoperto».



Source: lettera43.it

### 6.5. The inspiration: Alipay and its business model

After discussing Tinaba's direct product competitors as well as Tinaba's offering and its business model, we decided to consider Alipay, its business model and the ways in which Tinaba compares to it as well. Alipay, even though basically available to Chinese citizens only, is seeking to expand and increase its presence in Europe, in order to facilitate payments for Chinese tourists. Thus, the main argument for the inclusion of Alipay into the discussion is its recent partnership agreement with Tinaba.

Furthermore, Alipay is a functioning financial "ecosystem" that Tinaba could possibly learn a lot from; they have been market makers for this product in China, as Tinaba is in Italy. We will use this section to draw parallels between these two companies and at the same time consider what their partnership means for Tinaba.

Since November 2018, Chinese customers, Alipay users, can pay via Alipay on all Tinaba POS throughout Italy and encounter no extra costs in terms of transaction fees. Although Tinaba is not the only Alipay partner on the territory, it is the only one that presents its customers with the same type of payment procedure, based on QR code scanning, as does Alipay. This system has been widely accepted by Chinese tourists in Italy so far, reaching high success rates, while other Alipay's partners in Italy, such as UniCredit have struggled to attract the same customer base. It is a very interesting case study in terms of international payments, as, for example, UniCredit shows the Alipay-like QR code to

customers on POS devices or tablets connected to the cashier, but due to language and cultural barriers Chinese tourists seem to be unaware of this offering. On the other hand, Tinaba uses much less technological solution, and asks its merchants to keep a simple card or framed print-out with their QR code well visible to customers at the cashier, and this system “speaks” to the customers much better: Chinese citizens are familiar with the system and comfortable with using it, given no voice communication with the merchant is required during the payment process.

Alipay became very popular and almost a synonym for payments in China in the last decade. It was founded at the end of 2004 by Jack Ma under his umbrella organization, Alibaba. Jack Ma spent some time in Silicon Valley and remained impressed by the technological forefront of the world, and at the same time slightly deluded by how much China was behind. However, he did not go for copy-pasting solutions that worked for the US; he knew that culture gap between China and the US is wide and that China was also much less internet ready at the time. Instead, according to paper by Werker, Jack Ma leveraged on the weaknesses of the Chinese commerce system (low internet penetration rate, low percentage of small merchants in possession of credit card POS systems and high percentage of small merchants in the Chinese economy) in order to create an appropriate Fintech product.

Alipay started as a P2P and C2B payments solution, much like Tinaba, and in the last 15 years it has grown to be a financial “ecosystem” platform: now it offers its customers a possibility to acquire pretty much anything, offline and online, as well as wealth management solutions, SME loans, microcredit, and various insurances.

Although idealistically similar, there are two major differences between Tinaba and Alipay, that might explain the difference in popularity and network vastness between the two. First, Alipay takes part in a “closed” economy in China and their market share is in no way challenged by international players: PayPal tried to enter the market but failed miserably, both due to different regulations and cultural differences. The regulatory environment of Alipay is also much different, especially when considering data protection laws in China and the EU (especially since the introduction of GDPR last year). For example, Alipay is able to give their merchants a lot of data about consumer behaviour in order to better market their products, as there is no law forbidding such data distribution. On the other hand, in Italy (EU in general) the use of consumer data for marketing purposes is strictly forbidden without consumer’s explicit consent.

Second, Alipay is just a platform, while the products offered are developed by other companies within its parent Ant Financial group (whose ultimate owner is Alibaba). Tinaba, after developing a P2P and C2B platform in-house has been outsourcing its product development: banking solutions are developed and offered in partnership with Banca Profilo, and possible future insurance and credit offerings would be offered in partnership with other specialized institutions.

Furthermore, Tinaba's model is exportable internationally, as the platform used is modular and thus easily changeable according to the needs of banking partners abroad and respective regulations.

Alipay, as discussed before, is a "closed" economy player, suffers from no international competition but, at the same time, it is not "exportable" outside of China as its products are strongly embedded in the platform and are highly focused on a single market.

On the other hand, Chinese and Italian economies are also similar in some ways, making Alipay's business model, to some extent, a blueprint for Tinaba.

First, as mentioned in geographical market research, both Chinese and Italian economies are run by small-to-medium-enterprises (SMEs), usually family owned. These merchants have never adopted a credit card settlement-system as the fees charged eat too much into already small margins of their companies, and have "skipped" this financial development stage, always preferring cash. What both Alipay and Tinaba are leveraging on is that "mobile payments" system they offer merges the convenience of cash and safety of digital payments.

Second, regional differences present in China are also present in Italy (not as rural: urban but as South: North divide) and the product offering of the two companies appeals more to those from relatively undeveloped areas (rural and the South, respectively) that were, to different extents, "unbanked" before.

## 7. Risks and Regulations

### 7.1. Regulatory impact of the collaboration with Banca Profilo

The legal framework within the financial sector in Italy is very strict and regulated. According to the Italian regulator Banca d'Italia, there are only two kinds of companies that are allowed to provide its customers with all the products Tinaba offers: "Banks" and "Financial Intermediaries". These legal subjects, in turn, must be enrolled in the respective registers, created according to Articles 13 (for Banks) and 106 (Financial Intermediaries) of the "Consolidated Banking Act" ("Testo Unico Bancario", or TUB), and are subject to specific rules and limitations cited in the TUB and its subsequent modifications. Tinaba, itself, is not registered in neither of those, but the specificity of its business model and close partnership with Banca Profilo (that itself is a registered with Banca d'Italia as a "Bank") render Tinaba's product offering fully compliant and adherent to the regulations.

Other Italian competitors have found other solutions, according to their specific product offering and customer base.

As for companies offering products simply focused on payments, the new European Payment Service Directive (PSD2) has established a register for Electronic Money Institutions (ELMIs), that allows registered companies to manage payment services inside the European Union, allowing for easier geographical expansion within the EU borders with relatively few bureaucratic impediments. Italian competitors that focus only on the Personal Finance segment, like Moneyfarm, can apply for another kind of register, regulated by the TUB and its subsequent "Consolidated Financial Intermediaries Act" ("Testo Unico di Intermediazione Finanziaria", or TUF), made specifically for Trading Financial Intermediaries ("SIM di Negoziazione", or "Società Investimenti Mobiliari di Negoziazione"). Such companies are allowed to manage their customers' money by either keeping it in form of liquidity or investing it in any kind of traded financial product; but are not allowed to perform any payment service other than sending and collecting money from customer's connected bank account, that the customer has in a registered bank.

Other two regulations Tinaba must comply to are related to the onboarding process, the anti-fraud and anti-money-laundering checks and are required by both the Italian and European regulators.

The regulation regarding the onboarding is called eIDAS, and is designed to provide the company with all the required personal information about the customer, together with proofs that the customer exists, is exactly who she claims she is, and is willing to engage in the defined relationship with the financial market participant.

Regulations regarding anti-fraud and anti-money-laundering are respectively called “OLAF” and “4AML”, and they are designed to prevent customers from operating unlawfully through the established relations with the financial market participant. Such regulations oblige the financial market participant to establish both random-based and behaviour-based controls over its client base and, in case some misbehaviours are identified, to prevent negative outcomes and to report them to competent local authorities.

Just recently, the Italian branch of the Dutch financial giant ING was involved in an extensive scandal regarding lack of compliance with the eIDAS, OLAF and 4AML regulations by an online branch that was connected to a physical branch in Milan. The problems started when certain suspicious transactions triggered controls by different European central banks who received many complaints by customers in their respective jurisdictions. It turned out that, due to a poor onboarding process characterized by lack of appropriate KYC controls, plenty of scammers managed to open an account, through which they received payments stemming from worldwide platforms like Amazon and Airbnb without performing the paid service. Similarly, it was also discovered that some accounts, that were open to “fake” people, were used for money-laundering purposes. Due to the lack of compliance to regulations, in March 2019 Banca d’Italia blocked the Italian branch of ING from opening any new account to Italian customers.

Regulations other than those cited may have some impact on Tinaba, but they do not generate concern regarding the company’s daily operations. A noticeable example is the GDPR, that, while creating a need for some of Tinaba’s employees to do specific training, did not impact the way personal data is used or stored, given that the financial sector already had very specific and stringent regulation concerning personal data treatment.

## 7.2. Fraud Prevention

As discussed previously, one of the advantages of Tinaba and other Fintech payment and current account providers in Italy is that they are available to pretty much anyone, as long as they are physically and fiscally residents in the country. From one side, this is positive as it brings a banking product to people that, for various reasons, such as low income, geographical adherence or previous legal issues went unbanked in the past, further spurring the “black economy” issues Italy has been facing in the last decades. From the other side, however, making a banking product available to everyone brings about additional risks not inherent to traditional banks - even though sometimes unfair, there are legitimate reasons why banks choose not to open bank accounts for certain layers of society. To make problems worse, a digital bank, that offers its products “on distance”, is by definition less able to ascertain the identity of its customers, given it has never and will never physically meet them. This mix of factors exposes a digital bank to risk factors such as credit card fraud, money laundering, and identity theft, and may also be the reason

why some previously considered “online banks”, like ING and CheBanca! now opted for opening their first physical branches in major Italian cities.

Summing up, digital banks are much more exposed to risks inherent to their customer base than the traditional banks, but are subject to same regulations and are expected to provide the same level of security and scrutiny when it comes to money laundering and fraud prevention. Narrowing the narrative to Italy, there have been recent cases where Bank of Italy prohibited digital banks from operating for lack of scrutiny in KYC and onboarding process, leading to various financial frauds that affected other banks on the national and EU territory as well, as seen in the ING case presented above.

Tinaba, considering it as a stand-alone entity in this environment, is more risk-averse than an average Fintech would be as it must adhere to standards of Banca Profilo, a well-respected wealth manager that is trusted by a number of high-net-worth individuals, that in no way would want to put its reputation at risk over clients that other (retail) banks find “unbankable”. The high fraud-prevention standards stemming from possible reputational risks, combined with the impossibility to compare HNW clients and Tinaba clients, both in number and the deepness of relationship established, leads to additional problems in the management of operations within the digital wing of Banca Profilo. However, at the time of writing, new procedures are being constructed by a team of people selected from Compliance and Digital Channels departments, that are set to establish an automated set of controls for the onboarding process, overseen and constantly subject to improvements by the two departments.

This example serves to show that change management is the pillar of the whole Tinaba project. It is a brand new and unprecedented product that has no direct, but only sub-product competitors and any problems faced have to be solved bottom-up and ex-novo, in partnership with Banca Profilo, that offers both experience and additional set of strict standards to follow: it is all about balancing external and internal problems and opportunities to match and eventually lead the market.

### 7.3. Benefits of being an “Innovative Start-up”

Italy has been one of the first European countries to make a law regulating start-ups and providing for benefits both for those who establish innovative companies and those who invest in them. In 2012, the Italian government approved the so-called “Growth Decree 2.0” (*Decreto di Crescita 2.0*) that made reference to “Innovative start-ups” as a new legal form of incorporation for innovative enterprises of high technological value. The whole law was later dubbed “The Start-up Act”.

“Innovative start-up” has been defined as a company that is not listed, has been operational for less than 5 years, has its operational headquarters in Italy (legal headquarters can be in other EU countries as well), has a yearly turnover of less than

€5M, does not distribute its profits and, of course, bases its activity on an innovative technological solution.

Benefits enjoyed by companies who can be defined as “Innovative start-ups” are many, and here we bring 4 that we deem most important to the case at hand:

- **Fiscal benefits for investors:** This benefit, stabilized and significantly bolstered by the 2017 Budget Law (art. 1, par. 66), envisages a deduction on personal income tax (IRPEF) for individuals, amounting to 30% of the amount invested, up to a maximum sum of € 1 million. For legal entities, the benefit consists in a fiscal deduction on the taxable income for company tax purposes (IRAP) equal to 30% of the amount invested, up to a maximum of € 1.8 million. Starting from 2017, the incentives are conditioned to a holding period of a minimum of 3 years (previously 2 years);
- **Administrative benefits:** Italy is “famous” for its long and costly administrative and legal processes, and the government has noted that these could be off-putting to innovative companies who pride themselves of having lean business models. Thus, as a part of “The Start-up Act”, low administrative requirements for “Innovative Start-ups” have been established and they have been exempted from all Stamp Duties, from incorporation to possible bankruptcy. In fact, “Innovative Start-ups” can do most of the “paperwork” online;
- **Extension of term for covering losses:** Generally, as per Italian regulations, in situations where operative losses result in the share capital being reduced by over  $\frac{1}{3}$  shareholders' meeting must be called for and the capital subsequently reduced by no later than the following financial year, in proportion to the losses recorded. For “Innovative Start-ups”, a 12-month extension is applied to this rule;
- **More relaxed labour law:** Italy, as many European countries, has strong labour protection laws, making it very difficult for companies to reduce their employee base if needed for any reason. However, these rules are more relaxed for “Innovative Start-ups”, and for up to 3 years start-ups can offer their employees as short-fixed-term contracts as they wish, and do not have to maintain a fixed ratio between fixed-term and open-ended contracts firms in Italy usually do. Nonetheless, after 3 years of employment, the labour regulation becomes almost equivalent to the base one.

## 8. Customer Base

Even though Tinaba has been active for 3 years, its customer base is not as extensive as some of its competitors'. As of May 2019, Tinaba has approximately 55,000 users. As has been discussed throughout this paper, we hold that difference in market penetration is due to a different business model employed, a rather “complicated” product offering from Tinaba’s side and lack of appropriate marketing “explaining” it. As mentioned before, an S&P report found that only 37% of Italians passed a basic financial knowledge test, so it comes as no surprise that easier-to-understand products, such as that of Satispay that merely offers a sort of an e-wallet plug-in to a current account are better accepted.

Furthermore, the relative security of financing Tinaba has, compared to some of its competitors, allows for a “healthier” growth, meaning it can afford to concentrate more on perfecting the product offering in all its parts, from efficiency to security, than its Fintech counterparts. In fact, Revolut, N26 and even ING Direct have had regulatory breach accusations filed against them, as they have been concentrating purely on efficiency and growth.

While we already cited some of the different product offerings of Tinaba, we hold that client categories towards which these products are offered should be explained in more detail as they are created based on some specificities of Italian legal system. The client categories and connected product offerings are the following:

- **Consumer:** Physical persons (fiscal and physical residents in Italy) whose account provides them with a digital nominative wallet connected to a current account managed by Banca Profilo (used solely as a tool for making out-of-network bank transfers), a prepaid card and the possibility to invest through the Robo-Advisor and savings accounts;
- **Business:** Physical persons that have the so-called Partita Iva (fiscal code for businesses) and can therefore operate as a business, or juridical persons that are connected to a single physical person and have no other stable employees. This kind of account provides for the same products as the consumer account, along with the possibility to receive payments from a multitude of different accounts without regulatory issues and it is taxed accordingly;
- **Merchant:** Juridical persons whose account provides them with a proper bank account and the possibility to connect different Tinaba POS apps in order to allow consumers to pay through the App on different devices.

As can be expected and according to data we were provided by Tinaba, the majority of customers are Consumers, accounting for roughly 95% of total customers. The remaining 5% are Businesses and Merchants (some of them chains of considerable size) who are spread throughout the Italian territory and represent the core of Tinaba’s network,

allowing for in-App payments to a wide range of business and professionals. The most notable Merchant customers at the moment are IP<sup>10</sup> and URI Taxi<sup>11</sup>. IP has gas stations throughout the whole national territory and attracts many Consumers with periodical promotional offers. URI Taxi, on the other hand, has been of great importance for striking a partnership with Alipay as it provides taxi services in the main Italian cities and is thus very convenient for Chinese tourist to be able to pay in familiar way with no communication issues. Additionally, other partnerships with Federalberghi<sup>12</sup> and Confcommercio<sup>13</sup> have just started and are likely to strongly expand the Merchant customer base in the following months.

### 8.1. Customer survey on Fintech knowledge, brand awareness and bank satisfaction

During the last week of March 2019, we ran a survey among Italian consumers to understand their knowledge of Tinaba and the Fintech trends in general, focusing on start-ups operating in Italy in the payment and investment segments. We collected a total of 113 responses from diverse customer groups, in terms of age and regional affiliation.

Results were in line with our theories and expectations: most recognized brands were those of Fintechs operating within the Payments segment. Satispay is currently the most wide-known brand, recognised by 76.11% of the surveyed sample group, followed by N26, Revolut, and Hype (61.06%, 40.71%, and 40.7% recognition rates respectively). Tinaba ranks at the bottom, with “only” 25.66% of the surveyed sample group recognising its brand, in line with our expectations.

### 8.2. Overview of Tinaba’s customer pool

Despite the above, Tinaba’s growth is quite stable over time, with around 1,000 new customers registered per month among all categories, with no significant seasonal differences. There has been a slight decrease of registrations to the App in the first quarter of 2019, mainly due to minor technical problems related to the latest software architecture switch, but more recent numbers show that it was only a temporary issue, and that the new software architecture has been welcomed by the customers. It is important to note that with the new software architecture Tinaba has become more “modular”, making the whole system more manageable, faster, and exportable.

The conversion rate (in terms of customers who register and activate their account with respect to those who download the App) is 10,42%. In relative terms, this presents a good

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<sup>10</sup> Italiana Petroli, one of the biggest Italian oil distributors, with more than 5.000 gas stations on the whole Italian territory.

<sup>11</sup> Association representing Italian taxi drivers, present in 45 Italian major cities.

<sup>12</sup> Association representing Italian hotel owners all around the country.

<sup>13</sup> Association representing more than 650.000 Italian small businesses, the biggest of its kind.

achievement within the Italian market and it is approximately equal to the median value for the worldwide Fintech services, according to research by Burstein, senior director at MECLABS Institute.

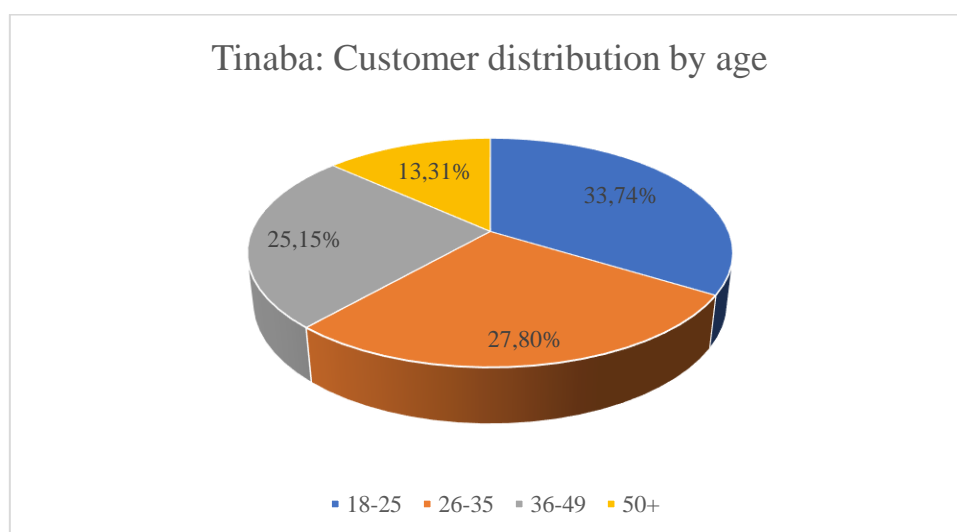
Actions have been taken to make the onboarding easier and faster without decreasing security levels, but the high percentage of prospective clients that do not end up registering and activating the account after downloading the App may also depend on other factors, such as:

- lack of understanding of the product offered, that is a proper nominal bank account and not a digital payment solution to be connected to already existing bank account;
- unavailability of the required documentation;
- non-abidance to the requisites (age or legal).

In fact, we found that the age restrictions may be a strong driver of “low” conversion ratio<sup>14</sup>. We find that the younger generations are attracted to this kind of product, but the minimum age required to register for a Tinaba account is 18. As explained before, this requirement is in place due to stronger due diligence process required by banking regulations for accepting clients in the age range between 12 and 18. Tinaba had a product aimed at those within the specified age group, that was to be connected to a parent’s or guardian’s account. However, the product was removed from the offering after a cost-benefit analysis of its performance provided for quite negative results and it was decided that the effort was not worth the opportunity.

According to data provided by Tinaba, the age distribution between the actual customers is the following:

**Figure 21.** Tinaba’s customer distribution by age



Source: Tinaba

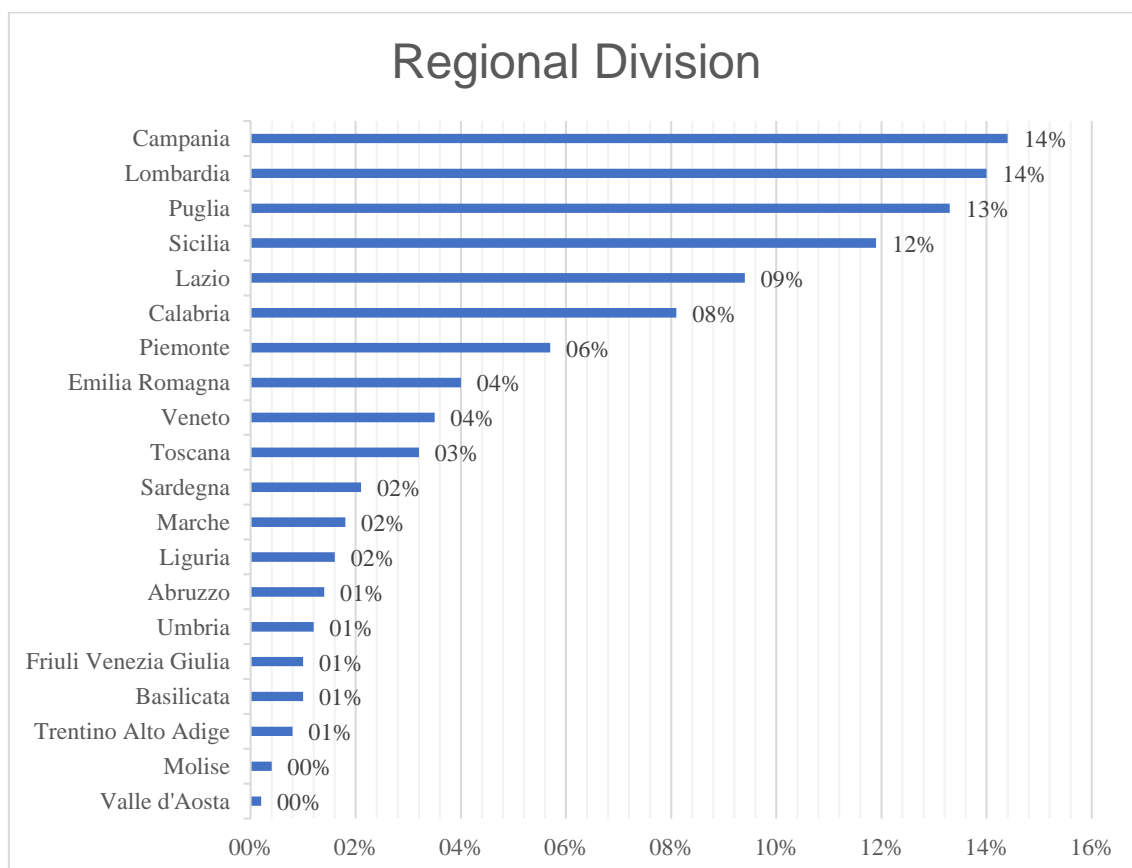
<sup>14</sup> In absolute terms, as in relative it is within the market median range.

Approximately a third of the total consumer base is concentrated within the narrow age group of those between 18 and 25 years old, demonstrating a strong interest among the younger generations.

Furthermore, almost 40% of customers are above 35 and are not “digital natives”. Although Tinaba was principally envisaged as a product for the young, new products such as Robo-Advisor as well as shared savings accounts are attracting older, wealthier customers as well. We hold that this is rather positive, as the “older” are generally less trusting, especially when it comes to personal wealth preservation, and their choice of Tinaba implies the perceived solidity of the Fintech platform developed with the support of Banca Profilo.

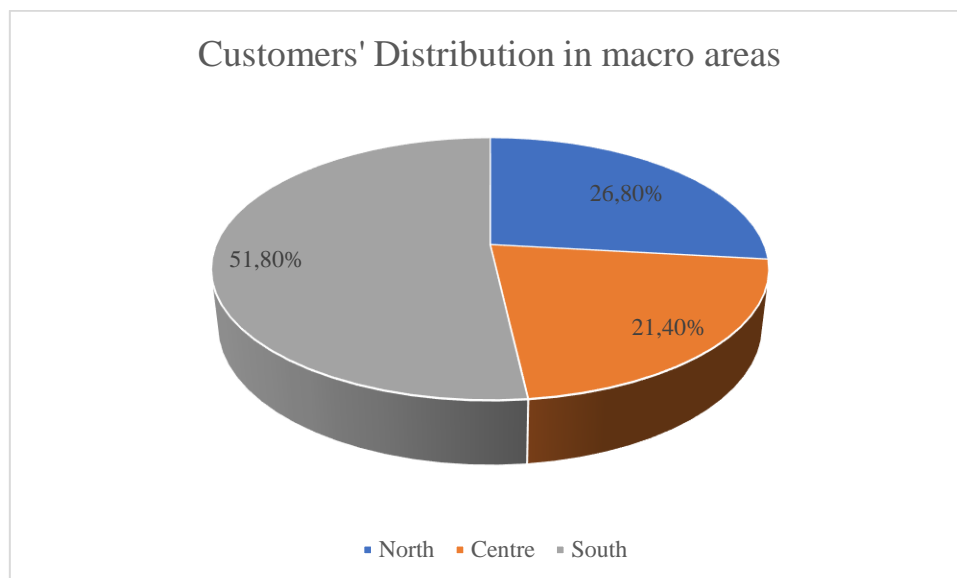
The geographical distribution of customers, as shown by Tinaba’s internal statistics, is quite surprising: according to the data obtained, more than a customer out of two is from the South of Italy, while 1 in 4 is from the North and 1 in 5 from the Centre of the country. This is quite counter-intuitive as the vast majority of banks, both digital and traditional, are located in the North. Following a deeper analysis of the regional division, we notice that Lombardia is the only region from the North in the Top 5, right under Campania and slightly above Puglia and Sicilia, all of which are in the South.

**Figure 22.** Regional Division between the Customers



Source : Tinaba

**Figure 23.** Customers' distribution in macro areas



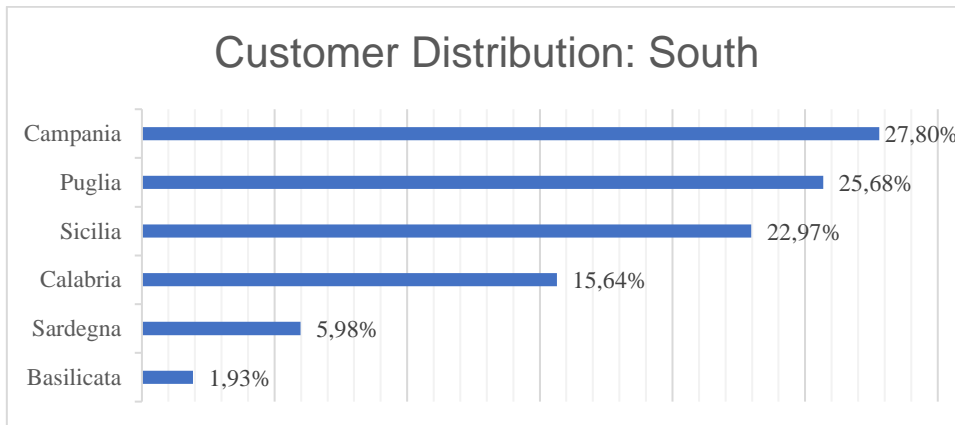
Source: Tinaba

This fact, however, helps our theory that digital banks are a useful mean for the so-called unbanked to enter in the world of finance and take advantage of benefits intrinsic to non-cash products. As further proof to support this theory, roughly 10% of our survey respondents answered that they do not have a bank account in a traditional bank, but 50% of the same respondents declared to have an account in one or more digital banks.

Geographical distribution of Tinaba's customers along with the increasing popularity of digital banks imply that in certain regions of Italy, where the trust in traditional banks and established institutions is historically low, new solutions are welcomed as they enable individuals to use their money for investing and paying digitally, without any interference with bank branches. In Italy these are seen as very unpleasant places to be, due to their perceived inefficiency in problem-solving, as every problem presented seems to lead to additional ones. Digital banks, on the other hand, offer a similar range of products (either in an "ecosystem" as Tinaba or separately, product per App, as offered by other Fintechs), but along with much better customer experience. A funny metaphor has been coined recently that depicts Digital banks as a "mother-in-law that cooks as well as others, but nags much less".

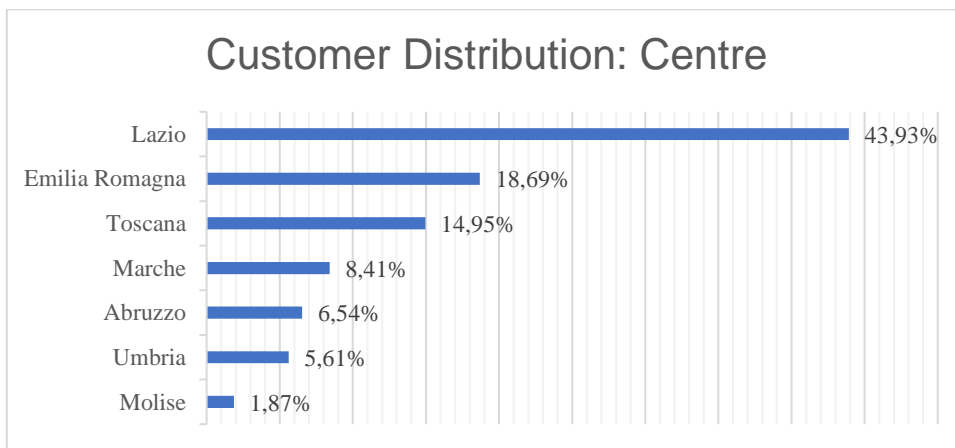
Current customer distribution within Tinaba's network is presented below:

**Figure 24.** Customer Distribution, South



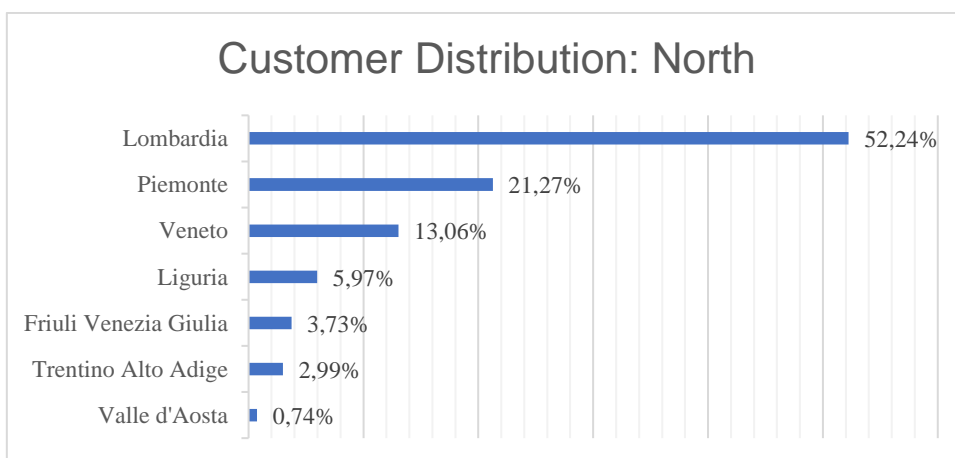
Source: Tinaba

**Figure 25.** Customer Distribution, Centre



Source: Tinaba

**Figure 26.** Customer Distribution, North



Source: Tinaba

## 9. Fintech Valuation Methods

Fintechs are a tricky subject when it comes to valuation. Companies in the industry, especially the youngest, have a very short financial track record, and in most cases, it comes together with strong growth levels and highly negative profit and cash flow figures. These issues are common for start-ups in general but are more pronounced among Fintechs, as they are subject to heavy regulations and generally have low margins, prolonging the period under which they are financially unstable. While this is not a tragedy in general, it poses a problem when valuing a Fintech company, because widely-used methods developed for well-established companies that show relatively constant revenues and growth are difficult to apply on such volatile and continuously changing market.

For these reasons, valuation based on using a Discounted Cash Flow (DCF) method and, in general, on figures other than sales is at worst impossible and at best highly misleading, due to two main reasons: the necessity to burn cash in order to gain market share and expand the customer base, and consequential need to broaden and improve quantity and quality of the products offered.

A more coherent valuation approach, for cases as specific as this, would be the Transaction Multiples method, that allows for more flexibility in terms of figures needed and more accurate valuation with respect to market trends. The most used multiples in the market, according to Hambleton Partners (one of the most successful firms in Fintech M&A) are EV/Sales and EV/EBITDA. This valuation method may be difficult to use for highly specialised Fintechs or those that offer niche products (or, on the other hand, those active in diverse Fintech segments), because of the scarcity of comparable companies and the even lower amount of transactions in the field. In these cases, that represent a high percentage of the total, particular and subjective adjustments by the analysts are required.

Additionally, Multiples valuation has some major drawbacks for this industry, because:

- 1) It does not take into account different growth levels among Fintechs;
- 2) It fails to recognize possible non-recurring factors that have positive impacts on the sales or revenues figures;
- 3) It fails to recognize differences in regulations and geographical scope of the Fintechs.

These are all important drivers that can largely impact Fintech's value, therefore the choice of comparable companies should be done carefully and taking into account all these factors, as not to create a strong valuation bias.

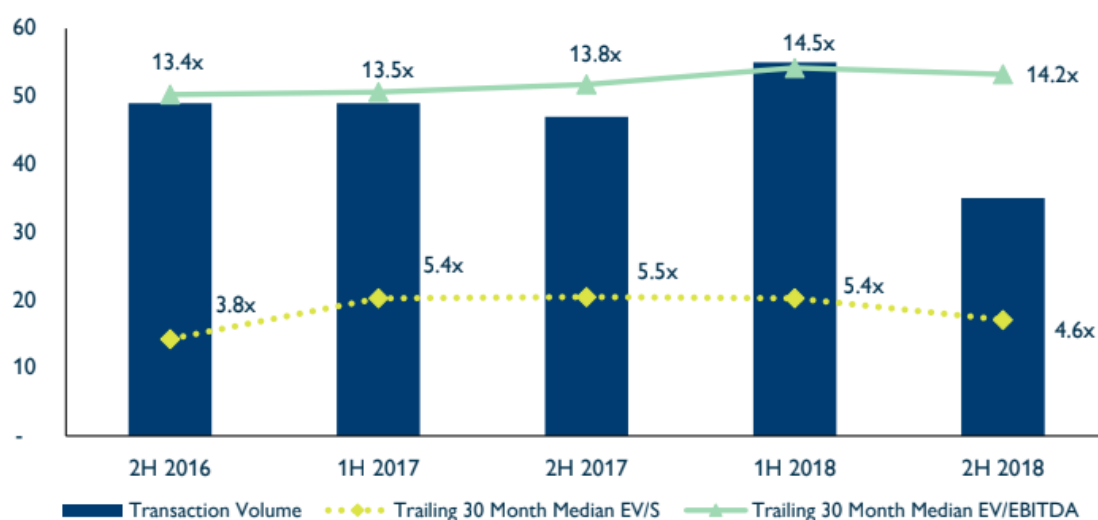
Researchers (Langerveld (2018)) showed that this method is highly accurate for Fintechs with stable and constant figures, i.e. those Fintechs that have already reached positive returns and a sustainable level of growth. In all other situations, the Transaction Multiples

model did not prove to be a good proxy for the real value despite perhaps being the least misleading.

## 9.1. Trends in Valuation

There is no real agreement among analysts about future trends in Fintech valuations. At the moment, Fintech M&A and IPO activities are slowing down worldwide in terms of transaction volumes (35 in H2 2018 vs 55 in H1 2018, according to Hambleton Fintech M&A research), but the multiples are remaining roughly constant. Latest data available, that of H2 2018, shows that the EV/EBITDA multiple was around 14.2x, slightly lower than the 14.5x as of H1 2018, but higher than the average value of the last two years (13.8x); while the EV/Sales multiple went down from 5.4x as of H1 2018 to 4.6x as of H2 2018 (average of past two years being 5.0x).

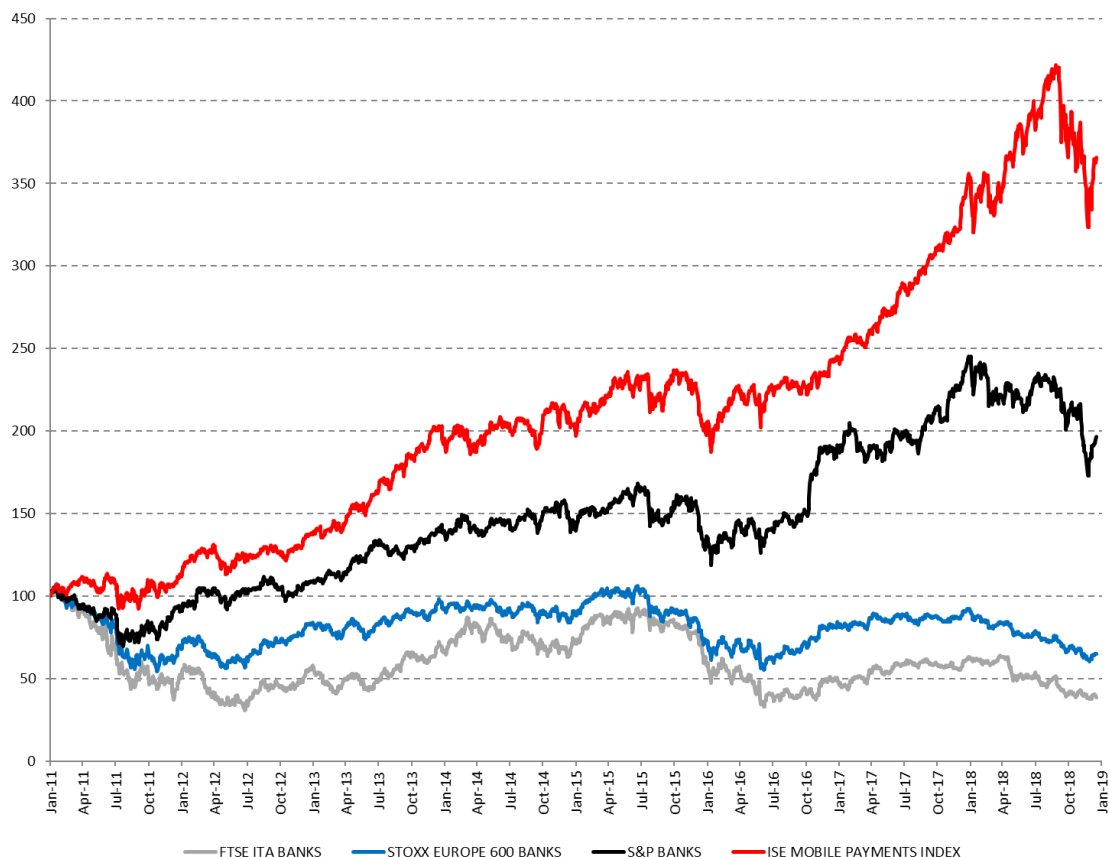
**Figure 27.** Worldwide Consumer Fintech M&A volumes and multiples from H2 2016 to H2 2018



Source: Simnet & Parizek (2019)

Coherently with these observations, the ISE Mobile Payment Index, an index that tracks stock values of companies operating within the payments segment, Fintech and non-Fintech alike, lost roughly 13.4% of its value in Q4 2018.

**Figure 28.** Performance of Selected Indexes



Source: Banca Profilo’s research

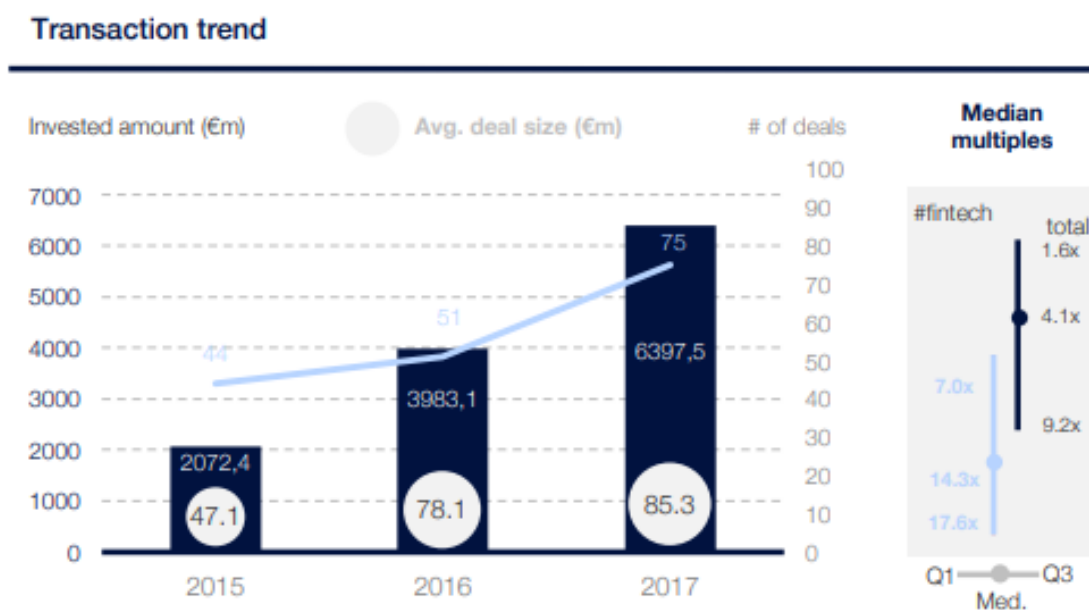
Despite the cited decrease, the index grew 262% in the past 8 years, compared to a 95% growth in “S&P banks” index and a decrease of both “STOXX Europe 600 banks” and FTSE Ita banks” over the same period, of respectively 35% and 61%.

According to analysts (Hampton and FT), the decrease in transaction volume and value that were followed by a slight decrease in the multiples are due to a more careful assessment of Fintechs performed by the investors. The analysts cited hold that there has been an increase in perceived risk of overpaying for Fintech companies due to the hype surrounding them (an example is the inexplicably high IPO price of Square, the American payment-software company), and a decrease in interest of the initial investors to immediately cash out their investments, in order to possibly achieve much higher returns in the future.

Additionally, Avolta Partners’ report titled “Tech Exit Transaction Multiples Europe 2018 Edition” quotes median EV/TTM (Trailing Twelve Month revenue) to be at 14.3x for 2017. This is further proof that during the last couple of years a general decrease in transaction values took place for reasons listed above.

Furthermore, the two information sources listed provide rather different multiple values that cannot be wholly attributed just to the passage of time (a year) between the two reports, but are also a proof of geographical differences and imply that the transaction values are considerably higher in Europe at the moment.

**Figure 29.** European Consumer Fintech Transaction Multiples as of 2018



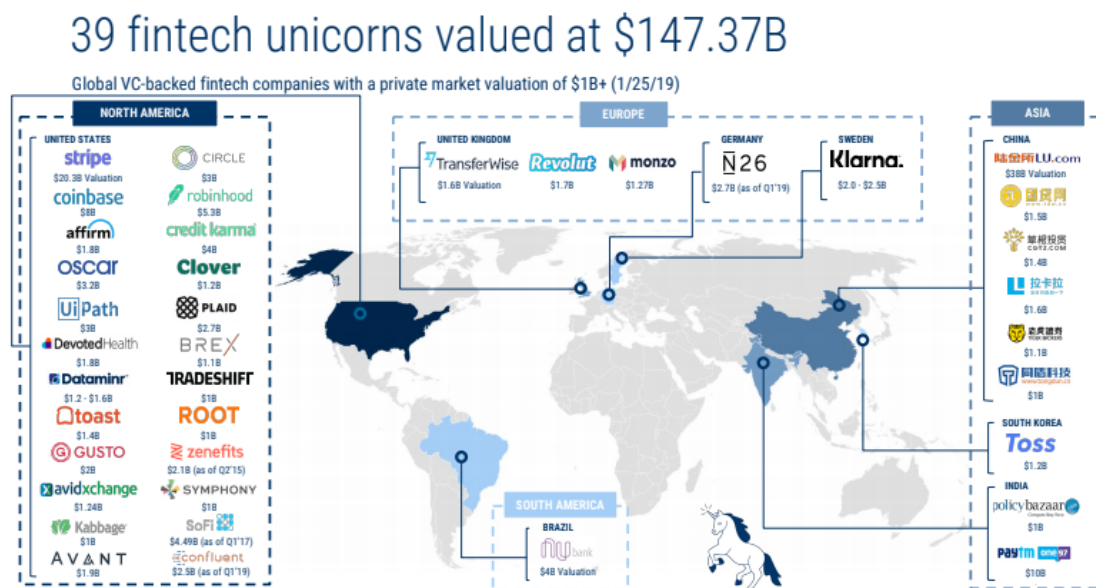
Source: Avolta Partners

## 9.2. “Unicorn” valuations: real value or a sign of a bubble?

Adding on to the discussion before, there are two very important things to note when it comes to Fintech valuation.

First, valuations that made it to the news recently (such as \$1.7B valuation of Revolut in April 2018, or an even more astronomical \$2.7B attributed to N26 in January 2019) are based on funding rounds wrapped up at the time these headlines raised some eyebrows in the financial community, and not on the balance sheet items of these companies.

**Figure 30.** Unicorn Fintechs and respective valuations as of Q1 2019



Source: CB Insights

As a reference point, Revolut’s 2018 revenues amounted to £12.8M (\$16.8M), implying that EV/Sales multiple that would match the cited valuation stands at staggering 101x, while N26’s estimated 2018 revenue of \$17.5M would raise the EV/Sales bar even further to 154x. It comes without saying that funding rounds attract investors who wish to invest into a possibly very bright future of the company and not into what it currently is, but the differences in perceived future value and that implied by current performance indicators are truly astonishing.

Second and rather connected point is that 56.2% of European Fintech deals made during 2017 went through without a disclosed valuation, according to Avolta Partners’ report. They hold that targets in these “undisclosed” transactions were valued between €0 and €20M, and that averages in terms of deal size within this market are highly skewed, as major acquisitions tend to be communicated much more than long-tail transactions.

Reasons for such a high rate of relatively small transactions can be found in a paper by Milous, Aspelund and Cabrol (2012), where the authors show that the value of any start-up depends on its industry outlook, but even more so on internal factors, such as the ability and competence of the founders and top management, and the network of relationships created with other companies. These factors, however, are almost impossible to evaluate objectively, further sustaining the thesis of Langerveld (2018).

In any case, valuations for start-ups should be discounted by their “survival probability”. The “survival probability” is company-specific and depends on various factors, such as the risk inherent to the particular set of services offered by the start-up, together with the industry-wide risk and others, for example legal and expansion risks, that can have a

strong impact on the operations of a start-up in question. This factor, too, contributes to the explanation of the considerable variability in transaction multiples for similar companies in the same segment.

Following up on this brief consideration of factors influencing a Fintech valuation, we considered the added value a valuation of Tinaba would provide for this case study. As our focus is the determination of an appropriate strategy and partners for tackling the implementation of digital banking solutions to a cash-centric society, valuation is not strictly necessary.

Tinaba, as we illustrated, is a highly specific case within a relatively specific market as it is highly dependent on its banking partner: without the back-office support and regulatory adherence provided by partnership with Banca Profilo, Tinaba would be just a plug-in software application: amazing if it is to be exported and partnered up with other banks abroad, but a bit less so if it is to be valued as a stand-alone financial entity. In conversations with the management, it was concluded that providing us with in-depth financial data regarding Tinaba's operations would disadvantage Banca Profilo's and Sator's interests in the partnership, which would be inopportune for all parties.

Furthermore, a Transaction Multiples valuation, per se, based on Revenues and/or EBITDA and without subjective adjustments would be highly imprecise, with very low significance due to a very wide possible range of values as direct peers are practically non-existent. Finally, the framework within which Tinaba is operating is rapidly evolving and possible future scenarios are numerous, meaning that the probability that any valuation attempt would be precise is minimal, leaving us with a high chance to misinterpret future products and solutions.

## 10. Conclusion

### 10.1. Concluding remarks

When analysing the Fintech market, it is important to evaluate data based on the geographical differences that exist between different markets. From our analysis, it is evident that Europe has lagged behind with respect to other areas of the world, especially China and the US. The reasons are the following:

- **Cultural:** the European market participants are generally keener to use already established financial institutions, even if are aware of their lower respective efficiency. In the rest of the world, this differs: the US society is always more open for external challenges, while Chinese financial institutions failed to provide their services to a vast percentage of the population, that boosted the adoption of more innovative solutions;
- **Technological:** while markets like China never fully adopted some technologies like credit card solutions, that reached the country when already obsolete, the European markets for credit cards and Personal Finance solutions just reached maturity, and consumers are not as prone to change as others, like the Americans, may be;
- **Legislative diversity and market dimensions:** the whole European market is quite big, but different countries have different regulatory requirements that may be costly to implement with respect to the benefits that such compliance may bring. Therefore, developing and using products for relatively small markets may easily prove unsuccessful in the long run.

Numbers show that the European Fintech market is going to grow but is highly unlikely to catch up with the others, mainly due to the fact that the phenomenon is still pretty new and other, more established markets are expanding at similar or higher rates.

Going deeper on our main topic, combining our research and consumer survey with Tinaba's consumer data, we reach the conclusion that single-product Fintech Apps are currently doing much better than Tinaba in the Italian market, as was our initial hypothesis.

There is, however, an intrinsic difference between Tinaba and the market in general: Tinaba is more popular among younger people, concentrated in the poorer and more "unbanked" areas of the country, while the prototype of an Italian Fintech customer is older and richer. Such a customer base is rather unusual considering the product offering, that ranges from payments to more sophisticated investment solutions, but serves to prove Tinaba's ability to reach and satisfy different kinds of customers. The ever more present "Banca Profilo" brand within Tinaba's offering is resonating its values of tradition and safety, something younger and low-income customers could not have had access to before and that cannot be provided by an average Fintech. Tinaba and Banca Profilo bridge the

gap between negative perception that borders with hatred towards traditional banks and lack of trust towards Fintechs. Younger people are also fond of the idea of being part of an App-based community network, therefore the “Me-We-All” concept embedded in the app should have a stronger impression on them. It would be interesting to see, in the future, if Tinaba will be able to retain the ability to attract a diverse range of clients while expanding its customer base.

The choice to expand towards a broader variety of products must be re-evaluated in a few years’ time: while more payment-focused apps may have a lot of “temporary” customers, the choice of positioning in a more “money-to-stay” versus a typical “money-to-flow” model may help not only customer retention that is already high (less than 3.5% churn rate), but also customer’s actual usage of the app for the whole range of services.

Another important question to address is the choice of Banca Profilo as a partner. While being part of the same group has definitely played an important role in the integration of different functions, the differences in business model and customer target may have proven difficult, while integration with a commercial bank could have been easier due to the similarities in customer processing and targeting. Some bank procedures needed to be changed due to different approaches to customers, along with some software and other applications in order to create Tinaba’s products and comply with the regulations.

We claim that a choice of choosing Banca Profilo as a partner has been successful for three main reasons:

- There was no possible customer cannibalization, given that the target markets are completely different and the two services offered are better described as complements than substitutes;
- It is easier to create a product from scratch than have to deal with legacy issues regarding similar products already offered by commercial banks through different, less technological channels, that have rather different requirements;
- Changing from traditional to digital channel would have entailed, for any bank, some changes in systems and software that would have been pretty similar to those Banca Profilo made, therefore no concrete positive benefit for Tinaba would have emerged from choosing a different partner from this perspective.

At the moment, Tinaba is not ranking as one of Italy’s main Fintech players, but the relative second-tier positioning, combined with the broad scope of the “ecosystem” approach, the right and solid partner bank and the possibility of easy expansions abroad, may allow it to further refine the product and obtain better market positioning in order to gain considerable market shares in both the Payment and Personal Finance segments.

## 10.2. Case Study Questions

This case study could be used as teaching material for future or existing SSE courses. The main questions we covered and that could certainly be elaborated on from different perspectives are the following:

Did Tinaba make a right choice when partnering up with Banca Profilo?

Other options Tinaba had, as suggested in the paper, was to partner up with a bigger commercial bank or to develop internally. What we find is that by partnering up with a small, private bank, Tinaba did not have to tackle legacy issues or complicated organizational structure inherent to bigger banks, but maybe missed out on know-how commercial banks had to offer. Furthermore, internal development would have provided Tinaba with more freedom but would have implied facing costs of obtaining own banking license and would render the product offering narrower.

Was the timing of product launches optimal?

With the benefit of hindsight, we considered the product array of Tinaba and whether or not the market was ready for it at the time of the launch. The case presented provides for a snapshot of Italian financial market and developments within it, along with the progress Tinaba's direct competitors have made. This information could be used to provide a critical perspective on what could have possibly been done differently in order to gain a bigger chunk of the market share.

Did Tinaba choose the adequate business model?

As a central point of the case, we discussed the benefits and drawbacks of a financial "ecosystem" model Tinaba put in place, with respect to the "single-product" model chosen by its competitors. There are some aspects of this choice that could be discussed in further detail, such as the model market fit as well as implications different ownership and financing structure had on this choice.

## 10.3. Further Case Study Development

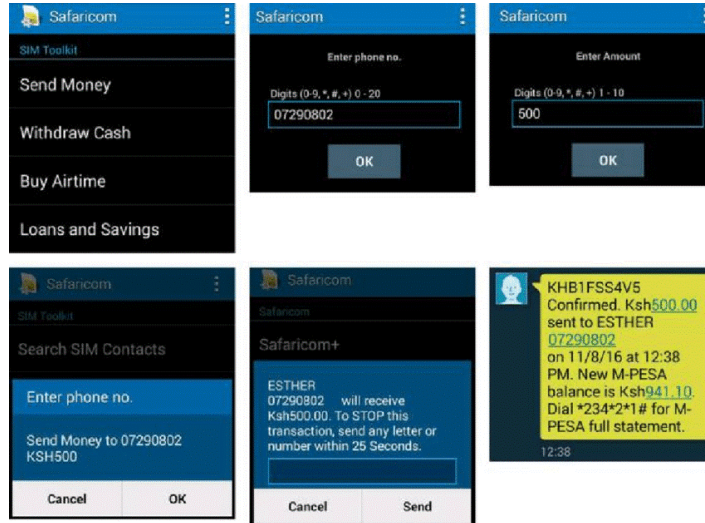
We believe this paper can be a good source of information for a case study on the development and comparison of different business models in Fintech and, in general, in the financial industry. The data available in this paper can be used to create a fictional Fintech company/financial institution that would like to modify its strategy and potentially increase profitability by either expanding into a new market or by collaborating with an established institution/Fintech. The case provides plenty of data regarding geographical expansion and business integration, that can be rearranged to give students the possibility to create forecast models for growth.

Another interesting topic for future case studies can be the development of a new Fintech product in a particular market. The data available in our case is enough, at least in the short run, to provide students with motivations for the choice of the best of the three main Fintech business lines, as well as the attracting features such product must have. Such development can be interesting also from a marketing perspective, embracing trending market theories such as co-creation and, in general, customer participation, to provide both a good product and satisfying experience.

# 11. Appendix

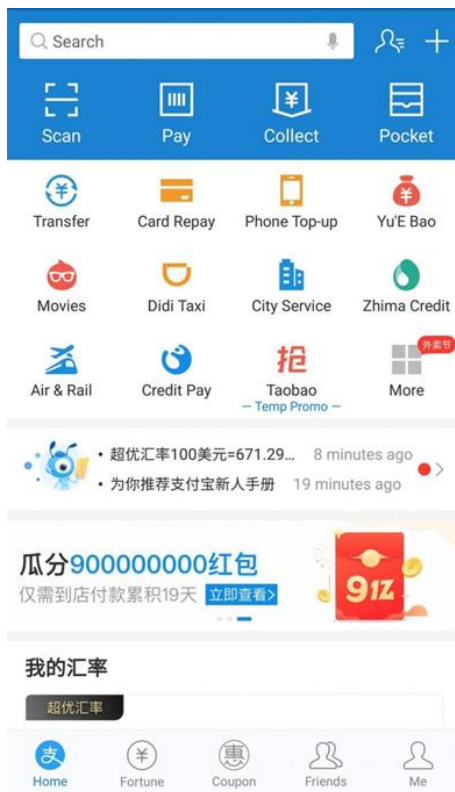
## Exhibit 1. Differences in User interface between M-Pesa, Alipay and Tinaba

M-Pesa:



Source: Emerald Insights

Alipay:



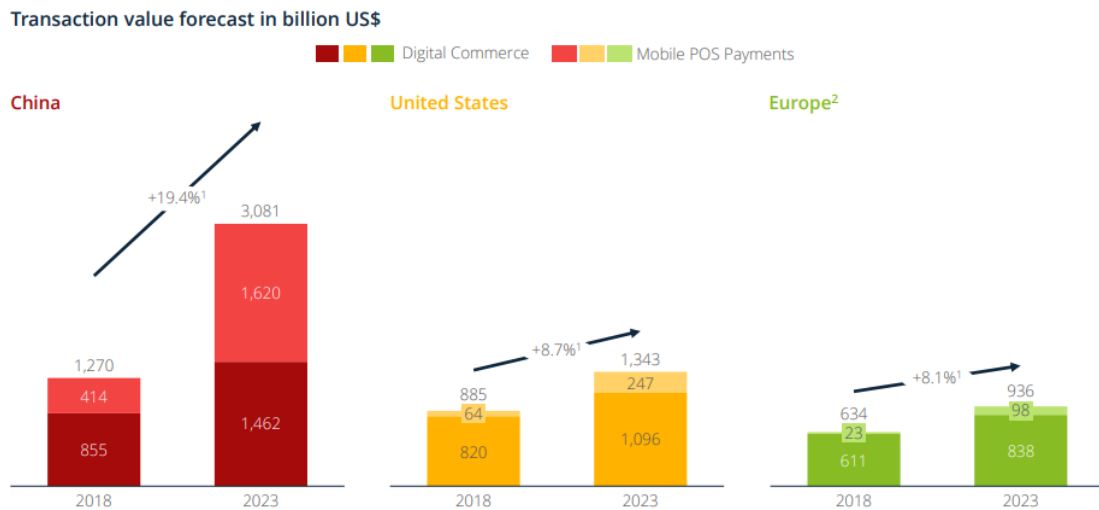
Source: xdowns.com

Tinaba:



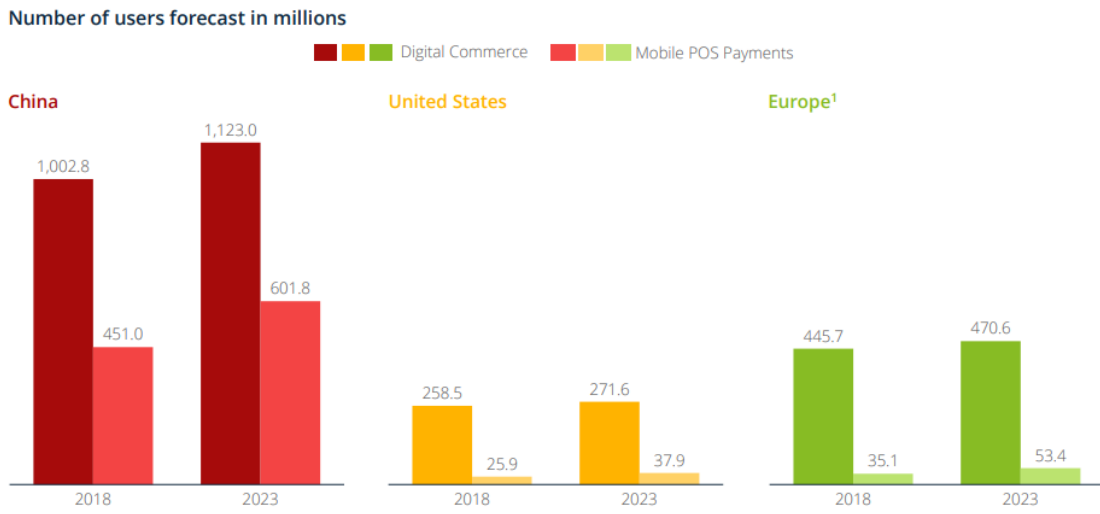
Source: Tinaba

**Exhibit 2.** Digital Payments, transaction value forecast in billion US Dollars



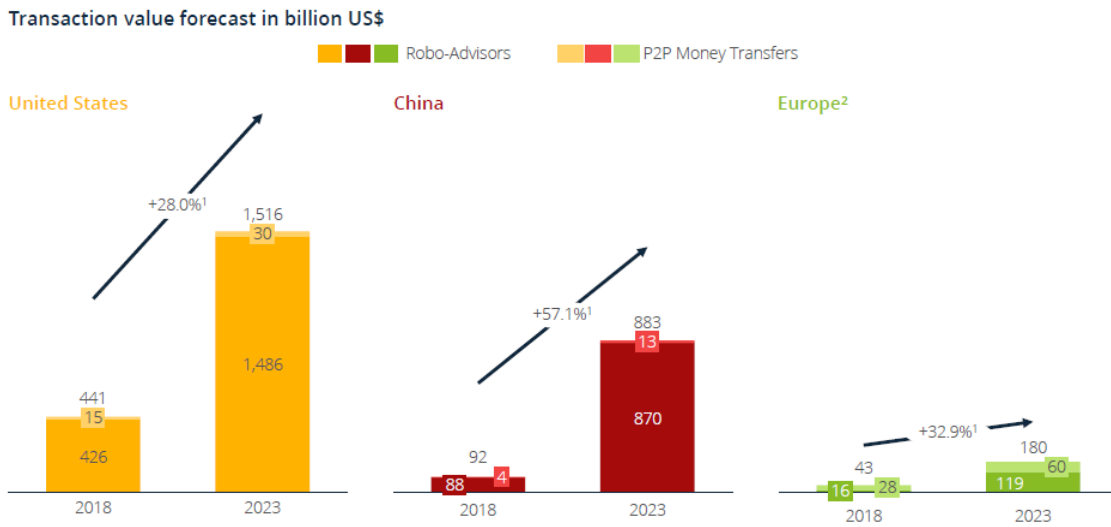
Source: Striapunina (2018)

**Exhibit 3. Digital Payments, number of users forecast in millions**



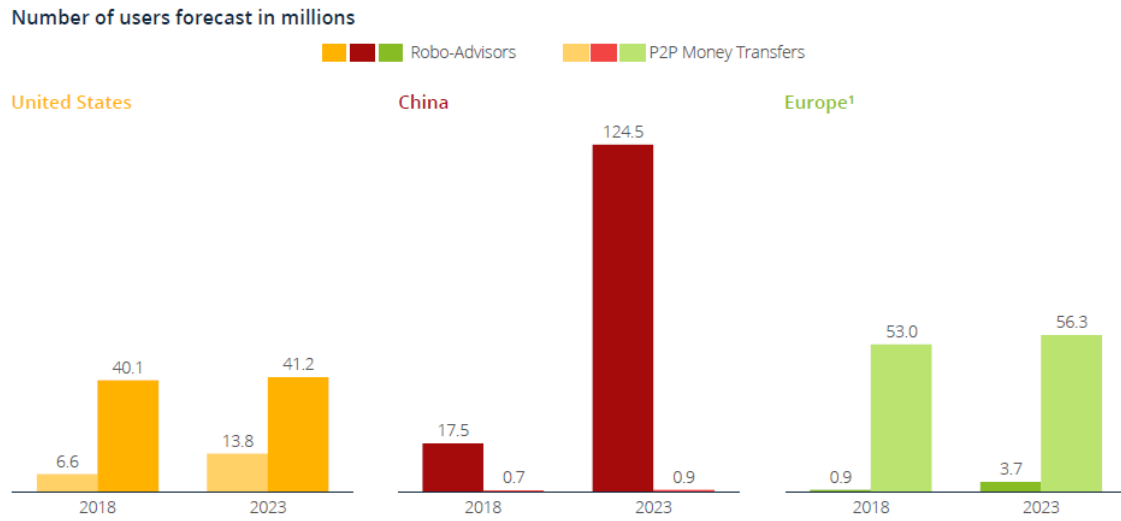
Source: Striapunina (2018)

**Exhibit 4. Personal Finance, transaction value forecast in billion US Dollars**



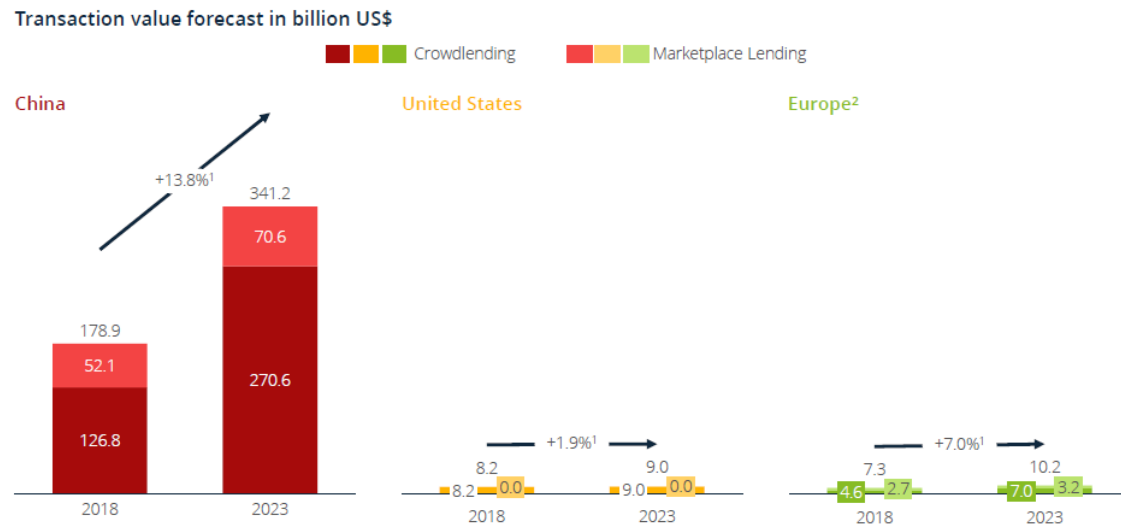
Source: Striapunina (2018)

**Exhibit 5. Personal Finance, number of users forecast in millions**



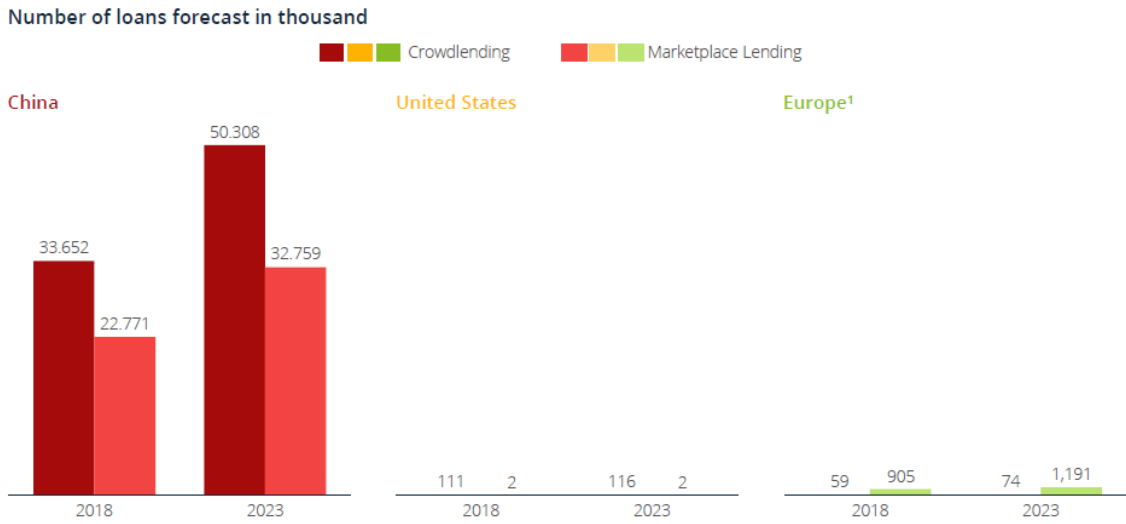
Source: Striapunina (2018)

**Exhibit 6. Alternative Lending, transaction value forecast in billion US Dollars**



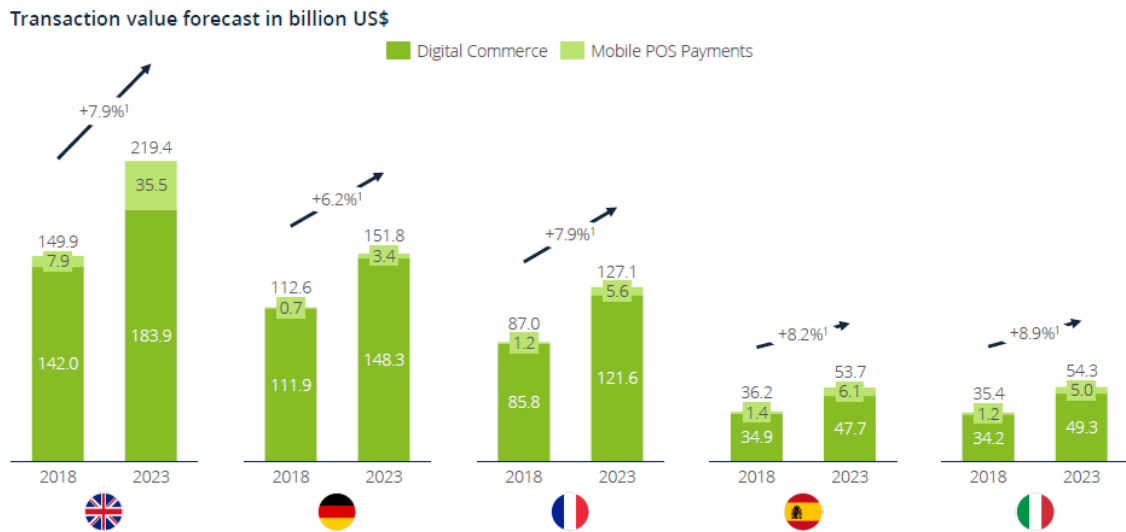
Source: Striapunina (2018)

**Exhibit 7. Alternative Lending, number of users forecast in thousands**



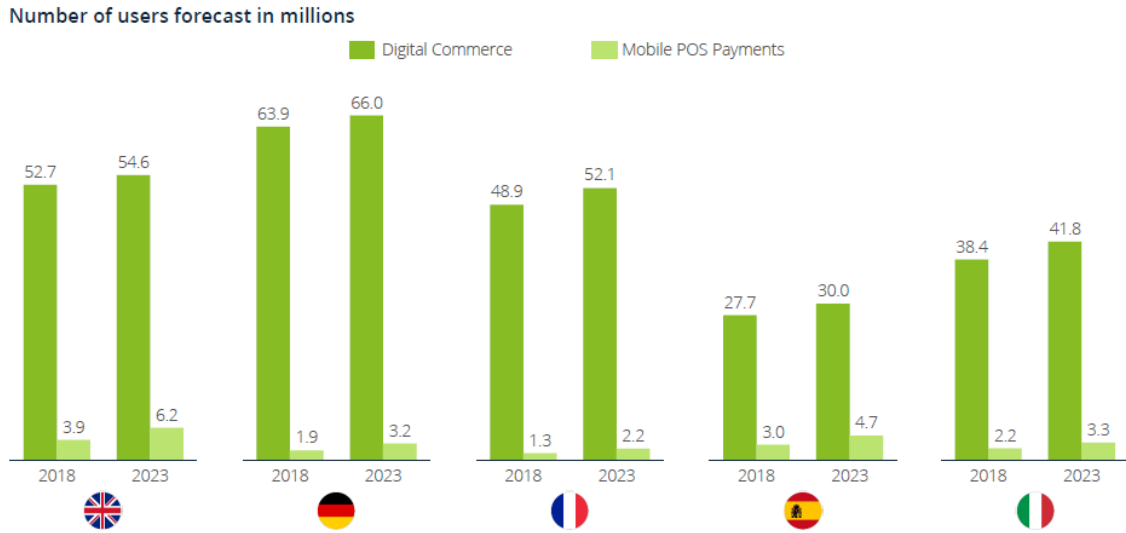
Source: Striapunina (2018)

**Exhibit 8. Digital Payments, transaction value forecast in billion US Dollars for European countries**



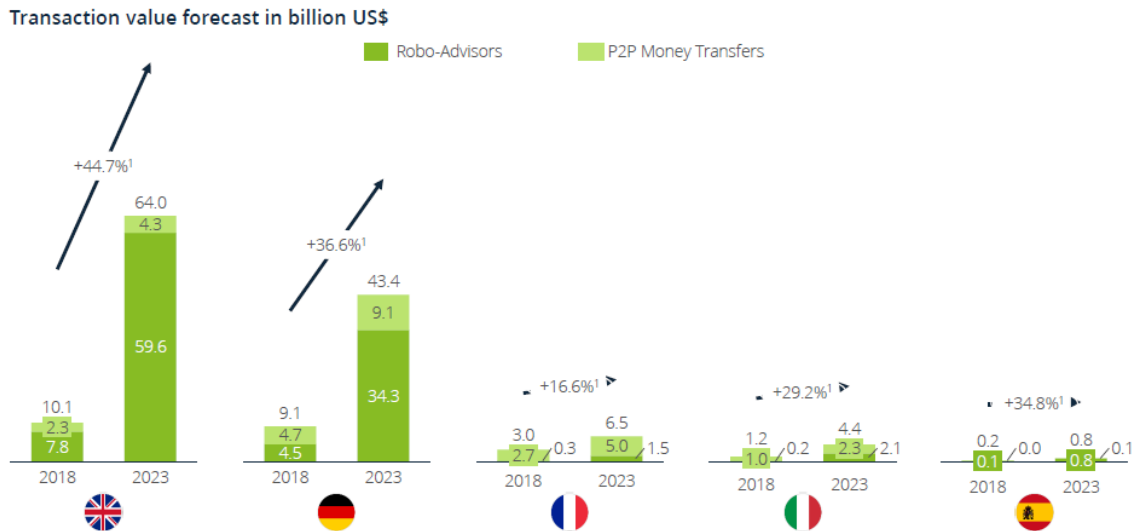
Source: Striapunina (2018)

**Exhibit 9. Digital Payments, number of users forecast in millions for European countries**



Source: Striapunina (2018)

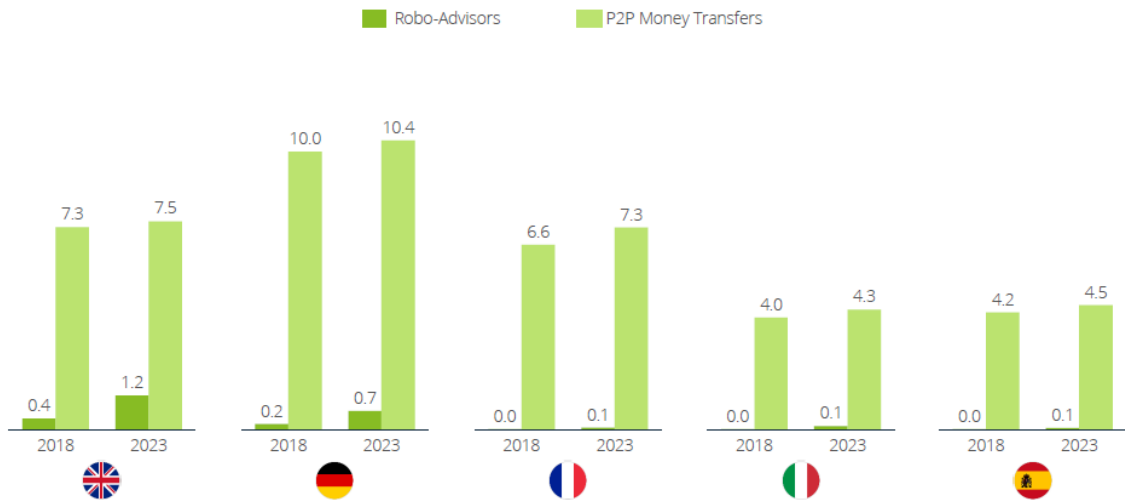
**Exhibit 10. Personal Finance, transaction value forecast in billion US Dollars for European countries**



Source: Striapunina (2018)

**Exhibit 11. Personal Finance, number of users forecast in millions for European countries**

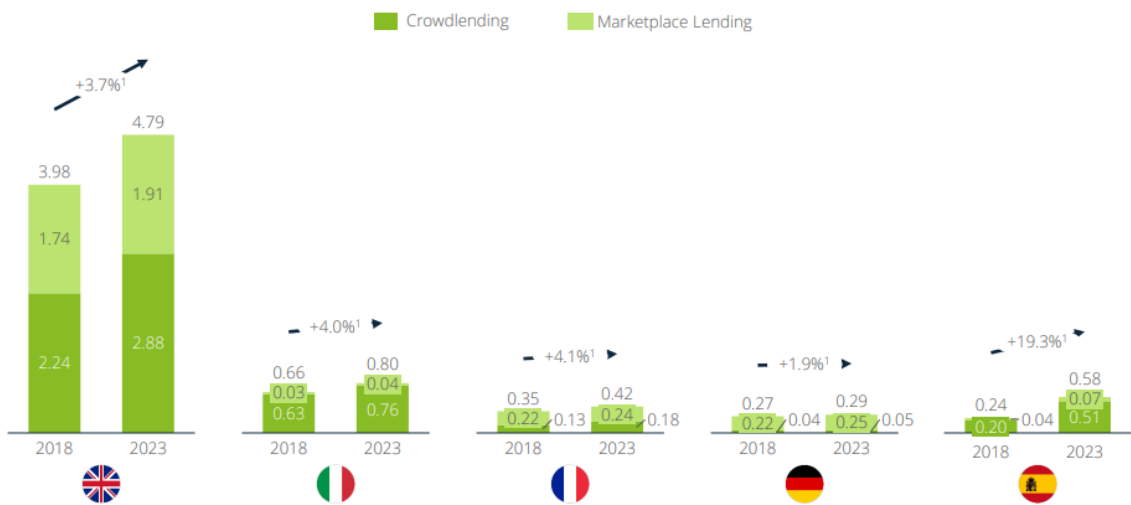
Number of users forecast in millions



Source: Striapunina (2018)

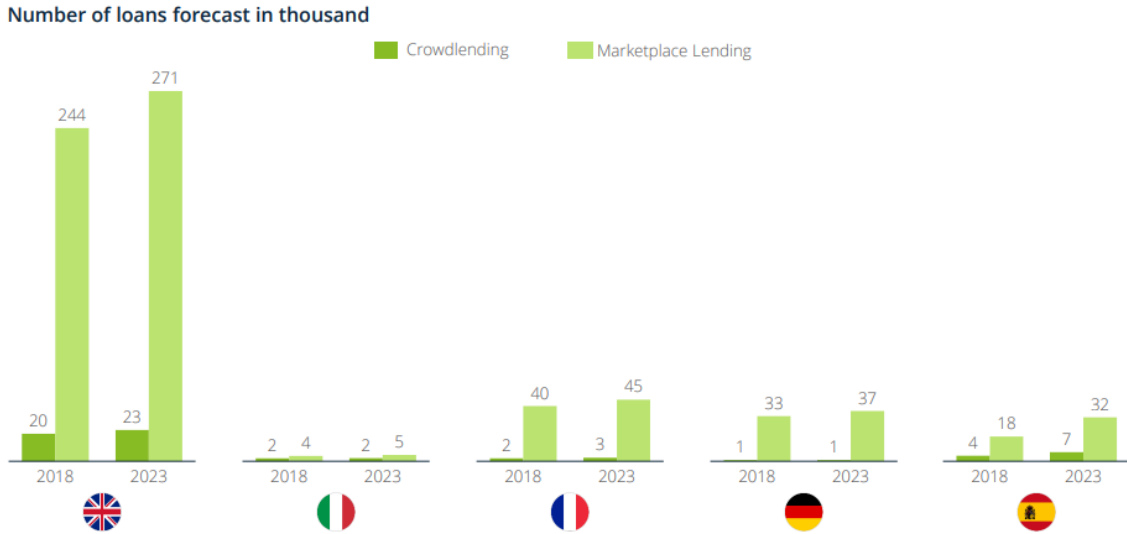
**Exhibit 12. Alternative Lending, transaction value forecast in billion US Dollars for European countries**

Transaction value forecast in billion US\$



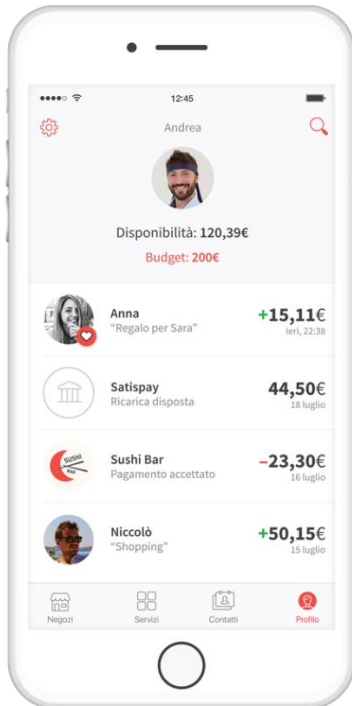
Source: Striapunina (2018)

**Exhibit 13.** Alternative Lending, number of loans forecast in thousands for European countries



Source: Striapunina (2018)

**Exhibit 14.** Satispay's Logo and User Interface



Source: Satispay

**Exhibit 15.** Hype’s Logo, User Interface and Prepaid Card



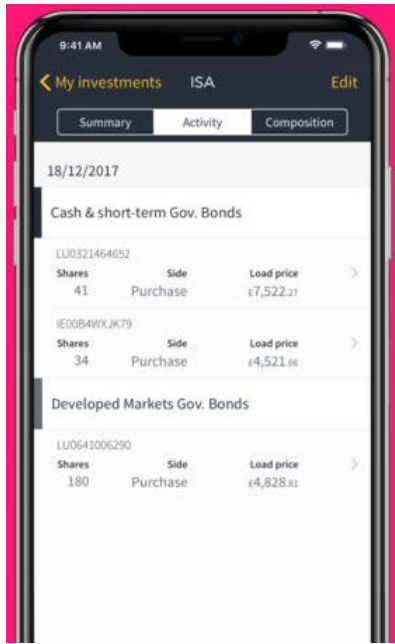
Source: Hype

**Exhibit 16.** Oval Money’s Logo, User Interface and Debit Card



Source: Oval Money

**Exhibit 17.** Moneyfarm's Logo and User Interface



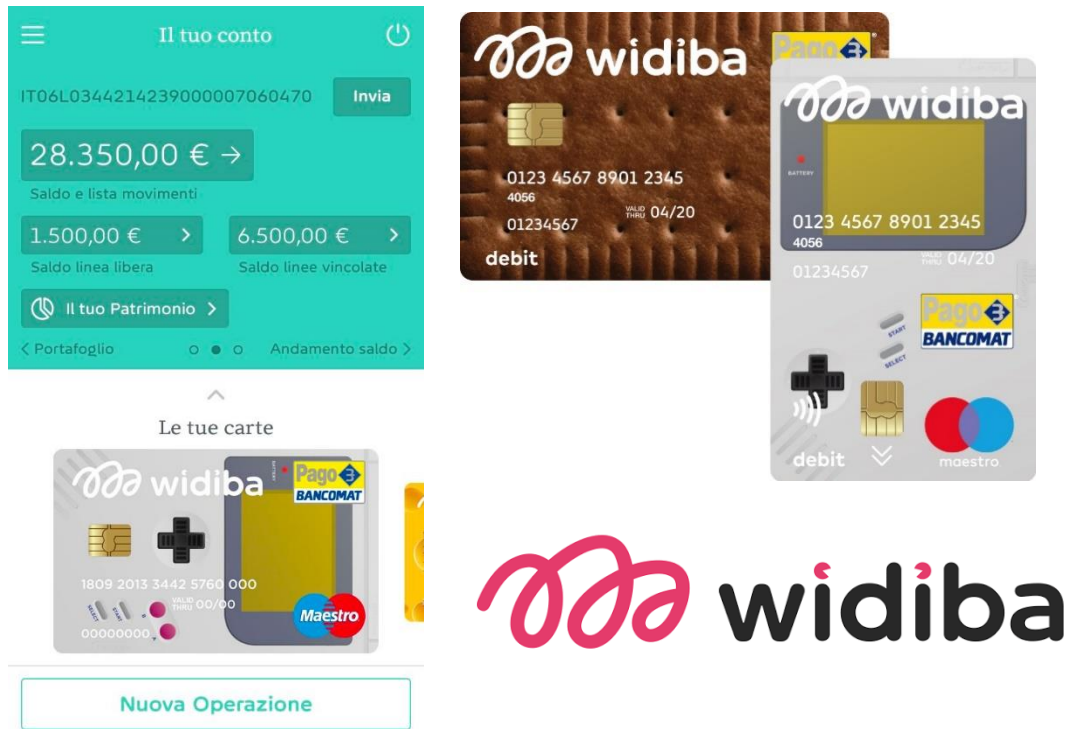
Source: Moneyfarm

**Exhibit 18.** CheBanca! Logo, User Interface and Debit Card



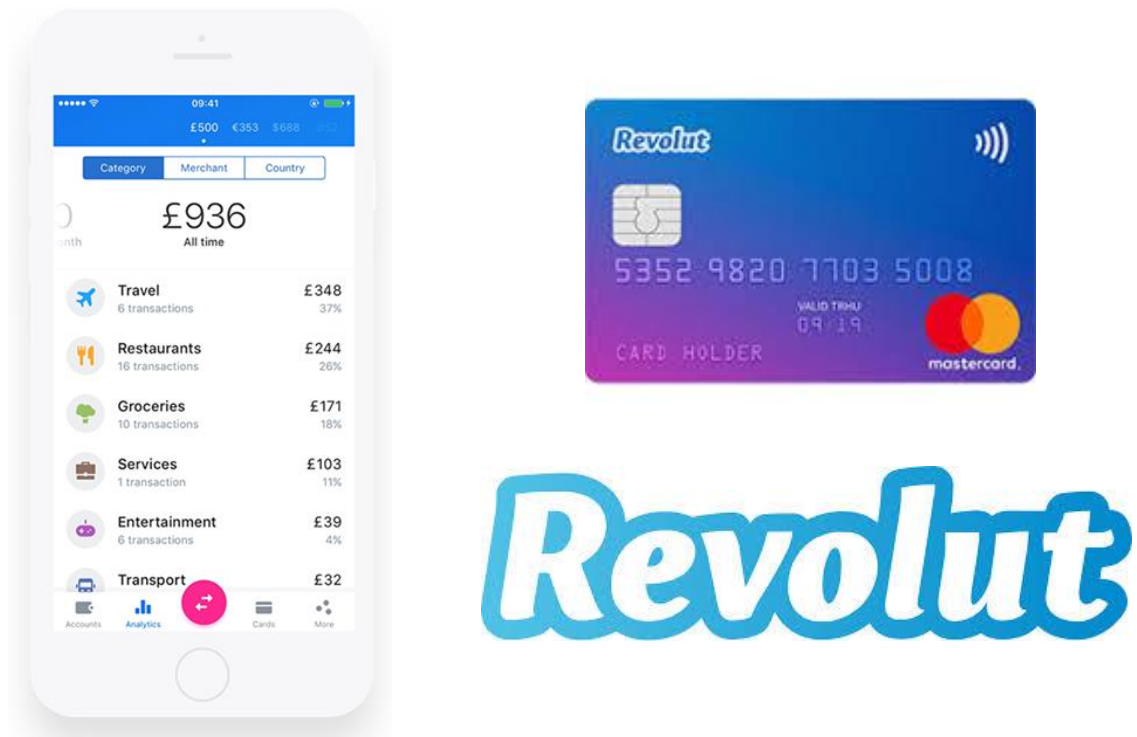
Source: CheBanca!

**Exhibit 19.** Widiba's Logo, User Interface and Debit Cards



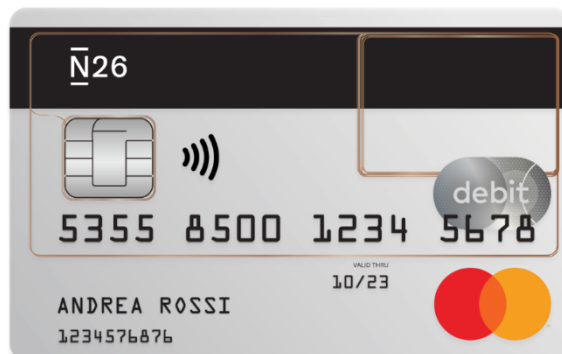
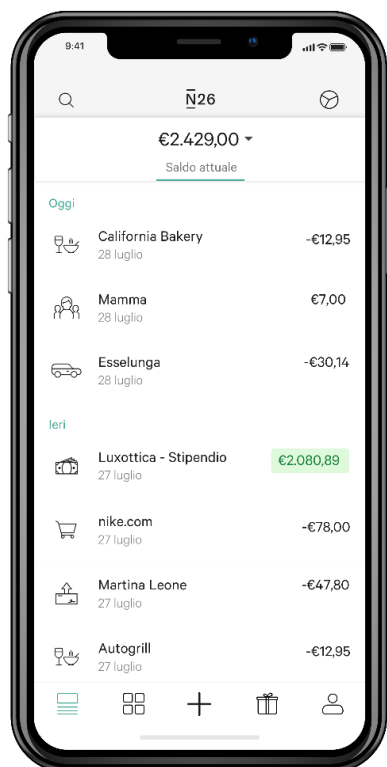
Source: Widiba

**Exhibit 20.** Revolut's Logo, User Interface and Debit Card



Source: Revolut

**Exhibit 21.** N26's Logo, User Interface and Debit Card



**N26**

Source: N26

## 12. References

- Adam, H. (2019). The Digital Revolution in Africa: Opportunities and Hurdles. *SSRN Electronic Journal, January 2019*. 239-267. doi: 10.2139/ssrn.3307703
- Andreasyan, T. (2018). *Revolut records annual loss but revenue grows fivefold*. Retrieved from <https://www.bankingtech.com/2018/09/revolut-records-annual-loss-but-revenue-grows-fivefold/>
- Aon (2018). *How PSD2 will revolutionise FinTech*. Retrieved from <https://www.aon.com/unitedkingdom/insights/how-psd2-will-revolutionise-fintech.jsp#>
- Arner, D. W., Barberis, J. N., & Buckley, R. P. (2015). *The Evolution of FinTech: A New Post-Crisis Paradigm?*. (The University of Hong Kong, Hong Kong, 2676553). Retrieved from <http://hdl.handle.net/10722/221450>
- App Annie (2018). *The Average Smartphone User Accessed Close to 40 Apps per Month in 2017*. Retrieved from <https://www.appannie.com/en/insights/market-data/apps-used-2017/?fbclid=IwAR0rVFWmcDayNs1WmbIRetLkNV4p-akanlCvKMYPApn4VPU2zWKvGFXP1tg>
- Avolta Partners (2018). *Tech Exit Transactions Multiples – Europe 2018 Edition*. Retrieved from <http://www.avoltapartners.com/tech-exit-transaction-multiples/>
- Backbase (2018). *CheBanca! Mastering the digital customer experience*. Retrieved from <https://www.backbase.com/resources/chebanca-case-study/>
- Backbase (2017). *The PSD2 Playbook*. Retrieved from [http://www.backbase.com/wp-content/uploads/2017/04/Backbase\\_The\\_PSD2\\_Playbook.pdf](http://www.backbase.com/wp-content/uploads/2017/04/Backbase_The_PSD2_Playbook.pdf)
- Barbagallo, C. (2019). *Fintech: Ruolo dell’Autorità di Vigilanza in un mercato che cambia. Proceedings of Convegno Invernale Associazione dei Docenti di Economia degli Intermediari e dei Mercati Finanziari e Finanza d’Impresa (ADEIMF) 2019, Napoli, February 8, 2019*. Retrieved from <https://www.bancaditalia.it/pubblicazioni/interventi-vari/int-var-2019/barbagallo-08.02.2019.pdf>
- Banca d’Italia (1993). *Decreto Legislativo n. 385/1993 (TUB): Testo Unico delle leggi in materia Bancaria e Creditizia*. Retrieved from <https://www.bancaditalia.it/compiti/vigilanza/intermediari/Testo-Unico-Bancario.pdf>
- Banca Profilo (2019). *Relazione Finanziaria annuale al 31 dicembre 2018*. Retrieved 4 May from <https://www.bancaprofilo.it/allegati/RelazioneFinanziariaAnnuale2018.pdf>
- Banca Profilo (2019). *Comunicato stampa – Approvati i risultati dei primi tre mesi del 2019*. Retrieved 2019 May 11 from [https://www.bancaprofilo.it/allegati/CS\\_20190509.pdf](https://www.bancaprofilo.it/allegati/CS_20190509.pdf)
- Basta, V. (2018). *What happens when fintech valuations come back down to Earth?*. Retrieved from <https://ftalphaville.ft.com/2018/04/16/1523849400000/What-happens-when-fintech-valuations-come-back-down-to-Earth--/>
- Botta, A., Digiacomio, N., Höll, R., & Oakes, L. (2018). *PSD2: Taking advantage of open-banking disruption*. Retrieved from the website of McKinsey:

- <https://www.mckinsey.com/industries/financial-services/our-insights/psd2-taking-advantage-of-open-banking-disruption>
- Buchak, G., Matvos, G., Piskorski, T., & Seru, A. (2018). *Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks*. Columbia Business School Research Paper No. 17-39. doi: 10.2139/ssrn.2941561
- Burstein, D. (2018). Ecommerce Marketing Chart : Median conversion rates for 25 industries. Retrieved from the MarketingSherpa website: <https://www.marketingsherpa.com/article/chart/median-conversion-rates-25-industries>
- Capgemini (2018). *World Fintech Report 2018*. Retrieved from [https://www.capgemini.com/fintechworldreport/?utm\\_source=pr&utm\\_medium=referral&utm\\_content=fs\\_groupsm\\_link\\_pressrelease\\_none&utm\\_campaign=innovation\\_fintechworldreport](https://www.capgemini.com/fintechworldreport/?utm_source=pr&utm_medium=referral&utm_content=fs_groupsm_link_pressrelease_none&utm_campaign=innovation_fintechworldreport)
- CB Insights (2018). *Global Fintech Report Q3 2019*. Retrieved from <https://www.cbinsights.com/research/report/fintech-trends-q3-2018/>
- CB Insights (2019). *2019 Fintech Trends to Watch*. Retrieved from <https://www.cbinsights.com/research/report/fintech-trends-2019/>
- Central Intelligence Agency (2018). *World Factbook 2017*. Retrieved from <https://www.cia.gov/library/publications/download/download-2018/index.html>
- Clifford Chance (2017). *European Fintech Regulation – An Overview*. Retrieved from <https://onlineservices.cliffordchance.com/online/freeDownload.action?key=OBWibFgNhLNomwBI%2B33QzdFhRQAhp8D%2BxrIGReI2crGqLnALtlyZexRJXnde45026c9GpgNonw%2Fp%0D%0A5mt12P8Wnx03DzsaBGwsIB3EVF8XihbSpJa3xHNE7tFeHpEbaelf&attachmentsize=2131363>
- Christiansen, B., Maalouf, K., Brandt, P., Seve, M., Piquet, F., Sandman, J., & Seidner, G. (2018). *A look at US and EU Fintech Regulatory Frameworks*. Retrieved from the website of Skadden: <https://www.skadden.com/insights/publications/2018/02/a-look-at-us-and-eu-fintech-regulatory-frameworks>
- Consob (1998), *Decreto Legislativo n. 58/1998 (TUF): Testo Unico delle disposizioni in materia di Intermediazione Finanziaria*. Retrieved from <http://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legislativo:1998-02-24;58!vig=>
- European Commission (2014). *Electronic Identification and Trust Services Directive (EU) 910/2014*. Retrieved from <https://eur-lex.europa.eu/eli/reg/2014/910/oj>
- European Commission (2015). *Payment Services Directive (EU) 2015/2366 (PSD2)*. Retrieved from [https://ec.europa.eu/info/law/payment-services-psd-2-directive-eu-2015-2366\\_en](https://ec.europa.eu/info/law/payment-services-psd-2-directive-eu-2015-2366_en)
- European Commission (2015). *Fourth Anti-Money Laundering Directive (EU) 2015/849*. Retrieved from [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ%3AJOL\\_2015\\_141\\_R\\_0003](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ%3AJOL_2015_141_R_0003)

- European Commission (2019). *Commission Anti-Fraud Strategy: enhanced action to protect the EU budget*. Retrieved from [https://ec.europa.eu/anti-fraud/sites/antifraud/files/2019\\_commission\\_anti\\_fraud\\_strategy\\_en.pdf](https://ec.europa.eu/anti-fraud/sites/antifraud/files/2019_commission_anti_fraud_strategy_en.pdf)
- Ferrari, G. (2019). *Italian Asset Gatherers – Paradigm shift, part 3*. Published by Mediobanca. Retrieved from Tinaba's internal resources.
- Financial Stability Board (2019). *FinTech and market structure in financial services: Market developments and potential financial stability implications*. Retrieved 2019 May 4 from <http://www.fsb.org/wp-content/uploads/P140219.pdf>
- Fintech Weekly (2019). *Fintech Definition*. Retrieved 2019 May 4 from <https://www.fintechweekly.com/fintech-definition>
- Ho, F. (2017). *Is Fintech Just Another Dotcom Bubble, Destined to Burst?*. Retrieved from <https://medium.com/@fiona.ho/is-fintech-just-another-dotcom-bubble-destined-to-burst-e1edda92a88d>
- Italian Ministry of Economic Development. (2017). *The Italian legislation in support of innovative start-ups*. Retrieved from [https://www.mise.gov.it/images/stories/documenti/Executive-Summary-of-Italy-s-Start-up-Act-new-format-23\\_02\\_2017.pdf](https://www.mise.gov.it/images/stories/documenti/Executive-Summary-of-Italy-s-Start-up-Act-new-format-23_02_2017.pdf)
- Langerveld, D. J. H. (2018). *FinTech valuation – The establishment of a valuation method for approximating the value an immature and highly uncertain financial subsector by combining academic financial heuristics* (Master's thesis, Eindhoven University of Technology, Eindhoven). Retrieved from [https://pure.tue.nl/ws/portalfiles/portal/92579383/Master\\_Thesis\\_Dani\\_1\\_Langerveld.PDF](https://pure.tue.nl/ws/portalfiles/portal/92579383/Master_Thesis_Dani_1_Langerveld.PDF)
- Linklaters (2019). *Global Fintech – Year in Review 2018, Year to Come 2019*. Retrieved from <https://www.linklaters.com/it-it/insights/publications/2018/december/fintech-year-in-review-2018-and-year-to-come-2019>
- Mastercard (2019). *How the Payment Process works*. Retrieved 2019 May 4 from <https://www.mastercard.us/en-us/merchants/start-accepting/payment-process.html>
- Miloud, T., Aspelund, A., & Cabrol, M. (2012). Start-up Valuation by Venture Capitalists: an Empirical Study. *Venture Capital*, 14(2-3), 151-174. doi:10.1080/13691066.2012.667907
- Owler (2019). *N26's Competitors, Revenue, Number of Employees, Funding and Acquisitions*. Retrieved from <https://www.owler.com/company/n26>
- Pollari, I., & Ruddenklau, A. (2018). *The Pulse of Fintech 2018*. Retrieved from the website of KPMG: <https://home.kpmg/it/it/home/insights/2017/11/the-pulse-of-fintech.html>
- Porto, N., Huang, Y., & Xiao, (2019). Credit Card Adoption and Usage in China: Urban-Rural Comparisons. *The Singapore Economic Review*, 64(1), 41-56. doi: 10.1142/S021759081743010X
- Quadrelli, F., Pesati, R., Lorini, R., Uttini, B., & Farina, F. S. (2019). *Piccole Fintech Crescono | Con "Intelligenza"*. Retrieved from PwC website: <https://www.pwc.com/it/it/publications/assets/docs/PwC-FinTech.pdf>

- Raymond James. (2019). *FinTech Insight – Mergers and acquisitions, public and private financings and financial advisory services*. Retrieved from [https://www.raymondjames.com/-/media/rj/dotcom/files/corporations-and-institutions/investment-banking/industry-insight/fin\\_tech\\_monthly.pdf](https://www.raymondjames.com/-/media/rj/dotcom/files/corporations-and-institutions/investment-banking/industry-insight/fin_tech_monthly.pdf)
- Rocco, G. (2019). *L'utilizzo del contante in Italia: evidenze dall'indagine della BCE "Study on the use of cash by households"* (Questioni di Economia e Finanza No. 481). Retrieved from the website of Banca d'Italia: <https://www.bancaditalia.it/pubblicazioni/qef/2019-0481/index.html>
- Romanova, I., & Kundinska, M. (2016). Banking and Fintech: A Challenge or Opportunity?. *Contemporary Issues in Finance: Current Challenges from Across Europe*, 21-35. doi:10.1108/S1569-375920160000098002
- Simnet, J., & Parizek, M. (2019). *M&A Market Report 1H 2019 – Fintech*. Retrieved from the website of Hampton Partners: <https://www.hamptonpartners.com/reports/fintech-report/>
- Skinner, C. (2015). *Why would a Digital Bank have Branches? (CheBanca! case study)*. Retrieved 2019 May 4 from <https://thefinanser.com/2015/05/why-would-a-digital-bank-have-branches-chebanca-case-study.html/?fbclid=IwAR0C44exw2psmcHqyFIN2ZrQ6Eqg8f20S3FOihBpy1Hn1Gfkp2BexaFyJ9k>
- Smith, O. (2018). *How Nikolay Storonsky Took Revolut From \$350m To A \$1.7bn Valuation In Just Six Months*. Retrieved 2019 May 4 from <https://www.forbes.com/sites/oliversmith/2018/04/26/how-nikolay-storonsky-took-revolut-from-350m-to-a-1-7bn-valuation-in-just-six-months/#e0209316aa32>
- Smith, O. (2019). *With A \$2.7 Billion Valuation, N26 Overtakes Revolut As Europe's Most Valuable Mobile Bank*. Retrieved 2019 May 4 from <https://www.forbes.com/sites/oliversmith/2019/01/10/with-a-27-billion-valuation-n26-overtakes-revolut-as-europes-most-valuable-mobile-bank/#61d08e466d64>
- Statista (2016). *Share of mobile device users willing to have the ability to perform bank transfers in future mobile banking apps in 2016, by region*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/statistics/623416/mobile-device-users-bank-transfers-mobile-banking-apps-by-region/>
- Statista (2017). *Which Five Factors are Most Important to your Clients when it comes to the Management of their Wealth and their Investment Decisions?*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/statistics/718347/factors-affecting-investment-decisions-uhnwis-by-country/>
- Statista (2018). *Number of Banks in Italy in 2018, by region (in units)*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/statistics/717429/number-of-banks-by-region-in-italy/>
- Statista (2018). *Online Banking in Italy*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/study/53930/online-and-mobile-banking-in-italy/>

- Statista (2018). *Online banking penetration in selected European markets in 2017*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/statistics/222286/online-banking-penetration-in-leading-european-countries/>
- Statista (2018). *Total Value of Card transactions in Italy from 2001 to 2017 (in Billion Euros)*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/statistics/436281/value-of-card-transactions-in-italy/>
- Statista (2019). *Alternative Finance in Italy*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/study/53903/alternative-finance-in-italy/>
- Statista (2019). *Banking in Italy*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/study/52270/banking-in-italy/>
- Statista (2019). *Financial Market in Africa*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/study/57585/financial-market-in-africa/>
- Statista (2019). *Fintech in Europe*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/study/26617/fintech-in-europe-statista-dossier/>
- Statista (2019). *Fintech in Italy*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/study/58338/fintech-in-italy/>
- Statista (2019). *In-depth: FinTech 2019 – Statista Digital Market Outlook – Trend Report*. Retrieved 2019 May 4 from <https://www-statista-com.ez.hhs.se/study/45600/statista-report-fintech/>
- Statista (2019). *Mobile internet in China*. Retrieved 2019 May 4 from <https://www.statista.com/study/14497/mobile-internet-in-china-statista-dossier/>
- Striapunina, K. (2018). *FinTech Report 2019 – Statista Digital Market Outlook – Market Report*. Retrieved from the website of Statista: <https://www-statista-com.ez.hhs.se/study/44525/fintech-report/>
- Tinaba (2019). *Panoramica Marzo 2019* [Pamphlet]. Milan: Tinaba.
- Tremolada, L. (2018). *Startup: Banca Intesa entra nel capitale di Oval Money*. Retrieved 2019 May 4 from <https://www.ilsole24ore.com/art/tecnologie/2018-06-18/startup-banca-intesa-entra-capitale-oval-money--140958.shtml?uud=AEIkVA8E>
- Werker, A. (2017). *The role of Alipay in commerce in China*. (Master's thesis, National Chiao Tung University, Hsinchu). Retrieved from <https://openaccess.leidenuniv.nl/bitstream/handle/1887/51299/Aleid%20Werker%2C%20MA%20THESIS.pdf?sequence=1>