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FinTech M&A: changes in the nature of the buyer and analysis of the main drivers

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Abstract

The FinTech sector has seen a rapid evolution in the last few years, thanks to the innovative solutions it manages to create and to the ability to apply the most recent technologies to the direct provision of financial services or to the development of software and digital solutions for financial services providers. Lately, investments in FinTech firms have reached their highest levels, with records achieved in 2021, not only through institutional investors like Business Angels and Venture Capitals but also through a great contribution of traditional financial institutions and FinTech players making acquisitions.

The research aimed at investigating two main topics: first, whether data analysis of the deals of the last five years allow to identify a change in the nature of the buyer, with a transition that sees the increment of industrial participant in acquisitions; second, which are the main drivers that can be distinguished behind the decision to pursue a FinTech strategic investment or acquisition.

Results showed that the presence of industrial investors has actually increased: from representing the 11% in the second semester of 2018, their presence is now the 26%, more than double compared to five years ago. Looking closer, data showed that the majority of acquisitions are performed by FinTech companies, confirming the period of consolidation of the industry. The broad analysis of the strategic deals, independent of the typology of the industrial buyer, revealed that the two main motives that drive acquisitions are (i) the decision to access a new technology to widen the firm's product offering or improve the existing product through the takeover of another company (63%) and (ii) the objective to expand the market reach by acquiring a firm in another geographical market or choosing to strengthen the position in the current market by reaching a different customer segment (21%). The other relevant driver that has been recognized is the mission to better serve a

specific target segment, in this case SMEs and underserved populations (7%). The ability to reach these customers is a peculiarity of FinTech businesses and characterized one of the main reasons for their success.

To conclude, general considerations on the existing literature suggest the development of a research on the “buy or build” topic to identify the factors that influence the decision-making process in the sector and the analysis of the selection method used for the choice of the target, with a specific point addressing when the target comes first and when the acquisition is primarily moved by the driver.

Keywords: FinTech, M&A, Buyer, Consolidation, Drivers

Abstract in italiano

Il settore FinTech ha visto una rapida evoluzione negli ultimi anni, in particolare grazie alle soluzioni innovative che riesce a creare e alla capacità di utilizzare le più recenti tecnologie per offrire servizi finanziari o per sviluppare software e soluzioni digitali per le istituzioni finanziarie tradizionali. Nell'ultimo periodo, gli investimenti nell'industria FinTech hanno raggiunto i massimi livelli, con record raggiunti nel 2021, non solo attraverso investitori istituzionali come Business Angels e Venture Capitals, ma anche grazie al sempre maggiore contributo di istituzioni finanziarie e di aziende FinTech che effettuano acquisizioni.

Questa tesi nasce con l'obiettivo di affrontare due temi principali: in primo luogo, se l'analisi dei dati delle operazioni degli ultimi cinque anni consenta di individuare un cambiamento nella natura dell'acquirente, con una transizione che vede un aumento nella presenza di investitori industriali; in secondo luogo, quali sono i principali driver che si possono distinguere dietro la decisione di perseguire un investimento strategico o un'acquisizione FinTech.

I risultati hanno mostrato che la presenza di investitori industriali è effettivamente aumentata: dal rappresentare l'11% nel secondo semestre del 2018, la loro presenza è ora del 26%, più che raddoppiata rispetto a cinque anni fa. Guardando più da vicino, i dati hanno mostrato che la maggior parte delle acquisizioni sono effettuate da società FinTech, confermando il periodo di consolidamento del settore. L'analisi complessiva delle operazioni strategiche, indipendentemente dal settore industriale dell'acquirente, ha rivelato che le due principali motivazioni che spingono alle acquisizioni sono (i) la decisione di accedere a una nuova tecnologia per ampliare l'offerta di prodotti o migliorare il prodotto esistente attraverso l'acquisizione di un'altra azienda specializzata (63%) e (ii) l'obiettivo di espandere la

presenza sul mercato acquisendo un'azienda in un'altra geografia o scegliendo di rafforzare la posizione nel mercato attuale raggiungendo un diverso target di clienti (21%). L'altro driver rilevante che è stato identificato è l'obiettivo di servire al meglio uno specifico segmento di clienti, in questo caso le PMI e le popolazioni poco servite dai tradizionali provider di servizi finanziari (7%). La capacità di raggiungere questi clienti è una peculiarità delle imprese FinTech e ha rappresentato una delle principali ragioni del loro successo.

In conclusione, le considerazioni generali sulla letteratura esistente suggeriscono lo sviluppo di una ricerca sul tema "buy or build" per identificare i fattori che influenzano il processo decisionale nel settore e l'analisi del metodo di selezione utilizzato per la scelta del target, con un focus specifico che affronti quando è il target a guidare l'acquisizione e quando invece questa è mossa principalmente dal driver.

Parole chiave: FinTech, M&A, Acquirente, Consolidamento, Drivers

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1 Introduction

1.1. Introduction to FinTech

1.1.1. General Introduction

The phrase "Financial Technology", or simply "FinTech", is used to denote technical innovation applied to revolutionize and improve different parts of financial services. It includes a wide range of innovative solutions that make use of cutting-edge technologies to improve the effectiveness, usability, and accessibility of financial processes. Among these, we can find several services, such as lending, payments and cryptocurrencies (Suryono, et al., 2020), but also blockchain and distributed ledger technology (DLT), machine learning (ML) and Artificial Intelligence (AI), cloud computing, open-source computing and APIs, big analytics and many more (Chemmanur, et al., 2020).

Although the concept dates back decades, the FinTech phenomenon has only just begun to gain traction. It is indisputable that the COVID-19 pandemic has contributed to this rapid growth (Fu & Mishra, 2020; Fu & Mishra, 2022) but looking a little further back, during the global financial crisis of the biennium 2007–2009, traditional financial institutions were deeply affected and suffered significant losses, both financially and in terms of reputation. In that context, FinTech found fertile soil for putting down roots (Darolles, 2016).

The majority of the services provided by traditional banks are now challenged by the advancement of digital solutions (Currencycloud, 2016). The emergence of completely new FinTech companies initially posed a threat to the established banking system, but now BigTechs are also competing in the financial services

industry, exploiting their superior knowledge of digital technology and taking advantage of the vast amounts of data gathered from clients (Fu and Mishra, 2022).

In addition to supplying financial services in a completely novel form, improvements brought about by digital disruption may also be able to address other issues with competition in the financial industry, such as high switching costs or high transaction costs (Currencycloud, 2016; Temelkov, 2020). These new market participants are currently posing a threat to the dominance of conventional banks thanks to the advantages deriving from open data access, pushing the financial system into a condition of insufficient regulation and insecure stability and inevitably marking the beginning of a period of significant changes (Zhang, et al., 2016; Temelkov, 2018; Hughes, et al., 2022).

1.1.2. FinTech trends and applications

The fusion of technology and financial services has produced an incredible variety of innovations and the development of new methods for conducting financial business, from the automation of financial services with the emergence of Robo-Advisors (Puschmann, 2017) to new methods of borrowing and financing such as BNPL ("buy now, pay later") and peer-to-peer lending (Temelkov, 2018) to the establishment of a new type of bank called challenger banks, where everything is managed using an app. These new banks were born as improved versions of traditional banks, offering a completely digital service and operating without a banking license, but then evolved and widened their range of services with others not necessarily related to banking but aligned with the innovation of technology. Their main advantage, compared to traditional banks, is that they manage to offer competitive rates by empowering their techniques with technological instruments; at the same time, they struggle to gain trust from clients (Gao & Waechter, 2017)

Because of the FinTech phenomenon, physical and digital solutions now coexist and are integrated to give customers faster, easier, and more individualized services (Darolles, 2016). The digitization found many uses in the financial sector, especially because of the enormous amount of data available and the opportunity to obtain

information in a much shorter amount of time, allowing for things like much faster credit request evaluations and the creation of instant insurances using personal data obtained right away (Buchak, et al., 2018). This data accessibility is made feasible by the growing adoption of Open Banking practices, which open up consumer financial and personal information to other financial institutions as well as third-party service providers like software firms (Laplante & Kshetri, 2021).

Financial services are being included into platforms or consumer experiences that are not financial through the development of embedded finance. Today, one of the activities that has benefited the most from the digital revolution is shopping, where embedded finance is used most extensively and has contributed to make online purchasing so common and convenient thanks to the underlying system that makes payment transactions possible (Ozili, 2022). But the concept takes into account more than just payments; it also serves as a word to describe how FinTech companies include credit and lending solutions, factoring options, trading goods, and leasing instruments within their applications.

The growth of banking as a service might also be included in the framework of embedded finance. BaaS allows banks to deliver their license without having direct contact with the final consumer, while non-financial companies or platforms can obtain the license necessary to perform banking services without being a bank themselves (Broby, 2021).

As artificial intelligence and machine learning processes continue to advance, FinTech companies can use them to automate procedures like loan origination and fraud prevention, improve accuracy and efficiency, and obtain insights into customer behaviour. Decentralized finance is another hot topic in the FinTech industry. As blockchain technology and cryptocurrencies gain importance, this alternative channel is becoming more and more popular due to its increased transparency and lower transaction costs (Frame, et al., 2018).

By making financial services more accessible and inexpensive for those who need them the most, financial technology has the ability to address the issue of financial

inclusion. Financial services can become more affordable and available to a larger range of people by becoming digitalized, and this is especially beneficial for developing nations whose access to financial services is restricted by geographical and financial barriers (Murinde, et al., 2022). Additionally, the blockchain technology can be applied to the development of more accessible and cost-effective financial services as well as the improvement of transaction security. To be successful, FinTech businesses must comprehend regulatory frameworks and how to work with regulators to forge strategic alliances and build a more inclusive financial system (Anagnostopoulos, 2018).

These were only a few of the key trends to watch while discussing FinTech, but nowadays technology has become established in virtually every aspect of financial life, and it is only going to get better as time goes on.

1.1.3. The evolution of the market

Traditionally, the financial industry has been dominated by established institutions like banks and financial services providers. However, FinTech companies are disrupting this landscape by offering digital solutions that aim to align to the changing needs and preferences of consumers, businesses, and even other financial institutions (Musabegović, et al., 2019).

Generally, it is possible to identify three roles of FinTech start-ups in relation to incumbents: Direct Competitors, which offer the same services of banks, Adjacent Competitors, which provide services that could be offered also by banks, and Enablers, which offer services that help banks to perform their activities.

Leveraging the use of the most advanced technology, their efficiency, and their easiness in reaching consumers in a shorter time, FinTech companies started growing their presence in the market, threatening the traditional system of financial institutions. In fact, the latter found themselves competing with companies that had a similar offer in terms of products, but exploited a level of technology that most of the incumbents could not implement internally (Riemer, et al., 2017); being that traditional banks' technologies were so entrenched in their whole structure, the

change of their technological asset would have led to so high cost that the transition wouldn't have been convenient anymore (Fariq, et al., 2022).

Due to this occurrence, there was an initial period where FinTech businesses offered themselves as alternatives to the established banking system, and their interaction was purely competitive. Then, the trend began to change (Lee & Shin, 2018), and the distinctions between the two models demonstrated that cooperation, rather than rivalry, would be the best course of action for banks (Lv, et al., 2022). Even though this is not yet a path that has been totally followed, certain steps have already been made in this direction.

In addition to lessening competition, there are many factors that point to the collaboration as being advantageous for both parties (Svensson, et al., 2019). On the one hand, there are FinTech companies that may appear to be more effective, flexible, and quick, but struggle to build a sizable customer base and establish credibility in the market (Riemer, et al., 2017). This is because investing in a young company that is essentially unknown on the market requires a more thorough investigation than investing in an established incumbent. Because of this, FinTech cost of acquisition of new clients is far higher compared to incumbents and this results in a significant cash burnt. On the other hand, the major and well-known traditional players are threatened by the digital disruption. They have a strong foundation, a deep understanding of the industry, are well-known in the market and have a wide customer base (Anagnostopoulos, 2018), yet have little to no innovation potential (Phan, et al., 2020).

The main benefits of the collaboration are the following: incumbents would gain access to vast amounts of data, capitalize on the latest technologies, and increase their revenue (Bömer & Maxin, 2018), while FinTech start-ups would gain trustworthiness and access to a larger customer base (Anagnostopoulos, 2018), have the chance to take advantage of economies of scale, and become more stable (Riemer, et al., 2017).

1.1.4. FinTech Business and Integration Models

The previous paragraph outlined three primary typologies of FinTech positions in relation to banks and discussed why cooperation appears to be the greatest option for the industry's future. The business models of FinTech companies have transformed from being rivals to collaborators as a result of the move toward partnerships. The two main categories of FinTech that exist today are the so-called "Independent" ones, like Direct Competitors, who offer a variety of products that are comparable to those of banks and operate from a perspective of competition, and the "Ecosystem Logic" ones, like Adjacent Competitors or Enablers, who seek to integrate their offer with the one of traditional players in order to offer particular services or attract new clients (Pwc, 2023).

Regarding the collaboration mode, there are three integration models that incumbents can pick from when deciding what kind of relationship to build with FinTech (Lee & Shin, 2018). This decision often depends on whether the bank prefers to invest in a technical system that was developed internally or rely on an external provider that is already specialized in the necessary functionalities (Pwc, 2023).

By using the *make* model, the incumbent develops internal procedures to preserve all the knowledge obtained through the new goods and services creation. Given the importance of the skills required, in this case the traditional institution must work hard to choose the best resources. Additionally, a significant investment in infrastructure is needed to support software development (Lv, et al., 2022). When these factors come into play, the entire process slows down and the time to market increases and although some of the largest financial institutions have adopted this approach, it is still the exception as it requires a significant amount of capital (Darolles, 2016). With the *buy* model, the incumbent purchases the FinTech completely or to a certain extent in order to have greater influence and participation over a longer period of time. This option presents some challenges, as the acquirer must integrate the newly acquired company into its current operations, technological stack, and corporate culture. Even though many financial institutions

have followed this route, the presence of such obstacles makes it not the best choice (Capgemini, 2018). Last but not least, the *collaboration* model involves cooperations for specific projects throughout the medium term. With this approach, the creation of digital products and services is made possible, and the bank is able to profit from the expertise of a FinTech firm that essentially serves as both a consultant and a technology provider. This is typically the most cost-efficient and efficient solution (Rise, 2021).

1.1.5. Industry cycles and the consolidation phase

As for businesses and products, industries follow a precise structure in their existence. This pattern is termed the 'industry life cycle' and is made up of many stages. Detailing this sequence, there are five phases: launch, growth, shake-out, maturity, and decline. Understanding where an industry stands in its life cycle is crucial because it affects the competitive environment and companies' ability to generate profits (CFI, 2021).

During the launch phase, players are still learning how to move their steps and take advantage of the market conditions. Here, R&D is the main focus of investing. The industry experiences its biggest changes during the growth period, as its size and income rise with the formation of more specific products or services. Then, in the phase of shake-out, growth sensitivity slows, and the major players begin to emerge, while in the phase of maturity, the revenue trend flattens and gradually begins to decline. As businesses attempt to combine with rivals to improve performance, market concentration tends to rise during this stage. As the name suggests, in the last phase total sales decline and industry concentration rises even further in an effort to force the business to reinvent itself.

In this life cycle, the FinTech sector appears to have entered its consolidation phase. After experiencing rapid growth over the last ten years, it is currently having trouble expanding on its own (White&Case, 2023). The majority of FinTech companies still relies heavily on Venture Capital funds to raise money and expand their businesses (Chemmanur, et al., 2020), despite the fact that some startups have been successful

and prospered after finding their own niche in the market. However, due to the recent industry's rapid development and the difficult macroeconomic environment, fund availability is running low and FinTech investments are declining (KPMG, 2023). Due to this reason and the challenges associated with scaling up and going global, mergers and acquisitions are increasingly becoming the best option for FinTech companies with a lower profile to keep operating (Rise, 2021). At the same time, this moment of consolidation will result in a more sustainable environment.

1.2. Introduction to the thesis

As stated in the introduction to the FinTech sector, the industry has gone through several stages of development. Beginning as bank rivals, FinTech startups introduced technological innovations into a sector that had previously operated primarily physically. With the introduction of new technology, incumbents and established financial institutions were put at risk.

The industry then saw its evolution. The structure and functioning of industry cycles and the shifting attitudes of traditional operators toward FinTech startups were examined in the prior section. As time went on, the tendency has changed from rivalry to the creation of closer relationships that increasingly see the cooperation and integration of the two distinct actor typologies through mergers and acquisitions.

This thesis was born with the goal of examining transactions in which FinTech businesses are the main players. The study's specific goal is to examine the buyer's perspective in order to determine whether it is possible to verify a shift away from the predominance of financial investors toward a greater presence of strategic purchasers. This hypothesis is based on the broad number of considerations that have been made on the subject: when the phenomenon first emerged, an incredible number of startups were born, and numerous Venture Capital firms and funds invested in the most promising ones, supporting their growth; later, the industry entered its maturity stage, and the market is currently moving toward

consolidation. These market conditions suggest that the analysis of the nature of the deals should reveal a higher number of strategic acquisitions, given the current scenario and the factors taken into account. This thesis will look at whether or not this theory is accurate before going more in-depth with some specific analyses.

The second objective of the work is then investigating which are the main drivers behind the acquisitions of FinTech companies. Past studies have variously discussed the topic of general approach of firms to M&As and also analysed some motives that move traditional financial institutions toward investments in FinTech companies, but existing literature reveals a scarcity in the analysis of a wider view of FinTech acquisitions, in the study of the factors that push the sector toward the consolidation and in the analysis of acquisitions performed by industrial entities not belonging to the financial industry. So, the scope of this research is to contribute to this gap by inspecting which are the main reasons behind FinTech M&As.

1.2.1. Research questions

Given the above-mentioned considerations and the main field of interest of this study, it is possible to define two main questions that the research wants to address:

1. *Which is the nature of the investor or buyer of a FinTech company and how has this changed in the last five years? Is it possible to identify a transition toward a higher presence of industrial acquirors?*
2. *Which are the main rationales that drive industrial buyers to perform strategic acquisitions of FinTech companies?*

2 Literature Review

The rise of digitalization and the innovations in the field of financial technology have radically changed the whole business environment.

The FinTech industry came as a major disruption for the financial services industry, introducing new technological ways to provide services traditionally offered by banks and creating a higher level of efficiency and flexibility.

The new banking business models that have emerged thanks to the digital disruption are the former basis of new FinTech firms, which have gradually strengthened their position in the financial markets creating a threat in the dominance of traditional banks. It is not clear whether the models proposed by newcomers could totally replace current financial institutions. At the moment, we observe in the market different approaches toward integration, which go from in-house digital development to product partnerships with FinTech companies, to mergers and acquisitions, but whatever the chosen method the certainty is that traditional banks will need to evolve in a technological direction.

Many researchers have conducted studies about the FinTech growth of the last years. It has been possible to define trends, patterns, and most of all understand how their entrance in the market has affected incumbents, meaning traditional financial institutions which were used to offer their services without the use of technologies. Studies have showed how the behaviour of incumbents have changed, going from a competition aptitude toward a cooperation one, and how this tendency can be explored by examining recent FinTech M&As, the evolution of the buyer typology and the reasons that lie behind the deals completed. This is what will be

analysed in this research, but before that the main findings reached on this topic are investigated.

2.1. The rise of FinTech

FinTech is not a new concept. Even if its hugest impact is observable today more than ever, financial technology started its slow development in the second half of the last century. Finance and technology have been reciprocally linked for a long time (Arner, et al., 2015), and the development of the two sectors have been often mutually reinforcing. Generally, the rise of technology in the financial field leads to a wide range of benefits both for the financial intermediaries and for financial services users, and this approach generates additional demand that therefore stimulates the development of FinTech even more (Pantelieieva, et al., 2018). Today, FinTech is not in the initial stage of hype anymore, but it has become a major player in the financial world (Lee & Shin, 2018).

The history of FinTech can be subdivided into three main stages, which have been nominated as FinTech 1.0, FinTech 2.0 and FinTech 3.0 (Arner, et al., 2015). These phases are subsequent in time; from 1866 to 1967, the financial industry still was mainly analogue, but the internet revolution of the early 90s was making it become more strongly interconnected with technology. In this period, many e-finance business models were born, like online banking and online brokerage services (Lee & Shin, 2018). From 1967, the financial industry benefited from the development of technologies for communication and transactions, moving itself toward a more digital approach and marking a period of transformation that lasted until 2008 (Arner, et al., 2015). In this stage, it was already estimated that this technological development would have induced fragmentation in the financial services sector, driven by specialized players capable of creating and offering products customization and align with customer preferences (Thakor, 1999). 2008 indicated the beginning of the last stage, which is still running, where new startups have begun to use technology to deliver financial products and services (Arner, et al., 2015). The

emergence of new technology-enabled innovations was driven by advancements in technology itself, changes in customer preferences toward digital solutions, but also by forces of economic development which are driving the adoption of FinTech in some rapidly growing emerging markets and creating new business opportunities for new entrants (Financial Stability Board, 2017). But the beginning of this third phase is also determined by the specific historical period. Banks were perceived as the main culprits behind the global financial crisis and claimed as incapable of managing the risk they took (Darolles, 2016). In this context, banks suffered losses in terms of trust and reputation, indirectly contributing in a crucial way to the raise of FinTech. In fact, trust has always been one of the main entry barriers for FinTech firms, and especially for the lending activity (Thakor, 2019; Yang, 2023) and the loss of trust in banks allowed FinTech to emerge.

In the first stages of this revolution, banks have been negatively impacted by the introduction of financial technologies. The digital disruption has undoubtedly created innovation, but it has also brought along an obvious earthquake for traditional institutions, which found themselves in a status of up-to-date digital situation (Phan, et al., 2020) and fighting against new entrants providing the same or similar financial services at lower costs and higher level of accessibility (Currencycloud, 2016). While FinTech startups were initially operating only in transactional offerings, they have then started increasing their presence as competitors in other areas of the financial services ecosystem, including loans and investments (Riemer, et al., 2017). They also expanded by developing the blockchain and the distributed ledger technologies used for the transfer of cryptocurrencies and by applying artificial intelligence and machine learning to improve lending monitoring and provide financial services at a lower cost than incumbents (Frame, et al., 2018). But not only FinTech had a great ascent in the retail sector. Along with the wide array of B2C solutions, FinTech companies are also becoming more and more widespread as B2B solutions providers. Indeed, corporate needs and expectations are shifting toward digitalization in the same way of the consumer world (Holmes & King, 2019).

Moreover, after the global financial crisis, one of the main challenges faced by banks was regulatory compliance. Because of the continuous evolution of regulations, being compliant became more and more expensive for banks (Wong, 2017) especially when serving specific segments of clients (Dahl, et al., 2016) that are consequently being left with limited access to funds (Currencycloud, 2016; Temelkov, 2018). In particular, banks have limited their availability to serve small and medium enterprises, since they are considered risky borrowers (World Economic Forum, 2015; Zhang, et al., 2016). In this context, FinTech startups managed to enter the competition by leveraging their advanced technology and their regulatory framework: first, the use of alternative data and complex modelling allows them to perform more accurate evaluations of credit risks (Hughes, et al., 2022); second, their looser regulatory environment generates a cost advantage compared to banks (Zhang, et al., 2016; Temelkov, 2018) and allow them to offer these clients an alternative source of financing without taking on excessive risk.

It is also possible to affirm that there are some countries where FinTech firms have more easily expanded, specifically the ones with a well-developed economy, a solid supporting infrastructure, and a flexible market regulation. Then, other two determinants have been the access to venture capital, which has always been indispensable for the formation of FinTech startups (Chemmanur, et al., 2020), and the difficulty for enterprises to get loans; countries where the access to traditional financing is more difficult saw a higher growth of FinTech presence on the territory (Haddad & Hornuf, 2019), reinforcing the fact that these companies are able to provide services to traditionally unserved or underserved populations (Mention, 2019). As technology helps to reduce costs in customer acquisition and servicing, it helps to tackle issues around financial inclusion and provide products for disadvantaged populations (Murinde, et al., 2022).

These first considerations on FinTech companies showed how they have been a major danger for banks in the beginning, affecting their performance and causing them clients' loss (Alt, et al., 2018).

Further analysis introduced other points of view: first, traditional banks have outdated ways to perform operations, but they also have the resources to adopt technological innovations and change the way they operate and do business (Musabegović, et al., 2019); second, FinTech also bring along many opportunities and, in the end, it is totally up to banks to decide how to treat them. If they go for strategic alliances, they will have the possibility to exploit synergies; if they choose the way of pure competition, the winner is yet to be determined (Temelkov, 2018).

There are divergent opinions regarding whether FinTech will end up substituting traditional banks or not: some studies affirm that eventually FinTech companies will substitute incumbents thanks to a less expensive and more efficient service (Phan, et al., 2020). The platform-as-a-model that dominates these companies' structures will create a new way to perform intermediation and will produce new markets structures that will allow FinTech to secure oligopolistic and monopolistic positions, while platform consolidation will be intensively performed by BigTech firms and incumbents (Langley & Leyshon, 2020). Others argue that, especially in specific cases like lending, the services offered by FinTech, like the peer-to-peer lending, will for sure take a good amount of market share away but they will not replace banks anytime soon (Thakor, 2019; Murinde, et al., 2022). In fact, although FinTech firms benefit from advanced information technology which give them advantage in lending decisions, bank still possess a more stable form of funding, thanks to deposit insurance and access to liquidity facilities operated by the Federal Reserve and can help stabilize credit supply during downturns. These characteristics, together with the advantages already discussed, make it hard to believe that banks will be replaced by newcomers if they manage to update their operations using new technologies (Wang, 2018).

2.2. FinTech investments

Starting from the years following the financial crisis, investments in FinTech companies started growing and they definitely took off from 2013 on. Historically,

the largest amount of investment was made in consumer payment, consumer lending and payment infrastructure (Chemmanur, et al., 2020). FinTech startups raise money like other types of startups, beginning with Seed Funding from Angel Investors, accelerators and incubators that help the company to start their business, and going on with Early-Stage funding first and Late-Stage funding as the company matures. Protagonists of Early-Stage fundings are usually Venture Capitals with equity investments or venture debt, and their more active presence can be registered in countries with a weaker regulatory enforcement and without a major financial centre, as it's easier and less costly for them to operate (Cumming & Schwienbacher, 2018). Moreover, policy makers have also strongly contributed to the development of FinTech startups through the establishment of specialized accelerators and incubators (Block, et al., 2018). The environment of these agents is designed to help startups to overcome their early-stage needs, protecting them against failure (Theodorakopoulos, et al., 2014). In Late-Stage fundings operate both Venture Capitals and Private Equity firms (Chemmanur, et al., 2020).

FinTech companies often use also other forms of funding when they find difficulties in getting funds from Business Angels and Venture Capitals (Cumming, et al., 2021). In fact, despite the importance of the innovation that FinTech companies want to bring, they frequently have hard times trying to access the large fundings they need, as they struggle to present a solid value proposition to Venture Capitals, which demand a clear offering with strong potential for scaling (Mention, 2019). VCs tend to favour a few firms that manage to signal their possibilities to succeed and this causes underfunding for many FinTech startups, making hard for them to develop and scale and also generating a strong regionalism in the sector, since it becomes really challenging for companies to expand globally and scale outside their own geography (Capgemini, 2018).

Moreover, it was also studied that geographical distance negatively impacts the likelihood of VCs investments due to the higher costs they should sustain (Sorenson & Stuart, 2001). In this context, crowdfunding has become an optimal alternative solution for startups to both overcome the problem of geographical distance

between funders and investors (Mollick, 2014; Cumming, et al., 2021) and collect the resources they need to launch their business (Cumming, et al., 2021).

But Venture Capital funds and other institutional investors are not the only ones who have invested into FinTech startups. Traditional financial institutions, which initially saw them as threats, started collaborating with various funding provisions (Lee & Shin, 2018). Other than incubating and accelerating FinTech startups, there is a variety of ways in which traditional institutions invest in FinTech, including providing them venture capital, establishing partnerships or outsourcing FinTech services, and acquiring FinTech companies (Lee & Shin, 2018). Generally, banks are more likely to invest in smaller FinTechs (Hornuf, et al., 2020), and they often create accelerator and incubator programs to get stakes in these startups from the early stages of their life. Doing so, they have the possibility to orchestrate specific services development in the best way to integrate them in their operational structure and IT infrastructure (Hornuf, et al., 2020), and they can ensure a strong relationship from the beginning, resulting in the capability to avoid internal tensions that may lead to conflicts and ultimately to the dissolution of the alliance (Das & Teng, 2000). Moreover, by making a minority investment or full acquisition in a FinTech, banks can manage to FinTech company's board and thereby gain at least partial control over it (Hornuf, et al., 2020).

It has been studied that FinTech investments are enhanced when the target company is in a later stage of development and when the bank is large. Together with the FinTech specialization that the bank is acquiring and the contribute of other investors, these elements allow to reduce information asymmetries and to mitigate risks (Barba Navaretti, et al., 2018; Haddad & Hornuf, 2019; Hornuf, et al., 2020). Indeed, large, listed and universal banks are more likely to create partnerships with FinTechs than smaller, unlisted and specialized banks (Hornuf, et al., 2020). Moreover, evidence showed that the relative and absolute size of a funding round are larger if more banks are involved in the deal (Carlini, et al., 2022) and that banks tend to increase the size of their investments as the maturity of the FinTech increases, but with a decrease in the share of the total funding. This could be an

effect of a raising valuation of the FinTech which would bring costs for the investing bank to be higher than the potential benefits (Bellardini, et al., 2022). At the same time the presence of banks within the investor base signals to the Venture Capital market that the investment is sound and contributes to bring in more investors (Carlini, et al., 2022). Anyway, investments in FinTech are not an easy choice for banks. The large quantity of FinTechs firms in different life stages make it challenging for traditional firms to choose the right one and, parallelly, their lack of agility generates hurdles for FinTechs attempting to find a suitable partner (Capgemini, 2018).

At this point, FinTech firms can decide in which way they want to secure venture capital: they can choose to compete with the traditional financial institutions and raise fundings by traditional Venture Capitals or they can collaborate with them and create partnerships. Usually, new startups tend to be less collaborative with established institutions when the regulatory environment is favourable (Lee & Shin, 2018) as they know that choosing the wrong partner could easily jeopardize their success (Capgemini, 2018).

2.3. The impact of COVID-19

The previous section discussed how the FinTech phenomenon was born and rose, and identified the three main stages of its development. But, after the global financial crisis of the biennium 2008-09, there has been another period that generated a massive growth of technology application in all fields and that allowed FinTech companies to increase their strength. The COVID-19 pandemic has undoubtedly accelerated both the digital transformation (Fu & Mishra, 2020) and the changes in consumer behaviour, pushing people toward a more digitalized life, and increased their propensity to look for digital solutions instead of physical ones.

At the beginning of the pandemic, there was uncertainty about how the FinTech industry would have responded to a slow-down in the economy. Indeed, lower venture capital investments could have strongly affected the possibility of FinTech

companies to grow, since historically they had always relied on external capital (LSE, 2020). Later on, reality showed that, while the entire global economy was actually in recession, the FinTech industry was booming (Sambetbayeva, et al., 2020), as technology-based financial services became the best way to conduct transactions while respecting social restrictions (Dubey, et al., 2020; Candy, et al., 2022). Their digital solutions and their ability in financial inclusion let them become in many cases the first choice of the customers, allowing them to overcome more easily the old heavy hurdle of customer acquisition (LSE, 2020), but still regulations played a central role. The higher perceived risk of cyber threats kept alive the trust issue, that can prevent consumers from using the services in the absence of a precise regulatory plan for customer protection (Das & Das, 2023).

With social distancing, people were much more likely to use digital channels to access financial services (Wójcik & Ioannou, 2020; Tut, 2023), exploiting the electronic banking service as a way not to physically visit banks (Dubey, et al., 2020; Al-Khawaja, et al., 2023). In these terms, online account opening, smart customer service, corporate financing, and remote contracting have been continuously optimized and were able to substitute offline bank branches (Wang, 2021). Studies conducted during the pandemic showed that the spread of the virus led to an increase in the number of downloads of finance mobile applications (Fu & Mishra, 2020; Fu & Mishra, 2022), and identified a first digital growth of traditional incumbents, followed then by the entrance of BigTech and FinTech companies that outperformed over time (Fu & Mishra, 2022).

The service that registered the higher diffusion rate during the pandemic period was mobile payment, with consumers shifting towards the cheaper and more convenient forms of payment offered by FinTech platforms (Tut, 2023) both for technological advantages like affordability and accessibility and for the classification of contact payment as a potential channel for the spread of the virus through the exchange of banknotes and coins (Coffie, et al., 2022). Specifically, the main factors that affected the adoption of mobile payments were the perceived ease of use, perceived usefulness, safety and trust (Hasan, et al., 2021), while generally speaking,

social influence, perceived trust and perceived value were strongly linked to the intention on users to adopt mobile financial services platforms and perceived risk, performance expectancy and effort expectancy influenced the perceived value of the same platforms during the pandemic. Although it is counterintuitive, the perceived risk does not significantly affect the intention to use FinTech applications (Al nawayseh, 2020; Yan, et al., 2021).

Also, the original online financial service model was strengthened and empowered and expanded online life consumption service in a moment when non-contact life restricted offline consumption (Wang, 2021).

From the banks point of view, the advent of COVID-19 has negatively affected the bank lending activity, and alliances with FinTech companies have not created benefits (Yudaruddin, 2023).

In this context, FinTech companies have maintained their peculiarity of being able to provide financing to underbanked populations, allowing access to customized credit services to categories that weren't able to get credit from banks, including low-income and unemployed borrowers.

But although credit access was positive from a quantitative perspective, it was observed that the quality of FinTech loans was negatively impacted from the spread of the virus, as the COVID-19 pandemic risk considerably increased the likelihood of marketplace loans default (Nigmonov & Shams, 2021). While before COVID-19 both banks and FinTech companies had a similar delinquency rate and, on average, FinTech lending inefficiency ratio was lower than the mean ratio of the largest bank group, that is, the most efficient ones in the lending field (Hughes, et al., 2022), the FinTech delinquency rate tripled after the outbreak, while banks were unaffected. This is explained by the fact that borrowers holding simultaneously both loan types are more likely to default on FinTech loans rather than banks loans, even if a reason has not yet been identified (Bao & Huang, 2021).

2.4. FinTech and Banks

2.4.1. Competitive advantages

Before going in deep with the main topic of this project, that is, analysing M&As in the FinTech industry, it is important to outline the context of the relationship between FinTech companies and traditional financial institutions, understanding how different their business models are, which are their relative advantages, how they relate and what are past and future models of competition or integration.

The first thing to analyse is the field of competition. The transformation enabled by technology evolution had significant implications for the internal operations of banks and for their interaction with customers (Bons, et al., 2012), the latter becoming more and more demanding in requiring a rapid execution of financial services and a personalized experience that could take into account their own specificities. FinTech companies find their success in satisfying these changing customer needs and get to define themselves as customer-centric banks (Temelkov, 2020). They create digital financial products based on hybrid business models that allow them to access underserved markets (Mention, 2019). Thanks to the way they carry out operations, they are able to provide personalized financial services (Nakaso, 2016) and this can be achieved thanks to their better capability of managing data that allow them to get instant feedback from customers and to understand what product or service better fits them (Mention, 2019).

On the other hand, the lack of flexibility makes it difficult for banks to offer the same level of customization.

It is essential to highlight that the traditional banking model is pretty different from the digital banking one, characterizing neo-banks. It is possible to identify five main critical fields, that are operational costs, operating efficiency, client acquisition costs, the ability to process data and difference in the organizational design (Temelkov, 2020). Banks have an outdated technological system and a complex structure with a high level of bureaucracy which limits their flexibility and make

them deal with high operational costs (Degryse, et al., 2007), while fully online banking models manage to strongly reduce the general costs thanks to their flexible structure and less regulated environment (Stulz, 2019) and to highly benefit from new technologies and data management (Temelkov, 2020). In the lending field, FinTech firms' ability to analyse data allow them to set customer-specific interest rates and also, thanks to the higher ease of online origination, they manage to charge higher interest rates, particularly among the lowest-risk and most time sensitive borrowers (Buchak, et al., 2018).

But there are aspects in which traditional banks have an advantage coming from their older presence on the market, represented by a strong financial expertise, well established infrastructure and a wide and 'old' customer base (Anagnostopoulos, 2018) but also experience in dealing with regulators and a broader range of product offerings (Stulz, 2019).

All these differences can be seen as a driver for partnerships. Collaborations with FinTech can help banks develop products that they couldn't themselves due to their rigid IT or organizational structure, broadening their portfolio and also reaching new customers through different distribution channels (Hornuf, et al., 2020). Banks will obtain digital expertise while providing FinTech companies with resources they need to scale-up and enter new markets (Rise, 2021).

2.4.2. From competition to coopetition

There are different approaches that financial institutions can have toward the technological development; they can choose to make a digital transformation on their own, abandoning their old structure and competing with FinTech startups, or they can look for the solution in FinTech companies, either deciding to make acquisitions or partnerships (Lee & Shin, 2018).

In the first case, we are in front of an internal digital transition, where banks invest in the organizational structure and human resources capital with the aim to achieve a reduction in marginal cost of financial services and efficiency enhancement simultaneously (Lv, et al., 2022). It is worth noticing that the process is not easy. The

industry incumbents have all the elements to succeed, meaning the knowledge of the business and of the clients, transaction security and financial resources, which they tried to leverage to change the way they are structured, but they obtained mixed results and the reasons that lie behind the struggles can explain why traditional players haven't showed a clear propensity to make massive investments in the internal digital transformation (Darolles, 2016). But when they succeeded, the technological improvements gained resulted in an enhancement of the ability of banking infrastructure to share data, increase connectivity, stability and cybersecurity, also making it easier to comply with more stringent regulatory frameworks (Wewege, et al., 2020). Research shows that new financial services added to banks thanks to the digital financial technology help saving effort, time and speed in completing transactions for customers, that digital tools contribute to an easier decision-making process (Mohsin, et al., 2023) and also that, if initiated on time, these transformations could also lead banks to an increase in profits (Drummer, et al., 2016).

The case of investments or direct acquisition of a FinTech company still seems not to be the preferred path; dynamic capabilities like sensing, seizing and reconfiguring are essential to keep on track with the evolution of the market (Fariq, et al., 2022), and the banking system is not always flexible enough to promptly respond to changes. Banks are afraid that they will struggle to integrate the new entity with their existing operations, development teams and corporate culture, and they believe that their customer trust and brand could be negatively impacted (Capgemini, 2018). Having an integration strategy is a key factor for the success of a transaction (Carbone, 2011) while, at the same time, the lack of a sound integration plan generates the risk that incumbent's processes would result incompatible with new technologies, jeopardizing the usefulness of the acquisition (Lee & Shin, 2018). In the cases when acquisitions are performed, the main reason for purchasing a FinTech firm is usually the acquisition or development of a new technology that can help to quickly modernise their offering shifting traditional client relationships toward a more customized one (Darolles, 2016). Here, the new form also benefits

FinTech firms which get funds to continue innovating, gain access to a wider customer base and a scalable process, and increase their own perception of stability, safety and security (Riemer, et al., 2017).

In the last case, banks decide to cooperate with FinTech firms to achieve smooth transformations, and it is certainly the best choice for incumbents that want to achieve transformation without internal investment (Lv, et al., 2022). Through a partnership model, FinTech firms can benefit from the knowledge of traditional players on the core banking system, while banks can position themselves as service-providers (Darolles, 2016). But not only from the perspective of banks the partnership way would be the best choice. Generally, newborn companies have a relational dependency on incumbents, coming from their need to access complementary resources (Kumaraswamy, et al., 2018). In this case, the collaboration between an incumbent and a FinTech startup may allow both of them to harness each other's expertise and achieve competitive advantage (Svensson, et al., 2019). For example, the financial institution could exploit FinTech technologies to gain insight into what kind of services it's better to offer to clients, while the FinTech startup can benefit from the incumbent's expertise in modelling and analysis (Lee & Shin, 2018). Then, another central theme is trust and how banks retain an advantage since they are perceived as stable, secure and safe. From this perspective, gaining trust can be a key motive for FinTech firms to pursue collaboration with incumbents (Riemer, et al., 2017). However, we don't know if the trust advantage will last in the future. Considering that new generations of customers are significantly oriented in the digital direction, FinTech platforms will only need to begin proving their stability over time before they become the first choice compared to traditional banks. So, the matter of trust has a double face that eventually should push both of the sides to choose collaboration over competition (Riemer, et al., 2017).

As previously mentioned, we know that the number of deals which have banks and FinTech companies as main actors are increasing, moving from a prevalence of competition to a co-competition strategy. Traditional institutions have started realizing

the power of FinTech innovation and have been recently reevaluating their business model to embrace the change (Lee & Shin, 2018). Since the FinTech phenomenon has become to spread, the number of banks has decreased, following a tendency toward consolidation aimed at strengthening their position on the market, and the whole financial sector has seen reductions of in-house production in favour to a higher outsourcing, specialization and diversification (Alt, et al., 2018). Findings show that banks tend to invest in small FinTech, while make product-related partnerships with larger FinTechs (Hornuf, et al., 2020). Companies from the traditional financial sector, international technology companies, and classic industrial companies have now integrated FinTech services into their product portfolio (Dorfleitner & Hornuf, 2023). But this does not come with no issues, as it requires two very different cultures to merge and learn from one another (Riemer, et al., 2017). Obviously, banks which have a more open and flexible architecture will more easily manage to cooperate with FinTech companies; one of the main conditions in which the alliance occurs is the one of substitutive convergence, that sees incumbents collaborating with new entrants to accelerate their innovation process and strengthen their position in the market (Pietronudo, et al., 2021). But there are still some barriers to these relations, such as differences in regulation compliance and in culture and operational processes, which mirror the fact that the merger between these two types of financial actors is not totally easy (Anagnostopoulos, 2018).

Independently on the specific path undertaken, the important thing is that banks take action. In fact, the fast development of more efficient competitors can get to decrease banks revenues approximately from 29-35% (Drummer, et al., 2016) and the loss in profits together with the decrease in customer base can already be enough to choose collaboration with FinTech companies (Currencycloud, 2016; Drummer, et al., 2016).

To conclude, there is a singular study that is separated from the existing literature and analysed the casual link between the performance of FinTech companies and the effects on the market power of banks. It showed that changes in bank market power positively impacts the performance of FinTech firms, confirming the theory

that the two typologies of companies are mainly complementing rather than competing (Andrikopoulos & Dassiou, 2022). Although many pioneering FinTechs do still exist as independent companies and cover a large market share (Dorflleitner & Hornuf, 2023), this evidence showing that incumbents are interested in collaborating with newcomers make the disruptive innovation theory not fully applicable to the development of financial markets (Varma, et al., 2022).

After the FinTech market has grown strongly in recent years, changes in the business models and consolidation can now be expected in the medium term. Ultimately, digitization, like the sustainability of financial services, will no longer be the exception in the medium future, but much more the rule, and may no longer be mentioned under the specific term FinTech (Dorflleitner & Hornuf, 2023).

2.5. Financial stability and regulation

Digital banking and, in general, the rise of FinTech, brought along the main issues faced by banks in terms of threats and opportunities, but also increased the attention on the matter of financial stability and regulation.

With regard to financial stability, it is not required a special treatment for FinTech, but supervisory authorities have to adopt a neutral position, examining banks' responsiveness and ensuring that they offer a banking package that is unfailingly sound (Dombret, 2016). It's important to be aware of potential threats that could further affect financial stability; the responsible authorities should establish systematic monitoring and reporting on the impact of FinTech on the development of financial intermediation and financial stability, and implement financial intermediation information security measures that use specific software and technical tools in order to create solid methods to regulate, supervise and protect financial information in a digital environment (Pantelieieva, et al., 2018). Furthermore, regulators should develop regulatory frameworks that promote stability and resilience while giving a special attention to financial inclusion goals and to the broader socioeconomic benefits that the advanced digitization can bring

(Varma, et al., 2022). Potential benefits are the greater financial inclusion that digitization allows, thanks also to higher decentralization and intermediation by non-financial bodies, together with better efficiency and transparency of the financial system that allow wider opportunities for growth, especially in emerging markets and developing economies. There are also potential risks, identified in both the micro-financial and macro-financial landscape (Financial Stability Board, 2017).

Concerning regulation, this topic has historically been an issue for banks. Regulators have the hard duty to balance two goals, limiting risk in the banking system while not preventing banks from reaching the desired level of loans and deposits (Gorton, 1994). Along with limiting risk, the scope of regulation is also to set some limitations on entry into banking. Indeed, an excessive reduction in concentration leads to lower market power of individual intermediaries and hence lower prices (Financial Stability Board, 2017); moreover, new entrants are more likely to underprice loans or debts in order to gain market share, forcing incumbents to reduce the interest rates and making their profitability decrease (Gorton, 1994). But it is also important that a good level of competition is maintained; if entry costs are too high, the decrease in competition brings a lack of innovation due to lower incentives (Murinde, et al., 2022).

After the global financial crisis, the tightening of banks regulatory environment benefited the great expansion of FinTech startups. The realization that major financial institutions generate systemic risk led the Basel Committee on Banking Supervision to opt for the application of more stringent measures and to increase banks' regulatory reserve requirement. Two main consequences followed this decision: banks were forced to scale back their activities and at the same time they were perceived as the main culprits behind the financial crisis (Darolles, 2016).

While banks were hit by changes in the regulatory framework and became subject to more stringent rules that caused them higher compliance costs and the necessity to cut-off the offering of some services to specific categories (Dahl, et al., 2016; Wong, 2017), FinTech could exploit their benefit coming from lower costs and grow

their presence on the market, providing services to underserved sectors and operating in places where regulatory guidance was limited (Mention, 2019). As a consequence, this situation raised public policy issues concerning the impact of digital banking on profitability and solvency of banks and the protection of borrowers and investors (Dermine, 2016). Regarding this last point, FinTech companies need to closely monitor evolutions in the regulatory environment, as they need to be ready to adjust their business model when limits change (Haddad & Hornuf, 2019). The increase in digitization raised even more the concerns about privacy: on the one hand, more access points and favourable circumstances for criminals are created and regulators have the task to make sure that customers and their data are protected (Murinde, et al., 2022); on the other hand, there is the customers' concern directly related to the utilization of their personal data. Fintech and all technologies that handle data as basis for the services they offer are now subject to the EU legal regime of data protection, but with high probability the next future of regulatory environment is going to see a rigidity loosening in the legal treatment of data in order to favour economic growth. With these premises, it will not be easy to find the right balance between the economic interest of companies and consumers' right to data protection (Cruz Rambaud & Expósito Gázquez, 2022). In addition to consumer and investor protection, the other main policy objectives that must be pursued are market integrity, financial inclusion and promoting innovation or competition (Financial Stability Board, 2017).

Regulation for FinTech should not be designed separately from the traditional banking one, but it should align with the current principles and stay consistent with the existing risk-centred regulatory framework where treatments are chosen according to risk, and not according to technology per se (Dombret, 2016). The necessity of a comprehensive framework goes back of decades, when non-bank institutions started offering banking services. In that situation, a bank-specific regulation became too restrictive and the need to make it applicable to all banking activities led to the creation of a system based on risk and not on the nature of the service provider (Gorton, 1994).

The regulatory framework should set boundaries that neither make new entrants favoured by rules nor create too high barriers to entry. The right environment should be well-balanced and neutral (Darolles, 2016). In this context, it is crucial that regulators are able to identify and monitor potential and emerging risks in FinTech and that they run alongside innovation and developments, evaluating whether it is necessary to intervene or allow evolution before action. Differently, the introduction of impulsive regulation could come disproportionately and potentially have the effect of blocking innovation and the implementation of valuable technology (Dombret, 2016; Anagnostopoulos, 2018).

Here comes the importance of collaboration between regulators, incumbents and new entrants to considerably determine how new innovations will effectively change the risk profile of the industry and progressively define a coordinated regulatory response (Anagnostopoulos, 2018). In this way, regulatory treatments would be coherent with the actual risk and not only based on the activity performed (Varma, et al., 2022). Moreover, FinTech companies can collaborate with regulators sharing consumer habits and behaviours, contributing to build a regulatory system that would help them gain consumer trust and successfully scaling-up (Mention, 2019).

This so build supervision and regulation mechanism would help the collaboration between banks and FinTech companies without reducing the possibility to harness the use of technology in the financial services field. Referring to the collaboration theme, the whole existing literature seems to agree that the best choice for both the parties would be the partnership. But there are some key barriers that restrain business relations between them, and they include regulation. From the incumbents' point of view, FinTech startups lack the regulatory-compliant IT security and regulatory certainty (Anagnostopoulos, 2018). But it's not a one-way concern. FinTech seek collaboration with traditional institutions trying to overcome entry barriers like stringent regulatory standards and high costs of customer acquisition or to fulfil, for example, solvency requirements (Hornuf, et al., 2020). In this way,

they can avoid facing large financial burdens for licensing and recurring administrative as well as regulatory processes.

In order to facilitate the development of FinTech innovations, some governments have started implementing regulatory sandboxes to provide FinTech startups with a safe environment to test new and innovative solutions in a real-world environment without the need of obtaining a full licence (Dostov, et al., 2017; Holmes & King, 2019). Regulatory sandboxes also bring two more advantages: first, they can help to overcome the current regionalism of the FinTech sector and create a cross-sectoral, global FinTech ecosystem (Mention, 2019); second, regulators can benefit from a greater visibility into new innovations to build new regulatory frameworks that better fit emerging business models and do not prevent their growth (Holmes & King, 2019).

2.6. M&As drivers

When talking about strategic investment, there are many factors that could influence a company to pursue a merger or an acquisition toward another company. Moreover, the success of a partnership strongly depends on the reasons of the pairing motive, and this is why it becomes relevant to understand which are the main drivers that lead to these market operations (Ruhland & Wiese, 2023). Research on M&A drivers has developed around many different areas of focus, generating a fragmentation in results.

Generally speaking about M&A, the main motivation that drives acquisitions is the maximization of shareholder value, reached through the gain in market power coming from a higher consolidation of the industry (Berger, et al., 1999). Other possible reasons can be identified in the efficiency improvement obtained by achieving economies of scales or synergies with the target, the aim of increasing market discipline, individual attempts by managers to expand, and the will to take advantage of opportunities for diversification (Andrade, et al., 2001). Nevertheless, it has been discussed that when the reason behind the acquisition is diversification,

the transaction does not automatically bring benefits to shareholders, as the market's valuation of a firm is negatively correlated with its degree of diversification (Lang & Stulz, 1994). Then, changes in economic environment can be partially responsible for the tendency toward the consolidation through M&As, and the main five ones are technological progress, improvements in the financial condition, the excess capacity or the financial distress of the specific industry, an international trend of consolidation and a high grade of deregulation (Berger, et al., 1999).

The eighties marked the beginning of a period of consolidation for the banking sector, where banks were driven by the aim of increase their market power and become 'too big to fail' (DeYoung, et al., 2009). But the FinTech phenomenon occurring later on came with a meaningful impact on the financial industry, bringing banks to face a new typology of business model that first came to light as a threat to the traditional financial structure. It has already been analysed how the relationship between incumbents and newcomers has evolved going from competition to a phase of collaboration and consolidation. This means that, as was already predicted (Berger, et al., 1999), in a matter of two decades the financial industry went from a consolidation of the traditional banking industry to mergers of banks and other types of financial services providers. In this context, banks try to meet the new needs of customers by performing acquisitions of FinTech companies, integrating new technologies that can help them improve their service offering (Rise, 2021) and create a more customized client relationship (Darolles, 2016), and adopting an open innovation framework (Collevecchio, et al., 2023).

One of the first reasons that lead to M&A and that also benefit cross-border M&A is that they reduce market frictions and decrease the information disadvantage (Wang, et al., 2023). All the advantages of the two sides have already been discussed, so it is clear how those benefits reflect in the reasons for M&As. The collaboration between the two business models brings higher customer satisfaction (Fonseca & Meneses, 2020), and in this way it's easier for incumbents to keep attracting their existing customers thanks to the innovative products, maintaining successfully their customer relationships (Glushchenko, et al., 2019) and creating additional revenue

streams (Bömer & Maxin, 2018). At the same time, for new companies it's easier to scale up by accessing the same existing customers of the incumbent, reducing the impact of entry barriers (Bömer & Maxin, 2018; Hornuf, et al., 2020). Then, a further motive lies in the mutual knowledge transfer, where new entrants can get advantage from the market, regulatory and customer know-how of established financial institutions, which in turn benefit from the start-ups' technological insights to update their physical and digital structures (Klus, et al., 2019).

Switching from a customer to an internal point of view, incumbents see the collaboration with FinTech companies as an opportunity to reduce costs, enhance systemic financial stability and mitigate negative consequences of competition, but they also believe that integrating emerging technologies can help in risk management and improve business performance (Varma, et al., 2022). Regarding this last point, it is worth noticing that the risk reduction obtained through these market operations is a primary reason to pursue M&As, making them valuable even without an increase in market performance (Austin & Dunham, 2022). Less profitable banks tend to engage more frequently with FinTechs, and this fact can be interpreted as an attempt to compensate their lack of efficiency and ability to innovate by engaging in alliances (Hornuf, et al., 2020)

It is also possible to identify some other features that make a company more likely to make an acquisition. For example, a young CEO, a great presence of women in the board, capital strength and liquidity, and low IT spending are all factors that can indicate a higher propensity for the acquirer to perform M&A (Kwon, et al., 2023). Moreover, firms that present a large patent portfolio and low R&D expenses are more easily becoming acquirors, while the opposite situation tends to describe firms that are more likely to become targets (Bena & Li, 2014).

Concerning the topic of FinTech consolidation, this tendency highlights that companies are driven by the wish to obtain a higher profitability and to scale globally. For more mature FinTechs, international expansion has increasingly become the main trend, as they need to break the boundaries of their local market

and look for external growth opportunities (Holmes & King, 2019), and this is contributing to shape a market with strong and stable companies strengthening their position as main players and weaker competitors being acquired (Rise, 2021). The acquisition of a FinTech company can also be the consequence of the ‘*build or buy*’ question. When the objective of a company is widening the offering portfolio, the decision can fluctuate among building a new solution in-house through R&D efforts, make a partnership or license the solution from the outside. But there is still an alternative solution, that is acquiring a company providing that service, being it a startup or a consolidated competitor (Chemmanur, et al., 2020). In these cases, actors have normally already pursued related R&D activities and have then identified in the other party valuable technologies and potential improvements deriving from synergies that trigger the transaction (Bena & Li, 2014). Technological overlap between firms’ innovation activities represents a positive factor for the likelihood of an M&A occurrence but can be reduced if the two companies also present an overlap in product markets. Anyway, the technological overlap positively affects post-acquisition results, leading to significant improvements in the combined firm’s innovation output. This highlights that synergies derived from combining innovation capabilities are an important driver for corporate acquisitions (Bena & Li, 2014). To conclude, there is another element to consider. When approaching the closing of a deal, usually the majority of discussion goes around the value of the new technology being acquired, market valuation and the definition of the new governance, but for a transaction to be successful it is fundamental not to neglect having a clear assimilation strategy of the new company into the acquiring one (Carbone, 2011).

2.7. Cross-border M&As

During the eighties, the number of M&As as a global tendency increased rapidly, engaging all the economy in general. Focusing on the banking field, M&As have always been particularly frequent, as the condition of low regulation worked as incentive for many companies to pursue the integration of different financial services. With the growth of international mergers, the number of deals increased

even more, but still in the banking sector cross-border M&As were pretty rare and even lower compared to the other industries. The reasons lying behind have been explored under different point of views.

Some research analysed the differences in cost and profit efficiency when considering domestic and foreign banks: the results showed that on average, domestic banks present higher cost efficiency and higher profit efficiency compared to foreign banks operating in that country (Berger, et al., 2000). Going in deeper detail with this consideration and splitting the research by foreign nation of origin, it appeared that this is true for most of the countries, but for some countries it has been registered an equivalent efficiency level (Vander Venet, 1996; Berger, et al., 2000). Then, studies on U.S. banks have instead highlighted that foreign bank are usually less cost and profit efficient (Mahajan, et al., 1996; Deyoung & Nolle, 1996), but also that domestic banks in other countries can be less efficient than U.S. foreign banks (Berger, et al., 2000).

Then other factors have been considered, as despite the advantages that international operations could bring, there are complementary aspects which offset most of the potential efficiency gains coming from cross-border consolidation. First, cross-border M&As are influenced by information costs and regulation barriers (Focarelli & Pozzolo, 2001; Buch & DeLong, 2004) and other factors like distance and difference in language, culture and currency (Berger, et al., 2001). Another factor considered was the earning advantage potentially coming from diversification and the reduction of business risk, but it has been discussed that these benefits are commonly offset by increases in financial risk (Bentson, et al., 1995). In conclusion, there is no clear evidence on how the acquirer's risk is affected, but findings suggest that the rise or fall that follows a cross-border acquisition is highly idiosyncratic. Moreover, the announcement of such mergers also create effect on acquirer's abnormal return, showing a significantly negative impact (Amihud, et al., 2002).

2.8. M&As impact on the acquiror

In the financial industry, including the FinTech branch, Mergers and Acquisitions are normally used as a growth strategy for value creation. However, existing research has presented mixed empirical evidence regarding the results of M&A performance and there is not a unanimous response to the question on whether an acquisition leads to positive results for the acquirer. This can be explained by the multitude of reasons that can lie behind such deals (Dranev, et al., 2019) and by the fact that a post M&A performance can be impacted by many factors at the firm-level, industry-level and country-level.

Financial gains that come from these market operations usually emanate from improvements in operational efficiency or increase in market power (DeYoung, et al., 2009), and the development of FinTech in traditional financial institutions leads to improved business models thanks to increased customer-centric service and reduced costs and risks (Wang, et al., 2021). Here, this last point is crucial: even if the operating performance reveals to be not improved after a FinTech acquisition, evidence suggests that risk reduction can be deemed to be a reason as important as performance improvement to conduct a deal (Austin & Dunham, 2022).

Qualitatively speaking, the research is not much developed, and results are not clearly giving an answer to the question. Evidence regarding mergers driven by product and geographical diversification is mixed (DeYoung, et al., 2009).

Another niche of studies that concern FinTech strategic M&As has been developed around how the acquirers are affected after an acquisition, analysing aspects like the stock return, the market performance and what are drivers and conditions that can lead to different results.

Researchers argue that the short-term impact of M&As on company stock returns is variable, since investors can have a different perception of the benefits of the acquisitions depending on the specific feature of the deals (Agrawal, et al., 1992). It has been discussed that positive results are created when there are synergies

deriving from the agreement of the managers that the M&A will bring higher shareholder value to both the parties (Berkovitch & Narayanan, 1993), while other papers found that the post-acquisition abnormal returns are positively insignificant (Beitel, et al., 2004; Goergen & Renneboog, 2004). Others demonstrated that stock markets negatively react to new announcements about banks undertaking investments in FinTechs (Hornuf, et al., 2020) and that the returns of the acquiror are negative or equal to zero (Fuller, et al., 2002). Additionally, multiple investments in the same FinTech company generate a negative impact on stock market returns that could be attributed to the risk and time needed for the investment to generate visible effects on bank value creation (Carlini, et al., 2022).

Other arguments regarded how the type of acquisition and the service offered by the target FinTech firm have an influence on post-merger results. Full acquisitions have negative impact on stock returns, but this could suggest a markets' belief that banks should opt for in-house development of new digital services rather than absorbing FinTech companies (Hornuf, et al., 2020). At the same time, partial acquisitions can still be a positive signal for the market, since they can indicate commitment in integration (Cappa, et al., 2022; Collevicchio, et al., 2023). Concerning the service, acquisitions in the sector of "payment services" bring negative reactions, as it is the nearest sector to services already offered by banks and it generates impediment for new value creation, high risk of cannibalization of existing products and of redundancy with current activities, leading to reduced profitability (Cappa, et al., 2022). Considering firm specific factors and the environmental context where companies operate, sustainability efforts have positive effects only above the average threshold, while M&As with FinTech firms belonging to different countries have a better impact than the ones with a similar institutional environment (Collevicchio, et al., 2023).

Other theories say that banks tend to invest in late stages of FinTech companies (Bellardini, et al., 2022) and obtain higher IPO exit rates than VCs. Moreover, best outperformances are achieved by banks which invest in fin-native FinTech start-ups which have a similar core business (Li, et al., 2023).

Talking about the general market performance variations of the acquirer, it has been demonstrated that significant differences are registered depending on the external environment, the acquiring firm level strategy and the CEO motivation, concluding that exploitation M&As are effective in all contexts and that M&As should strategically be pursued (Angwin, et al., 2022). Specifically, in cross-border M&As, the acquirer's performance is more positively impacted when it is located in an area with a better FinTech development (Wang, et al., 2023), even if the positive average abnormal return can end up being only a short-term achievement and result in a negative one on the long-term (Dranev, et al., 2019).

At the same time, other studies found out that acquirers do not experience an initial significant market reaction while their performance is significantly improved on the long-term (Al-Halawani, 2019). Looking closer, it has been discussed that the operating performance, liquidity and financial leverage of banks are positively impacted from M&As, but a negative impact is registered on the market performance of banks in the long run (Akhtar & Nosheen, 2022).

3 Methodology

3.1. Data collection

The process started with the collection of data from Orbis, a platform for financial analysis, specifically providing data on M&As. The research wanted to address the deals performed in the FinTech industry in the last five years. Many studies have been conducted around this topic, but still there is not a unique definition that allows to understand what the sector really comprises. So, in order to carry out the more unbiased research possible, the query was limited to the words 'FinTech' and 'InsurTech' as keys. Then, to limit the results to the field of the study, the deal types selected were set to 'Acquisition', 'Minority stake' and 'Merger'. The time period selected was '5 years' starting from the date of the database download, which was August 1st, 2023, and was refined only to 'Completed Confirmed' deals. 'Rumoured' and 'Completed Assumed' deals were excluded in order not to consider deals that had not concluded, in the same way as 'Pending' and 'Withdrawn' deals. The geography was not restricted. The so obtained database was composed of 2638 occurrences.

3.2. Data Cleaning

The cleaning of data has been realized by analysing the dataset through the use of Jupyter Notebook. As the dataset was imported, columns that were not useful for the study were removed in order to have a better view of data.

The subsequent operations performed were aimed at checking if there were missing pieces of information in fields necessary for the study. So, the first move was checking if there was any deal not reporting the completion date. The research showed no missing dates.

Then, the second step was seeing if there were deals without information about the acquiror, which is essential since it is the focus of this analysis. The result was positive and a closer look to those records showed that those deals regarded two typologies of operations: sales of stakes or fund raisings. The occurrences regarding a decrease in stakes were deleted, while the others were kept and the acquiror name was filled with a generic denomination 'Investor'. The same logic was applied to the acquiror business description and its country code, that were both indicated as 'Not defined'. An additional check was done to delete other deals where stakes were sold instead of bought, since these operations fell out of the field of interest of this research.

Then, deals whose typology was "Acquisition increased from 100% to 100%" and the ones recording exchanges of division among subsidiaries of the same parent company were deleted, as they indicated an internal restructuring and not an actual acquisition.

At this point, the target business descriptions were singularly analysed to detect possible incongruencies with the target of the research. The database reported a great number of deals that were not coherent with the field of the analysis and a long work of screening was required, following an iterative process that progressively streamlined the database by narrowing the number of deals to keep inside the analysis.

The first operation was deleting all the deals where none of the companies involved belonged to financial or technology industries. Then, deals were inspected again, deleting the ones occurred between tech companies but not concerning financial applications and the ones linked to companies that had a FinTech branch which was not correlated with the specific transactions.

Other three deals were removed. The first was a spin-off, while the others regarded the acquisition of non-performing loan portfolios from unknown firms. The last step was deleting transactions regarding alterations of minority stakes held in listed companies.

3.3. Classifications and analyses

Once that the database was completed, five main different analyses were performed. The first one was the identification of the nature of the buyer or investor, which constituted the core structure on which was possible to build all the other analyses. Once this division was made, the following classifications were developed working on the deals where the acquiror was classified as 'industrial':

- Identification of the FinTech segment in which the acquisitions fall
- Continental allocation of investors and targets
- Deal typology clusterization based on the industry of the players involved in the deals
- Clusterization based on the rationale behind the deals

Every classification above was possible thanks to a deep analysis of all the available information about every single deal. Let's see them in detail.

The first clusterization performed saw the separation of buyers and investors based on their nature. The scope was to make a clear distinction: on the one side, identify which acquisitions or investments had been conducted by a non-industrial investor, meaning funds, Venture Capital firms, Private Equity firms, Investment firms, that performed acquisition of companies with a high growth potential that could also guarantee them lucrative exit opportunities or that were participating in funding rounds in various stages of FinTech companies lifecycle; on the other side, the main focus of the research, meaning deals where the buyer had an industrial establishment. These included banks, financial services firms, FinTech firms themselves, but also companies not related to these specific industries. Banks are usually included in the definition of 'institutional investor', but in this research they

will be treated as industrial one since considered deals in which they participate are not investments made to reinvest deposits and purely generate profits, but represent acquisitions performed from the entrepreneurial perspective, aiming at bringing inside new technologies to sustain the new competition of FinTech firms. Eventually, another cluster also appeared from the scrutiny of all the records, that is the one identifying deals where investors were “mixed”. In this case, both financial and industrial investors participated to the deal, but these occurrences were not classified as strategic as they all referred to different stages of funding rounds that did not report an explanation of a rationale for the industrial participant.

Once that the strategic deals had been identified, they have been singularly analysed. This final work led to the elimination of some transactions that ended up not being classifiable as FinTech and, as very last intervention, to the exclusion of deals where the FinTech company was not the target but was instead the acquirer of a firm not classifiable as FinTech nor belonging to one of its ramifications. At this point, data were cleaned, and the database preparation was completed.

The final dataset was composed of 1526 deals.

4 Results

4.1. Discussion

The numeric results were the following: from August 1st, 2018, to August 1st, 2023, the deals conducted by a financial investor were 1028, the ones performed by industrial investors were 257 and the ones with mixed investors were 241.

In the following graphs showing data representation, the term ‘financial investor’ is used to group investors than do not have an industrial connotation, meaning funds, Venture Capital firms, Private Equity firms, Business Angels and Incubators, Investment firms and all those contributors participating in seed funding or subsequent funding rounds of FinTech companies. These entities do not perform investments or acquisition with the intention to get a new useful technology or to grow to keep competing in the market, but their market operations are only finalized to invest in the development and the growth of a promising firm with the objective of exiting in a certain period of time and generate a significant profit from the sale. Instead, the term ‘industrial investor’ is used to indicate an industrial buyer, that in the study is mainly represented by a FinTech company, a FinTech Holding, a bank or a traditional financial services provider, a Tech company, a non-financial company or a Corporation or a Group that has a FinTech branch or is entering the FinTech market.

The graph reported below shows how the different typologies of buyers have contributed in the FinTech market investments in the time period considered in this research and how this contribution has evolved along the years, with an additional subdivision by semester:

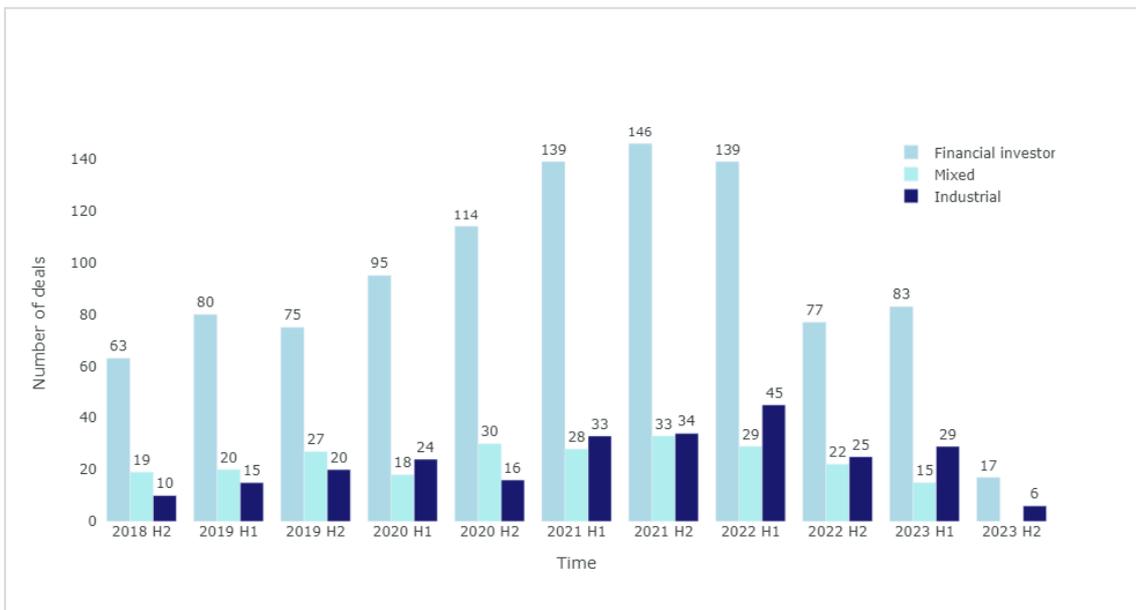


Figure 4.1: Deals subdivided by investor typology and time period

In this picture it is possible to observe both the trend of deals driven by financial investors and the one of deals strategically carried out by industrial investors. For the sake of comparison, *mixed* deals will be considered together with financial investments, as this analysis aims at differentiating industrial acquisitions from the others in order to better understand what we are investigating.

At the beginning of the period of study, it was expected that a spike in FinTech venture capital operations would have occurred (Cumming & Schwienbacher, 2018). The overall improvement of technology and its always increasing integration inside financial processes brought a significant attention to the FinTech sector and set all the basis for it to become field of massive investments in the years that were to come. Then, the unexpected advent of the pandemic caused a general slowdown in the economy and FinTech companies struggled to survive as the majority of other SMEs. In this economic landscape, Venture Capitals and investors were more liquidating assets than investing, and FinTechs had to rely much more on their own resources (LSE, 2020). Anyway, even if COVID impacted the evolution of FinTech investments, this industry was among the ones that better managed to keep on track, as they suffered from the economic situation but at the same time ended up

being one of the sectors that was benefitted by the rapid and intense shift to technology to face the need for no-contact solutions. This justifies an investment slope that kept being upward even during hard times and continued its run in the following period, with the number of investments that doubled in 2021, making it the year with the record of investments for VCs, Private Equity and Funds, occurring in funding for FinTech at all stages (KPMG, 2022; Dealroom.co, 2022). The effects of the pandemic provided a tailwind for many FinTech startups and made FinTech one of the sectors that most benefitted from the digital transition. In 2021, the sector got the largest share of global Venture Capital investments (SVB, 2021). In 2022 investments decreased, but this drop was not exclusive to the FinTech industry. The three concurrent recessions occurring across major international markets like China, Europe and the US were the main cause of a global slowdown (Innovate Finance, 2022). The down-sloped trend is still going on in 2023, due to the unstable state of global economy and geopolitical tensions. Though challenges like high levels of inflation, high interest rates and global conflicts are depressing valuations and reducing investments (KPMG, 2023).

The results concerning deals carried out by strategic investors follow a different trend, that is showed in the figure below. Compared to the start of the period of study, meaning the second half of 2018, the number of industrial M&As having a FinTech target has raised, and it is expected to continue increasing in the following period. As data of the study show, acquisitions are performed by traditional financial institutions which aim to add digital services to their offerings and narrow technological gaps (Rise, 2021), by companies external to the financial sector that decide to enter the FinTech space as it can represent a great opportunity for growth, but most of all by other FinTech companies. This evidence confirms how the FinTech industry is now in a consolidation phase. FinTech companies acquire other FinTechs for many reasons, like staying competitive in the sector, widen their reach to other areas of financial services (Rise, 2021) and strengthen their finances and scale more quickly (White&Case, 2023). Moreover, the recent stressful market conditions contributed to the increase of M&As in two ways: first, difficulties in raise finance

for financial investors make it more difficult to pursue an internal growth, becoming an additional driver for M&As (White&Case, 2023); second, lower valuation of firms incentivized acquisitions (KPMG, 2023). Compared to the level of VC investments, M&A activity remained stronger, and it is believed that they will surpass the level of 2020 also this year even though the low number of deals disclosed suggest that terms reached by founders are though (SVB, 2023).

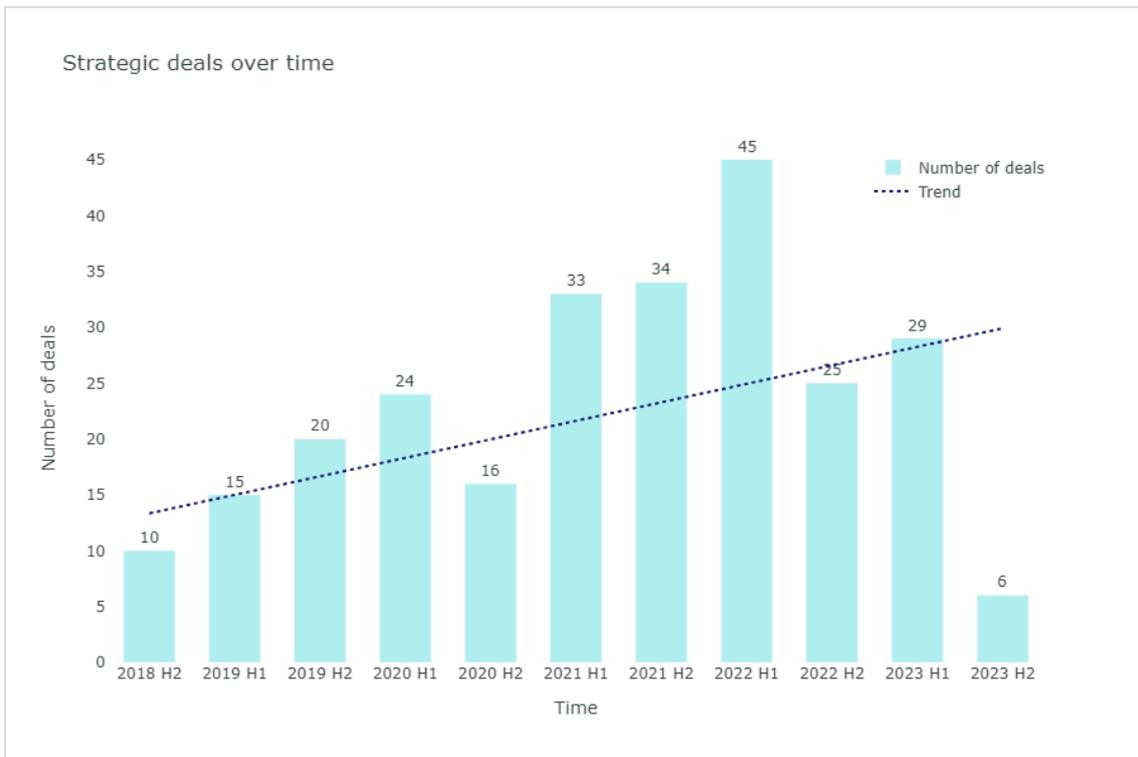


Figure 4.2: Strategic deals trend

To summarize, the results that came out from this first inspection answered the initial question on how the landscape of strategic investments has changed in the last years. The underlying hypothesis behind the question was that the number of strategic acquirors had increased, following an upward trend, and this assumption was confirmed. But not only the number has increased. The absolute increase alone wouldn't be significant enough in this context, as it could only mirror the trend followed by investors approach to FinTech in general. In the following table, deals carried out by institutional investors and mixed investors have been unitedly

considered with the aim to highlight the changes in the percent weight of industrial investors on the totality of acquisitions and investments performed.

	2018 H2	2019 H1	2019 H2	2020 H1	2020 H2	2021 H1	2021 H2	2022 H1	2022 H2	2023 H1	2023 H2
Industrial	11%	13%	16%	18%	10%	16%	16%	21%	20%	23%	26%
Others	89%	87%	84%	82%	90%	84%	84%	79%	80%	77%	74%

Figure 4.3: Weight of the different typologies of investors

If we focus our attention on how the industrial side has evolved, we can notice that the percentage has gone from the 11% of the second semester of 2018 to the 26% of the second semester of 2023, meaning that the impact of industrial investors has become more than doubled compared to the one it had five years ago.

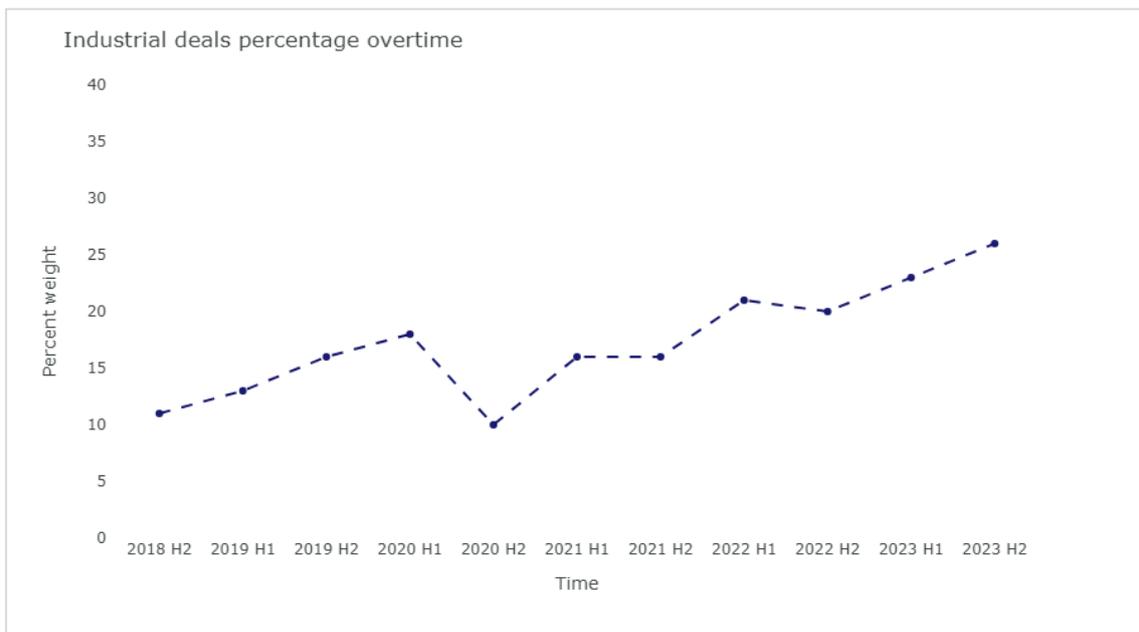


Figure 4.4: Evolution of the weight of industrial investments on total investments

The following section will start the specific analysis of strategic acquisitions. Precisely, it will inspect which are the FinTech segments that are identifiable starting from data gathered in this work and will then analyse which of them are the ones that dominate the scene of FinTech deals.

4.2. FinTech Segments

As we know, there isn't a unique definition of FinTech that allows us to understand which are all the typologies of activities that it includes. Many accredited firms defined in their reports what they identified as the main FinTech segments, but they rarely coincide and are frequently grouped differently. Therefore, another part of this work was looking closer to the target companies of all the deals and clustering them into different subsectors based on the type of business they carry out. In cases where the businesses of the acquired firm were multiple, the one considered was the one targeted in the specific occasion. In this way, it was possible to identify many different segments, whose relevance on the total number of deals is reported in the table below.

Definitions of the segments and what they do include, starting from data of deals analysed:

- Accounting: in this cluster are classified digital and AI-based accounting solutions
- Banking: the banking cluster takes into account digital banking platforms and Banking-as-a-service software.
- Blockchain/Crypto: deals classified under this segment recorded acquisitions of companies operating in the field of blockchain solutions, cryptocurrency solutions, digital asset custody or exchange platforms, alternative investment solutions, NFT marketplace and Bitcoin payments.
- BNPL: 'buy-now-pay-later' is a hybrid service that finds its positions between the payments and the lending segment, so it was assigned a specific category.
- Cards: this cluster groups payment cards issuers and technology providers.
- Cybersecurity: this segment includes those deals performed to acquire payments fraud prevention technologies and transaction monitoring solutions.
- Data Analytics, AI and ML: this cluster puts together businesses offering data analytics services both using traditional technology and artificial intelligence.

These services include analytics used to take more informed financial decisions, analytics on financial products offered with the aim to create a better service, analytics for credit investors, and artificial intelligence and machine learning data analytics solutions.

- Debt management: here are considered debt management and debt collection platforms.
- Digital solutions: this group classifies those deals where the acquired company is neither a platform who targets the direct customer nor a software provider for financial services players. Instead, they directly provide financial institutions or businesses with customizable digital solutions through which they can offer their service. The cluster also includes providers of digital transformation services for financial organizations.
- InsurTech: this segment includes online insurance platforms, digital claims solutions, digital brokerage services, and software created for the insurance field.
- LegalTech: the term describes the application of cloud solutions to legal practices management.
- Lending and Alternative financing: this segment includes P2P lending platforms, crowdfunding platforms, invoice trading platforms, inventory monetisation solutions, earning-on-demand solutions and mortgage marketplaces.
- MedTech: this term refers to the application of financial technology in the medical sector.
- Money exchange: this cluster identifies an online foreign currency exchange services provider.
- Open banking: this segment refers to the acquisitions performed to acquire open banking providers, with the intention of entering the open banking market, to improve the company connection with other institutions or to start offering a new service.

- Payments: the payments segment includes payment platforms, digital wallets and payment gateway solutions to enable or automate POS transactions and in-app payments.
- Payroll: this term refers to a software for payroll management.
- Personal finance: this cluster groups all those platforms created to manage savings and deposits, to track personal finances utilization, to calculate personal creditworthiness and to administrate personal pension plans.
- Real Estate: this segment refers to the so-called PropTech, meaning financial technology applied to the Real Estate sector.
- RegTech: this segment refers to technologies applied in the regulatory and compliance environment.
- Software for finance: this cluster puts together all those deals where the acquired firm operates software development for FinTechs and financial institutions, helping the latter design and execute their core transformation strategies.
- Trading: this segment includes digital trading platforms and solutions enabling transactions on physical commodity import/export.
- WealthTech: to this group are assigned all those businesses concerning the wealth management, meaning investment platforms and digital investment and asset management services. Trading and personal finance solutions are treated separately.

Fintech segment	Number of deals	Percentage
Payments	55	21%
Lending and Alternative Financing	32	12%
Digital solutions	20	7%
Banking	19	7%

Wealthtech	17	6%
Insurtech	17	6%
Blockchain/Crypto	17	6%
Software for finance	14	5%
Trading	11	4%
Data analytics, AI and ML	10	3%
Personal Finance	7	2%
Open banking	7	2%
BNPL	5	1%
Debt management	4	1%
Cybersecurity	4	1%
Regtech	4	1%
Real Estate	4	1%
Cards	3	1%
Accounting	2	<1%
Payroll	1	<1%
Money exchange	1	<1%
Medtech	1	<1%
Legaltech	1	<1%
Many	1	<1%

Figure 4.5: FinTech segments of deals

The table shows that the most targeted segment in FinTech M&As is the one of Payments. Even if the payments business was initially negatively affected by the advent of the pandemic, it immediately managed to switch its focus from the traditional technology behind payments toward the development and the strengthening of online payment solutions. Payments have always been the strongest segment in the FinTech environment (Pwc, 2023), as its technologies can be transversally applied to all business in which transactions occur. Along with this, the development of digital solutions and software to make online purchases and the increasing growth of embedded finance confirmed the position of the payments segment as the one in which the highest number of investments occur, since technological solutions are always innovating and are required in a constantly increasing number of fields.

The second highest percentage is represented by the *Lending and Alternative Financing* segment. This segment finds its fortune in the satisfaction of needs of unbanked and underbanked populations and of SMEs. These categories are the ones that benefit the most from the creation of a lending system that does not rely on traditional methods but streamlines procedures and allows much easier fundings. The development of peer-to-peer lending creates links between entrepreneurs and potential investors, making much easier for SMEs and individual investors to get the approval for financing (Ferreira, et al., 2022). As will be better explained in the section dedicated to M&As rationales, the alternative lending form that FinTechs provide to enterprises that find harder getting funds is one of the main reasons that explains its great presence as acquirors' targets.

Digital solutions and *Banking* also have a strong relevance in FinTech M&As. Digital solutions providers manage to offer their clients digital support for them to provide their services in a technological way. They build platforms that can be customized by clients depending on their needs and preferences to offer the best possible service to the final customers, but provide also digital tools that can be directly integrated into already developed solutions to improve the product. So, acquisitions of these firms are essential for those companies that need help to implement their digital transformation and build it from scratch, but also for the ones that decide not to develop the technological infrastructure in-house but prefer to outsource it. For what concerns banking, this denomination includes both firms provider of digital banking platforms, named challenger banks, that have significantly increased in the last years and represented the greatest challenge for traditional banks, and companies that provide banking software solutions, meaning the core structure of digital banking services provision, that can power new online solutions offered by traditional institutions. Following the reasoning of digital solutions providers acquisitions, even the software part is needed and acquired by those institutions that aim at modernizing their services by purchasing the technology through the direct acquisition of third parties. For what concerns acquisitions of digital banking platforms, their relevance can be explained by the overall tendency toward

consolidation of the FinTech industry: the integration of multiple solutions inside one only platform can generate better solutions with a stronger market power that manage to reach a wider customer base, making the decision to pursue strategic acquisitions of digital banking platforms a clever choice for the growth and improvement of the business.

The following positions are taken by *InsurTech*, *WealthTech* and *Blockchain and Crypto* segments, each of them representing the 6% of total investments. The InsurTech segment is facing a period of remarkable growth, in an era where the utilization of the huge amount of data available allows to have instant information about customers and to create personalized solutions that best adapt to their different needs. Moreover, the significant recent development of Open Banking and the frequent interaction between insurance companies and financial institutions or, in other cases, the presence of an institution on both the insurance and the financial services markets, allow to have access to an incredible amount of data and to give birth to the most innovative digital solutions. Acquisitions from insurance companies of InsurTech companies are becoming more frequent, both in the case where the InsurTech is a digital platform that can be integrated to the traditional insurance provider and when the company develops software that find their application in the insurance industry. Then, there are acquisitions made by other InsurTech that follow the general trend of market consolidation of the industry. The WealthTech is gaining traction thanks to the attractiveness of new methods of investments. Technological innovation brought to the development of new digital solutions that aim at transforming the way in which investments and asset management are performed, bringing to life new digital platforms, allowing the possibility to perform micro-investments, but also providing new way to wealth management companies to automate their processes and offer more personalized services to their clients. Investments on WealthTech are primarily driven by the purpose of asset management companies to integrate their traditional service with an innovative one, capable of being more flexible, accessible and allowing incumbents to reach a wider customer base by bringing on board more easily also

the new generations. At the same time, WealthTech acquisitions are also performed by FinTech firms that already operate in the wealth management field and want to exploit synergies and complementarity with the target company to create a more comprehensive solution and offer a better service to the customer bases of both of the companies. For what concerns the Blockchain and Crypto segment, this is one of the most growing ones and is gaining more and more importance as new technologies are developed. Blockchain and cryptocurrencies are changing the way money and transactions are perceived, creating a complete alternative to the classical channels. The growth potential of this segment is really high, and this is why it is attracting big volumes of investments, driven by companies' intention to merge forces, knowledge and technologies with other experts in the sector to guarantee a continue evolution and the establishment of new frontiers for the management of investments, transactions and for digital asset custody.

While there are still other segments that have been identified and are showed in the table, these described above are the ones that revealed to be the most relevant in terms of investments and attractiveness for the FinTech industry.

4.3. Geographical analysis

The geographical analysis aims at representing which are the countries that have contributed more to FinTech investments and where the acquired firms are mostly located. For this analysis every buyer or investor participating in M&A operations has been singularly considered. This choice was made since the majority of deals which had institutional investors as protagonists, meaning most of all seed investments and funding rounds, included multiple investors often coming from different countries. So, the impossibility to allocate the acquiror side to a specific country suggested to split the deals and consider every investor as a single occurrence. The analysis took into account only deals where information on the investor or target location was available.

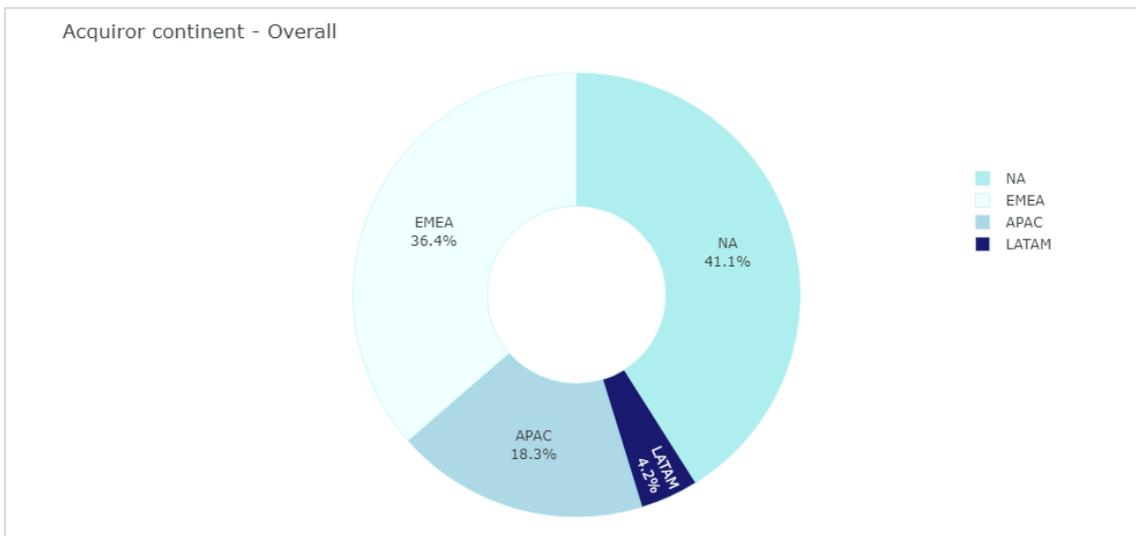


Figure 4.6: Overall geographical distribution of the buyers

This figure shows how the acquirors and the investors are distributed around the world, and it considers the aggregate result that puts together both industrial and institutional players. The continent that registers the higher presence among the others is North America, that confirms itself as a leader in the field and its economic power. But it not a remarkable superiority, as the EMEA region also presents a great percentage of investors. The APAC region is still backward compared to the other two but it's increasing its activity. Companies located in the LATAM region are instead the less active, especially due to the less developed economic activity.

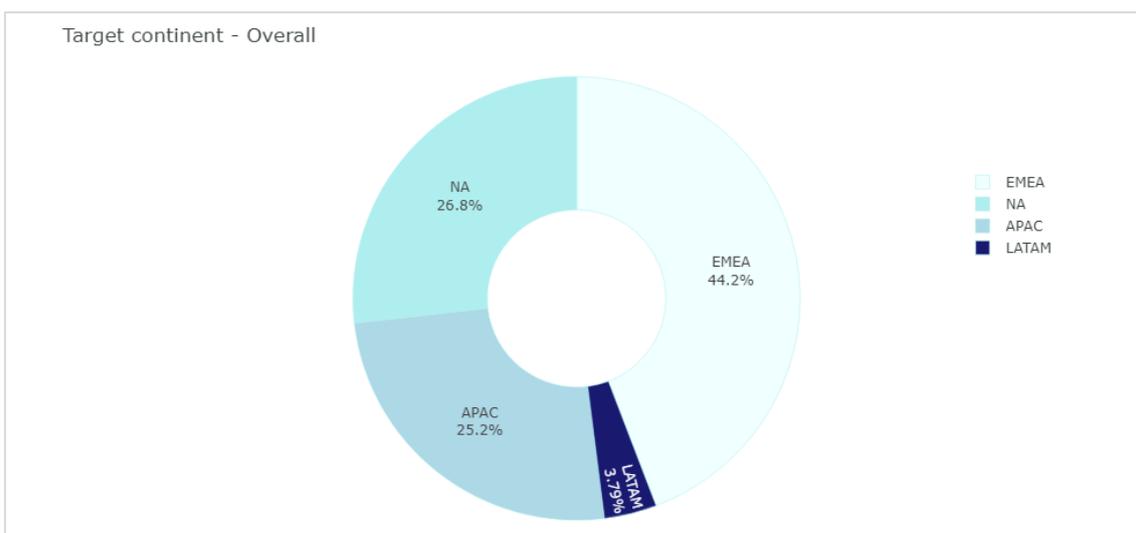


Figure 4.7: Overall geographical distribution of the targets

This time, the picture shows how target companies are geographically distributed. The situation is similar to the previous one, with North America and the EMEA region that dominate the scene of M&As. But what's different here is that, while investors were mostly operating in North America, the majority of target companies are located in the EMEA region. The APAC region gains some points, thanks to the fact that the Asiatic continent is a growing market that is becoming more and more attractive to investors which seek the opportunity to expand their business. A special mention goes to Singapore, which is strongly working on becoming a dominant hub for FinTech development. The LATAM region is again the least hit; investments are significantly influenced by geography (Cumming, et al., 2021) and a less developed economy does not attract many institutional investors (Golder & Barua, 2022).

It is worth remembering that the geographical allocation here made does not consider the value of the acquisitions but only the quantity relative to the number of deals closed. This means that, should an analysis on the total value of investments be performed, results could be different. Let's now shift the focus on strategic acquisitions and let's see if the subdivision on the continents is still the same.

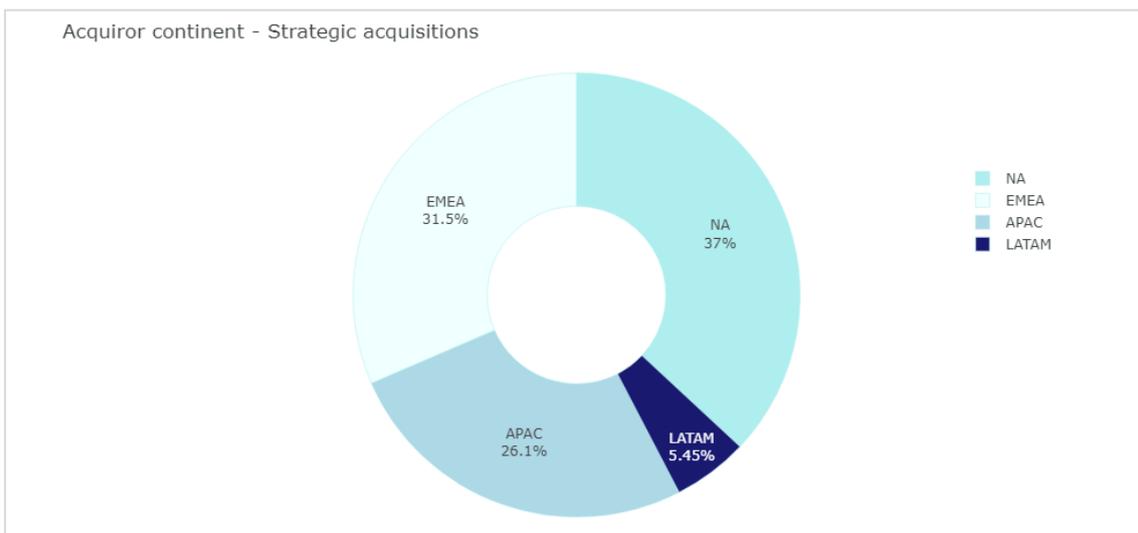


Figure 4.8: Geographical distribution of industrial investors

For what concerns the buyer side, the overall result does not change. North America owns the highest number of investments even in this case, while the EMEA region finds its place immediately after. The only difference visible from this graph is that North America and the EMEA have lost percent points in favour of the Asia Pacific region, which covers a higher percentage compared to the one showed in the overall. These data confirm Asia, North America and Europe as leaders in FinTech deals (Golder & Barua, 2022).

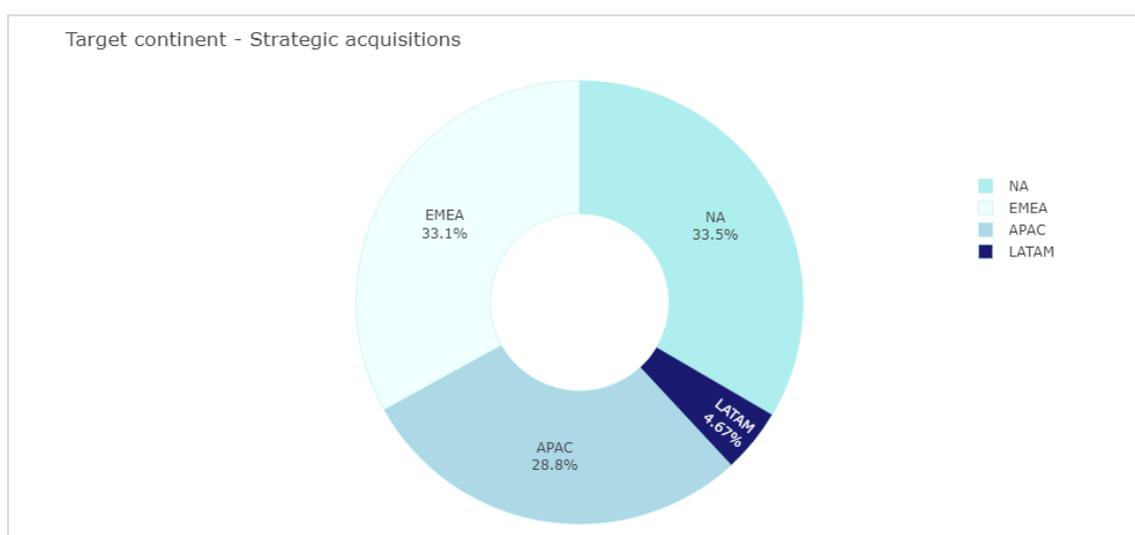


Figure 4.9: Geographical distribution of targets of industrial investors

For what concerns the geographical distribution of targets of industrial investors, the biggest difference is recognizable in the decrease of the percentage of the EMEA region, which loses more than ten percent. This drop is compensated by an increase in the position of North America, which still demonstrates to be a very attractive market to pursue growth and to develop new innovations.

4.4. Deal typology: analysis and consolidation considerations

The introductory description of data aimed at showing that the number of FinTech deals conducted by an industrial acquiror are increasing along time. Going on along

this path, it was interesting to investigate who the buyer actually is and what is the industry it operates in.

Actors type	Number of deals	Percentage
Fintech - Fintech	159	61%
Tech - Fintech	21	8%
Financial Services - Fintech	18	7%
Bank - Fintech	15	5%
Insurtech - Insurtech	11	4%
Other industry - Fintech	7	2%
Corporation - Fintech	5	1%
Insurance - Insurtech	3	1%
Regtech - Fintech	2	<1%
Fintech - Proptech	2	<1%
Fintech - Regtech	2	<1%
Insurtech - Fintech	2	<1%
Proptech - Proptech	1	<1%
Proptech - Fintech	1	<1%
Other industry - Insurtech	1	<1%
Financial Services - Insurtech	1	<1%
Financial Services - Regtech	1	<1%
Holding - Fintech	1	<1%
Bank - Insurtech	1	<1%
Fintech - Medtech	1	<1%

Figure 4.10: Main actors involved in acquisitions

Let's analyse the top five. Results show a clear prevalence of FinTech-on-FinTech deals, and this is in line with all that has been said so far regarding FinTech consolidation and respects our expectations.

Immediately after the first dominant deal typology, we find that the other more active typologies of FinTech acquirors are Tech firms, financial services providers and banks, that for all this work have been treated separately. Regarding purchases made by Tech firms, this shows the increase of interest from IT providers to enter

the financial market and exploit all the new opportunities that the FinTech phenomenon is bringing. The FinTech market represents a great possibility to achieve growth for Tech companies, that are becoming more and more fundamental in the provision of digital solutions for financial services and that could be the real source of competitive advantage. Acquisitions of FinTech companies allow them to bring in new expertise that is indispensable for them to gain market power in this sector. For what concerns acquisitions made by financial institutions and banks, this follows the need of incumbents of the financial industry to keep up with technological changes and to manage not to be replaced by FinTechs. By acquiring FinTech firms, traditional financial players can modernize their structure, introducing innovations inside their organization and becoming able to better serve a new generation of customers that relies more than ever on digital solutions.

In the fifth position we find InsurTech-on-InsurTech deals. This follows the general consolidation period of the FinTech sector, being InsurTech a specific FinTech segment, but it also highlights the increasing importance that this business is gaining. InsurTech companies are able to offer their customers personalized offers that are achieved thanks to the best utilization of new technologies. The fusion between companies belonging to the same typology allow them to benefit from better technologies, that combined can offer even better solutions to customers, and also get advantage from the wider quantity of data they can reach and dispose of.

After this discussion, let's go back to the leader of the chart.

When we have a closer look at how FinTech-on-FinTech deals are distributed along the timeframe here considered, we find an upward trend, reinforcing the fact that not only acquisitions between FinTech firms represent the most widespread typology of deal, but also that their occurrence has increased in the last years, following the same picture of general investments in the FinTech industry. The following trend has been computed by considering data from 2019 to 2022 and excluding 2018 and 2023 as they are incomplete and so not comparable to the other

years. As the figure 4.11 shows, the number of deals was already raising before the beginning of the pandemic. COVID-19 has slowed down the growth, that started again in the first semester of 2021 and saw the record in the number of deals closed in the first semester of 2022. Overall, 2021 and 2022 were the years with the highest occurrence of FinTech-on-FinTech deals, reflecting the whole trend of both industrial and financial investments. The lower number of closed deals in 2023 mirrors the situation in which the current global economy lies, as it has already been discussed.

The result can confirm once again that the market is now going through a clear consolidation phase, and this time not only underlining that FinTech-on-FinTech deals are the most relevant ones but also that they are actually increasing year by year.

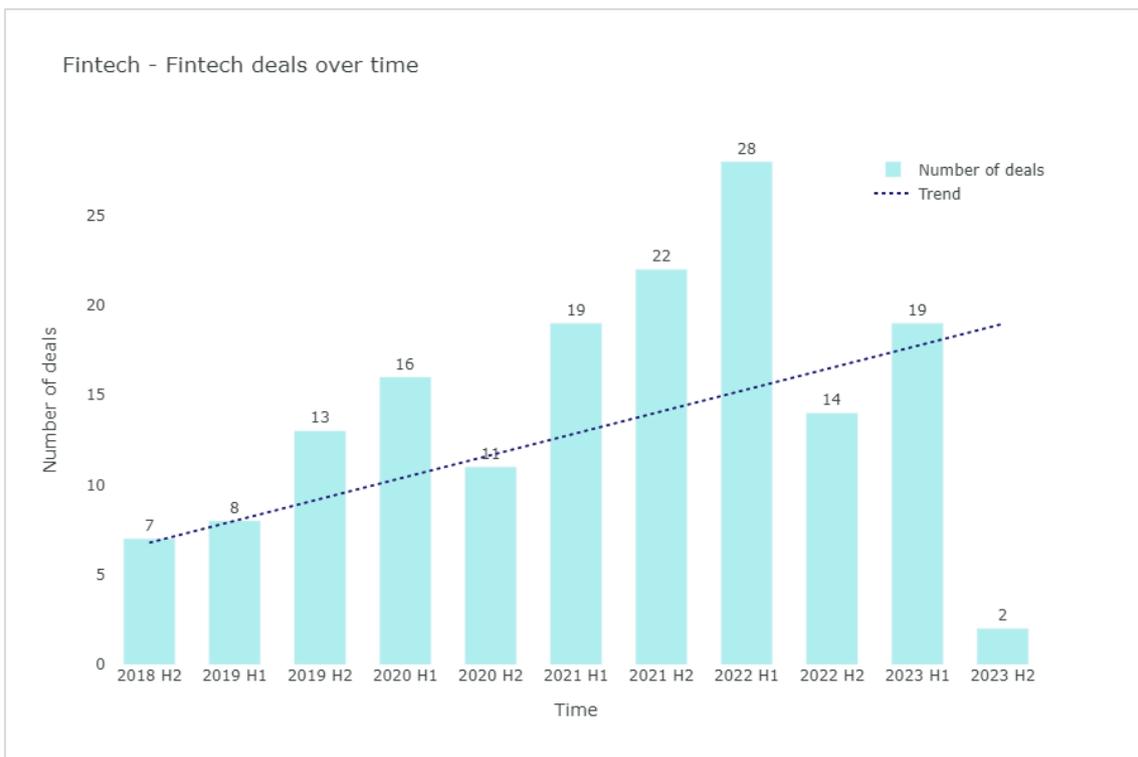


Figure 4.11: FinTech on FinTech deals growth

This evidence confirms the consolidation phase that the FinTech industry is living. FinTech companies are increasing their tendency toward acquiring other players of the same sector with the intention of keeping being competitive on the market and being able to expand their business and scale more quickly (Rise, 2021; White&Case, 2023). This is also a strategy to react to recent difficult conditions of the market, influenced by a general unstable geopolitical condition, and to compensate the lower level of investments made by Venture Capitals. With this environment, external growth is becoming an additional driver for M&As (White&Case, 2023).

4.5. Drivers of FinTech M&As

The Fintech ecosystem is continuously changing, and it is not easy to follow the pace of its evolution. The past years have seen a huge increase in the number of deals closed to finance or acquire Fintech businesses and a great quantity of them have been performed by institutional investors, as showed in the previous analyses. But numbers have also highlighted how industrial investors are becoming more and more present and how the financial industry has started to act to integrate technology into every sector of their operations.

Starting from this observation, it has to be noticed that the literature regarding the main reasons that lie behind FinTech deals is scarce. Many studies have analysed general drivers for M&A market operations, but the topic has not been deeply investigated in the FinTech field.

This study wanted to contribute to fill this gap. Starting from the refined dataset of acquisitions and investments performed by industrial investors, every deal has been singularly inspected to understand which were the main objectives of the acquiring company. The total amount of market operations presented a significant granularity of characteristics that have been progressively grouped with the intention to create a restricted number of clusters that could allow to create a classification of the main motives.

When pursuing an operation of Mergers & Acquisitions, the main pressure that comes from behind is always creating something that will deliver a superior value to the firm's shareholders. In other terms, this implies a move that is believed in the future will contribute to the growth of the firm and to the increase in revenues, first, and profit, then.

What emerged from the analysis of the data is that the nature of the acquiror is clearly a factor when considering the reason why a FinTech firm has been acquired. In the following explication of the results, it will emerge how some specific drivers belong only to some categories of acquirors, while others are in common to many categories. A small number of deals was excluded by the analysis since they presented extraordinary feature, meaning the ones where the buyer was chosen as partner directly by the target, the ones that did not report enough information to make evaluations and considerations, and reverse takeovers.

Acquirors have been categorized and clustered as follows: FinTech firms, FinTech Holdings, Financial Services, Banks, Corporations, Groups, Holdings and firms operating in another industry.

4.5.1. FinTech firms and FinTech holdings

We have seen that the majority of the acquisitions has been performed by FinTech or InsurTech firms, in line with the expansion of the industry and the current shift toward consolidation. By carefully analysing the disclosed information about the deals, it has been possible to identify three main pillars that stand behind the decision to pursue the purchase of another firm: first, the decision to acquire a specific technology; second, the aim of expanding the customer base and grow the business; third, serving a specific target sector. In many cases, the decisions of pursuing the acquisition of a specific technology or to expand the business reach are contemporary and complementary. In the study, the differentiation has been made by identifying and selecting what of the two came first and represented the primary motive that moved the acquiring firm.

The cluster '*Technology and expertise*' groups those M&As where the first objective was getting access to the specific financial technology offered by the selected target. The new technology and the expertise coming from the team of the acquired company can contribute to the offering of the acquiring company in two different ways: (i) improving the current product or service that the firm offers or (ii) expand its offering suite.

In the first case, the target company either operates in the same FinTech segment of the acquiror or offer services that can be implemented and used to provide a better product or service to the customers. When the target operates in the same segment, the acquisition can bring to the acquiror new technologies that can help to innovate the product or the service offered in order to better satisfy the customer and keep up with the continuous evolution of the clients' needs; otherwise, the target can bring in specific missing features or possibilities that are complementary to the product offered, with the result of a better user experience. Disposing of a better product to offer can lead the firm to attract more customers, generating higher revenues, but also to benefit from costs reduction deriving from the synergetic use of technologies. Another scenario occurs when the target is specialized in the use of data; here, the expertise acquired can help the acquiror to have more insights both on the market and on the response of the customers to the product or service, leading to a better capability to identify areas for improvement.

In the second case, the target company can either operate in a different FinTech segment or in the same one while offering a different or complementary product or service to the one offered by the acquiror. When targeting the same segment, the acquisition is performed with the intention of foraying into a new market where the company is not yet operating. This move can lead to a double result: first, the new segment represents an additional line of business, which can generate new revenues coming from the already existing customer base of the company; second, the acquiror gets to expand its customer base both having access to the target's customer and managing to attracting completely new customers thanks to a more comprehensive offering, generating more revenues in both the cases. But the

expansion of the product offering can be performed also by acquiring a target operating in the same segment but offering a completely different service. Here, the purchase aims at widening the services package that customers can access, in order to create a comprehensive ecosystem able to offer an integrated experience.

There is also an additional case that is worth mentioning as a hybrid situation between the ones described above, where the new technology is acquired with the intention of developing a new product or service. Here, the target's technology is not acquired to be integrated into the acquirer offering but will be leveraged to give birth to a brand-new product or service, like a new platform to launch on the market or a new financial software to provide.

The cluster '*Market expansion*' identifies those deals in which the primary objective of the acquirer company was to increase the market coverage and strengthen its own position as a leader player in the market. Being able to grow and scale the business is generally the major objective of FinTech firms that aim at stabilizing their company on a good profitability level and manage to survive without the need of venture capital funding, but this is often difficult to obtain through organic growth. Through the deals analysed, four main paths have emerged when a company pursues the market expansion. In the first one, the firm identifies a new business line to add to the ones already running, selecting a branch that can be in line with the existing business and a company that shares the same values and aligns with the vision of the company. Here, the company manages to reach a wholly new customer base which would have stayed out of its target market without the performance of the acquisition. In the second one, the acquiring company buys a firm who operates in the same market but targets a customer base that the company does not serve yet. In this case, the acquisition allows the firm to expand its reach and strengthen its position in the market. A third way sees the buyer deciding to acquire a foreign company with the intention of expanding its geographical footprint and increase its global presence. This often represents a step in the growth of a company that aims at becoming an international player. The last case concerns the merger or acquisition between two strong players who already have a significant market power

and see complementarity. Here, the intention is of exploiting the synergies between the players and jointly become a unique leader in the market served. These mergers can occur among two companies operating in the same FinTech segment in order to become better together, or in different segments, generating a powerful comprehensive solution; they can be between players operating in the same country, in order to become the national landmark, or in different countries, with the aim of establishing a continental presence.

Differently from the case where the deals were driven by the acquisition of technologies of expertise that were integrated with the ones of the acquiring company, here the two firms do not necessarily start operating under the same roof. Except from mergers, market-size-driven acquisitions frequently see the target company going on operating autonomously while reporting to a new property.

FinTech firms and FinTech holdings	Market expansion	Enter a new business line	3	1.7%
		Expand the customer base	13	7.5%
		Geographical expansion	17	9.8%
		Significant synergies	8	4.6%
	Technology and expertise	Develop new products or services	4	2.3%
		Expand the product offering	57	32.8%
		Improve the current product	65	37.4%
	Final customer focus		7	4.0%

Figure 4.12: Main drivers for FinTech firms and FinTech holdings

4.5.2. Traditional financial services firms and holdings

Acquisitions made by traditional financial services providers and banks require a separate discussion as it is necessary to introduce a factor in the evaluation of the driver of the investment. In the financial industry, incumbents are the ones that found themselves in the situation of deciding whether to keep up with technology advancements and approach to FinTech or to go on maintaining their traditional

form. In the dataset, only the first category appears, and it can be subdivided into two parts: the first one is represented by traditional financial services provider that enter the FinTech market for the first time, while the second one includes financial players already operating in the FinTech market. In the dataset of this research, the incumbents entering the FinTech market for the first time were just a couple, the first making the acquisition with the aim of starting its transition toward digitization and the second one for business diversification. The other players, which had already stepped into the digital technology market, performed the acquisitions following similar strategies of FinTech actors described in the previous paragraph, either directly integrating new technologies into their traditional systems in order to provide digital product and services to their customers or by acquiring a firm and maintaining its autonomy, gaining in this way a competitive presence in the FinTech sector. Deals driven by a specific technology occurred with the intention to improve a FinTech product offered by leveraging new competences, to add a new product to the offering suite, or to invest in a specific segment to deepen the company's expertise in FinTech solutions, the latter belonging in particular to firms aiming at developing new products or to financial services holdings that want to further develop the technological vertical. Then, the other major cluster is again the one comprehending deals driven by market expansion. Here, we find again (i) the geographical expansion component, where acquiring a specific target firm allows the financial institution to expand in a new market and at the same time increasing its FinTech ownings, and (ii) the customer base expansion component. The acquisition of a FinTech firm expands the business of the acquiror, which starts providing its service both through a traditional solution and a digital one, adding the target's customer base to its own and increasing its capabilities to satisfy a wider range of customers' needs, attracting more of them. The last category of deals are the ones not driven by a growth strategy of the acquiror. These investments are represented by the acquisition of minority stakes made with the intention to support the growth of emerging and promising FinTechs.

Traditional financial institutions	Market expansion	Deepen fintech expertise	1	2.9%
		Expand the customer base	6	17.1%
		Geographical expansion	2	5.7%
	Technology and expertise	Deepen fintech expertise	4	11.4%
		Expand the product offering	5	14.3%
		Improve the current product	7	20.0%
	Enter the Fintech market	Business diversification	1	2.9%
		Digital transformation	1	2.9%
	Final customer focus		3	8.6%
	Invest in fintech		5	14.3%

Figure 4.13: Main drivers for traditional financial services firms and holdings

4.5.3. Tech companies, multi-vertical corporations and firms operating in other industries

The last buyer category is represented by Tech companies, firms operating in an industry different from the one of IT and financial services, and by Corporations, Groups or Holdings operating in more than one vertical through different industries. In the totality of this category, the majority of the acquisitions or investments is driven by the strategical decision to enter the FinTech market.

When acquisitions are performed by Tech companies, two cases can be identified: in the first one, the company decides to enter the FinTech market for the first time, driven (i) by the decision to integrate FinTech solutions into their software in order to deliver a better product to the customers or (ii) by the identification of opportunities for growth in the sector; in the second case, the acquiring firm has already stepped into the FinTech market and decides to perform an acquisition driven (i) by the wish of expand its market reach or (ii) by the intention to deepen its FinTech expertise, which will allow the company to become even better at serving financial customers and deliver an always better product.

Tech companies	Enter the Fintech market	Improve the service offered	1	5.3%
		Opportunities for growth	6	31.6%
	Technology and expertise	Deepen fintech expertise	7	36.8%
		Improve the current product	3	15.8%
	Final customer focus		1	5.3%
	Market expansion	Geographical expansion	1	5.3%

Figure 4.14: Main drivers for Tech companies

Regarding the M&As performed by firms operating in other industries, all the buyers in the records made the acquisition with the intention to enter the FinTech market for the first time. This strategic decision was taken for different reasons, meaning the identification of (i) the opportunity to improve the product or service offered through the integration of FinTech solutions, (ii) opportunities for growth in the FinTech sector, (iii) opportunities coming from the diversification of the business or (iv) the decision to expand the product offering by adding a new product to the offering suite.

To conclude, Groups, Holdings and Corporations choose to enter the FinTech market for the same reasons explained for single firms operating in other industries, while, when they have already developed into the FinTech vertical, they decide to pursue acquisitions to (i) acquire new technologies that allow them to enhance their offering in the segment or (ii) to expand their market through the acquisition of a FinTech firm.

Other industries	Enter the Fintech market	Improve the service offered	1	5.3%
		Opportunities for growth	6	31.6%
	Technology and expertise	Deepen fintech expertise	7	36.8%
		Improve the current product	3	15.8%
	Final customer focus		1	5.3%
	Market expansion	Geographical expansion	1	5.3%

Figure 4.15: Main drivers for multi-vertical corporations and firms operating in other industries

4.5.4. Transversal driver: financial inclusion

There is a particular cluster that hasn't been mentioned until now, that is transversal to the various categories and is named '*Final customer focus*'. It is a smaller one, but it is worth discussing separately as it highlights one of the core distinctive traits of FinTech companies which strongly contributed to the significant growth of the sector. This group signals a certain number of acquisitions that were performed starting from the global strategy of the firms of being able to serve a specific target of customer, meaning the historically underbanked small and medium businesses and underserved populations. This cluster does not include all the deals where the acquiring company targets SMEs, uniquely or among different customer segments, but only those M&As that were primarily driven by the mission of the acquiring company to manage to target segments that are often forgot by traditional institutions. In these cases, companies performed acquisitions in the attempt to address them and try to close the gap in the credit access for small and medium enterprises or individual entrepreneurs, that are considered risky borrowers (World Economic Forum, 2015; Zhang, et al., 2016) and often struggle to secure working capital loans from traditional banks. So, these M&As aimed at acquiring firm specialized in providing services to this target market, in order to create a better and more comprehensive service for those businesses or to become able to reach a wider number of SMEs. Along with underbanked businesses, there are unserved or underserved populations. Here, deals are conducted as a way to merge expertise and create products and services that can reach populations and countries where digital infrastructures are less developed, leveraging new innovations and being able to provide new technological solutions that go toward a larger financial inclusion. This type of strategic acquisitions was mostly made by FinTech firms, but also by banks that decided to leverage technologies provided by FinTech companies to contribute to financial inclusion and reach underbanked or underserved markets, trying to become a landmark for them among traditional financial institutions.

4.5.5. Other considerations

There are also other considerations that are worth doing. There are many cases in the data analysed, precisely the 9% of occurrences, where the acquisition came as the following step of an established partnership that had already lasted years. This fact highlights the coexistence of the two typologies of relationships that two firms that collaborate can create and, at the same time, shows how there is an underlying tendency in FinTech firms to look for an external partner and the tendency to pursue inorganic growth. Instead of directly developing technologies in-house, these companies decide to cooperate with other players for the development of innovations and the creation of new products or services. In these cases, the acquisition of one of the two companies can be chosen as the most logical following step when the partnership gives good results, as the acquirer decides to bring home the technology it was outsourcing to consolidate its position and get the best advantage out of its integration.

The following tables show the aggregate results: the first one presents the subdivision made on the first level, while the second one shows the complete percentages of all the different rationales, subdivided on the second level ramification.

Rationales	Enter the Fintech market	18	2%
	Final customer focus	11	4%
	Invest in fintech	5	7%
	Market expansion	53	21%
	Technology and expertise	156	63%

Figure 4.16: Main drivers – subdivision on the first level

Rationales	Market expansion	Deepen fintech expertise	2	0.8%
		Enter a new business line	3	1.2%
		Expand the customer base	19	7.7%
		Geographical expansion	21	8.5%
		Significant synergies	8	3.2%
	Enter the Fintech market	Business diversification	2	0.8%
		Digital transformation	1	0.4%
		Expand the product offering	2	0.8%
		Improve customer experience	3	1.2%
	Technology and expertise	Deepen fintech expertise	12	4.9%
		Develop new products or services	4	1.6%
		Expand the product offering	62	25.1%
		Improve the current product	78	31.6%
	Invest in fintech		5	2.0%

Figure 4.17: Main drivers – complete subdivision

5 Conclusions and future developments

The concept of this research was born with the intention of analysing the evolution of the buyer typology in FinTech M&As in the last five years. The financial technology industry has always found the basis of its growth in investments made by venture capitals, business angels and other institutional investors, which allowed the incubation of FinTech companies and the development of their business, giving them the possibility to grow on the market and gain credibility. The economic context of the last years has been quite turbulent, conditioned by the pandemic, the war, and a general tense geopolitical situation, and this obviously reflected on the global economic activity. Relatively to the field of the research, the element that has been mostly considered among the ones listed above is the pandemic and how its advent has influenced the activity of FinTech investors and, consequently, of FinTech companies. COVID-19 had a double impact of the FinTech industry, opposite and subsequent: first, the sector suffered from a scarcity of investments and a general reduction of the economic activity, following the general difficulties in global economies. Then, FinTech revealed itself as one of the most resilient industries, pushed by the immediate relevance gained by digital solutions. The great shift toward the use of technological innovations to provide financial services brought these companies to grow their importance as key players in the market. And while institutional investments started again their activity, registering their record for FinTech deals in 2021, still finding funds wasn't easy for startups. This fact lays the foundation for the results of the analysis, which highlighted that the

number of industrial acquirors pursuing acquisitions of FinTech firms has actually increased in the last five years and that the percentage of industrial acquisitions on the total number of deals has raised, going from representing the 11% in the second semester of 2018 to being the 26% in the second semester of 2023. The difficulties in raising funds by usual investors constitutes one of the reasons why the number of strategic deals went raising, but the reality is that all the results obtained through the various analysis reported above are strongly interlinked, driven by the union of two main motives that reinforced one each other: more difficulties to get accepted for funding by institutional investors and a market that is going through its consolidation phase. These two reasons together generate the picture described all along the chapter. The number of strategic acquisitions made by industrial investors is raising and the relative percentage on the total number of investments is increasing. More and more FinTech companies accept to take investments from industrial investors or being acquired by more established companies that can allow them the resources needed for growth and the access to a wider market. The majority of strategic deals are FinTech-on-FinTech, meaning that companies are choosing to acquire new innovations, technologies and knowledge by buying another firm that will allow them to develop a wider suite of products and improve the service they offer to their clients. At the same time, these moves consent to companies to become stronger players, thanks to the new customer base that they reach but also to strategic synergies that companies can have between them that allow them to develop an exponentially improved product and to gain significant market share. We have seen that, considering all the natures of acquirors, the main driver for acquisitions is the decision of the acquiring firm to invest in a new technology (63%) never to lose the pace of digital innovation, being it a financial software or a developed platform, accessing in this way both new products or services to offer to their customers and new competences to improve their own product and project new ones. The second main driver is the decision to pursue market expansion (21%) and gain a higher market share through geographical expansion or making acquisitions to strengthen the position in the current target

market while attracting new customer segments. Additionally, others rationales are present with lower percentages and are represented by (i) the decision to enter the FinTech market (7%) to add a business segment to the existing ones and exploit growth opportunities, (ii) the focus on a specific final customer to address that can be better reached through the acquisition of an identified player (4%) and (iii) the decision to make minority stake investments in promising FinTech companies to support their growth and develop an early-stage partnership (2%). The remaining 1% is attributable to deals driven by a target directly selecting the investor and to a reverse takeover.

Choosing to buy instead of building can be seen as an alternative way to solve the problem of getting funds, redirecting the effort and deciding to purchase another entity instead of developing in-house. This can reduce organic growth expenses and allow to benefit from synergies with the target company at the same time, but actually specific details about costs evaluation in the decision-making process didn't emerge in the research. This is where a suggestion for future approaches at the theme can be made: many studies in literature faced the "make or buy" topic across various industries but limiting the boundaries of the discussion to specific components or packages needed for specific projects. So, the company was not expanding its dimension but taking a single decision. This research aimed at contributing to literature in the identification of which are the main drivers behind FinTech acquisitions since the topic of M&A drivers has been widely analysed in the past but still FinTech literature is scarce, but couldn't specifically address the decision-making process and again this is a gap to fill in the FinTech field. Another interesting point to address could be understanding how the selection of the target is done, and investigating when the target comes first and when is the driver that moves the acquisition. Firms' decision to perform M&As can spring from the identification of a perfect fit or from the general objective to grow and expand, and it would be worth investigating which are the situations in which a company is moved by a specific target to acquire and which are the features and the circumstances that make a firm a perfect target, and when instead the decision of

pursue inorganic growth comes first, meaning for example the intended acquisition of a new technology to widen the business offering or the decision to enter a new geography, and which are the processes that bring to the selection of the right target to achieve the planned result.

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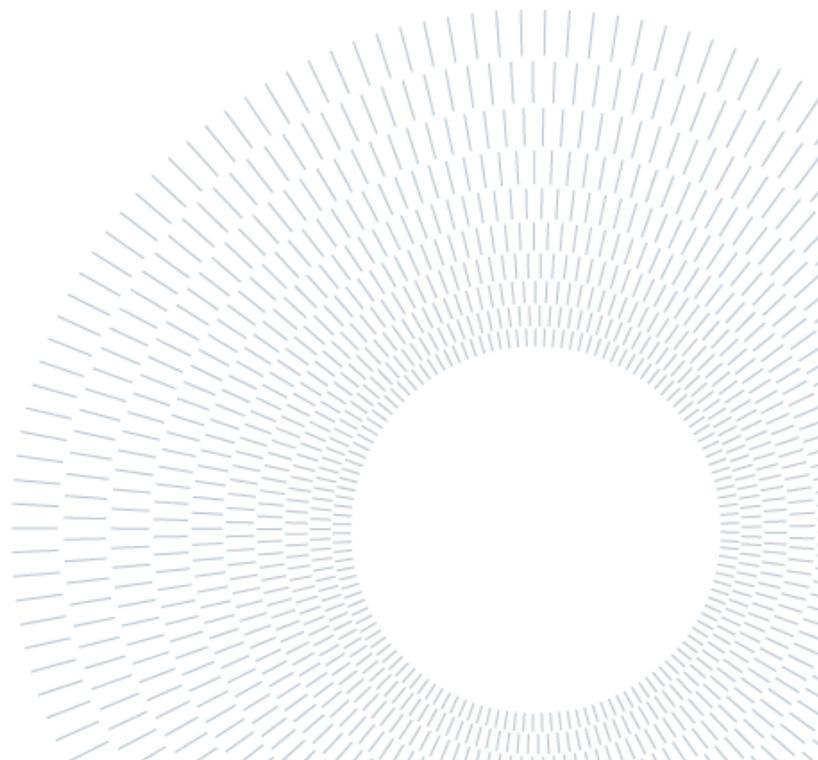
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