

The Role of Fintech in Enhancing Financial Inclusion: The experience of Norway

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ARTICLE INFORMATION

Original Research Paper
Received: 17 /4/ 2024
Accepted: 18 /7/ 2024
Published: 21 /9/ 2024

Keywords:
Keyword.1: Financial inclusion
Keyword.2:Fintech
Keyword .3:Digitalization
Keyword.4:Digital financial services
Keyword .5:Norway
JEL Clkassification Codes: G21, G28,O33

Mots clés :
Mot clé.1 : Inclusion financière
Mot clé.2 : Fintech
Mot clé.3 : Numérisation
Mot clé.4 : Services financiers numériques
Mot clé.5 : Norvège

Codes de classification JEL : G21, G28, O33

Abstract :

This study aims to examine the role of Fintech in advancing financial inclusion in norway. By employing a descriptive analytical approach, the research synthesizes data from secondary sources to examine Norway's financial inclusion landscape, FinTech adoption trends, and the impact of technological advancements on financial accessibility from 2012 to 2028. The results reveal that over the past decade Norway has witnessed a notable increase in financial inclusion, largely attributed to the catalytic role of FinTech driven by a supportive regulatory environment and an unwavering commitment to social impact.

Le résumé :

Cette étude vise à examiner le rôle de la technologie financière dans l'avancement de l'inclusion financière en Norvège. En utilisant une approche analytique descriptive, la recherche synthétise des données provenant de sources secondaires pour examiner le paysage de l'inclusion financière en Norvège, les tendances d'adoption de la Fintech et l'impact des avancées technologiques sur l'accessibilité financière de 2012 à 2028. Les résultats révèlent qu'au cours de la dernière décennie, la Norvège a connu une augmentation notable de l'inclusion financière, largement attribuée au rôle catalyseur de la Fintech, soutenu par un environnement réglementaire favorable et un engagement indéfectible envers l'impact social.

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1- Introduction:

In the realm of financial services , Financial inclusion refers to the availability and equality of opportunities to use financial services and have access to it, And access to such services is essential as it enables individuals to invest in education, save for business and to manage consumption. However , In the developing world, access to essential financial services is limited. factors such as the distance of financial service providers, and the fact that services are often geared to people with higher incomes. Consequently, poorer populations are excluded from loan markets and without access to credit, this in turn limits the amount they are able to save and invest. Its within this gap where the transformative potential of financial technology, referred to as ‘fintech’, emerges.

Fintech has become a diverse global industry, consisting of companies that use technology to offer financial services. This ranges from mobile payment apps to cryptocurrencies. Fintech has the power to make financial services more efficient and be immensely convenient for customers. With a world that is becoming more and more digital, the fintech industry is developing quickly and is showing no indication of slowing down. For the next generation, fintech services will be a first and foremost concern when it comes to banking and other financial services. Although developed countries are well on their way to changing over to these efficient automatic services, developing nations can also profit from it. Various fintech services have the ability to serve instead of traditional banking systems, which have not effectively served billions of individuals .

1-1 The Research Question:

In light of the above, the study addresses the following research problem:

What is the role of fintech in enhancing financial inclusion in norway ?

To address this issue, we have formulated two hypotheses:

- **first :** The adoption of fintech solutions significantly enhances financial inclusion by increasing access to financial services for previously underserved populations.
- **second:** Supportive regulatory frameworks and high levels of digital literacy are critical drivers of the successful integration and adoption of fintech solutions, leading to enhanced financial inclusion.

1-2 The aim of the study :

The aim of this study is to provide a comprehensive analysis of norway's efforts in leveraging fintech as a key driver for enhancing financial inclusion in the country.

1-3 The methodology of the study :

- A descriptive analytical method was chosen to answer to the question posed by the research, The research is divided into two parts as follows
- theorical framework : the concept of financial inclusion and fintech

- The Role of Fintech in Enhancing Financial Inclusion :insights of Norway. The study will analyse data from the past decade (2012-2023) and Projections and forecasts until 2028 will also be examined for future trajectory, using data from the Statista , reports, the global data base ..etc

2- Reviewing the literature :

-The study of (Hollanders, 2020), titled "FinTech and Financial Inclusion: Opportunities and Challenges," aimed to underscore the significance of electronic accounts and payment services in enhancing the accessibility of financial services to all societal segments. This paper highlighted the importance of innovations in improving the quality of financial services and offering innovative solutions, while also addressing potential challenges. The research was based on two reports, the first issued by the Payments and Market Infrastructure Committee and the second by the International Bank for Reconstruction and Development.

- The study by (Luiz Antonio Joia, 2021), titled "Unlocking the Potential of Fintechs for Financial Inclusion: A Delphi-Based Approach," aimed to highlight the tremendous potential of financial technology to increase financial inclusion in emerging markets using the Delphi method. This approach focused on expanding access to financial services, reducing costs, and providing innovative solutions. The study included an analysis of expert opinions on the role of financial technology in achieving financial inclusion, using Brazil as a case study. The research identified several challenges, such as lack of awareness, limited access, skill deficiencies, and the absence of legal frameworks, and offered recommendations for updating infrastructure, enhancing awareness, building trust, developing legal frameworks, and fostering public-private collaboration.

- The study by (Aurelien Kamdem Yeyouomo, 2023)titled "Fintechs and the Financial Inclusion Gender Gap in Sub-Saharan African Countries" aimed to highlight the role of financial technology companies (Fintechs) in narrowing the gender gap in financial inclusion, focusing specifically on Sub-Saharan Africa during the period 2011-2017. This analytical study utilized a multilevel Tobit regression model. The findings indicated that Fintechs contribute to reducing the financial gender gap primarily by diminishing disparities in access to and usage of financial services.

The study of (Xiaojie Chen a, 2024)entitled: Can Fintech development improve the financial inclusion of village and township banks? Evidence from China " The study aimed to explore the impact of fintech development on the financial inclusion of village and town banks (VTBs). While identifying the role of mediation that the use of mobile banking plays in the relationship between financial technology and financial inclusion. A statistical analysis was carried out covering 900 banks. The findings found that fintech improves the financial inclusion of village and town banks

through the use of mobile banking. Fintech has also helped to raise the loan ratio to rural households, poor households and small and micro enterprises.

2.1 The concept of financial inclusion

2.1.1 The definition of financial inclusion and its importance :

-The Bank of Algeria defines financial inclusion as: ensuring the availability and access to financial services by all segments of society, including institutions and individuals, especially the marginalized. Financial inclusion aims to provide formal channels such as bank accounts, savings, payment and transfer services, insurance and credit facilities. With the provision of more accessible financial services at competitive and reasonable prices. (Ali dahman Mohamed, 2022)

-it is widely recognized that Financial inclusion is in growth and poverty alleviation especially in less developed regions. It encompasses providing opportunities for all to access services.

It targets individuals and businesses of all sizes and income levels offering a range of services such, as savings, loans, insurance and payments. Its significance lies in empowering individuals reducing poverty promoting gender equality boosting growth and ensuring stability and integrity (Antonella Francesca Cicchiello, 2021).

2.1.2 Financial inclusion over the years :

Financial inclusion has seen significant progress over the years, with advancements in the accessibility and utilization of financial services globally. Data from the Global Findex indicates a 50% rise in the percentage of adults owning an account in the past decade highlighting efforts to bridge the financial gap. However, Disparities remain due to factors like gender, income levels and education. (group', 2023)

slowed down progress across sectors in years but acted as a catalyst for financial inclusion by driving a significant surge in digital payments amid the global expansion of formal financial services. It led to an uptick in payment usage as millions of adults transitioned to transactions over traditional cash based methods, for the first time.

The shift, to technology has not made it easier for more people to access financial services but has also started to reduce the gap between men and women in owning bank accounts in developing countries showing a step towards more equal financial opportunities. (Group W. B., 2022)

However true success in promoting financial inclusion should not focus on access and usage but should also consider the financial goals that individuals and families are aiming for. The lack of security is still a concern as many adults in developing nations do not have savings to cover unexpected expenses. Relying on sources like borrowing from their relatives highlights the need for financial safety nets and affordable banking services. (Ankita Singh, 2022)

The International Monetary Fund (IMF) highlights the increasing interest in financial inclusion over the past two decades, acknowledging its role in fostering sustainable economic growth that benefits everyone. This emphasizes the importance of understanding the trends and disparities in inclusion to create effective strategies that address these differences among various regions and demographics. (Adolfo Barajas, 2020)

2.1.3 Key indicators of financial inclusion :

- Access indicators reflect how widely financial services are available such as the presence of bank branches or POS devices in areas as well as obstacles faced by customers like costs or lack of information.

- Usage indicators measure customers utilize financial services, including frequency and duration of use (e.g. average savings balances transaction volumes per account electronic payments).

- Quality measures evaluate whether financial products and services meet customer needs, the variety of options offered to customers and customer awareness and understanding. (How to Measure Financial Inclusion, 2015)

The World Bank incorporates indicators like phone and internet access bank account ownership, active account usage, participation in payments across different demographic groups. Other metrics focus on the availability of services such as the number of payment service provider agents, ATMs and bank branches per 100,000 adults. Additionally there are assessments of financial literacy levels and utilization of services, for saving and borrowing purposes. (G20 Financial Inclusion Indicators, 2024)

2.1.4 The Challenges of financial inclusion :

Financial inclusion, a critical component of economic development, faces a myriad of challenges that prevent its widespread adoption and effectiveness. These obstacles encompass issues on both the side of demand and supply showcasing the nature of initiatives aimed at promoting financial inclusion.

Regarding the demand side significant challenges arise due to lack of awareness, low income levels, prevalent poverty and high rates of illiteracy among the target. These factors create a barrier to accessing financial services since individuals may lack the necessary knowledge and means to interact with traditional banking systems. Additionally geographical factors like distance from bank branches operating hours at branches and cumbersome paperwork and processes often limit the demand for services. These hindrances further contribute to excluding marginalized groups from engaging with channels thereby restricting their access to essential financial services.

Conversely, supply-side challenges also play a crucial role in hindering financial inclusion efforts. The complexity involved in providing financial services to marginalized communities, coupled with the reluctance of formal

financial institutions to cater to these segments, poses a significant barrier to inclusive financing.

Additionally, the need to bridge the gap between those excluded from services and the mainstream financial systems poses a challenge that demands creative solutions and targeted actions. Moreover promoting literacy and reinforcing credit delivery mechanisms are elements in advancing financial inclusion and supporting economic development. (Damodaran, 2016)

2.2 The concept of fintech :

2.2.1 The definition of fintech and its importance :

-Financial technology (fintech), which combines technology with finance, has emerged as the form of innovation in the modern era enabling a wider audience to access more sustainable financial services (Francesca Collevocchio1, 2023) ,

-It is recognized for its potential in the finance sector ,fintech incorporates cutting edge technologies like intelligence, big data, cloud computing and blockchain. This dynamic field has garnered interest due, to its ability to enhance operational efficiencies streamline transactions and fund management processes boost management transparency and improve customer convenience and security. (Qianhua Liu, 2024)

The rise of fintech has brought forth a range of implications. Both challenging. Which are detailed systematically in the table: (iman, 2020)

Table 01 : Exploring the advantages and drawbacks of FinTech

the advantages of fintech	The risks of fintech
Fintech's Advantages and Impact • Fosters innovation and efficiency, providing enhanced security and flexibility. • Potential to disrupt established financial services, fostering competition and new business growth. • Enhances financial inclusion by providing services to disadvantaged individuals. • Provides a rich field for study, offering insights for policymakers and governments.	•Rapid fintech expansion presents regulatory challenges due to the rapid pace of technological advancements and innovative business models. • The zero-sum game in fintech may lead to market consolidation and decreased variety. • Fintech may require skill development in sectors like legal, accounting, and technology. • Growing loan volume in fintech markets raises concerns about underestimating credit risk, emphasizing the need for risk management strategies in industries like insurance.

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2.2.2 The types of fintech :

-**Digital Lending:** This refers to technology powered nonbank lending platforms that use data analysis and technology to streamline borrowing and lending processes. These platforms employ data analysis to assess credit

risks effectively. For example, companies like Lending Club and Prosper offer peer-to-peer lending services, connecting borrowers directly with investors .

-Payments: ; This category involves fintech advancements that are reshaping payment methods, including peer to peer (P2P) transactions and mobile payment apps for in store purchases. Services like Apple Pay and Android Pay enable users to make payments using their smartphones. Furthermore improvements in security technologies such, as tokenization and biometric authentication enhance payment security.

-Blockchain: Blockchain technology has the potential to transform payment clearing and settlement processes by offering improved efficiency and security. For instance, it can facilitate transparent and tamper-proof transactions without the need for intermediaries. Bitcoin, a digital currency, operates on a blockchain network, showcasing the disruptive potential of this technology .

-Digital Wealth Management: management traditional financial institutions are integrating robo advisers to provide automated investment services to customers. These robo advisers utilize algorithms to offer tailored investment recommendations and manage portfolios. Companies such, as Betterment and Wealthfront serve as examples of wealth management platforms catering to tech savvy investors . (An introduction to fintech : Key sectors and trends , 2016)

2.3 The role of fintech in enhancing financial inclusion:

The emergence of technology known as 'fintech' represents an advancement, in the contemporary world offering new avenues for individuals to interact with financial services. These technological progressions hold significance for those historically excluded from the realm. By digitizing services and making them more secure and user friendly fintech plays a role in ensuring that everyone can engage in the economy.

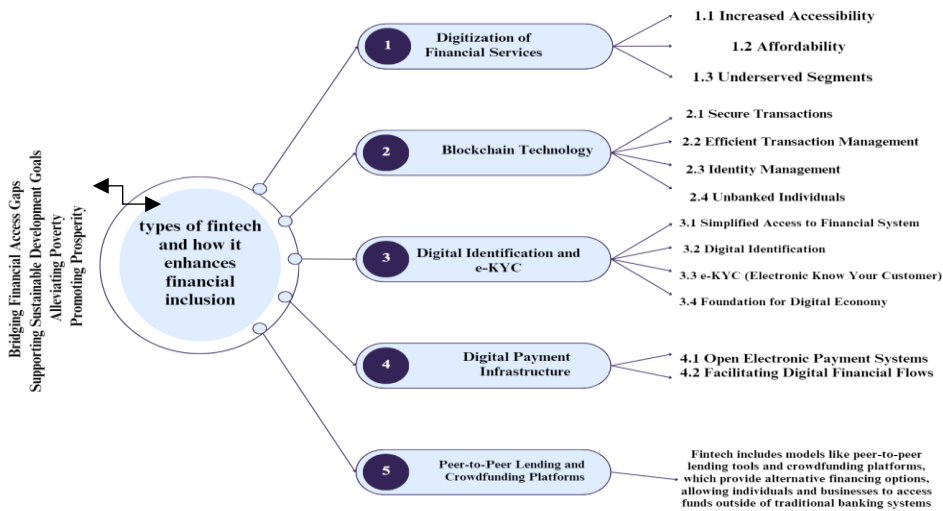
To begin with fintech firms have introduced solutions that lower the expenses associated with banking services making financial products more accessible to individuals and businesses with limited resources. This reduction in barriers to entry has democratized access to vital financial tools.

Furthermore through the use of technology fintech has enabled individuals to conveniently access financial services especially in regions lacking traditional banking infrastructure. This increased accessibility has bridged infrastructural gaps empowering communities previously marginalized.

Lastly fintech solutions have enhanced the speed and efficiency of transactions by simplifying processes like money transfers, bill payments and credit acquisition. This optimization has reduced procedures burdensome nature while improving user experiences and promoting inclusivity

Moreover, fintech has expanded its services to reach individuals who were previously excluded from banking systems. This expansion has particularly benefited marginalized groups such, as the youth and women leading to increased inclusivity. This inclusive approach has had an impact on communities by promoting economic empowerment and social mobility. Moreover by incorporating people and businesses into the financial sector fintech has the potential to stimulate economic growth enhance incomes and improve livelihoods. This ongoing cycle of advancement and financial inclusion underscores the importance of fintech in fostering prosperity. Additionally digital financial services provided by fintech firms complement the offerings of banks by addressing gaps in inclusivity and catering to underserved populations. The collaborative relationship between fintech and traditional finance strengthens the landscape ensuring that all segments of society are included in the financial system. (fintech and digital finance for financial inclusion , 2023)

Figure 01 : innovative fintech solutions and their role in enhancing financial inclusion



Prepared by the authors

To sum up, fintech is a powerful tool in the movement towards inclusive finance. It is dismantling barriers that have long hindered access to services while paving pathways for individuals to manage their finances effectively. The continuous progress in this field holds promise for a future where financial resources are accessible, to all contributing to a secure and prosperous society.

2.4 The Challenges of fintech in leveraging financial inclusion :

leveraging fintech to enhance financial inclusion globally presents both challenges and opportunities. One of the primary challenges is the digital divide, where certain groups lack internet access or digital devices limiting their ability to take advantage of fintech services. The changing regulatory landscape can also be a barrier, for fintech companies seeking to expand their offerings while adhering to various rules and regulations. Moreover the looming threats of cybersecurity breaches and data leaks can erode trust in the sector. Many individuals, those in communities may struggle with understanding how to effectively utilize fintech products due to a lack of financial literacy. Additionally regions with infrastructure, such as power supply or poor internet connectivity may face challenges in fully embracing fintech solutions. (Heng, 2022)

3 The Role of Fintech in Enhancing Financial Inclusion in Norway:

Norway's fintech industry is growing, with an emphasis on innovation and technical improvement. These firms use cutting-edge technologies such as mobile applications, artificial intelligence, and blockchain to provide innovative new financial products and services for banking, payments, lending, and other areas. Their ideas have had a significant impact on boosting access to financial services for underserved people in Norway, as will be investigated further. The expanding fintech business has brought easy digital solutions that allow users to better manage their money and obtain access to services such as mobile banking, digital wallets, peer-to-peer lending platforms, and others. This has helped to foster greater financial inclusion by reaching out to those who were previously underbanked or unbanked, as discussed in the following section

3.1 Norway's Financial inclusion landscape :

-According to the 2023 Global Financial Inclusion Index report, Norway achieved an overall financial inclusion score of 59.4, positioning it at the 8th position globally. (Group P. F., 2023)

-Account Ownership at a Bank or Mobile-Money Service Among Individuals Aged 15 and Older (as a Percentage of the Population):an impressive 99.8% of individuals aged 15 and above have an account at a financial institution or a mobile-money-service provider, and 100% of women in the same age group have such an account, "if you're a woman, you're more likely to have an account in the Nordics than almost anywhere else". (Striving, scaling or sailing ? nordic fintech and the future of finance, 2020) This significant account ownership rate showcases Norway's dedication to fostering inclusion by ensuring universal access, to financial services.

-Norway was late to implement contactless payments, but its percentage has climbed considerably in recent years. The percentage more than doubled,

reaching 86 percent by the end of 2022. In the first half of 2023, the percentage of contactless payments climbed slightly to 88 percent. (nordic payment report , 2023)

Norway's impressive strides in promoting financial inclusion naturally leads to the inquiry: What underlying factors have contributed to this positive development?

3.2 Norway's infrastructure :

One key aspect to consider when exploring Norway's fintech landscape is its infrastructure, which plays a crucial role in supporting the growth and success of fintech ventures within the country.

-A Populace Primed for Fintech - Norway's Digitally Literate Consumers

- a. Internet usage :In 2019, 97% of Norway's population used the internet, and the country has 36,817 secure internet servers per million people, surpassing EU and OECD averages. As providers, it is our responsibility to capitalize on this opportunity. This high level of internet use and infrastructure promotes fintech development since it indicates a technologically competent and well-connected populace.
- b. Financial Literacy and Preference for Digital Platforms: Norwegian consumers prefer digital solutions from both public and private companies. This is due to the country's well-developed infrastructure, which includes the digital signature and identification solution BankID, as well as user-friendly banking and payment services. As a consequence, the usage of cash has decreased to around 3-4% of all payment transactions, while new digital payment options have expanded significantly. Several services have been automated, and clients are becoming more self-serviced. (nordic payment report , 2023)
- c. Trust in Technology: The Norwegian population has a good level of trust in technology,. This confidence in technology, along with the population's technological savvy, offers a conducive atmosphere for the integration of FinTech solutions into the banking industry. Norway has a high degree of digital competency among professionals and the general public, which allows for easy adoption of FinTech solutions.
- d. Digital Competence: Norway is recognized for its high levels of digital competence among professionals and the general population, This competence enables individuals to easily adapt to and utilize FinTech solutions, leading to increased adoption rates. (Stian Omreng, 2017)

-Regulations and laws 's role in development of fintech in Norway :

Norway made regulations that aim to safeguarding consumers promoting competition and managing risks in the rapidly advancing technology sector. These regulations establish a framework for fintech companies to operate securely and responsibly while encouraging innovation and growth within

the industry. Adhering to these regulations is increasingly crucial for both entrants and established players in the field.

- a. Payment services : Regarding payment services recent laws have been implemented to regulate services aligning with the EUs PSD2 directive. This includes the Financial Contracts Act and the Financial Institutions Act which introduce a regulatory environment with varying requirements and licensing options.
- b. Banking and insurance: The Financial Institution Act outlines the basic rules for financial institutions like banks and insurance firms based on EU banking standards. It focuses on aspects such as licensing procedures, capital requirements and risk management. Consumer protection measures have been reinforced to mitigate debt and fraudulent activities concerning electronic signatures.
- c. GDPR and ICT: full enforcement of the General Data Protection Regulation (GDPR) is underway along, with provisions addressing technology related risks. Fintech companies need to handle customer data with caution especially when using it to personalize services . (Ole Andenæs, 2023)

3.3 Norway's Fintech status

3.3.1 The landscape of Fintech in Norway :

To start with , Norway has a strong fundamentals in place – economic, technological and banking of \$403,336 , 2019 GDP (IN USD MILLIONS) which leads to gerater fintech

Figure 02 : the number of companies in Norway through the years(2012-2022)

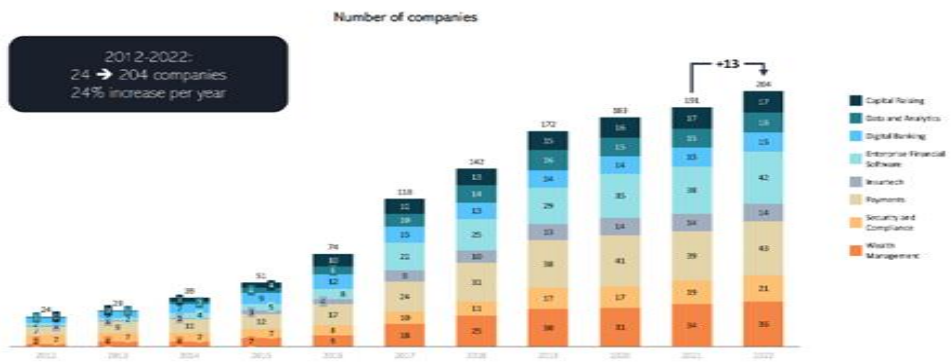


Figure 03: Norway's Fintech Landscape map



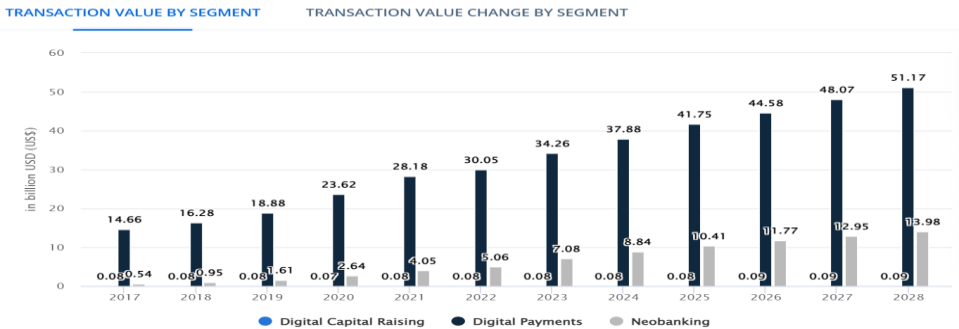
Source : FINTECH 2023 report – State of the Norwegian Fintech Industry (Ontogeny, 2023)

According to the FINTECH 2023 report on the Fintech Industry by Ontogeny the increasing number of companies in Norway over the years reflects a growing environment. This environment is crucial for driving innovation in technologies and services. The expansion of these companies signifies a trend for inclusion as it offers a wider range of services and products to consumers including those, in underserved communities. (Ontogeny, 2023)

3.3.2 Norway’s fintech progress over the years :

In Norway, FinTech has been instrumental in bridging the gap between traditional banking services and the modern consumer’s needs. The growth in transaction values across various segments of FinTech, such as digital payments and neobanking, indicates a shift towards more accessible financial services. This shift is not just about providing digital alternatives but also about creating systems that are more user-friendly, cost-effective, and widely available.

Figure 3 : fintech in Norway2017-2028



Notes: Data shown is using current exchange rates and reflects market impacts of the Russia-Ukraine war.
Most recent update: Jan 2024
Source: Statista Market Insights

Source : statista

The rise of neobanking as indicated by the projected growth in transaction values demonstrates a growing preference among consumers for banking solutions that offer enhanced convenience and often lower fees compared to traditional banks. This is especially beneficial for individuals who may have been underserved by conventional banking systems, including those in remote areas or with limited financial history.

The expanding realm of payments highlights the growing ease of conducting transactions encouraging more individuals to participate in economic activities. This increased convenience can lead to improved monitoring, the establishment of credit histories. Ultimately provide greater access, to credit and investment opportunities.

Moreover, the projected numbers, for 2028 show an increase in the use of

FinTech services in line with initiatives to improve financial inclusivity. As per the International Monetary Fund (IMF) FinTech shows a connection with digital financial inclusivity compared to traditional financial inclusion metrics. This implies that as FinTech advances it could have an impact on narrowing the gap in inclusivity not only in Norway but worldwide

Figure 04: Digital Investments _
2017-2028:

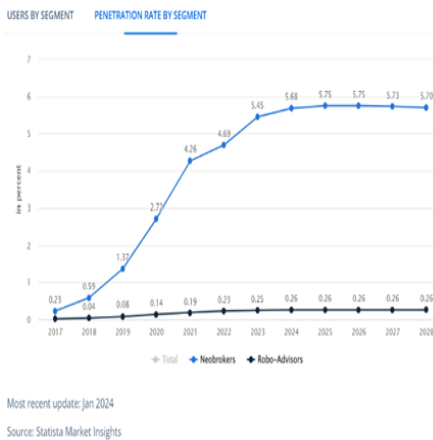
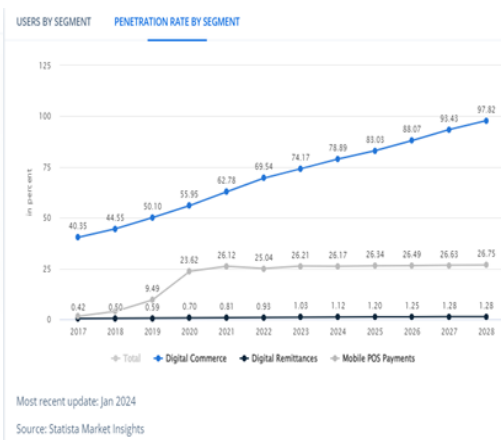


Figure 05 : Digital payments
_2017-2028



Source : statista

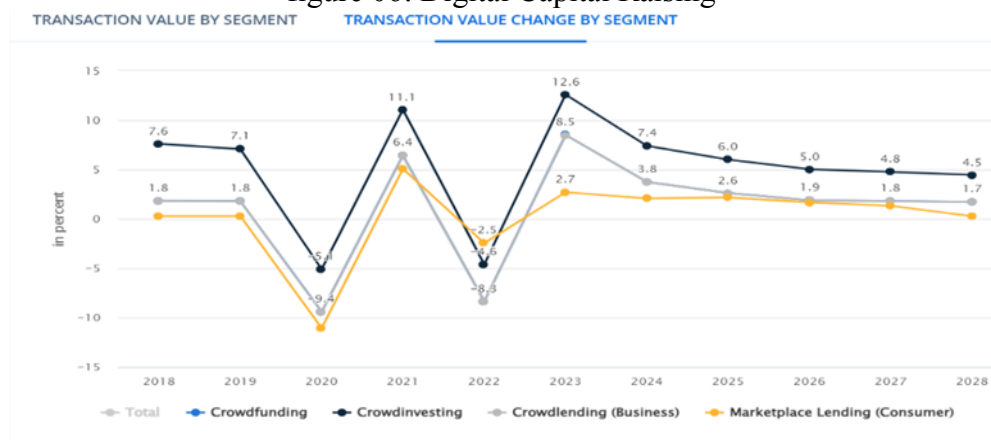
In the realm of investments the growing popularity of neobrokers and robo advisors has made investing more accessible to an audience. Online investment platforms have experienced a rise. Are estimated to attract around 5.7 million users by 2028. Similarly automated investment advisory services like robo advisors are gaining traction with an user base exceeding

5.2 million by the year. This trend reflects an increasing demand for to use technology based investment options that enable individuals, with varying levels of knowledge to participate in investing activities.

has also undergone changes with digital commerce and mobile point of sale (POS) payments taking the lead. By 2028 it is projected that all Norwegians will be involved in shopping activities highlighting the widespread use of digital commerce.

Furthermore the extensive use of point of sale (POS) payments expected to reach a 95.41% adoption rate by 2028 demonstrates how contactless payment methods have become a part of everyday life, in the country. Although digital money transfers have shown growth compared to areas there seems to be room for new ideas and increased acceptance in this field tailored to meet the specific demands of the Norwegian market. Norways impressive advancements in embracing services showcase its forward looking mindset and its peoples readiness to embrace technological progress. This supportive atmosphere has not promoted financial inclusivity but has also positioned the country as a fertile ground, for further financial technology innovations steering the finance industry towards a more accessible and inclusive future.

figure 06: Digital Capital Raising



source : statista

-The crowdfunding segment, which includes equity based crowdfunding, saw a significant rise in activity, hitting a peak transaction value of 12.6 billion NOK in 2022 before dropping to an estimated 7.4 billion NOK by 2028. This increase and subsequent stabilization may be linked to changing market dynamics and regulatory shifts.

-Crowdfunding, which comprises reward based and donation based models, experienced a steady climb in transaction value, reaching 6.0 billion NOK by 2028, showing a consistent interest in this alternative financing method.

-The crowdlending (business) segment, which facilitates debt-based financing for businesses, witnessed a notable surge in 2022 with a peak of 8.5 billion NOK before declining to 4.5 billion NOK by 2028. This pattern hints at possible changes in business lending preferences or regulatory modifications.

Lastly, consumer marketplace lending segment, allowing peer to peer lending for consumers, had a slower growth trajectory, reaching a transaction value of 1.7 billion NOK by 2028. The segment's gradual growth could be due to traditional consumer lending channels competition or shifting consumer trends.

3.3.3 Examples of Fintech products that helps enhance financial inclusion in Norway:

Table 02: Fintech products that helps enhance financial inclusion in Norway:

Category	Description (Ole Andenæs, 2023)	Example (markus nilssen, 2023)
<i>Banking and payment solutions</i>	In the realm of financial services, competition has evolved. Digital niche banks, neobanks, e-commerce and payment solutions, and digital providers of consumer and corporate financing all pose a threat. Furthermore, in an effort to remain competitive, traditional banks and major financial institutions are allocating resources towards the expansion and investment in fintech solutions.	Vipps AS, owned by a consortium of Norwegian institutions, offers mobile payment services since 2015. Since 2015, Vipps has provided Norway with efficient peer-to-peer transactions. Significant milestones include a 2018 merger with BankAxept and BankID, and a 2021 merger with MobilePay and Pivo. The company has undergone rapid development since its inception in 2015. After undergoing decommissioning from BankID and BankAxept, the consortium continues to own all three companies.
<i>Savings and investment</i>	A limited number of nascent fintech providers in Norway offer investment and savings services, predominantly designed to be user-friendly, straightforward, and cost-effective for both individual and business clients. Furthermore, there is a growing trend towards the adoption of robo-advisors in Norway. These entities leverage customer data and algorithms to generate automated investment	Regardless of the income level of the users, Spiff, Kron, Dreams, and Harvest Funds are among the largest independent providers of mobile applications for personal savings and investments. They endeavor to be simple to understand and place the consumer directly in command of his/her savings and investment strategy via smartphone, tablet or PC. Similar offerings from established bank groups include the apps Spare (owned by DNB Bank ASA) and Smartspar (owned by the Eika group).

	recommendations and portfolio allocation strategies that are customized for each client. In 2021, the Norwegian bank Sbanken became the first in the world to achieve authorisation for its robo-advisor.	
Lending, capital raising and crowdfunding:	Banks are also experiencing competition in credit intermediation. Banks have never held a monopoly in this field. Large firms may acquire financing in the bond market. Finance businesses provide leasing to corporations, and vehicle loans and consumer credit to retail clients, generally tied to a credit card. Web-based solutions, improved access to information and machine learning make it feasible to do standardized credit checks rapidly and effectively, which opens up new channels for credit intermediation. In addition, the crowdfunding sectors are expanding up in Norway, offering digital platforms that route loans from savers to borrowers. The crowdfunding industry in Norway predominantly gives loans to small- and medium-sized firms, which are not exceptionally appealing to conventional financial institutions, frequently because the loans are small.	Monio, Funding Partner and Kameo, whilst firms like Perx and Kredd create crowdfunding platforms for consumer loans. There are also a variety of reward-based crowdfunding sites in the Norwegian market, such as Spleis and bidra.no.

Prepared by the authors

4 . Key results:

- Norway has achieved a leading position globally in terms of overall financial inclusion indicating widespread access to financial services.
- Widespread Adoption of Digital Financial Services: There has been a significant surge in the adoption of digital payment methods, reflecting Norway's rapid transition towards a cashless economy and the seamless integration of fintech solutions into the financial landscape.
- Norway's robust digital infrastructure, high levels of digital literacy and competence among its populace, coupled with consumer trust in technology,

have created a fertile environment conducive to the development and adoption of fintech innovations.

-Enabling Environment for Fintech Growth: Norway's robust digital infrastructure, high levels of digital literacy and competence among its populace, coupled with consumer trust in technology, have created a fertile environment conducive to the development and adoption of fintech innovations.

-Norway's fintech industry has experienced remarkable growth, fostering a vibrant entrepreneurial ecosystem that has expanded access to user-friendly financial services, including digital banking, payment solutions, investment platforms, and alternative financing channels.

5 . Conclusion

Over the past decade, Norway has witnessed a remarkable transformation in financial inclusion, largely propelled by the dynamic interplay of financial technology (FinTech). By leveraging technological innovations, fostering an enabling regulatory environment, and investing in robust infrastructure, Norway's fintech ecosystem has successfully extended financial services to diverse population segments. Notably, digital payment adoption has soared, accompanied by near-universal financial account ownership—a testament to Norway's commitment to inclusive finance.

The Norwegian experience serves as a beacon, demonstrating how FinTech can democratize access to financial services. By nurturing an environment conducive to fintech innovation, Norway has ensured that the benefits of digital financial solutions are shared equitably across society. As FinTech continues to evolve, Norway's strategic approach positions it as a leader in bridging economic divides and empowering individuals, businesses, and communities through universal access to essential financial services.

In essence, Norway's journey underscores the transformative potential of FinTech, where technology, regulation, and societal impact converge to create a more inclusive financial landscape.

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