Factors affecting neobanks sustainability and development

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Abstract

Neobanks have managed to disturb the comfort of traditional banks in the market for financial products and services. The new digital-only banks are considered to be a serious competitor to the traditional, brick-and-mortar delivery of services. Nevertheless, aside from the swift growth, the sustainability and future growth of the neobanks' business models are yet to be determined. Accordingly, there is a need to identify some of the most important factors that will have a significant impact on the neobanks' ability to sustain their business operations.

Keywords: Neobanks, neobanks growth, fintech, neobanking market, traditional banks.

1. Introduction

The last couple of years are marked with the swift development of neobanks and significant growth of the neobanking market. Top neobanks managed to acquire millions of users, achieving double-digit growth in customer base, but some failed to achieve profitability. A combination of technological innovations, changing customer preferences, and regulatory changes enhanced the advance of fintech companies and, more precisely, the neobanks institutions. The coronavirus also affected the neobanking industry. But the impact was different for different digital-only banks and the neobanking market in different regions. On one side, the outbreak positively affected certain challengers that utilized the situation to acquire new users and expand their customer base. On the other side, the Covid-19 has brought failure and closures of neobanks.

There is an indication that the neobanking market has the potential to maintain its upward trend, but this comes with some degree of uncertainty. Hence, there is a need to identify the key factors that could influence the future development of neobanks.

2. Features and characteristics of neobanks

Neobanks appeared to be one of the most vivid competitors that could seriously threaten the position of traditional banks in the financial system. They have already acquired a substantial customer base and taken over a large number of users from the banking sector. Commonly quoted reasons that initiated the intense development of neobanks are the financial crisis of 2008 and the development of innovative financial technology [1]. The rise of digital-only challengers originates from the supply and demand side, i.e., the technological innovations

that modified the manner in which financial services are delivered along with changing customer preferences [2]

Neobanks can be defined as a type of institution that offers financial products and services fully online without any physical location using financial technology and technological innovations [3]. The interaction between customers and neobanks is executed entirely online using mobile or desktop apps. Based on the manner in which they execute their activities, neobanks can structure their business activities under three basic models: a full-stack neobank model, front-end focus neobank model, or hybrid model.

A full-stack neobank is also referred to as a standalone bank that has acquired a banking license. Therefore, it offers its products and services as an independent institution without the need to partner up with a traditional bank [4]. Neobanks owning a full banking license are sometimes referred to as challenger banks that originally entered the financial market as neobank [5].

Contrary to the full-stack, front-end focused neobank doesn't hold a banking license. Hence, it needs to enter into partnership and cooperate with a traditional or legacy bank to offer its products and services [5]. Under this model, the regulatory compliance and risk requirements fall upon the partner bank while the neobank delivers technological solutions. With the hybrid or mixed model, a neobank may own a license for certain financial services while it offers other services through a partnership with a traditional bank.

Neobanks, as direct competitors of traditional banks, are characterized with lower fees, better user experience, better pricing, online verification, faster processes, and customer-centric platforms [6]. The following table shows a breakdown of some basic financial, non-financial, and non-traditional services offered by digital-only banks.

Table 1 Digital banks products and services

Complexity	Financial	Non-financial, Non-traditional or Non- regulated activities
Low	Basic financial intermediation: Retail deposit and credit cards	> Budgeting> Spending categorization> Basic financial planning
Medium	> Retail and SMEs financial intermediation > Foreign exchange > Insurance > Brokerage	> Travel services > Integration with online retailers
High	Full corporate and retail banking services: Intermediation, wealth management, trade finance	> Crowdfunding > Crypto asset trading and wallets > Exotic products (binary options, contracts for differences, etc.)

Source: AFI (2021) Policy framework on the regulation, licensing, and supervision of digital banks, Alliance for Financial Inclusion. Available at: https://www.afi-global.org/wp-content/uploads/2021/11/DFSWG-framework FINAL.pdf

It is evident that neobanks offer basic as well as advanced financial products and services, depending on their business model. They offer their services to individual customers or SME's or both.

Neobanks enjoy a vast number of advantages as a business model solely based on offering digital-only products and services, compared to the traditional brick-and-mortar banks. Some of the most notable advantages of the neobanks market can be noticed in the customer experience, convenience, simplified processes, customer-centric platform-based models, high degree of cost efficiency, and utilization of APIs [5] [7].

Because neobanks rely primarily on innovative technology, they have lower costs to attract new customers, which is estimated to be between \$1 to \$38, while the same cost for traditional

banks is around \$200 [5]. Also, the employment of technology and APIs increases efficiency and lowers operational costs, which enables neobanks to achieve certain price superiority by offering a higher rate on savings. Lower fees are another benefit offered to digital-only customers, and it should be noted that some of the fees charged by traditional banks are significantly lower or even zero when banking with neobanks.

Users' convenience is higher because accessibility to financial services, account opening process, and customers compliance requirements are executed online. Their products and services are available right after the user downloads the respective app and sign in. Unlike traditional banks that have rigid product creation and customization processes, the digital business model allows for a higher level of personalization. Neobanks have the opportunity to focus on a specific group of customers and develop custom solutions that will cover specific needs.

By eliminating or modifying some obsolete processes, neobanks offering loans have managed to reduce the loan processing time. For instance, neobanks have adapted the credit scoring models, and they are able to verify customer's credit score using multiple data sources. Customers can see the loan amount and the guoted interest rate for their loan almost instantly, which is not the case with incumbent banks.

International payments using traditional products may come with certain limitations and restrictions, which is not the case with neobanks. Customers can easily make payments with their neobank app, while they might need to send a request for international payments when using traditional debit cards.

Although referred to as neobanks, these companies are not entirely considered banks, making them less regulated than traditional banks. Hence, they are not subject to the tight regulation imposed on the banking industry and regulatory framework that emerged after the last financial crises.

3. Overview of neobanking market

The neobanking industry attracted a vast number of users that used the financial products and services delivered through digital-only channels. A significant increase in the number of users, as well as the number of neobanks offering financial services, has been evident in the last couple of years. However, the first failed neobanking institutions were are registered.

2.1. Neobanking market

Neobanks ecosystem records significant growth in the past years in terms of the number of organizations and customers served. The rapid growth is especially evident from 2018 to 2020 when the number of digital-only challenger banks operating globally quadrupled, from around 60 neobanks to more than 250 neobanks [8]. Almost half of the 256 neobanks offered their services or operated in Europe [9]. The neobanking market has received substantial support from investors, where a vast number of neobanks received significant funding amounts to further develop their business activities. Table 2 presents the total funding and the funding year for some of the most popular neobanks operating in different countries.

Table 2: Overview of total funding received by selected neobanks

Name	Funding year	Total funding	Country
Oak North	2015	\$1 Bn	UK.
N26	2013	\$515 Mn	Germany
nUbank	2013	\$420 Mn	Brazil
Revolut	2015	\$361 Mn	UK.
Chime	2012	\$300 Mn	US.

M Monzo	2015	\$277 Mn	UK.
Starling Bank	2014	\$180 Mn	UK.
Varo	2015	\$142 Mn	US.
Solaris Bank	2016	\$98 Mn	Germany
Masthaven	2014	\$77.8 Mn	UK.
Monese	2013	\$75.8 Mn	UK.
TANDEM	2013	\$75.7 Mn	UK.
Chetwood	2016	\$70 Mn	UK.
voltbank	2017	\$45 Mn	Australia

Source: Rajeshwari M. Shettar (2020) Neo Bank: A new landscape. Journal of Xi'an University of Architecture & Technology Volume XII, Issue III, 2020 Issn No: 1006-7930. pp. 3843–3847.

The funding of neobanks follows the trend of increased interest among investors to provide financing for different types of fintech companies. Aside from being alluring for investors, neobanks are widely accepted among customers seeking digital financial solutions for everyday financial activities. Neobanks also show success in the customer acquisition process and substantially expand their customer base in rather short period of time. One of the leading US neobank, Chime, acquired more than 25 million users while NuBank from Brazil is one of the biggest neobanks with more than 40 million users [10]. According to the annual reports of Revolut, a popular UK neobank, the company had 10 million retail customers and 220,000 business customers in 2019. During 2020 they experienced significant growth in their customer base, reaching 15 million retail customers and 500,000 business customers. The digital bank N26, founded in Germany, states that it has more than 7 million customers as of 2021 in more than 25 markets.

In terms of valuation, the neobanking market is composed of a vast number of institutions valued at above than \$1 billion mark. NuBank's valuation is set at \$25 billion, Revolut's valuation is \$33 billion, and Tinkoff from Russia has a valuation of \$17 billion [11]. There are multiple other neobanks that received a multibillion-dollar valuation.

The market for financial products and services offered by fintech institutions recorded double-digit growth since the last financial crisis. Multiple analyses and reports anticipate that neobanks will continue to attract new customers and augment the size of their operations. For instance, neobanks in the US have more than 20 million customers with anticipation that this number will grow to more than 45 million by 2025, while the global neobank market could be worth in excess of \$720 billion by 2028 [12]. Accordingly, there is an overall positive sentiment regarding the future development of the neobanks market with the expectation that these challengers will continue their growth and development.

2.2. Neobanks failures and closures

Even though the neobanking market is growing, there are already the first signs that not all neobanks will survive the digital-only trend. A couple of neobanks have been closed or sold for different reasons in the last couple of years. Strong competition, decreasing profitability, or lack of resources are some of the reasons that initiated the closure of digital-only institutions. Moven was founded in 2011 announced that it would close its consumer bank but due to the inability to secure an adequate level of funding needed to continue its business activities [13].

Xinja was an Australian licensed neobank that failed due to inadequate business planning and mismatching of deposit and loan products. More precisely, Xinja attracted depositors and incurred interest expenses while it didn't secure an adequate level of demand for loans [14]. Founded in 2009, Simple neobank was acquired by BBVA USA, which was later acquired by PNC. The parent company announced that it would close Simple as part of its plans to focus on the development of its core banking platform [15]. The closure of Simple should additionally reduce operating costs and improve the management of remaining platforms operated by PNC.

Bo Bank is another neobanks that was closed due to profitability issues. It was created by the Royal Bank of Scotland (RBS) to compete with neobanks such as Starling or Monzo [16]. Nevertheless, RBS announced that it would close Bo Bank after its profits nearly halved, recording a substantial drop in pretax profits during the pandemic [17].

3. Factors affecting neobanks development

The recent rapid growth of neobanks comes primarily from the increased demand for digital solutions by tech savvy clients, easier account opening process, faster transactions, increased investments in technology, and lower costs [18]. Despite the success of neobanks in recent years, part of their initial advantages are fading away due to new technological entrants, problems with operational models, or the activities undertaken by traditional banks.

Therefore, the technologically advanced neobanks might fall short of their advantages in the years to come, and their superiority might disappear, indicating that not all banks will survive the next wave of expansion. The market has already witnessed the first cases where neobanks have failed or closed their operations because of different factors or challenges.

The outburst of Covid-19 accelerated the acceptance and development of neobanks in some countries, leading to the sector's overall growth. Customers turned to products and services provided by digital-only banks due to the crediting restrictions imposed by traditional banks. Moreover, in the pandemic years, banks were oriented more toward keeping their existing customers and consequently neglected the process of acquiring new clients. The challenger banks utilized this opportunity to their advantage to acquire new customers by satisfying their needs for financial products and services. Yet, the pandemic also caused severe problems for certain neobanks that eventually failed or were closed.

Despite the progress of neobanks and the neobanking market up to this point, it is still too early to firmly define or anticipate the direction of future developments of these institutions and markets. This is so because they are still in some form of a development stage, with most neobanks operating less than ten years. A high degree of uncertainty regarding the developments and the possible changes that might occur in the neobanks ecosystem limits the opportunity to clearly anticipate future movements. Hence, it is of particular interest to determine the key drivers that could affect neobanks ability to sustain their business activities and achieve further growth.

The competitive advantage may be undermined by traditional banks that have the resources to adapt certain aspects of their products or enter the neobanking market and expand their operations. Moreover, even though alternative banks managed to acquire new customers during Covid-19, they have been faced with limited profitability levels [8]. A major hit for neobanks generating revenue from international payments and everyday transactions occurred from the limitation imposed on the tourism industry, movement of people, and lost jobs.

The key factors that will have an impact on the sustainability and development of neobanks can be placed in three broad categories of factors, changing economic and regulatory landscape, changing customer expectations, and evolving technological environment [19]. Each category is composed of a variety of factors with varying degrees of relevance and impact on the neobanking market.

Although neobanks had significant success in acquiring customers, they are still far from the customer base served by traditional banks. To attract customers from the traditional banks, digital-only banks need to cope with customers' inertia and the potential trust issues [20]. Customers need to see additional value in products offered by neobanks compared to the same or similar products accessible through the traditional sector. A crucial issue that will affect the further growth of neobanks is the level of trust in alternative financial institutions. The neobanking market is relatively young while traditional banks have been around for centuries, and there is a high level of trust in the sector [6].

A positive aspect for the neobanking market is that customers are gradually changing their preferences toward digital products and services while there is a high level of acceptance of digital channels among younger generations [19].

There are a plethora of differences in the neobank regulatory environment. Countries create and implement regulations adequate for their socio-economic conditions and existing regulatory framework. Nevertheless, authorities from certain countries and regions tend to move toward creating or adopting a more unified, relevant, and universal set of rules pertaining to opening and managing neobanks. For instance, Europe is considered to have a more neobank friendly environment due to relaxed regulatory mechanisms, which also promote the development of neobanks through the Payment Services Directive Law. UK financial authorities use a more relaxed regulation for acquiring banking licenses as a method to stimulate competition in the market [21]. The Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA) have lowered the capital requirements, simplified the license application process, as well as other changes associated with Basel III requirements [21]. It is also acknowledged that authorities managed to lower the period for obtaining a license from more than two years to six months with the implemented changes. Ukraine is another country that is oriented toward the creation of neobank friendly regulatory environment and enhancing the utilization of financial technology for the delivery of banking products and services [22].

Moreover, some countries in Asia take the initiative to develop regulatory frameworks to create an adequate environment for establishing and operating neobanks. The focus is more enhanced with countries where a large part of the population is unbanked or underserved by traditional banks.

Changes in the regulatory framework in individual countries may result in an unequal development of neobanking institutions between the regions. Moreover, differences in regulations might impede the potential for expansion of neobanks in other markets and countries. Notable examples are the experiences of Monzo, N26, and Revolut's entrance into the US neobanking market. The European neobanks faced certain limitations when applying for a banking license in terms of uncertainty whether the license would be granted. Moreover, the entrance to the US market has turned out to be an expensive adventure because the regulatory ecosystem in the US might impose high costs and come with a high degree of complexity. Monzo and N26 decided to seize their activities in the US and focus their activities in the European market while looking for new opportunities for expansion.

Business related factors are among the most important factors that could promote the future growth of neobanks or impede their development. Profitability is considered to be among the key drivers for the future development of neobanks. Currently, the neobanking industry faces debatable profitability levels, especially because the profit-generating products and activities are yet to be fully developed. Overall, neobanks are concerned with reaching profitability levels that would offer stability, especially because they didn't succeed in achieving positive results in the last couple of years [23]. Only half of the 10 most popular neobanks in terms of user base managed to record positive results in their bottom lines [5]. In addition, popular names such as N26, Revolut, and Chime still struggle to achieve profitability even though they have attracted a large number of users.

Nevertheless, if the neobanks manage to cope with the profitability issues and generate profits from their business activities, it will give them substantial support for future development.

The industry participants need to reconsider the viability of freemium and premium services for customers. Although freemium services enabled neobanks to attract customers to use their services, it is unclear whether these customers will use the premium offers in the future. The reason is that customers could switch to another provider that provides freemium services.

Neobanks have easy access to innovative technology that allows them to offer new services and swiftly customize products for specific niche markets. Also, at the moment, they have the ability to swiftly react to changes in customers' preferences. Nonetheless, the sustainability of advantages gained from using advanced technology is not clear because traditional banks with a high level of resources could also utilize the technology [24].

Neobanks' initial successes and popularity in acquiring customers is yet to be perceived as an indicator for future development. The reason is that even though they are efficient in offering basic banking and payment services, they are far from being a full-grown alternative to traditional banking [25]. Even when they are granted a banking license, they still have to adapt their operations to accommodate a broader set of financial products and services. The banking license will impose additional regulatory and compliance issues, and this, in turn, places even more pressure on the profitability of the neobanks.

Low or zero fees have been one of the most alluring features in neobanks operations that attracted a vast number of customers. However, this advantage is disrupted by the traditional banks that initiated a wave of a fee reduction. A recent example is an announcement made by Bank of America to reduce its overdraft fee from \$35 down to \$10 and eliminate some of the other fees [26]. However, traditional banks still have a long way to go when it comes to a fee reduction or elimination to fully meet the fees policies imposed by neobanks, especially considering the so-called hidden fees.

Traditional banks are undertaking multiple steps to cope with the pressure coming from the neobanks. Consequently, incumbent banks attempt to utilize technological advancements to improve their efficiency and services as well as to capture new markets. They have taken action for digital transformation to satisfy the changing customer preferences and compete with neobanks [27]. Moreover, traditional banks enter the neobanking market to capture new customers through a new brand and digitalized financial products and services [28]. A traditional bank may enter the neobank market through the acquisition of an existing neobank, such as the acquisition of Simple by BBVA USA. Another option is for an incumbent bank to set up its own digital-only bank.

The challenger industry for financial services is also faced with another form of competition coming from tech giants and embedded finance [29]. These are well-known tech companies such as Google, Facebook, or Apple that utilize their current resources and access to large customer bases to offer financial services [30].

Neobanks are faced with diminishing competitive advantage over traditional banks. One of the main advantages of neobanks was their ability to offer different packages of products due to innovative technology not available with incumbent banks. However, this advantage is fading away because, nowadays, traditional banks utilize technological advancements to implement digital solutions as a response to increased competition. Moreover, the incumbent banks have adequate levels of resources to maintain their brick-and-mortar operations while simultaneously entering the neobanks market. An example of this activity would be when BBVA acquired 29,5% interest in Atom Bank, which obtained its license in June 2015 [31].

Another competition emerges from the neobanking market itself, or more precisely from founders and co-founders of existing digital and traditional banks. For instance, the founder of Atom Bank was co-founder of Metro Bank or Matt Cooper, one of the founders of Tandem Bank comes from Capital One [31].

It is often quoted that heavy reliance on technology to execute business operations comes with certain risks. One such risk is cybercrime which is widely recognized due to the heavy reliance of financial institutions on innovative technology for the execution of everyday banking and financial activities [32]. The cybercrime risk is primarily associated with the hacking of personal accounts, unlawful acquisition of customer data and information, and misusage of customers' funds.

It is pointed out that the ability for a person to open an account online by going through the onboarding process might be alluring for people that could engage in fraudulent activities. This potential risk might affect the reputation and could result in the neobank being funded due to money laundering issues.

Neobanks offer a viable solution for a problem that has a significant impact on the economic development and financial activities of individuals that don't have access to traditional financial services. Neobanks are able to successfully capture part of the population that is underserved or neglected by incumbent banks. Access to basic products and services is of crucial

importance for the augmentation of individual living standards, poverty reduction, and economic growth.

Although neobanks experienced significant success in developing countries, it is estimated that every third adult doesn't have access to basic or affordable account [33]. This shows that there is a sufficient number of potential customers that could be served in the upcoming years. However, the success depends on coping with relevant regulation and overcoming some of the potential issues that impede the future development and expansion of neobanks activities.

4. Limitations and further research areas

The limitation of this research is that it offers a basic and broad overview of key factors that will most probably impact the sustainability and further development of neobanks and the neobanking market in general. The impact of each individual factor on the sustainability and growth potential of neobanks' business models is not easy to determine solely from a theoretical point of view. This opens grounds for new research areas related to the creation and delivery of financial products and services through digital-only channels. Future research should be focused on evaluating the degree and direction of the impact on neobanks coming from different factors in each category. The differences in regulations and consumer behavior between regions and countries indicate that all economies don't offer equal conditions for the development and growth of neobanks. Accordingly, it would be beneficial to see which countries will become the center for neobank startups.

Another area that could be of particular interest is the potential entrance of neobanks in related industries. The development stages and expansion of traditional banks in the past raises the question of whether neobanks will be entering new areas in the financial markets and compete with other providers of financial services. Technological advances and regulatory changes may offer a breeding ground for the growth of Neo-pension, Neo-insurance, Neo-mortgage, etc. [34].

5. Conclusion

It is clear that most of the factors that contributed toward the development of neobanks during the last decade will continue to be among the primary drivers for their future growth. Factors that supported the rise of neobanks are associated with changing customer preferences, advances in financial technology, and regulatory frameworks. Nevertheless, while their importance is easily identified, the manner in which these factors will impact neobanks in the future is unclear. Some factors may contribute toward the sustainability and further expansion of the neobanks market while other factors could negatively affect the industry. The uncertainty is additionally augmented because there are different conditions regarding the licensing and managing a neobank in different countries. Consequently, while neobanks might experience swift growth in a friendly environment, they could be faced with numerous challenges in countries with an unfavorable environment. Ultimately this should lead toward uneven development of the market.

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