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Trust and the Future of Financial Intermediation

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Abstract

The purpose of this thesis is to explore how trust affects the future of financial intermediation following the PSD2-regulation. To research this topic we draw on a broad theoretical foundation involving research on financial intermediation, strategic resources, technological shocks, cognitive perceptions and trust. The study has a mixed methods design with three seperate forms of data collection. The first is semi-structured interviews with industry experts on fintech and financial intermediation. The second is a survey that tested how a group of brands scored in three different trust dimensions. The third is an experiment with a questionnaire involving a fictitious fintech app which was provided by three brands, which we selected through the previous survey based on their trust levels. From this data, we analyze and study the importance of trust for financial intermediation services and the transferability of trust between different domains. Through our analysis and research we found three key insights on the topic. Firstly, we found that integrity-based trust has the most impactful effect on behavioral intention towards use of financial services. Secondly, we found that integrity-based trust and benevolence-based trust is more transferable between domains than ability-based trust. Thirdly, we expect that integrity-based trust will become less important in financial intermediation as the domain and its services move further away from traditional financial intermediation following technological change. Overall, our findings suggest that trust is integral for financial intermediation and that it still provides incumbents a competitive edge. However, regarding the future of financial intermediation we expect that technological change will alter the relative importance of the trust dimensions. The reasons for this change will be the drivers of disintermediation of finance and changes in consumers' cognitive perception in reaction to technological change.

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1 Introduction

The revised Directive on Payment Services (PSD2) was made effective in September 2019 with the goal of improving payment services within the European Union. The main focus of the directive was to promote innovation in the financial services sector, increase payment security and standardize payment systems, to the benefit of the end customer (European Commission (2019); European Union (2015)). One of the most important and discussed features of the directive is Access to accounts (XS2A). This feature grants authorized third party providers (TPP) access to both account information and the authorization to initiate transactions on behalf of customers who approve this (European Commission, 2019). Such TPPs can provide "value-added"-services on top of the existing infrastructure of banks (Cortet, Rijks and Nijland, 2016), and thus compete for parts of the revenue streams banks have from providing these services today. The number of fintechs aiming to take advantage of the regulatory change have increased (Eidem, 2019), and more services are expected to arise, with a focus on user friendliness, integration, and advanced use of data (Cortet et al., 2016).

Prior to the implementation of PSD2 it was widely assumed that incumbents in financial intermediation would have a competitive advantage over new entrants. This competitive advantage was partially due to the established trust the incumbents had with their customers, illustrated by DNB and other incumbents in the Norwegian market for financial intermediation who believed prior to PSD2 that they had a competitive advantage through their established trust (Eidem, 2019). Now, two years after PSD2 was implemented, this statement seems to hold its merit. The expected "PSD2-Revolution" has still not unfolded, in contrast to prior expectations.

However, even though the general consensus is that banks should not be concerned about their competitive advantage of trust, we do not know the long term effects PSD2 will have and how financial intermediation will change in the future. Currently, firms from different industries with rich resource pools have the opportunity to enter financial intermediation. Large tech firms such as Google, Amazon and Apple may also possess many of the resources needed to compete in this market. The effects this could have on incumbent banks and their competitive advantage of trust are uncertain.

The purpose of this thesis is to explore the role of trust for innovative financial services, and investigate how different dimensions of trust can be transferred from one domain to another. Our context is PSD2 and expected future changes in financial services, and we aim to shed light on how the competitive potency of trust might change in the years to come. More broadly, our research question is:

How does trust affect the future of financial intermediation following PSD2?

To answer our research question, we combined insights from research on financial intermediation, strategic resources, technological shocks, cognitive perceptions and trust. From this, we have developed propositions about how trust affects the future of financial intermediation. To investigate our propositions, we used a mixed methods design, with three separate forms of data collection. The first was a qualitative study involving semi-structured interviews with industry experts. The second was a survey which measured how a select group of brands scored in relation to three dimensions of trust. The third was an experiment conducted involving a questionnaire, which provided quantitative data for our analysis. The experiment included brands selected through the prior survey due to their scores in the trust dimensions, which would provide a fictitious fintech app.

There are three key insights related to trust and financial intermediation gathered from our study. First, we found that integrity-based trust has the most impactful effect on behavioral intention towards use of financial services. Second, we found that integrity-based trust and benevolence-based trust is more transferable between domains than ability-based trust. Third, our findings is in line with the expectation that integrity-based trust will become less important in financial intermediation as the domain and its services move further away from traditional financial intermediation due to technological change.

Our thesis offers three main contributions. Firstly, it provides experimental data of a higher quality than what is most often seen in the research on trust within the scope of financial intermediation, and thus mitigates some of the issues with existing surveys. Secondly, our thesis offers relevant findings for managers within financial intermediation, who should be aware of how the value of their trust can be altered by a technological shock and expected future developments within financial services. Incumbents should aim to acquire complementary resources through fintechs who possess resources related to ability-based trust, in order to increase their value proposition. This stems from the

expectation that ability-based trust will become more important going forward. Lastly, our thesis offers a contribution to research on trust within financial intermediation, and shows that trust is a multifaceted construct. It shows that trust cannot be transferred across different domains without a loss. This is relevant for non-finance firms moving into financial intermediation, and for finance firms expanding outside their traditional domain. Therefore, further research should be conducted by using a broader experiment with more brands acting as proxies for trust. In addition, it also suggests performing the experiment on a younger sample which might be more susceptible to use innovative fintech applications. This could offer further insights on the future of financial intermediation.

The rest of the thesis is structured as follows. First, we present the theoretical foundation, including the propositions we developed based on it. We then present our methods and data. Following this, we present the results from our data analysis, followed by a discussion of these findings in light of the propositions made in the theoretical foundation. Lastly, we present our conclusions with managerial implications and suggestions for future research.

2 Theoretical background

In this chapter, we will introduce the theoretical foundation for this thesis. We will present a review of theory on financial intermediation and the role of banks, and how megatrends over the course of recent decades have put pressure on the traditional business models of this industry, leading to disintermediation of finance. Various factors leading to the technological shock represented by these megatrends will be discussed in light of theory on technological shocks. The role of trust as a strategic asset following this technological shock is then reviewed from a resource-based view. Following this we will review theory on technological shocks and disruption, as well as cognitive perception on technological change. Lastly, theory on trust and the importance of trust dimensions after the technological shock is presented. Thus, this chapter provides a rich foundation from which the competitive environment within the market for banking services post PSD2 can be discussed, and our hypotheses will be drawn from.

2.1 Financial intermediation

When markets are perfect and complete, resource allocation is Pareto efficient, and there is no need for financial intermediation as there is no scope for intermediaries to create value (Fama, 1980). Savers and investors can make perfectly informed decisions with no costs and can therefore find each other directly. Households with sufficient resources to invest their savings can participate in capital markets and purchase securities from the firms with no mediators. On the other hand, firms raising capital for investments do not have to borrow from banks but can approach the aforementioned investors directly in capital markets (Gorton and Winton, 2003).

Given the fact that real life is far from the theoretical ideal, financial intermediaries have existed for a long time. Allen and Santomero (1997) argue that financial intermediaries not only solve problems related to transaction costs and asymmetric information, but also play a role in facilitating risk transfer and dealing with the complex maze of financial instruments and markets as well as reducing participation costs. Participation costs are the costs related to learning about using the markets efficiently and participating in them on a day-to-day basis. Creating value by offering new services is another drive for

a modern financial intermediary (Scholtens and Van Wensveen, 2000). Merton (1992) argues that the primary function of a financial system is to facilitate the allocation and deployment of economic resources in an unstable environment.

Informational asymmetries may arise when the information of a borrower and a lender differ, as a would-be borrower often has better information about their own credit risk. This suggests a role for financial intermediaries, who seek to deal with informational asymmetries by producing information on the credit risk of potential borrowers to set terms and allocate loans correctly priced with regards to the credit risk (Boyd and Prescott, 1986). If a financial intermediary is able, through a customer relationship, to obtain private information about a borrower which is only available to that financial intermediary, then that information may constitute an intangible asset to the financial intermediary (Gorton and Winton, 2003).

Agency cost is another market imperfection financial intermediaries seek to mitigate. As described by Jensen and Meckling (1976), agency costs can occur in a relationship where a principal hires an agent to perform a service on their behalf, involving delegation of decision-making authority. Agency costs are the sum of monitoring costs, bonding costs and residual costs. Monitoring costs are incurred by the principal to limit activities by the agent which are not in the interest of the principal itself. Banks possess the technology which allows them to monitor borrowers better than an individual lender (Moran and Cesaire, 2003). Bonding cost is what the principal pays the agent to ensure that it will not take actions hurtful to the principal. Any costs remaining, stemming from different incentives of the principal and agent, are called residual costs. Financial intermediaries can reduce these costs. Even though there are similarities between the agency problem of an individual borrower and lender, and that of an intermediary and its depositors, intermediaries can diversify to the point where the probability of being able to repay a debt claim to the depositors is very high (Diamond, 1984).

Benston and Smith (1976) argues that transaction cost is the raison d'être for financial intermediaries and that several forms of financial intermediation have arisen to reduce these costs. In short, there are three main ways financial intermediaries seek to lower transaction costs. First, economies of scale allows intermediaries to use information about a type of customer to process other customers. This principle is prevalent in both insurance and

credit scoring, and makes it cost effective to specialize in providing a certain commodity. Secondly, financial intermediaries may obtain information about a borrower's financial condition at a lower cost than an individual could because a financial intermediary is expected to exhibit discretion with such information. In other words, a borrower entrusts the intermediary with this information. This highlights how trust plays into the role of a financial intermediary. Lastly, there are transaction costs related to searching. It is more expensive for an individual who wishes to lend to find another person who wishes to borrow, rather than going through a market facilitated by a financial intermediary.

As financial intermediaries aim to solve the aforementioned issues, trust is essential for the financial intermediaries to serve their purpose in society at-large, which is derived from the lack of trust (van Esterik-Plasmeijer and van Raaij, 2017). As long as there is vulnerability, risk, and interdependence related to the use of financial services, trust plays an important role (Ennew and Sekhon, 2007). Furthermore, as the role of financial intermediation evolves, so does the role of trust involved in the process. The intangible, complex and long term nature of many products means that customers face high levels of risk in making purchase decisions; they will often have difficulty in judging product performance and will need to trust financial intermediaries to offer products of an appropriate type and quality (Ennew and Sekhon, 2007).

The traditional business model of financial intermediaries is to lend at an interest rate that is higher than the rate at which they borrow, with the margin between the yields being the compensation they receive for providing their intermediation services (Gurley and Shaw, 1956). Such a business model can best be identified as a pipeline business model. In such a business model, input is processed by the firm and thereby transformed into an output with a higher value to the customer (Lien, Knudsen and Baardsen, 2016).

2.2 Disintermediation of Finance

Financial intermediation has remained relatively unchanged for several hundred years. However, technological advancements combined with other megatrends the last 30 or so years have increasingly put pressure on the traditional models of financial intermediation. This has in turn facilitated innovations within the finance industry, changing products, services, processes, and organizational structures (Frame, Wall and White, 2018).

Therefore, we will present a selection of the various changes, which have in sum created the pressure that traditional models of financial intermediation is facing. This could lead to a future of disintermediation in finance.

The growth of the internet and an increase of access points for people through a variety of devices, has enabled growth for business models reliant on user connectivity. The emergence of platforms and platform business models stems from these advances, as building and scaling up platforms has become cheaper and easier (Alstyne et al., 2016). As defined by Hagiu and Wright (2015), such multisided platforms facilitate transactions and other forms of interactions between two or more user groups. One example of this is the emergence of "marketplace lending" platforms, which attract borrowers with more simple loan application processes, use new credit scoring tools to analyze the applications, and then match borrowers with investors (Frame et al., 2018).

As internet platform-based business models grow their user base, their amount of user data increases as well. User data is inherently valuable as it can provide key insights and business opportunities for firms. Consequently, access to and analysis of user data has contributed to facilitate a technological shift which is altering the financial services industry. As a result, there has been a transition from traditional human judgement to automated analysis of consumer data. Frame et al. (2018) argue that this change improves risk measurement and reduces the need for local presence, opening up for new competition from both banks and nonbanks alike. Omarini (2018) argues that this digital evolution can cause disintermediation as more activities become available online, and technology starts breaking up value chains. When using these services, consumers no longer need direct interaction with their bank to make a payment, thus disintermediating banks (Cortet et al., 2016). This exemplifies how consumer preferences are changing with advancements in financial technology.

Another factor creating the technological shock occurring in financial intermediation are regulatory changes. In particular, PSD2 opens financial intermediary services, previously performed exclusively by the payment and banking industry, to third parties. This may weaken revenue streams of these incumbent financial intermediaries. Thus, the traditional pipeline business model of banks in possession of account information could be threatened, as any authorized third-party provider (TPP) could provide these services (Omarini,

2018). As a result, opportunities arise for new actors to enter the market for financial intermediation and increase competition.

By requiring banks to provide TPP's with access to customer account data and enabling them to provide customers with account-information services and performing payments on the customers' behalf, PSD2 represents a significant step towards commoditization in the banking sector and thus the market for intermediating services (Botta et al., 2018). Consequently, banks also must compete with non-banking companies licensed to offer financial services in Europe (Ellingsen, 2018). Hence, existing business models of financial intermediaries could be challenged by potential digital platform business models enabled by the increased access to user data following PSD2.

In summation, the aforementioned factors all contribute in creating the technological shock which is occurring in financial intermediation. Technological developments, the internet, platform based business models, data driven processes, regulatory changes and changing consumer preferences help create opportunities for new firms to enter the industry of financial intermediation.

2.3 New Entrants in the Finance Industry

The opening provided by advancements in technology and the PSD2 regulation has led to a variety of firms originating from different industries to enter the market of financial intermediation. As technology develops market boundaries become blurred, which can increase firm's resources versatility. Hence, untraditional actors can enter the market by leveraging their existing resources within the market of financial intermediation. There are multiple examples of high-profile firms leveraging their digital platforms to provide financial services as an add-on to their original value proposition such as Facebook, Google and Apple (Saebi, Foss and Knudsen, 2019). Technology affects firms' existing resources in both positive ways and negative ways, as well as providing new opportunities outside their original market or domain to threaten incumbent financial intermediaries. In the case of tech firms leveraging their existing resources linked to their platform based business model, they could compete with financial intermediaries by offering similar services in the eyes of the consumer (Saebi et al., 2019). Therefore, it is necessary to study the resource based view on firms and how firms' resources are affected by changes in technology.

In the resource-based view, the focus concerns how firms can leverage resources to gain a sustained competitive advantage over other competing firms (Barney, 1991). This theoretical approach has been used to analyze a variety of firms and industries. Hence, applying resource-based theory to study trust as a resource for banks and financial intermediaries contributes to our research.

Strategic resources are defined as all assets, capabilities, organizational processes, firm's attributes, information, knowledge, etc. controlled by a firm that enable the firm to create and implement strategies which improve its efficiency and effectiveness (Daft and Lengel, 1983). Lien et al. (2016) use trust as an example of an intangible resource. Intangible resources are defined as non-physical resources that are accumulated over time by a firm, where the resource inventory can be altered indirectly (Lien et al., 2016). Scholars within strategic literature such as Barney (1986, 1991) and Dierickx and Cool (1989) have researched how firms can leverage their resources to gain a sustained competitive advantage. Barney (1991) argues that a resource requires four attributes to create a sustained competitive advantage. In order to create a sustained competitive advantage, a resource needs to be "valuable, rare, imperfectly imitable, cannot be equivalent substitutes for this resource that are valuable but neither rare nor imperfectly imitable" (Barney, 1991, p.101).

In the resource based view some scholars view complementary resources as essential in having a competitive advantage in a market. Tripsas (1997) argues that incumbent firms that own complementary resources can dominate the market, even if they are technologically inferior compared to new entrants. Complementary resources, according to Teece (1986), are resources which have mutually beneficial effects on each other, these types of resources are essential for firms to gain a competitive advantage if they are inimitable or difficult to acquire. Firm's owning complementary resources might outperform competing firms following a technological shift, this concerns both incumbents and newcomers to an industry.

2.4 Technological shocks in financial intermediation

2.4.1 What is a technological shock?

The developments described above can be collectively described as a technological shock for the established financial intermediaries. A technological shock is a form of external shock that affects actors within a market (Lien et al., 2016). External shocks are changes in a firm's external environment that create a discontinuity in the competitive environment by either having a positive or negative effect on the majority of firms in a market. External shocks increase the level of uncertainty within a market when they occur (Lien et al., 2016).

According to Anderson and Tushman (2001) a discontinuity is followed by an era of ferment. The era of ferment is characterized by high levels of uncertainty and turbulence, since the market and the technology is early in development (Kaplan, 2008). Following an era of ferment a dominant design might emerge which is followed by an era of incremental change (Anderson and Tushman, 2001). However, the focus in this thesis is towards the discontinuity and the era of ferment.

Technological shocks create uncertainty in a firm's environment (Tushman and Anderson, 1986), which can affect firm's strategies, competition and resources. PSD2 created a technological shock within the market for banking and financial intermediation as it opened the possibility for both new actors and technology to enter a market with large entry barriers. When a shock occurs, incumbents are faced with decisions on how they choose to act on the changes occurring in their environments. Incumbents' resources that once created a sustained competitive advantage could potentially lose this value due to the changes in the environment following a technological shock.

2.4.2 Cognitive perceptions on technological shocks

Following a technical discontinuity the competitive landscape in a market might change due to an increase in environmental uncertainty. Recent research (Kaplan, 2008); (Anthony et al., 2016); (Grodal and Suarez, 2015) suggests that stakeholders' cognitive perception affects how the technological changes unfold. Scholars are using socio-cognitive lenses to capture the sociocognitive dimension of industry emergence (Grodal and Suarez, 2015).

Kaplan and Tripsas (2008) apply technological frames to study the effects of technological discontinuities formulated by Tushman and Anderson (1986) on how actors' technological frames affect the technological development in the market. Furthermore, Kaplan (2008) suggest that users, producers, and institutions' perceptions affect the technological trajectory following a discontinuity in the era of ferment with their technological frames. An example of how cognitive perceptions affected technological change was presented by Grodal and Suarez (2015) where they studied the nascent synthesizer industry. Although the technical specifications and abilities of the synthesizer instruments made by four different producers were similar, they had different perceptions in the eyes of consumers due to the positioning of the technology (Grodal and Suarez, 2015). This illustrates how there can be a difference in how consumers might have a subjective view on a technology that differs from its objective qualities and abilities.

In the finance industry, we are particularly interested in how the mentioned technological changes affect the perceptions of the services offered by traditional- and new services of financial intermediation. In this regard, a key concept is trust. Earlier, we showed how trust is a key resource for any intermediary, and especially in finance. Trust is especially important for banks and other providers of financial services (van Esterik-Plasmeijer and van Raaij, 2017). It is widely believed that traditional banks possess a competitive advantage through their established consumer trust (Itera and DNX, 2020). This discussion points to two key questions. The first is how the mentioned technological changes will affect the perceived trust levels of incumbent financial intermediaries when new and alternative business models are introduced. The second is what trust actually is. In other words, in order to say anything meaningful about how perceived trust might change, we need to know what we actually mean by the term.

2.5 Trust

Mayer, Davis and Schoorman (1995, p.712)) define trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party". Research from psychology and marketing provide ample evidence that trust is not a unidimensional concept. Quite the contrary, in psychology and

marketing, trust is viewed as a multidimensional construct encompassing at least three different types of trust. These three dimensions are ability, integrity, and benevolence.

2.5.1 Ability

The ability dimension of trust entails a set of skills, competencies and abilities that grants an actor influence within a specific domain (Mayer et al., 1995). The domain is important in determining the achieved level of trust, since a trustee can be competent in one area, while being less competent in another. For example, a trustee may be competent in a technical area, granting that person trust within that domain. However, that person may not have the competence or training in some other area, such as interpersonal communication and thus may not be trusted to initiate contact with important customers (Mayer et al., 1995). Hence, trust can be domain-specific (Zand, 1972).

2.5.2 Integrity

The integrity dimension of trust concerns the trustor's perception of the trustee's set of principles which are found acceptable by the trustor (Mayer et al., 1995). Therefore, the two parties' principles must coincide for the principles of the trustee to be perceived to have integrity (McFall, 1986). For example, in a buyer-seller relationship the seller has integrity by fulfilling agreements as promised. However, if the seller does not fulfill agreements as promised, the seller will not be perceived to have integrity.

2.5.3 Benevolence

The benevolence dimension of trust refers to the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive (Mayer et al., 1995). Benevolence concerns whether the trustor has a positive perception of the trustee towards the trustor. In other words that the trustor believes that the trustee cares about the trustor outside of their financial motives.

2.6 Propositions

In the following section we will present propositions about the relationship between the three trust dimensions and financial intermediation. Our aim with these propositions is

to tie together insights from the different theoretical sections and give direction to our empirical investigation.

As we have touched upon in the previous theoretical sections, it is clear that trust is an important resource within financial intermediation historically. By having trust, financial intermediaries are able to solve issues related to transaction-, participation- and agency costs amongst others. Research presented in this chapter points to integrity being the most important trust dimension within financial intermediation, which leads to the following proposition.

P1: Integrity-based trust is most important within financial intermediation

The theoretical background for the three trust dimensions implies ability-based trust is more domain specific than integrity and benevolence. This leads us to the following proposition, which will be tested and discussed in light of our data.

P2: Ability-based trust is less transferable between domains than the other trust dimensions

Our third proposition is based on the theoretical insight that following technological shocks the value of resources are susceptible to change. In addition, consumers and other actors' cognitive perception are affected. This suggests that the relative importance of the three trust dimensions in connection to financial intermediation would change as the industry evolves. Therefore, we expect the technological shock will move services further away from the domain of financial intermediation. Consequently, altering the relative importance of the trust dimensions for the future of financial intermediation.

P3: Ability-based trust will become more important relative to integrity-based and benevelonance-based trust in the future of financial intermediation

3 Method and data

In the following chapter we will describe how we collected data and the methods used to shed light on our research question. Our thesis is part of a larger research project at NHH's DIG center, led by our supervisors Eirik Sjåholm Knudsen and Helge Thorbjørnsen. An additional purpose of our thesis was to collect data of such a quality that it could be used in research papers targeted at international journals. This additional purpose had two implications for our data collection. The first was that the requirements to data quality meant that the design- and data collection phase was more extensive and longer than what is often common for a master thesis. The data collection was organized within the research project as a collaborative effort together with two other master students that pursued adjacent themes for their theses. The second implication was that the data needed to be broad enough to serve multiple purposes. More specifically, it was intended to be used in different ways and for different purposes in three different master theses, and in a research paper by our supervisor. This means that all of us faced a continued trade-off between designing a study that was as relevant for each research question, and broad enough to also be relevant for the other research questions. In our description, we will highlight some of these choices where we had to prioritize the broader interests, at the expense of the specific interests of our research question. We now turn to discuss key methodological choices and descriptions of our data collection efforts.

3.1 Research approach

The overarching research question of our study is to understand how the ongoing technological shock caused by PSD2 affects financial intermediation. To address this empirically, we opted for a broad research approach encompassing three different studies. The first study was a series of qualitative interviews with key players in fintech, to understand what new and innovative offerings we can expect to see in the market for consumer finance in the years to come. We did this because we wanted to get top level insight so that the content of our research would represent the current situation and the expectations of future fintech services. The second study was a survey, aimed at teasing out how firms both within- and outside of the financial sector vary on different

trust dimensions. We did this because we wanted the selected brands to act as proxies for the three trust dimensions. We then wanted to study the transferability of the trust dimensions and their importance for consumers in financial intermediation. The third study was an online experiment, where we wanted to see how consumers evaluated an innovative fintech app differently, based on which firms that offered this service. The goal was to study trust as a strategic asset when providing a financial intermediation service and it's transferability. When designing this experiment, the insights of the two former studies were important input to our choice of services on the fintech app, plus which firms we used to "offer" these services, and our choice of questions.

There are four main reasons why we decided to use this mixed methods design for this study, combining semi-structured interviews, a survey and a controlled experiment. The first is that we aimed to test how consumers would respond to services that had not launched yet. The second is that the qualitative interviews provided us inspiration and information from some of the top minds in the fintech community in Norway. By doing so enabled us to properly calibrate the functionality and design of an application for a service representing the future expectations of financial intermediation services. The third reason being that the quantitative survey's results provides us with proper backing for the selection of brands providing the innovative finance app. This was in contrast to the experiment of Hauklien and Hansen (2019) which was based on assumptions on how different firm's differed along the trust dimensions, we gathered data and tested how brands scored in the trust dimensions. This resulted in a selection of brands which tested high in each of their own dimensions of trust. The fourth reason was that testing the brands beforehand enabled us to test the transferability of the trust dimensions, and which of them lead to behavioral intention amongst consumers in the experiment. Hence, the experiment allows us to draw causal inferences. Additionally, the insights from the first two studies combined with the experiment would give us valuable information when analyzing and discussing our findings, as well providing us with a rich foundation to answer our research question.

The experiment uses a questionnaire with a between-subjects design, where the participants are randomly divided into one of three groups and the independent variable is different amongst the groups. This allows us to study the effects of manipulating the independent

variable. Some of the benefits provided by using a quantitative method is that it enables us to quickly gather large amounts of data from multiple participants. However, a drawback associated with questionnaires is that they are limited in terms of flexibility, since the questions are predetermined. Even though questionnaires are not necessarily recommended for exploratory research, it may be better used in combination with other methods such as in a mixed methods design (Saunders, Lewis and Thornhill, 2016).

We will now describe our methods for each of these data collection efforts, while results are presented in chapter 4: Results.

3.2 Study 1: Qualitative interviews

In order to get input on the design of the hypothetical services in the experiment, as well as gain insight into the current fintech environment, we conducted semi-structured interviews with a number of industry experts. As described by Saunders et al. (2016), semi-structured interviews allow for a collection of a rich set of data, given that the interviewer is competent enough to conduct the interview. It was therefore important for us to prepare thoroughly before conducting the interviews by reading industry reports and studying the backgrounds of the interviewees. In addition, semi-structured interviews rely largely on the quality of contributions from participants due to the exploratory nature of such interviews (Saunders et al., 2016). We were fortunate to receive contributions of high quality from our interviewees, which in turn helped guide the early stage of our research.

3.2.1 Interview development

While we wanted to have a broad perspective and to let interviewees elaborate freely as much as possible, we also wanted to prepare questions beforehand in order to have a mutual starting point for the interviews. Moreover, we wanted to make sure that we were able to cover the information relevant to our research. We therefore developed an interview guide, which can be found in Table 3.1.

Table 3.1: Interview guide

Interview guide
Present ourselves and the research project: We are still at an early stage, and will start with a broad perspective. *Feel free to guide the conversation in a direction which you find most relevant for the topic*
Tell us shortly about your professional background
Which financial services do we have today (savings, mortgages, account aggregation, payment services, automatization), which have been made possible by PSD2, and could be relevant for our research to draw inspiration from?
What type of services do you believe we can see in the future?
Which role do you believe trust plays as to what players succeed and not?
What do you think about future market structure and the future business models of banks?(if time allows)

The questions in the qualitative study were related to what types of fintech services are currently available due to PSD2, what services could be seen in the future, and the importance of trust. Thus, the questions were closely related to the theoretical foundation of this thesis. The use of open questions allowed the interviewees to elaborate on the topics and helped to avoid bias. When deemed relevant, the use of probing questions helped further explore certain topics, to produce a fuller account (Saunders et al., 2016).

3.2.2 Sample

When selecting respondents for the interviews we wanted to talk to the leading experts within fintech and financial intermediation in Norway. We also wanted to draw on insights evenly distributed from professionals from different players in the market; consultants and other independent professionals, representatives from incumbent banks as well as professionals from fintech startups and open banking firms. It was important to have such a distribution to avoid bias which could arise from interviewing only one group of experts. Bankers might have a different perception of the effects of PSD2 than that of an entrepreneur aiming to take advantage of it. We believed consultants would be able to bring a neutral perspective. Based on this, we created a list of experts we wanted to interview prior to performing interviews. Our list was developed in tandem with our supervisors which had prior connections with the majority of the interviewees. We also included names which would come up during other interviews, and contacted these

individuals as well. Of the 10 people we contacted, we had 8 positive responses which lead to interviews.

Table 3.2: List of interviewees and the reason for interviewing them in the qualitative study

	Role	**Reason for interviewing**
1	Manager, Management Consulting	Research experience with regards to PSD2
2	Country Manager, Open Banking	Experience with PSD2 and open banking
3	Head of Analysis, Consulting Firm	Works with open banking, technology View from a neutral perspective
4	Fintech Entrepreneur	Background from finance. Insights on the effects of PSD2 from a challenger perspective
5	Head of Private Customers, Bank	Experience from consulting and banking
6	Independent Consultant	Extensive experience with banking, fintech and PSD2
7	Tech investor/Serial Entrepreneur	Experience with Tech and SaaS. Insights from a challenger in the market
8	Head of Digital banking, Bank	Experience with banking and consulting, Insight on PSD2 response of banks in Norway

3.2.3 Data collection

The interviews were held in the time interval February - March 2021. Potential interviewees were contacted well in advance through an email containing a short pitch in which we 1) described the project, 2) explained why we wanted to interview them, 3) relayed information about the structure and formalities of the interview and 4) asked them to schedule a time for the interview at their convenience.

Each interview was held virtually over Zoom, with two interviewers and one interviewee each time. We chose one person who would lead the interview while the other would keep track of time as well as taking notes and asking follow-up questions when relevant. The planned duration of the interviews was 40 minutes, while some lasted longer if interviewees had more insights to share and available time. Prior to asking any questions, we briefed the interviewee on the research project. We briefly described that the project was related to whether or not the trust that traditional banks have can give them a competitive advantage over new fintechs after the implementation of PSD2. Then, the goal was to find out how trust varies for equal financial services based on the provider of a given financial

service. Furthermore, we explained how their up-to-date knowledge and familiarity with the market for financial services could help us design an innovative fintech app to be as realistic as possible. We then proceeded with the interview, and followed the interview guide when relevant. From this point and to the conclusion of each interview, it was the interviewees who spoke most of the time, elaborating on our questions, which was what we aimed for. Following each interview we wrote a summary highlighting key insights and themes the interviewee discussed.

3.3 Study 2: Survey

There were mainly two purposes for the survey. The first was to map variations across firms from both within- and outside the financial sector in how they performed on the three different trust dimensions: integrity, benevolence and ability. The second goal was to select three brands for the experiment. A survey is an ideal method for such a purpose. A strength of a survey is that it provides an opportunity to gather a large amount of quantitative data from many respondents in a short amount of time, which was necessary for the progression of our research project.

The survey consisted of 24 questions, of which six of these were control questions. The questions asked respondents to evaluate a set of firms on issues related to risk and trust. Of the 24 questions, three questions aimed to capture the ability dimension, three questions aimed to capture the benevolence dimension and three questions aimed to capture the integrity dimension. The remaining nine questions concerned measuring various forms of risk including performance risk, perceived risk, security risk, financial risk and privacy risk. The survey with all the questions asked for each brand can be found in the Figure A0.1 in the Appendix.

To develop the items, we drew on items developed by Chen and Dhillon (2003), Oliveira et al. (2017), Featherman and Pavlou (2003), Gefen et al. (2003) and Aldas-Manzano et al. (2011). Respondents would answer questions related to trust and risk, using a 5-point Likert scale. There were three questions related to each of the three trust dimensions, with questions designed to have a high internal consistency. The variables of the survey were measured through statements which respondents had to take a stance on. The majority of statements in the survey were control variables, with questions related to trust dimensions,

as independent variables. Our goal was to pick three brands which had a similar mean score over the three dimensions but scored differently across the three dimensions. These three brands would then be used as independent variables for our final experiment. The 35 brands (found in Table 4.1) were selected to provide a broad spectrum of firms within different industries including but not limited to, banking and consumer finance, insurance, tech, consumer goods, media, online retail and real estate. The brands selected were predominantly domestic, but also included several international brands. Many of the brands were selected from the Norwegian consumer satisfaction index (BI, 2020).

In order to avoid fatigue among the respondents, which potentially could impact results, it was important to make the survey as short as possible. One of the measures taken was to split the 35 brands into two groups and by using the randomizer function in Qualtrics, each respondent would be exposed to 17 or 18 brands.

3.3.1 Sample and data collection

The method we used for sampling the survey was convenience sampling. Using convenience sampling benefited us as we could gather respondents for the survey quickly, efficiently and as cheaply as possible. However, there are weaknesses by not having the sampling fully randomized. One factor is that convenience sampling reduces the generalizability of the study. Although this is a concern, we chose to use convenience sampling to save both time and funds in order to properly develop the comprehensive experiment which in turn would have a larger randomized sample of respondents. We collected the survey data through Qualtrics. In order to get respondents we used a snowballing technique where we shared the survey through social media platforms including Facebook and LinkedIn. In addition, it was sent out to all NHH students' school email accounts. We did not provide any prices or monetary incentives for respondents to complete the survey. The required number of respondents was 160 which was decided on in conjunction with our supervisors. Thereby, we would have 80 responses for the two groups of brands, which was deemed as a viable amount to generate sufficient findings amongst the brands. The data collection period lasted a total of 14 days in March 2021. All respondents remained anonymous.

3.3.2 Responses

In total there were 172 respondents that completed the survey. These completed responses were used in the analysis. However, there were 160 respondents that started the survey but did not complete it. These incomplete responses were not included in the analysis, as it would negatively affect the quality of our data. The incompletion rate of our survey is an inherent limitation of its design and a concern regarding its validity and reliability. We will discuss this limitation further in our section for methodological concerns of the study. Figure 3.1 shows the age distribution of our respondents. Note that some respondents chose not to respond to this question, resulting in a lower sample than for the survey as whole.

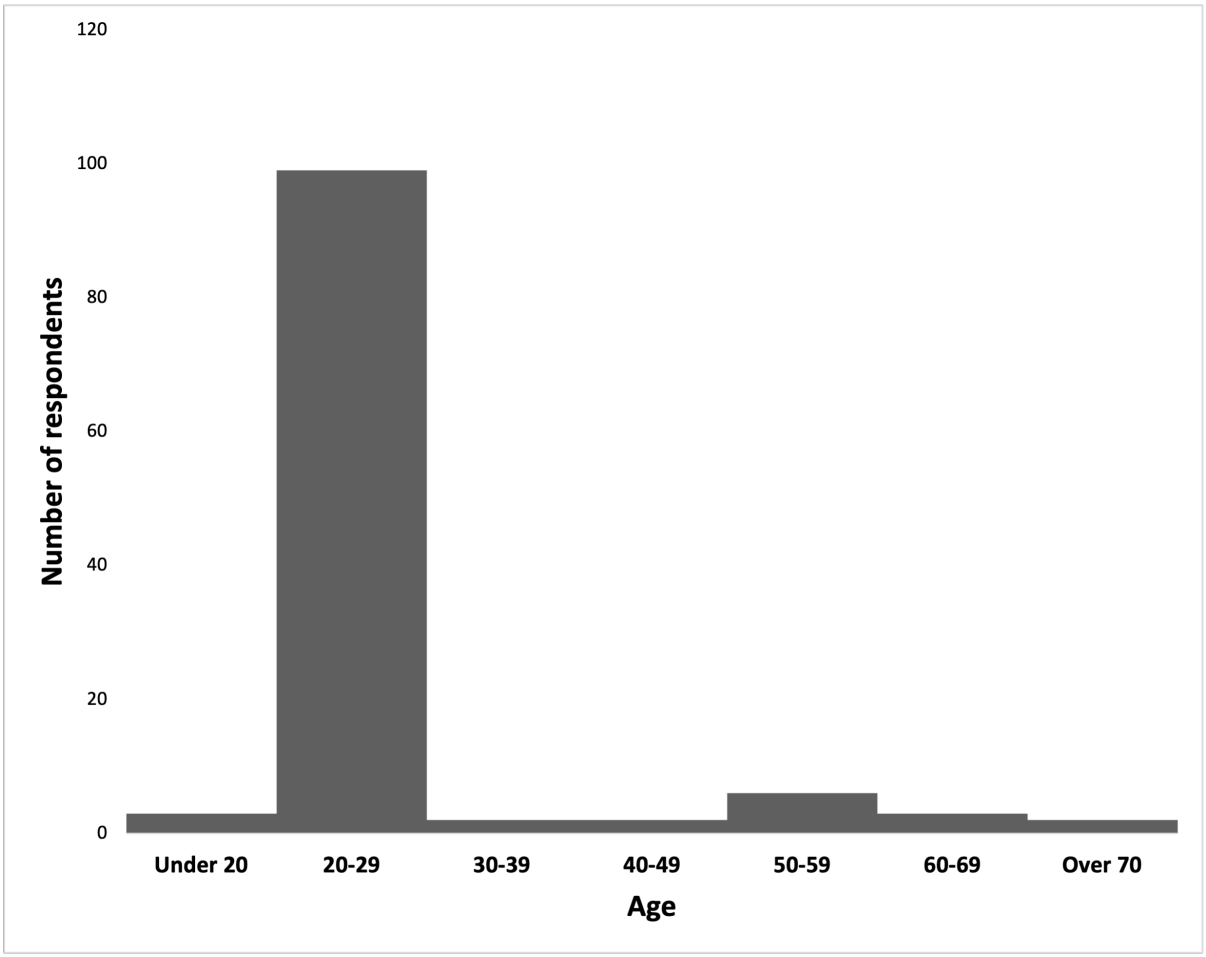


Figure 3.1: Age distribution of survey respondents.

3.3.3 Analytical approach

As previously mentioned, the overarching analytical approach was using the programming language R to analyze our data in order to pick brands for the experiment. The data was first sorted by using Excel, then imported to R. The goal was to inform our choice of brands for the experiment, in addition to drawing insights from the descriptive statistics. We wanted to find brands which would have a similar mean trust score, but differ within each dimension. We visually sorted brands to find brands matching these qualities. Then, by trial and error, we tested these differences for significance by computing Tukey honest significant differences, which left us with brands for the experiment.

3.4 Study 3: Experiment

The next and final stage of our data collection process was to gather our primary data through an experiment using a questionnaire. Our prior research in the qualitative study and survey set the foundation for our experiment.

The main idea of our experiment was to present respondents with a mockup of a fintech app which was an innovative over-the-top mobile bank service, with associated services which to different degrees relied on automation of important decisions. To tease out the effect of trust, we changed the logo of the provider behind this service between brands selected in the survey, with the brands acting as proxies for the trust dimensions presented in the theoretical foundation.

3.4.1 Overarching logic of the experiment

In the experiment respondents were exposed to a fintech app provided by the three brands we selected through the prior survey. The three brands were Prisjakt, Tryg and Amazon. These brands were selected with the goal to tease out effects relating to the different trust dimensions. The brands were selected for their scores in the different trust dimensions in the survey. Amazon represented ability-based trust, Tryg represented integrity-based trust and Prisjakt represented benevolence-based trust. We chose these three firms following the analysis of our survey as the data indicated these three brands could individually tease out the effects of the different trust dimensions. In our survey, none of the banks

included scored significantly differently across the three trust dimensions, while still not having a significant difference in mean score. Therefore, we concluded that they would not be ideal to tease out effects relating to trust. However, due to PSD2, firms like the ones we included in the experiment could provide a similar service in reality. Respondents were presented with screenshots of the fintech app where one of the brands logos were present in every screenshot. Our goal by doing so was to evoke trust-effects amongst respondents. The respondents were randomly divided into three groups where they all were presented an identical Fintech app, but with a different company logo. They were required to answer questions related to trust issues, risk issues and behavioral intention. We would then be able to measure the effects of the brands on trust, risk and behavioral intention.

3.4.2 The Fintech App Mockup

The fintech app we used in the experiment was developed based on two sources of inspiration. The first, was a variety of existing fintech and banking service applications. We downloaded the applications Horde, Bulder Bank, Dreams, Kron, Spiff and Revolut in addition to drawing inspiration from the mobile applications of traditional banks. This gave inspiration with regards to how a fintech app may look with regards to user interface, placement of logos and buttons within the interface, font size and styles as well as symbols.

The second source of inspiration was insights from our qualitative pre-study where we interviewed experts on fintech and innovative financial services. We found throughout multiple interviews that banking and financial services are relatively low interest products amongst consumers. However, amongst such products mortgages are generally of higher interest for Norwegian consumers. As multiple interviewees pointed this out, we chose to add the mortgage element to the fintech app with the purpose to trigger higher interest amongst respondents. In some interviews, we would propose various ideas to see how interviewees would respond, and the response to a mortgage related service was generally positive. The mortgage feature is also vaguely reminiscent of Bulder Bank, one of Norway's most successful fintechs, which specializes in mortgages. In addition, interviewees discussed the potential of automated services switching between products and securities offering better interest rates for consumers as a possibility following PSD2 and potential future regulations. Consequently, we built upon this idea for our financial service mockup since

some interviewees believed similar services could potentially become viable within a few years. This was done to add a futuristic element to the service, geared towards teasing out effects related to risk and trust. Lastly, our supervisors encouraged us to pursue a more futuristic design for this purpose as well.

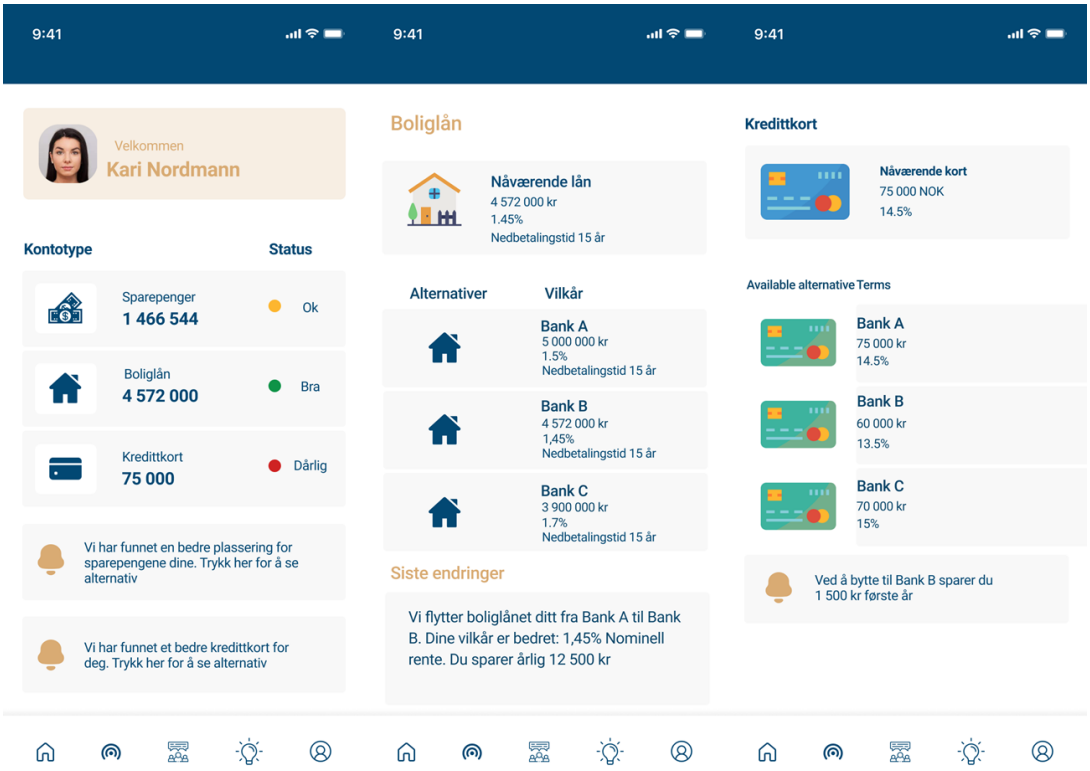
To develop mockups of the fintech app, we did as follows. First, we developed and designed our own screenshots in Microsoft Powerpoint. These screenshots contained all the important functionalities of the app. Then, to improve the design and appearance of our mockups, we turned to a digital freelance marketplace. Here we hired an external graphic designer to improve the design of the mockups, and to recreate them as a template that could be further customized in the design program Figma. Lastly, we used Figma for final editing and formatting to produce the screenshots used in the questionnaire.

As previously mentioned, the general design of the fintech app was inspired by existing financial services apps on the market. Our goal was to have a design that resembled an app that an actual financial intermediary would provide its customers. Across the three brands the color combinations and design remained mostly unaltered. However, we made sure that the logo of the brand was present in every screenshot. This was done to ensure that participants would understand that the specific brand in their questionnaire provided the service.

In terms of content, our fintech app had two main features. The first feature participants presented was the pages for the account aggregator service. This feature involved showing personal finances such as account balances and credit card debt across different banks, as well as a mortgage overview. PSD2 has enabled such features for financial intermediaries and third parties, which is why we included this in the application. Lastly, we show the service's suggestions of switching mortgage and credit card providers, another feature enabled by PSD2.

The design of this feature was aimed towards testing trust amongst respondents. As previously mentioned, trust involves a willingness to be vulnerable to another party, without being able to control or monitor the other party (Mayer et al., 1995). By using the automation features regarding managing debt, users would have to accept vulnerability in forms of their personal finances being managed by the fintech app. Thereby, they are required to exhibit trust towards the provider by using the app.

Figure 3.2: Fintech app userface for the functions related to switching mortgage and credit card providers



The second feature of the fintech app participants was presented was the personal finances pages focusing on savings. By investing the user's money automatically between different securities that could generate higher returns than keeping money in a savings account. The user then had to trust the service to have the ability to provide this feature and to offer better terms. As can be seen in the screenshot presented in Figure 3.3, the service provides an overview over savings and how the savings are divided amongst various securities. This specific feature was inspired by existing fintech savings apps within the Norwegian market.

With this feature the same previous logic regarding trust and accepting vulnerability was used. There are no guarantees that this feature will provide higher yields or prevent financial losses. It is only mentioned that the fintech app aims to automatically invest in different securities with the intention to gain higher yields. Hence, there is risk involved in accepting using the automation feature of managing personal funds. Users would then be vulnerable to the provider of the fintech app managing their personal funds. This is the reason for why we added this feature to the service, as it gave us a possibility to measure risk and trust amongst respondents.

Figure 3.3: Savings function of the fintech app

3.4.3 Design of the questionnaire

The questionnaire consisted of 35 questions and claims, and the full questionnaire is presented in Figure A0.2 in the Appendix. The questions fall into five main groups. The first group, the opening questions, asked general questions related to participants' age, education and financial situation. We included these questions because we wanted to be able to control how these variables could impact our results. One example could be that younger respondents might not have the same perception of the risks involved in using financial services as older respondents. An additional example is that older respondents might not have the familiarity with technology, or internet brands such as Prisjakt and Amazon.

The second group of questions asked the participants to answer claims intended to inform us on their dispositions to trust, financial services, technology and willingness towards risk. Although these sets of questions were not strongly related to our thesis, they were important for the larger research project as a whole.

The third group of questions asked about the specific brand which the participants were

told provided the fintech app: Tryg, Prisjakt or Amazon. Which of the three brands a participant was presented depended on which of the three groups the participant was randomly selected to. These questions were included to capture the participants' prior knowledge of the brands.

The fourth and final group of questions asked the participants different questions about how they valued the fintech app they were presented with. The fintech app and its financial service features were first presented in the form of explanatory texts and six screenshots of the service, before the participants were asked to answer the questions. These texts and screenshots presented key features and functions of the fintech app, as well as requirements for personal financial information. It is of utmost importance in this section of the questionnaire that the participants took time to understand the fintech app, which they were advised to do. By competently understanding the service, participants would be better equipped to answer the ensuing questions. The questions related to the fintech app aimed to measure the participant's trust in form of the three dimensions ability, benevolence and integrity in addition to behavioral intention and perceived risk. Lastly, the final page thanked the participant for taking part in the experiment and emphasized that the service is purely fictional and neither of the brands intend to provide such a service to our knowledge.

3.4.4 Scales and variables

The variables of the experiment were measured in a similar way as in the survey. The questions were answered using a 7-point Likert-scale. This scale was used for the whole experiment, except for control variables, in order to maintain consistency.

Dependent variable. Our dependent variable is behavioral intention. This was based on a question from the survey asking participants "I would adopt this service if it came out on the market". Respondents answered on a 7-point Likert scale, where 1 represented "Strongly disagree" and 7 represented "Strongly agree". This question is inspired by Li (2014). The purpose of this variable was thus to capture the degree to which a respondent would have the intention to use the fintech app. This was inspired by research from Dodds et al. (1991) and Mitchell (1999) on purchasing intent. Similarly to this study they also used a Likert-scale to measure whether or not participants would use a service or purchase

a product.The variable was also made up from a question regarding disclosure intention. This was based on a question from the survey; "I am willing to provide this service with personal information, so that it can find optimal products for me". Respondents answered on a 7-point Likert scale, where 1 represented "Strongly disagree" and 7 represented "Strongly agree". This question is inspired by Li (2014), and was used in Hauklien and Hansen (2019). The purpose of this variable was to capture how willing the respondent is to provide personal information in order for the service to find optimal products for the respondent. In our analysis, we use both questions combined to create the dependent variable.

Independent variables. As previously mentioned, the independent variables are the variables that are systematically changed to measure the effect on the dependent variable (Saunders et al., 2016). For this experiment, the independent variables are the brands behind the presented fintech app; Amazon, Tryg and Prisjakt.

Amazon is a leading global online retail corporation, with over $386 Billion in net sales in 2020. Amazon Web Services (AWS) is a business segment offering cloud computing, database and storage amongst others (Amazon, 2020). Tryg is the second largest insurance company in Scandinavia, based out of Copenhagen, Denmark. Prisjakt is a subsidiary of the Norwegian media group Schibsted, and is a leading online price and product comparison service in the Nordics, United Kingdom, New Zealand and France. We believe that it is reasonably plausible that all of these companies could launch such a service: Amazon may include PSD2 functionality in their existing platform, and has been feared to do so by DNB (Lorentzen, 2019). Tryg might take advantage of the opportunity presented by PSD2 in combination with their existing customer base. Lastly, Prisjakt already delivers an online platform which can be used by consumers to find good deals, so it is plausible that the firm can do something similar for financial services. The main point here is not that it must be highly likely that these companies launch such a service, but it must be plausible to a degree. One closing remark is that in our survey none of the banks included had significant scores in any of the trust dimensions. Consequently, they would not be ideal to tease out effects relating to trust. However, due to PSD2 firms like the ones we have included in the experiment can provide a similar service in reality.

We also have the independent variables ability, integrity and benevolence. These are the

trust dimensions presented in the theoretical foundation of this thesis. These variables were measured using questions inspired by insights from earlier studies from Ennew and Sekhon (2007) and van Esterik-Plasmeijer and van Raaij (2017) on trust in the financial services sector. Questions were designed to accurately measure each dimension specifically. We used two questions for each trust dimension, as we aimed to keep the questionnaire short and validity high. The two questions for each trust dimension was combined, in order to create a variable for each trust dimension.

Ability was measured using two questions. The first question was "This service is competent enough to find the best terms for me". The second question was "This service will accommodate me and my financial needs over time". Respondents answered on a 7-point Likert scale, where 1 represented "Fully disagree" and 7 represented "Fully agree". These questions were inspired by Doney and Cannon (1997), Flavián et al. (2006), Roy et al. (2001) and Siguaw et al. (1998).

Integrity was measured using two questions. The first question was "This service shares dependable information". The second question was "This service keeps promises it gives me". Respondents answered on a 7-point Likert scale, where 1 represented "Fully disagree" and 7 represented "Fully agree". These questions were inspired by Doney and Cannon (1997), Flavián et al. (2006), Roy et al. (2001) and Siguaw et al. (1998).

Benevolence was measured using two questions. The first question was "This service's primary intention is to help me". The second question was "This service genuinely wants me to be satisfied". Respondents answered on a 7-point Likert scale, where 1 represented "Fully disagree" and 7 represented "Fully agree". These questions were inspired by Gefen et al. (2003), Doney and Cannon (1997), Flavián et al. (2006), Roy et al. (2001) and Siguaw et al. (1998).

Moderating variables. We test for the moderating effects of the variables age, technological familiarity, and perceived fit. We also test for the moderating effects between age and our independent variables, as well as the moderating effect between perceived fit and the independent variables.

technological familiarity was measured by asking participants to take positions on claims regarding technology using a 7-point Likert-scale. The five claims involved participants'

familiarity with AI, general knowledge of technology and adoption of technologies. Li (2014) argues that familiarity is a way to reduce risk. Hence, knowledge and technology could affect risk for participants and behavioral intention.

Control variables. We use a total of 5 control variables, all based on questions from the survey. The control variables were related to personal and financial information.

Personal information was gathered on the gender and education of respondents. Studies show that women are more risk averse than men (Dohmen et al., 2005). It is plausible that older respondents might have more experience using financial services, but also have a different attitude to technology than younger respondents. Furthermore, it is reasonable to believe that education might impact perceived risk.

Disposition to trust and risk was measured using a simplified version of the questions from Dohmen et al. (2005). More specifically, the participants were presented with a hypothetical scenario where they receive 6000NOK and can choose an amount which can be added or subtracted with an equal probability of 50%. Expected value will be the same for all amounts chosen, but risk averse participants are likely to choose a low number. Disposition to trust was measured by having respondents using a 7-point Likert-scale to rank their disposition to trust.

Financial information was important for us to gather as we would like to check the results towards participants' personal financial situation. The financial information we collected was if participants had mortgages, credit cards and personal savings. Participants could choose between four intervals of savings amounts. From our interviews during the qualitative study we gathered that mortgages are of high interest both for consumers and financial intermediaries, relative to other financial services. In Norway it's quite common that people over the age of thirty have a mortgage and debt. We therefore expected that people who have a mortgage and debt would better grasp the implications of the actions the fintech app could conduct. These participants could then better understand the risk involved by moving their debt and mortgage between various providers offering different rates. We applied the same logic to participants that had personal savings as they could better comprehend the implications of the service's personal savings feature.

3.4.5 Execution of the experiment

The execution of our online experiment was conducted in collaboration with Norstat, a provider of data collecting services in Norway. The questionnaire was answered through Qualtrics analytic software and participants could do this on their device of choice using a web browser. Participants were randomly divided into one of three groups of 150 participants, where each group was tested with one of the three brands. On average the time spent on answering the questionnaire was less than 10 minutes. All respondents remained anonymous. The experiment was released on May 10th, 2021 and was concluded May 15th, 2021. We then received the data from the experiment for analysis once it concluded, 16 days prior to the deadline of this thesis.

3.4.6 Sample

A sample of 450 participants of 30 years of age and up was ordered from Norstat for the experiment. We chose to have participants over 30 years and older as we could expect them to have more familiarity with mortgages, savings and credit cards alike. There were 228 male respondents and 198 female respondents. The age of respondents ranged from 30 to 76, with a mean of 50.52. We saw that the majority of respondents have mortgages, as 290 respondents reported to have mortgages and 136 respondents did not have a mortgage. 357 respondents reported to have credit cards, against 69 respondents who reported to not have credit cards. The distribution of savings amongst the respondents can be found in figure 3.5. Education levels of respondents can be found in figure 3.4.

3.4.7 Analytical approach

Data from the experiment was sorted and analyzed using Excel and the programming language R. As the data collection was done in a project with three theses, not all the data would be relevant to our research. Thus, we selected the parts of the data we considered relevant for our research. First, we started by cleaning the data and creating dummy variables. We removed respondents who did not answer question number 9 correctly, a simple question which gauged if respondents had correctly understood the nature of the financial application, in an effort to sort out careless responders. This removed 24 respondents from the sample. We then created dummy variables for gender, credit card,

Figure 3.4: Education level of respondents

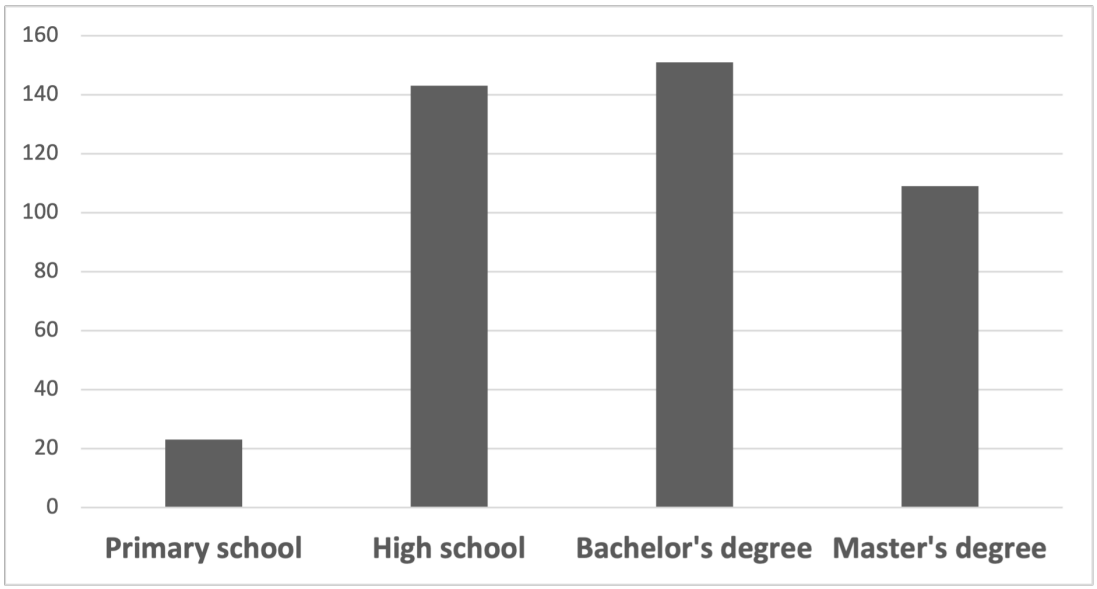
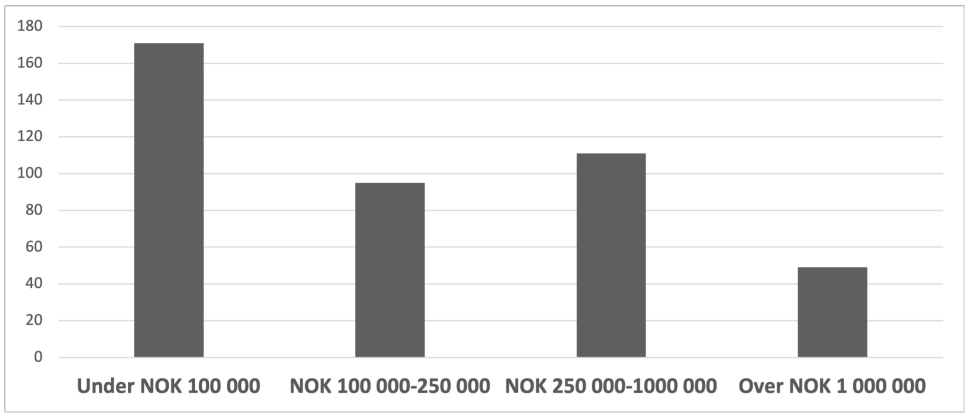


Figure 3.5: Distribution of savings for experiment respondents



mortgage and each level of education and savings.

There are mainly two insights we wanted to draw from analyzing the data from the experiment. With the three brands acting as proxies for the trust dimensions within their domains, we wanted to 1) Analyze differences in behavioral intention for the three trust dimensions and 2) Analyze the transferability of trust between domains.

We analyze the difference in behavioral intention for the three trust dimensions and for the three brands by running linear regressions. We also compute Tukey Honest Significant Differences to test for significant difference in behavioral intention between the three brands.

To analyze the transferability of trust between domains, we performed t-tests for scores of the brands on the trust dimensions in the experiment with the corresponding values in the trust survey. This allows us to analyze how the brands score on the trust dimensions within the domain of financial intermediation, and thus we can compare this to how the brands scored in their own domain.

3.5 Methodological concerns

In the following sections we will provide our evaluation of the methods used to conduct our research. Hence, we will focus on the validity and reliability of the research and its findings.

3.5.1 Validity

Validity in research refers to the appropriateness of the measures used, accuracy of the analysis of the results and generalizability of the findings (Saunders et al., 2016). We will assess both internal and external validity of our research in the following sections.

Internal validity

Internal validity in relation to questionnaires refers to the ability of the questionnaire to measure what it is intended to measure. Internal validity is achieved when the research accurately demonstrates a causal relationship between two variables (Saunders et al., 2016). In a questionnaire internal validity is established when a set of questions can be shown to be associated with either an analytical factor or an outcome.

During our research we discovered a potential threat to the internal validity due to mono-operalization. Issues related to mono-operationalization is one concern to internal validity. By using only one brand with a high score on each trust dimension effects unique for that particular brand might arise. We can use Amazon as an example: If the behavioral intention is lower for the financial service when delivered by Amazon compared to Tryg or Prisjakt, it is difficult to decide whether this is due to the fact that: 1) Ability-based trust lacks importance or 2) The ability-based trust Amazon has in its own domain is not transferable to financial services. Our assessment is that this is a potential limitation of our study, which could have been mitigated by having two or more brands acting as proxies for each trust dimension.

External validity

External validity refers to whether the data collection techniques and analytical procedures would produce consistent findings if they were repeated on another occasion or if they were replicated by a different researcher (Saunders et al., 2016). Regarding the external validity, our study faces the same limitiations as any controlled lab experiment. We study three different brands, and one specific financial service app. This gives us control over causal mechanisms, but it is not necessary that our findings hold for other brands and other types of financial service applications. However, our use of the pre-experiment survey was intended to reduce this concern.

3.5.2 Reliability

Reliability refers to whether the results of a particular study can be reproduced in another study with the same type of participants or at another time (Johnson and Christensen, 2017). In this study we have gathered data through interviews, a survey and an experiment using a quantitative questionnaire. Reliability refers to replication and consistency, it is also central for judgements of the quality of quantitative research (Saunders et al., 2016). Therefore, it is important that we assess the reliability of our study. Hence, we will discuss measures taken in order to increase reliability as well as potential threats to reliability in this study.

Before sending out our final questionnaire for the experiment we made sure to have multiple test runs. Everyone involved in developing the questionnaire had friends and

family test the questionnaire and to provide feedback. By doing so we ensured that the questions were understandable and that we got our desired message across to respondents. Therefore, we made necessary adjustments taking the feedback into account, which would likely increase the study's reliability.

One potential threat to reliability would be participant error. Saunders et al. (2016) defines participant error as any factor which adversely alters participant performance. By having a self-completed internet questionnaire, we could not control what environment participants did the experiment in. However, we recommended they fill out the questionnaire in a quiet environment without distractions. This is something we could not control and could potentially negatively affect the internal validity of our study. Furthermore, we could not control when the participant took the questionnaire. Meaning participants could have rushed through the questionnaire due to external disturbances or time constraints. Luckily, we have a rather large sample which should reduce the likelihood of these issues affecting the majority of participants.

Researcher error could threaten the reliability of our study. Saunders et al. (2016) define researcher error as any factor which alters the researcher's interpretation. To counteract such factors, we have made sure to conduct an in-depth literature review to give ourselves a strong theoretical foundation when conducting our study. Furthermore, we have strived to study important aspects of conducting an experiment using a questionnaire. In addition we have focused on conducting a data analysis of high quality and to fully understand our findings.

Another potential threat to the study's reliability is researcher bias. This could possibly occur when we analyze and interpret our data, by projecting our own subjective dispositions to our findings. In order to counteract this, we have made sure to carefully study and cooperate on our analysis, as well as challenge our own biases regarding the research. By being two people who both analyze the data, we then reduce this risk through transparent and proper documentation of our findings.

Regarding the reliability of our survey, there are a few limitations that we must address. Firstly, as previously mentioned we had 173 complete responses and 160 incomplete responses on our survey. This suggests a completion rate of 52 percent. This completion rate was likely due to the survey being too long and that we did not provide any material

incentives or prices for complete responses. Secondly, the majority of respondents in the survey were in the age group 20-29. This was a result of using convenience sampling, and impacts the generalisability of the survey. A potential effect of this age group representing the majority of responses, is that brands that are more popular amongst people in this age group scored better than they would in a fully randomized sample.

3.5.3 Ethical Concerns

An important aspect of conducting research is handling ethical concerns and following ethical guidelines. Saunders et al. (2016) specifies that ethical concerns can occur at all stages in a research project, specifically in terms of data collecting, data analysis and reporting findings. In the following paragraphs we will highlight the important ethical concerns considered during our research process.

While performing the interviews in the qualitative study, we always strived to keep a high ethical standard. The anonymity of the interviewees was respected, and no statements could be traced back to a given individual.

When handling data it is of utmost importance that this is done in accordance with ethical standards. Norstat is a data collection service provider which follows the guidelines, rules and regulations from Datatilsynet for handling personal data. Norstat provided us with voluntary participants and ensured anonymity of participants (Norstat, 2020). Norstat also emphasizes to participants that the information given in a questionnaire will be compiled with other participants' information and delivered to their customers in an anonymized form for the purpose of statistical research (Norstat, 2020).

We strived to have a high ethical standard in relation to how we handled participants of the experiment. In the start of the questionnaire participants are informed of the purpose of the study and what it entails. Therefore, we open the questionnaire with an introductory message which explains who is conducting the experiment and for what purpose. The experiment in its entirety was not fully explained as we feared it could potentially affect participants' responses. Consequently, we referred to the experiment only as a questionnaire in the texts presented to participants.

During our experiment participants were exposed to different brands. Furthermore, the brands provided a financial service which was fictional. In addition, neither of the brands

to our knowledge planned to provide such a financial service in reality. That is why we emphasised that the fintech app was fictional in the questionnaire. Consequently, the screenshots do not represent a real service nor are the brands associated with this service. Getting this message across to participants was a goal in the questionnaire design, and was therefore highlighted in the closing message. Furthermore, we also emphasized that the questionnaire was designed by a group of master students to measure how different brands that provide a financial service score in trust and perceived risk. We used this closing message as a short way to debrief the participants.

Lastly, in accordance with ethical guidelines we focused on presenting limits and weaknesses associated with our research and findings. Likewise, we also acknowledged limits of our data. Our goal by doing so is to follow the expected ethical standards in conducting research and providing the reader with a balanced and nuanced analysis.

4 Results

4.1 Qualitative interviews

The interviews with industry experts on fintech and PSD2 yielded several insights, in terms of ideas for the Fintech app, reflections around PSD2 and the financial industry going forward. The questions can mainly be placed in three categories, what interesting services are we seeing today, what services could we see in the future and lastly questions on trust. Notes from the interviews in addition to recordings make up the qualitative data in this section.

There are several innovative services seen in the fintech space today. Mentioned by several interviewees, Vipps started out by offering simplified peer-to-peer payments, but have now expanded to payments within online shopping, identification and even mobile service plans. It is likely that Vipps is the largest PSD2-related service in Norway by user adoption.

Klarna was also mentioned by several interviewees as a player who does not necessarily depend on PSD2 to offer their services within simplified and delayed payments, but who can potentially aim to enter the segment of PSD2 related services. Horde, and their PSD2 related service offers a simplified process in which users can cancel or swap credit card providers in addition to seeing aggregated account information across different banks. Horde is also building a SaaS (Software as a service) solution for banks. Horde was mentioned by several interviewees.

Renteradar.no was mentioned by one interviewee as an interesting fintech-service seen today. While not directly related to PSD2, it is a service in which users can use the platform to find mortgages with better terms. When designing our fintech app, Renteradar was one of the current services used as inspiration sources for our mockup. The savings applications Spiff and Dreams were also brought up by two of our interviewees. These applications served as inspiration for the service as well.

Regarding services which could be seen in the future, the insights suggested that it could be of high interest to create a service that can move the mortgage of a bank customer to a different bank offering better value. Also mentioned by several interviewees was a similar service but for savings, where it could be moved automatically to provide customers with

better returns. Both services would depend on trust from consumers as well as a seamless user experience in order to be successful. This view was shared by several interviewees.

An account aggregator service where a customer can see account information from multiple banks aggregated in one single user front is not of high interest to bank customers in Norway. Norwegian bank customers on average use less than two banks, and thus, the value proposition is simply not high enough. However, if pooled with the aforementioned functions, such an aggregated user front could be part of an innovative application.

The interviews also provided insights beyond input on the hypothetical service for the experiment. The general consensus on PSD2 is that it has not caused the revolution within the financial industry that was expected by many prior to its implementation. PSD2 has not been a big priority for most banks, as many banks believe there are few incentives to do anything in excess of what is necessary to be compliant with the directive. One interviewee argued that while PSD2 in itself will not cause a "revolution", it can potentially be part of a larger shift in consumer finance. Also discussed by several interviewees was how future banking is bound to be even more technology related, and that this can play to the strengths of large tech firms who have the capabilities to leverage large amounts of data.

Opinions on trust are somewhat split. As pointed out by one interviewee, trust is at the core of the business models of banks. However, several interviewees argued that a large enough value proposition may outweigh concerns about trust. Such a value proposition could e.g. be increased convenience, which has been the value proposition of Vipps. However, the argument that banks in Norway generally enjoy high levels of trust is mostly agreed upon. This view is supported in our survey. One interviewee argued that while consumers may trust banks as a safe place to save their funds, banks might not be best suited to develop improved services for customers.

We gathered from the interviews that the Norwegian market for financial intermediation enjoys generally high levels of trust in comparison to other parts of Europe. Norway is a well developed market for banking and financial services, in terms of technology and technology adoption. One interviewee pointed to the contrasting experience of setting up a bank account in Spain, which required a physical presence and more time and effort than in Norway. However, the interviewee pointed to the fact that one could instead

set up an online account with neo-bank Revolut in a matter of minutes. This makes a neo-bank's value proposition stronger in Spain due to its relative convenience.

4.2 Survey

Results from the survey were sorted and analyzed using the programming language R. There were two main purposes of the survey: Pick brands with significant differences in trust dimensions for the experiment and to use descriptive statistics to gain insights on the relative trust levels for brands within their domain. In figure 4.1, the trust levels of all brands are shown with the mean score from all respondents in the three trust dimensions dimensions, with 5 being the highest possible score and 1 being the lowest possible score. In Table 4.1, all the brand names of the survey are shown.

Figure 4.1: The relative trust levels of all the brands in the survey.

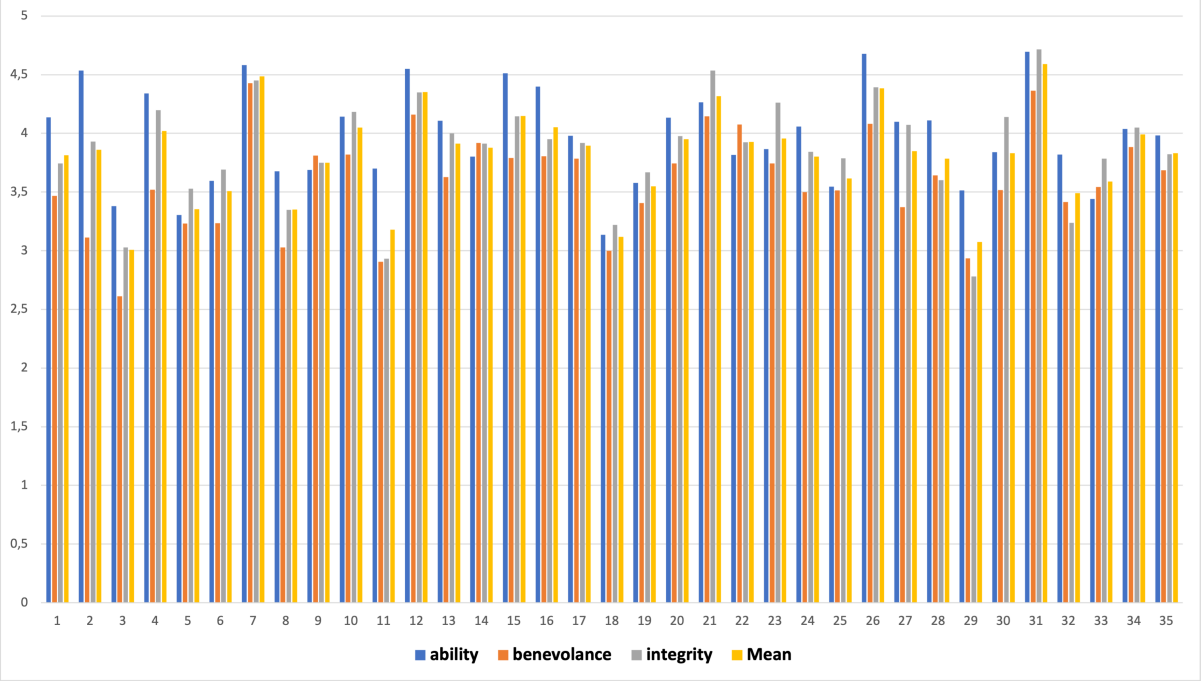


Table 4.1: Brands from the survey

	Brand name		Brand name		Brand Name		Brand Name
1	Amazon	11	Huawei	21	Posten	31	Vipps
2	Apple	12	IKEA	22	Prisjakt	32	Volkswagen
3	Bank Norwegian	13	Klarna	23	Sbanken	33	Vy
4	DNB	14	Kolonial	24	Schibsted	34	XXL
5	Eie	15	Microsoft	25	SparebankenSør	35	Zalando
6	Elkjøp	16	Netflix	26	Spotify		
7	Finn	17	Nordic Choice	27	Telenor		
8	Fjordkraft	18	Notar	28	Tesla		
9	Foodora	19	OneCall	29	TikTok		
10	Gjensidige	20	Paypal	30	Tryg		

We also see that banks have generally high trust levels, with the mean trust score of both DNB and Sbanken (Prior to the announcement of the proposed acquisition) at 4.02 and 3.96 respectively, which are higher than the scores of the brands chosen for the experiment. Sparebanken Sør, a local bank of southern Norway scores lower, at 3.61. This serves as an argument as to why not include a bank in the experiment: Banks are not equal and one could not find one bank which could represent all Norwegian banks. Also, no banks had large differences in the three trust dimensions while still having a low difference in mean score. A comparison of banks with the top five scoring brands in the survey is presented in figure 4.2, in which we see that banks score lower than these brands. We chose not to include Bank Norwegian. While it is a bank in Norway, it is mainly focused on credit cards and does not offer mortgages and thus not all features of a total bank.

Figure 4.2: The top 5 mean trust scores from the survey, compared to banks

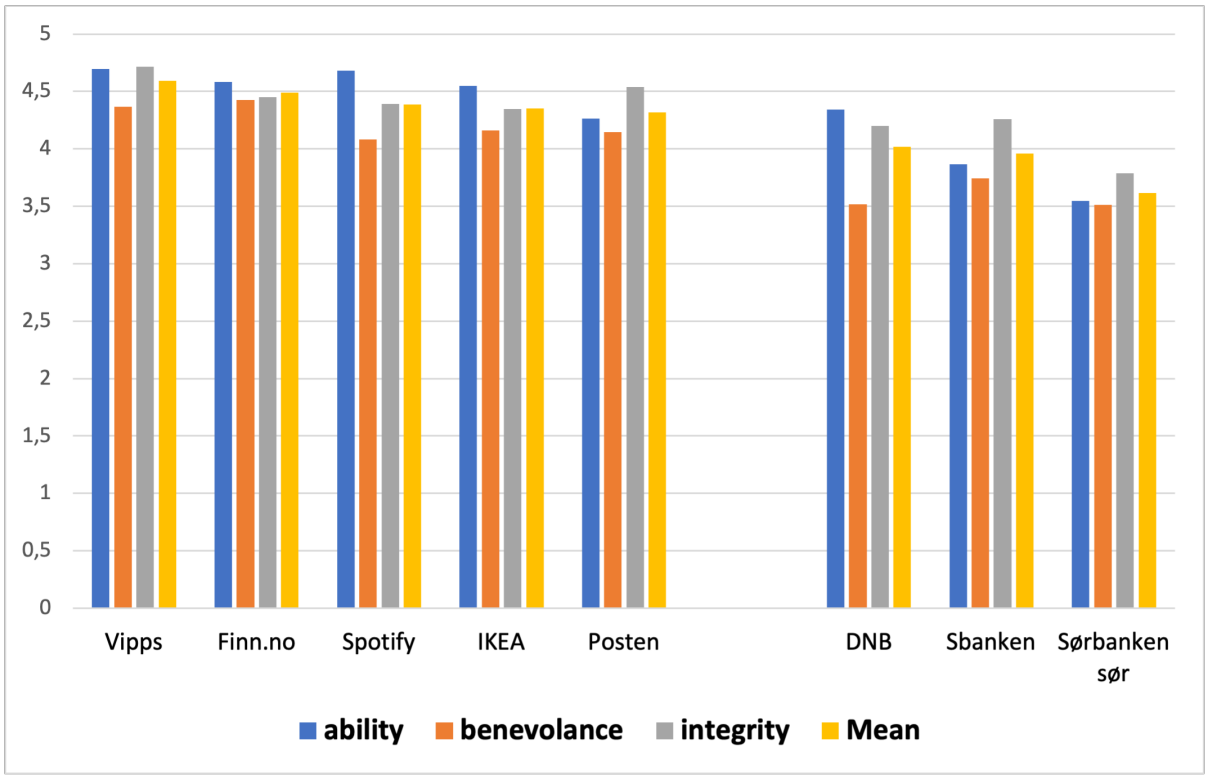
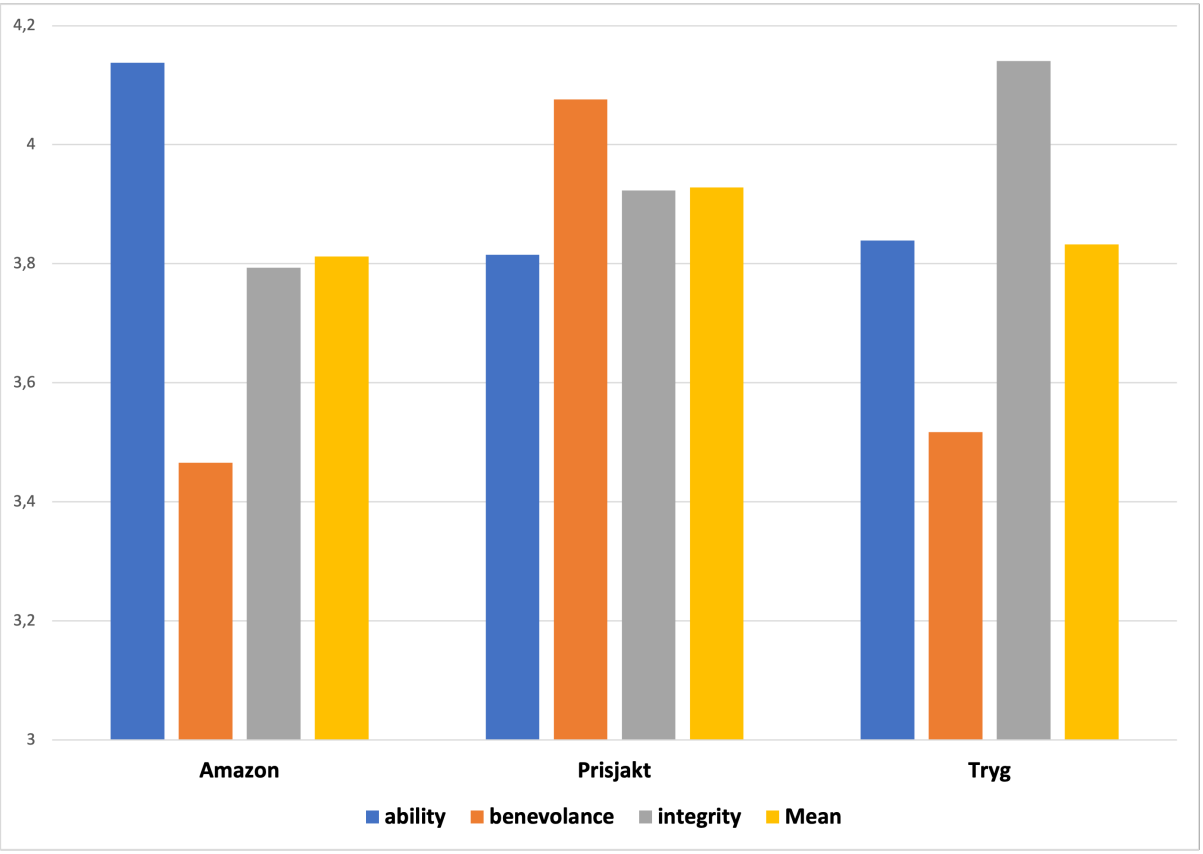


Figure 4.3: Trust levels of Prisjakt, Tryg and Amazon



From figure 4.3 we can see the trust levels of Amazon, Prisjakt and Tryg. These brands were selected after a process of trial and error where we visually inspected the data in figure 4.1 for firms which had the scores we wanted in order to tease out effects for the experiment. After visually selecting brands, we analyzed the results for significance.

Table 4.2: Test of trust levels in survey: Mean

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.141	-0.054	0.336	0.205
Tryg-Amazon	-0.015	-0.214	0.183	0.982
Tryg-Prisjakt	-0.157	-0.351	0.038	0.144

We found that the brands Amazon, Tryg and Prisjakt.no did not have a significant difference in mean score across all dimensions for trust, which can be seen from Table 4.2. Amazon scored significantly higher than Tryg and Prisjakt on ability-based trust as seen from Table 4.3. Tryg scored significantly higher than Amazon and Prisjakt on integrity-based trust as seen from Table 4.4. Prisjakt scored significantly higher than Amazon and Tryg on benevolence-based trust as seen from Table 4.5.

Table 4.3: Test of trust levels in survey: Ability

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	-0.853	-1.201	-0.505	0.000
Tryg-Amazon	-0.563	-0.921	-0.206	0.001
Tryg-Prisjakt	0.290	-0.058	0.638	0.124

Table 4.4: Test of trust levels in survey: Integrity

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.053	-0.420	0.527	0.961
Tryg-Amazon	0.594	0.121	1.067	0.010
Tryg-Prisjakt	0.541	0.053	1.028	0.026

Table 4.5: Test of trust levels in survey: Benevolence

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.507	0.095	0.918	0.011
Tryg-Amazon	-0.009	-0.415	0.397	0.998
Tryg-Prisjakt	-0.516	-0.931	-0.100	0.010

Based on these results, we could use these brands as proxies for the different trust dimensions, within their respective domains. Amazon represents a proxy for ability-based trust, Prisjakt for benevolence-based trust and Tryg for integrity-based trust. Thus, these brands were ideal for teasing out the effect of the different different trust dimensions and their transferability to the domain of financial intermediation.

4.3 Experiment

With the three brands acting as proxies for the trust dimensions within their domains, we wanted to 1) Analyze differences in behavioral intention for the three trust dimensions and 2) Analyze the transferability of trust between domains. We tested this by testing for significant differences in means. Then we performed linear regressions, in which we also tested for the moderators, age, perceived fit and technological familiarity, to see whether these variables had any effect on the trust variables.

4.3.1 Significance of differences

In Table 4.6, the differences in behavioral intention are analyzed. Here we find that Tryg has the strongest behavioral intention, followed by Prisjakt then Amazon with values of 3.61, 3.27 and 2.64, respectively. The difference between the behavioral intention of Tryg and Amazon is significant at the 5% level, as is the difference between the behavioral intention of Amazon and Prisjakt. If we include the willingness to give personal information to the brand, in which Tryg scores 3.63, Prisjakt 2.90 and Amazon 2.44, we see that the differences increase and are all significant at the 5% level, see Table 4.7.

Table 4.6: Test of difference in user intention in Experiment

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.627	0.133	1.121	0.008
Tryg-Amazon	0.965	0.471	1.459	0.000
Tryg-Prisjakt	0.338	-0.156	0.832	0.243

Table 4.7: Test of difference in Combined user intention and willingness to give personal information in Experiment

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.542	0.0724	1.012	0.019
Tryg-Amazon	1.077	0.608	1.547	0.000
Tryg-Prisjakt	0.535	0.065	1.005	0.021

We observe the following overall trust levels amongst the three brands. These are presented in Table 4.8. The mean trust level of the application from Tryg is 3.7735 compared to 3.1772 for Amazon and 3.4613 for Prisjakt. Results from computing Tukey Honest Significant Differences of overall trust levels yields the results seen in Table 4.8. We find that the difference in overall trust scores are significant between Tryg and Amazon. Although Tryg has a higher overall trust score than Prisjakt, this is not significant at the 5% level.

Table 4.8: Trust scores experiment

—— Brand Trust	Tryg	Amazon	Prisjakt
Ability	3.743	3.275	3.391
Integrity	3.813	3.166	3.482
Benevolence	3.764	3.092	3.512
Mean	3.774	3.177	3.461

Table 4.9: Test of trust levels in Experiment: Mean

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.284	-0.075	0.643	0.152
Tryg-Amazon	0.596	0.237	0.955	0.000
Tryg-Prisjakt	0.312	-0.047	0.671	0.103

Table 4.10: Test of trust levels in Experiment: Ability

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.116	-0.263	0.495	0.751
Tryg-Amazon	0.468	0.089	0.848	0.011
Tryg-Prisjakt	0.352	-0.027	0.731	0.075

From Table 4.10 we see that Tryg scores significantly better than Amazon in the ability dimension. This is contrary to the results from the survey, where Amazon scored better than Tryg, however not significantly at the 5% level. Tryg also scores significantly better in the integrity and benevolence dimensions as seen from Table 4.11 and Table 4.12, respectively. Across all dimensions Tryg scores better than Prisjakt, but not significantly at the 5% level. In turn, Prisjakt scores better than Amazon across all dimensions, however not significantly at the 5% level.

These results differ from the results we saw from the survey. In the survey, Amazon had a ability-score significantly higher than the mean score, Tryg a significantly higher integrity-score and prisjakt a significantly higher benevolence-score. In the experiment, however, we see that the data indicates that the integrity based trust of Tryg is transferable to the domain of financial intermediation services, as Tryg scored the highest on this dimension in both the survey and experiment.

Table 4.11: Test of trust levels in Experiment: Integrity

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.317	-0.062	0.696	0.121
Tryg-Amazon	0.648	0.269	1.027	0.000
Tryg-Prisjakt	0.331	-0.048	0.710	0.101

Table 4.12: Test of trust levels in Experiment: Benevolence

Brand	diff	lwr	upr	p adj
Prisjakt-Amazon	0.419	-0.001	0.839	0.051
Tryg-Amazon	0.673	0.252	1.093	0.001
Tryg-Prisjakt	0.254	-0.167	0.674	0.332

Table 4.13: T-tests of significance of difference in means between survey and experiment

Brand	**Trust dimension**	**Survey**	**Experiment**	**T-value**	**P-value**
Amazon	Ability	6.134	3.274	15.705	0.000
	Benevolence	4.699	3.092	8.693	0.000
	Integrity	5.115	3.165	10.737	0.000
	Overall	5.155	3.177	14.387	0.000
Tryg	Ability	5.289	3.743	7.560	0.000
	Benevolence	4.776	3.764	5.668	0.000
	Integrity	5.711	3.813	9.769	0.000
	Overall	5.131	3.773	9.410	0.000
Prisjakt	Ability	4.854	3.391	7.503	0.000
	Benevolence	5.615	3.511	11.845	0.000
	Integrity	5.385	3.482	9.401	0.000
	Overall	5.366	3.461	13.912	0.000

In order to test the significance of difference in means between the sample of the survey and the experiment, the values of 5-Point Likert scale must be manipulated to match the values of the 7-point Likert scale. This is done by multiplying the survey value by 1.5, then deduct 0.5 (IBM, 2021). From t-tests comparing the differences in the trust scores between our survey and experiment, we reject the null hypothesis that there is no difference in means between the two samples and find that the true difference in means between the trust scores is not equal to 0 for all variables. This result tells us that we have, in general, higher trust levels in the survey than in the experiment. This can be due to mainly two factors; The context in which trust is measured, and the differences in age between the two samples. The t-tests can be found in Table 4.13

4.3.2 Linear regression and moderator analysis

A linear regression of our data set is presented as regression (1) in Table 4.14. We find that all trust dimensions are statistically significant at the 5% level and with positive coefficients, with integrity having the largest effect. We also find that age and perceived fit are significant at the 5% and 1% level, respectively. Adjusted R-squared for the model is 0.453, indicating that 45.3% of the variation in behavioral intention can be explained by the regressors in our linear model. We also ran a linear regression which included dummy variables for all levels of saving and education. These results found these variables to have an insignificant effect on behavioral intention. This regression can be found in Appendix A0.1.

A linear model testing the effect of the brands on behavioral intention is also presented as regression (2) in Table 4.14. This model shows the effect of the brands on behavioral intention. We see here that compared to Tryg, which is Amazondummy=0 and Prisjaktdummy=0, the effect of the brands Amazon and Prisjakt is negative, and statistically significant at the 5% level. We also see that perceived fit has a positive effect on behavioral intention, significant at the 1% level. However, only 28.46% of the variation in behavioral intention can be explained by the regressors in this model.

We also performed an analysis to test for moderating effects of age and technological familiarity on the trust variables, as well as for the brand variables. The results from the moderating effects of age and the trust dimensions can be found in Table 4.15. From the regressions we can see that only the effect of moderation between age and ability-based trust is significant at the 5% level. This effect is negative, indicating that the effect of ability-based trust decreases when age increases. It constitutes an increase in adjusted R squared from 0.453 to 0.457, which is a non-trivial increase.

From Table 4.16 we can see that the moderating effect between the trust dimensions and familiarity with technology is positive. Regressions also show that the effect of the trust dimensions are negative when there is no familiarity with technology. Increased familiarity increases the effect of trust. The moderating effect between familiarity to technology and ability-based trust and integrity-based trust is significant at the 5% level. Adjusted R squared values have a non-trivial increase from 0.453 to 0.466 for the regression with the

moderating effect between ability-based trust and familiarity with technology, and from 0.453 to 0.458 for the regression with the moderating effect between integrity-based trust and familiarity with technology.

The moderating effect between perceived fit and the trust dimensions is positive, as seen from Table 4.17. At the 5% level, only the moderating effect between integrity-based trust and perceived fit is significant. There is an increase adjusted R squared from 0.453 to 0.473 meaning that the moderating regressor picks up a variance in the dependent variable which is more than non-trivial, and we can conclude that there is a moderating effect. The interpretation is that when perceived fit increases, so does the effect of integrity based trust.

We also tested the moderating effects between age and brands, and between brands and trust dimensions. Results from this analysis suggests that these moderating effects are insignificant, and can be found in Table A0.2. Thus, our data suggests that the brands were not age specific, as age of respondents did not change the effect of the brand on behavioral intention. This finding is limited to the sample within the experiment, however, and is not necessarily transferable to the sample of the survey. The results from this chapter will be further discussed in chapter 5, Discussion.

Table 4.14: The effect of the three trust dimensions and control variables on behavioral intention

	Dependent variable:	
	Behavioral intention	
	(1)	(2)
Amazon	−0.470**	
	(0.190)	
Prisjakt	−0.447**	
	(0.184)	
Integrity-based trust		0.309***
		(0.097)
Benevolence-based trust		0.222***
		(0.068)
Ability-based trust		0.223**
		(0.089)
Age	−0.017***	−0.012**
	(0.006)	(0.005)
Gender	−0.123	−0.148
	(0.155)	(0.136)
Credit card	−0.280	−0.185
	(0.214)	(0.186)
Mortgage	−0.349**	−0.198
	(0.165)	(0.146)
Familiarity with technology	0.210**	0.112
	(0.097)	(0.086)
Brand familiarity	0.091*	0.050
	(0.048)	(0.042)
Financial familiarity	0.032	−0.002
	(0.062)	(0.054)
Perceived fit	0.469***	0.141***
	(0.051)	(0.053)
Constant	1.718***	0.224
	(0.589)	(0.501)
R^2	0.301	0.466
Adjusted R^2	0.285	0.452
Residual Std. Error	1.531 (df = 415)	1.340 (df = 414)
F Statistic	17.907*** (df = 10; 415)	32.869*** (df = 11; 414)

Table 4.15: Linear regressions and moderating effects of age

	Dependent variable:		
	Behavioral intention		
	(1)	(2)	(3)
Ability-based trust	0.605***	0.227**	0.234***
	(0.190)	(0.089)	(0.089)
Benevolence-based trust	0.223***	0.491***	0.222***
	(0.067)	(0.170)	(0.067)
Integrity-based trust	0.309***	0.304***	0.581***
	(0.097)	(0.097)	(0.195)
Age	0.015	0.007	0.008
	(0.013)	(0.012)	(0.013)
Gender	−0.139	−0.138	−0.151
	(0.135)	(0.136)	(0.136)
Credit card	−0.181	−0.194	−0.197
	(0.185)	(0.186)	(0.186)
Mortgage	−0.237	−0.203	−0.211
	(0.146)	(0.146)	(0.146)
Brand familiarity	0.052	0.058	0.053
	(0.042)	(0.042)	(0.042)
Familiarity with technology	0.132	0.123	0.125
	(0.086)	(0.086)	(0.086)
Financial familiarity	−0.014	−0.012	−0.012
	(0.054)	(0.055)	(0.055)
Perceived fit	0.143***	0.143***	0.141***
	(0.052)	(0.052)	(0.052)
Ability-based trust * Age	−0.008**		
	(0.003)		
Benevolence-based trust * Age		−0.005*	
		(0.003)	
Integrity-based trust * Age			−0.006
			(0.003)
Constant	−1.197	−0.781	−0.809
	(0.800)	(0.766)	(0.816)
R^2	0.473	0.470	0.469
Adjusted R^2	0.457	0.455	0.454
Residual Std. Error (df = 413)	1.333	1.337	1.337
F Statistic (df = 12; 413)	30.864***	30.524***	30.457***

Table 4.16: Linear regressions and moderating effects of familiarity with technology

	Dependent variable:		
	Behavioral intention		
	(1)	(2)	(3)
Ability-based trust	−0.489**	0.243***	0.251***
	(0.224)	(0.089)	(0.089)
Benevolence-based trust	0.242***	−0.133	0.236***
	(0.067)	(0.202)	(0.067)
Integrity-based trust	0.303***	0.299***	−0.203
	(0.096)	(0.097)	(0.239)
Familiarity with technology	−0.439**	−0.155	−0.246
	(0.180)	(0.167)	(0.175)
Age	−0.012**	−0.012**	−0.012**
	(0.005)	(0.005)	(0.005)
Gender	−0.116	−0.137	−0.142
	(0.135)	(0.136)	(0.135)
Credit card	−0.200	−0.195	−0.183
	(0.184)	(0.186)	(0.185)
Mortgage	−0.238*	−0.234	−0.225
	(0.144)	(0.147)	(0.146)
Brand familiarity	0.064	0.052	0.057
	(0.041)	(0.042)	(0.042)
Financial familiarity	−0.028	−0.018	−0.025
	(0.054)	(0.055)	(0.055)
Perceived fit	0.152***	0.142***	0.147***
	(0.052)	(0.052)	(0.052)
Ability-based trust * Tech fam	0.166***		
	(0.048)		
Benevolence-based trust * Tech fam		0.083*	
		(0.045)	
Integrity-based trust* Tech fam			0.111**
			(0.047)
Constant	2.515***	1.366*	1.733**
	(0.827)	(0.792)	(0.815)
R^2	0.481	0.471	0.473
Adjusted R^2	0.466	0.455	0.458
Residual Std. Error (df = 413)	1.323	1.336	1.333
F Statistic (df = 12; 413)	31.920***	30.596***	30.913***

Table 4.17: Moderating effects between Trust and Perceived fit

	Dependent variable:		
	Behavioral intention		
	(1)	(2)	(3)
Ability-based trust	0.231***	0.058	0.240***
	(0.089)	(0.126)	(0.089)
Benevolence-based trust	0.083	0.215***	0.210***
	(0.102)	(0.067)	(0.067)
Integrity-based trust	0.288***	0.305***	0.083
	(0.097)	(0.097)	(0.136)
Age	−0.012**	−0.012**	−0.012**
	(0.005)	(0.005)	(0.005)
Perceived fit	−0.031	−0.066	−0.101
	(0.108)	(0.123)	(0.115)
Gender	−0.158	−0.173	−0.169
	(0.136)	(0.136)	(0.136)
Credit card	−0.173	−0.187	−0.186
	(0.186)	(0.186)	(0.185)
Mortgage	−0.219	−0.218	−0.226
	(0.146)	(0.146)	(0.146)
Familiarity with technology	0.127	0.137	0.137
	(0.086)	(0.086)	(0.086)
Brand familiarity	0.049	0.048	0.045
	(0.042)	(0.042)	(0.042)
Financial familiarity	−0.004	−0.006	−0.006
	(0.054)	(0.054)	(0.054)
Benevolence-based trust * Perceived fit	0.046*		
	(0.026)		
Ability-based trust * Perceived fit		0.056*	
		(0.030)	
Integrity-based trust * Perceived fit			0.067**
			(0.028)
Constant	0.683	0.738	0.873
	(0.560)	(0.572)	(0.569)
R^2	0.470	0.471	0.473
Adjusted R^2	0.455	0.455	0.458
F Statistic (df = 12; 413)	30.574***	30.590***	30.936***

5 Discussion

In the following section we will discuss the findings from our analysis while focusing on answering our research question.

How does trust affect the future of financial intermediation following PSD2?

The background for our research question and this study is the general assumption of the importance of trust in financial intermediation. We aimed to analyze how different dimensions of trust affect behavioral intention for financial services. Additionally, we study the transferability of trust between different domains. We then aim to use this insight to study and discuss the future of financial intermediation following the technological shock of PSD2 using our theoretical foundation.

P1: Integrity-based trust is most important within financial intermediation

Revisiting the proposition drawn from our theoretical foundation, we will now discuss this in light of the results from our data analysis. In our theoretical foundation, we present research from van Esterik-Plasmeijer and van Raaij (2017) arguing that the integrity-based dimension of trust is the most important in banking and financial intermediation. This suggests that incumbent financial intermediaries possess this form of trust in the market, which an entry barrier to newcomers. Hauklien and Hansen (2019) suggested that the ability-based dimension of trust had a larger effect on behavioral intention. In the following, this will be discussed in light of our data.

In our linear regressions presented in chapter 4.3, we see that the three trust dimensions all have an effect on behavioral intention of the financial application. We see that the effect is positive for all trust dimensions. One goal when designing the fintech app was to ensure there was a certain amount of risk involved in using it, so that trust would be necessary in order to show behavioral intention. From this perspective, it is not surprising to see that trust has a positive effect on behavioral intention. The positive effect of integrity-based trust is the strongest, followed by benevolence-based trust and ability-based trust. This is based on the responses to questions about trust related to the brand within the domain of financial services, thus being based on the explicit trust scores of the brands in the experiment.

By looking at the effect of dummies of the brands on user intent, this can act as an implicit way of analyzing the variation in importance of the three trust dimensions. As the brands act as proxies for trust in their own domains, we can see how this affects user intent for the application and thus, which trust dimensions our data suggest to be the most important for financial intermediation. Here, our data shows that the dummies for Amazon and Prisjakt show a negative effect, significant at the 5% level. This shows stronger user intent for Tryg, which scored high on integrity.

Our data supports the argument that trust is a multidimensional concept and that a trustee must have trust along several dimensions. However, our data suggests that integrity is the strongest determinant for behavioral intention within financial intermediation. In a general sense these findings bodes well for incumbent banks in Norway. Our findings indicate that they still have a competitive advantage as integrity-based is most important for consumers to use financial intermediation services. Therefore, we expect players with strong integrity-based trust will continue to control financial intermediation in the short term.

If we shift our focus to the long term then we cannot be certain that incumbent banks will sustain this competitive advantage as the market continues to change. As was illustrated by findings of our data analysis, every trust dimension had a positive effect on behavioral intention. However, the introduction of new players, business models and services will affect incumbents competitive position and resources. Intangible resources like trust are indirectly affected by other competencies and activities which could affect integrity-based trust importance positively or negatively. However, in the current market situation incumbents will benefit by having high integrity-based trust levels.

P2: Ability-based trust is less transferable than the other dimensions between domains

In the theoretical foundation, we point to Zand (1972) who argues that trust is mainly domain specific. This view is partly supported by our data in which we saw that the mean trust levels of the experiment was lower than those of the survey. T-tests across all dimensions suggested significance of these differences at the 5% level. However, there were variations between how the scores of the trust dimensions changed from the survey to the experiment.

Tryg was used as a proxy for integrity-based trust due to a high score within this dimension in the survey. In the experiment, Tryg scored high in this dimension again, the highest score of the experiment, relative to the other dimensions. Still, this score was significantly lower than the integrity score of Tryg in the survey. Our data thus suggests that the high integrity-based trust Tryg has within its own domain, is partly transferable to the domain of financial intermediation which this financial application falls within.

Prisjakt was used as a proxy for benevolence-based trust due to a high score within this dimension in the survey. In the experiment, Prisjakt still scored higher within this dimension than ability and integrity, but not statistically significant. All scores of Prisjakt were significantly lower in the experiment than in the survey. These findings suggest that the benevolence-based trust of Prisjakt is partly transferable to the domain of financial intermediation.

Amazon, the proxy for ability-related trust due to a high score within this dimension in the survey, did not have similar results to those of Tryg and Prisjakt. In the survey, the ability-based trust of Amazon was the highest score across any dimensions for the three brands. However, in the experiment, the score of the ability-based trust of Amazon was the lowest recorded among the three brands within the ability-based trust dimension, with both Tryg and Prisjakt having better scores. Thus, this suggests that the ability-based trust of Amazon in its own domain is less transferable to the domain of financial services than the integrity-based trust of Tryg and the benevolence-based trust of Prisjakt.

While these results are in support of the theoretical foundation presented in this thesis, we cannot be certain that the gap in trust levels between the survey and the experiment is solely due to the limited transferability of trust. Other factors, such as the difference in sampling may be a cause for the trust gap. The survey had a younger sample than the experiment, and this age difference could have an impact as age is negatively correlated with trust. This was supported by the data in the experiment, where age had a negative effect on trust, but whether or not these effects are applicable between the survey and experiment is uncertain. Also worth noting is that older respondents might have lower familiarity with Amazon and that this could potentially affect results. However, our analysis of moderating effects between age and the dummy variable for Amazon does not support this, as there were no significant age effects within the sample in the experiment.

Thus, we expect that the difference in trust levels between the survey and experiment to be largely due to the limited transferability between domains.

If we follow the notion that trust is partially transferable, which was the case with Tryg in the experiment, outside players can enter the industry of financial intermediation equipped with trust and complementary resources from their original domain. Saebi et al. (2019) point to the potential of tech firms with large customer bases such as Facebook, Google, Amazon and Apple leveraging their digital platforms to provide financial services as an add-on service to their value proposition.

As we pointed out in our theoretical foundation is that traditional financial intermediation is pressured by the emergence of multisided platform-based business models. Amazon, which was used in our experiment, is potentially such a firm in possession of complementary resources that could be leveraged within financial intermediation. In 2019, DNB expressed that Amazon was a potential actor they feared the most Lorentzen (2019). This highlights incumbent awareness and caution of new untraditional actors to financial intermediation.

Our main point regarding transferability of trust is that it provides an opening for outside players to enter and threaten incumbents in the industry. The aforementioned factors of transferability of trust, complementary resources from other domains and factors pushing towards disintermediation of finance could threaten incumbents future competitive position. Findings from our survey suggest that major tech firms Spotify and Apple score well in terms of trust. Both firms possess multi sided platform business models with large customer bases. Hypothetically, they could add a financial service on top of their current value proposition leveraging both trust in their brand and their customer reach to compete in financial intermediation. Insights from interviews on data driven tech firms confirmed that this is a potential scenario. Such firms, in addition to Amazon, would then pose a threat to incumbents in the future. Therefore, we suggest that partial transferability of trust between domains will negatively affect incumbents in the future of financial intermediation.

P3: Ability-based trust will become more important relative to integrity-based and benevelonance-based trust in the future of financial intermediation

Following the discontinuity that PSD2 has created, it potentially affects the value of

assets such as trust which incumbent firms possess. Past studies by Kaplan (2008); Anthony et al. (2016); Grodal and Suarez (2015) point to the fact that sociocognitive lenses affect perceptions of stakeholders and technology in periods of technological change. Hence, the perception of relative importance of the different trust dimensions could be altered as technological change, environmental uncertainty and new third party players are introduced to the market for banking and financial intermediation. If this is the case then the implied strategic advantage of trust that incumbent banks and financial intermediaries possess might no longer grant them a competitive advantage as the market changes.

Ability-based trust involves having a combination of skills, competencies and abilities that provides influence within a domain (Mayer et al., 1995). In our theoretical foundation, we presented factors which combined are putting pressure on traditional financial intermediation and might lead to disintermediation of finance. Frame et al. (2018) argues that these factors have led to industry innovation entailing changing products, services, processes and organizational structures. These factors include the rise of the internet, multi-sided business models, increased importance of user-data and regulatory changes. The combination of skills, competencies and abilities a financial intermediation requires today is therefore different from years past. The trend has led to banks and other financial intermediaries resembling tech firms more closely. As technological shocks occur it also affects the cognitive perceptions of consumers, in theory then affecting how they perceive trust levels or the relative importance between them. Hence, technological change affects both activities and competencies of firms and perception amongst consumers. We expect the aforementioned factors would lead to ability-based trust becoming more important for behavioral intention following technological change.

It is important to point out that trust is a multidimensional concept and that the dimensions in combination creates overall trust. However, changes in cognitive perception amongst actors in industries could change in times of technological change. Therefore, we suggest that the relative importance of the trust dimensions for financial intermediation could change amongst consumers as the industry evolves. Technological shocks contribute to blurr market boundaries, leading to domains becoming intertwined. In this sense it is logical to expect that the ability-based trust dimension is mainly affected as it is the most domain specific of the three. Thereby, ability-based trust would surpass integrity-based

trust in terms of importance in the future of financial intermediation. For this to happen then the existing factors pushing for financial disintermediation must continue to increase in order to spurr this change. If we allow ourselves to be speculative, this would lead to the integrity-based trust of incumbent financial intermediaries to decrease in its value relative to ability-based trust. Consequently, it would minimize incumbents' competitive advantage of integrity-based trust. Hence, newcomers empowered through blurred market boundaries with stronger ability-based trust would become more competitive against incumbents in financial intermediation. Insights from our interviews suggest that banking and financial intermediation is inching closer to tech-related domains due to an increase of data driven services. Furthermore, a driving force pushing for disintermediation of finance is multi-sided platform business models, data-driven technologies and an increasing value of consumer data. In addition, future consumer preferences will likely lean towards an all digital experience as younger generations solely interact with banking and financial services through apps. We expect these factors will contribute to increasing the relative importance of ability-based trust in financial intermediation going forward. Thereby, threatening the sustained competitive advantage incumbent financial intermediaries possess through integrity-based trust.

Lastly, as a side note we present one example in Norwegian financial intermediation that illustrates changes in consumers' cognitive perceptions following technological change. Vipps is one of Norway's most popular financial services, and widely used across the population. An interviewee explained that people were skeptical and had low levels of trust in Vipps initially. However, the service developed a strong enough value proposition over time which resulted in mass adoption. Data from our survey showed that Vipps scored highly in all three trust dimensions and tested as the most trustworthy brand. Our theoretical foundations suggest that new entrants can compete with incumbents as long they offer a service which is similar in the eyes of the consumer. One success factor for new entrants is providing a sufficient value proposition. However, our data suggests trust is an important factor for behavioral intention amongst consumers for financial intermediation services. As previously mentioned, accumulation of trust as a resource is indirectly affected by other resources and activities, due to its nature as an intangible resource. Thereby, by performing activities increasing the value proposition, trust can increase as an indirect effect. One interviewee suggested that if the value proposition

is sufficient, then it could compensate for an eventual lack of trust leading to consumer adoption. This also illustrates how consumers' cognitive perceptions on a technology and service changed, which in turn led to its increase in trust.

In our discussion we have focused on drawing on our theoretical foundation and our data to explore propositions based on our research question. We were able to use our data actively in order to discuss our two first propositions. Meanwhile, our third proposition discussion drew mainly on insights from our theoretical and qualitative interviews. We aimed to discuss important insights from our study, while utilizing a broad collection of data and theoretical background in combination to shed light on trust and its role in the future of financial intermediation.

6 Conclusion

In this final chapter of our thesis, first we will aim to answer our research question. Following this we will present managerial implications of our research. Lastly, we will present our suggestions for future research.

The goal of our research was to explore how trust affects financial mediation following the PSD2 regulation. We assumed that PSD2 was part of a technological shock to the industry of financial intermediation moving it into an era characterized by increased uncertainty. Trust, a multidimensional concept is an intangible asset that acts as a resource providing incumbent banks and financial intermediaries a competitive advantage facing new entrants following PSD2. First we presented our theoretical foundation connecting a plethora of research from different fields of study. The theoretical foundation was fundamental in developing our propositions which we would later discuss in light of our findings. Then, we performed a comprehensive data collection involving qualitative interviews, a survey and an experiment. We used this data for extensive analysis to generate findings which would contribute to research on financial intermediation and trust. Lastly we discussed our propositions in relation to our theoretical foundation and findings through our research.

A presumption prior to our study was that banks in Norway generally enjoy high levels of trust. This was confirmed in our interviews, and was supported by the data in our survey. In a practical sense this is positive for banks in Norway and their competitive position in future competition from new entrants to the market.

The next of our key findings was that integrity-based trust is most impactful on behavioral intention for use of financial services. This was also expected to be the case based on our theoretical background and was supported through the analysis of our experiment. This in turn benefits incumbents within financial intermediation and their competitive position in the market in the short term. Another key finding from our survey and experiment was that both integrity-based trust and benevolence-based trust was more transferable between domains than ability-based trust. Based on our theoretical foundation we suggest these findings will have a negative effect on incumbents in financial intermediation in the future. The reason for this is that outside players can enter the market and reap benefits by leveraging trust and complementary resources from their original domain within financial

intermediation. This combined with factors pressuring the disintermediation of finance indicates a future of increased competition from outside players for incumbents.

Lastly, we expect that integrity-based trust will decrease in its relative importance as financial services move further away from the domain of traditional financial intermediation services. The reason being that technological change affects activities and competencies that create ability-based trust as well as altering consumers cognitive perception. Furthermore, ability-based trust is the most domain specific of the three. Technological shocks create change within domains and blurred market boundaries. Therefore, we expect that in the future of financial intermediation ability-based trust will increase in importance, while the importance of integrity-based trust will be reduced relatively. This could have negative future implications for incumbents with integrity-based trust, while benefiting new entrants with strong ability-based trust.

We conclude that trust still is an integral resource within financial intermediation, which provides a competitive advantage for incumbents. Financial intermediation involves activities which still require trust. For the future of financial intermediation we expect that technological change will alter the dynamics of trust and its different dimensions as a resource, due to drivers of disintermediation of finance and changes in consumers' cognitive perception in reaction to technological change.

6.1 Managerial implications

In the following section, we will present the managerial implications based on the conclusions of our research.

We find that integrity-based trust is still the most important dimension for financial intermediation. This means that banks, who in general terms have high levels of integrity-based trust still have this competitive advantage and can leverage this trust as a resource.

In times following a technological shock the environmental uncertainty is high. Our research suggests that new entrants could provide viable financial intermediation services post PSD2. After the occurence of a technological shock incumbents are left with the decision whether or not to act on changes in their environment. Management of incumbents need to sense stirrings in their external environment and continuously try to innovate and

adapt as the market evolves. However, innovation and change requires both time and capital, as well as patience and acceptance for failure. There are multiple ways incumbents can attempt to facilitate innovation as for example through changes in organizational structures, alliances, partnerships or acquisitions. Established firms could acquire smaller fintechs with resources that could be complementary to existing inhouse resources and in turn increase their value proposition. In addition management needs to be aware that their existing resources value might be altered after a shock. Therefore, it is necessary to be aware of this factor and to continuously evaluate various resources' value as the market evolves.

Our study indicates that the trust is mainly domain specific, which is in line with arguments of Zand (1972). The domain we have studied is in close relation to banking and financial intermediation. Both the data and results gathered emphasizes the role of trust and its different dimensions in this domain. However, the factors pressuring towards financial disintermediation still loom large and will likely increase in the coming years. Naturally, innovation of technology and an increase in importance of multisided platforms are expected to continue its development in the future. Therefore, we expect that services in financial intermediation will continue its trajectory towards resembling technology services rather than traditional financial intermediation services. Thus, we expect this will impact trust as a resource in the future. As the domain moves further from traditional financial intermediation, prior established trust will be less transferable and its competitive advantage will no longer be a given. This should create concerns for management within incumbent financial intermediaries. They should be cautious not to overvalue the future value and transferability of their trust as the domain evolves. Especially, as we expect that integrity-based trust will be less important as services become further removed from traditional financial intermediation. Even though, incumbents currently have a competitive advantage through integrity-based trust.

6.2 Suggestions for future research

The goal for our study was to study how trust affects financial intermediation following PSD2. As we have studied the subject matter and applied a broad theoretical foundation, we have developed suggestions for future research based on our study.

We propose that a similar experiment should be conducted that would involve a larger group of brands and a diverse selection of respondents. By having a larger group of brands we mean having a larger amount of brands but also from different industries. Furthermore, we suggest having two or more brands acting as proxies for the three trust dimensions in comparison to one brand in our study. This provides the opportunity to study differences in transferability for specific the trust dimensions amongst the proxies. Consequently, by including more brands the risk of mono-operalizating effects is reduced as this was a limitation of our study. In regards to having a more diverse group of respondents it would be interesting to have a wider age range, as people of separate ages are likely to view brands differently. We suggest this would provide insight on if different brands or different types of trust affect behavioral intention of a financial service between separate age groups.

Another suggestion is that an experiment should be done solely with brands within financial intermediation. In our survey we discovered that although the bank brands included had high levels of trust, they scored differently along the three trust dimensions. In such a study we recommend using a variety of brands including international banks, large domestic banks, local banks, neo banks and other fintechs. This would provide findings on how trust differs amongst existing actors or groups in financial intermediation and its effect on behavioral intent.

One limitation of our research is that there were contrasting differences in terms of the average age of respondents between the survey and the experiment. This was an effect of using convenience sampling in the survey and fully randomized sampling in the experiment. Therefore, future research should involve conducting a similar study using the same respondent sample for the survey and the experiment. While effects of age were found to be relatively small, a more similar sample would mitigate the effects of age differences. In addition, it would study transferability of trust and its different dimensions between domains accurately amongst an identical group of respondents.

Our data suggests that there are differences in trust between age groups. Future research should pursue deeper studies on this phenomenon as it relates to use of financial intermediation services. Younger generations of consumers have a tightly knit relationship with use of technology and might only think of a bank as an app rather than institution,

in comparison to older generations. Therefore, a study focusing on these generational differences could find implications for the future of financial intermediation.

References

Aldas-Manzano, J., Ruiz-Mafe, C., Sanz-Blas, S., and Lassala-Navarre, C. (2011). Internet banking loyalty: evaluating the role of trust, satisfaction, perceived risk and frequency of use. *The Service Industries Journal*, 31(7):1165–1190.

Allen, F. and Santomero, A. M. (1997). The theory of financial intermediation. *Journal of Banking and Finance*, 21(11-12):1461–1485.

Alstyne, M. W. V., Parker, G. G., and Choudary, S. P. (2016). Pipelines, Platforms, and the New Rules of Strategy. *Harvard Business Review*, 94(4):54–62.

Amazon (2020). Annual Report. Technical report, Seattle, Washington. "https://s2.q4cdn.com/299287126/files/doc$_f$*inancials*/2021/*ar*/*Amazon* − 2020 − *Annual* − *Report.pdf*[*Accessed* : 20.05.2021]".

Anderson, P. and Tushman, M. L. (2001). Organizational Environments and Industry Exit: the Effects of Uncertainty, Munificence and Complexity. Technical report.

Anthony, C., Nelson, A. J., and Tripsas, M. (2016). Strategy Science "Who Are You?...I Really Wanna Know": Product Meaning and Competitive Positioning in the Nascent Synthesizer Industry. *Competitive Positioning in the Nascent Synthesizer Industry. Strategy Science*, 1(3):163–183.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*.

Barney, J. B. (1986). Strategic Factor Markets: Expectations, Luck, and Business Strategy. *Management Science*, 32(10):1231–1241.

Benston, G. J. and Smith, C. W. (1976). A Transactions Cost Approach to the Theory of Financial Intermediation. *The Journal of Finance*, 31(2):215.

BI (2020). Norsk Kundebarometer 2020. Technical report, BI, Oslo. "https://www.bi.no/globalassets/forskning/norsk-kundebarometer/presentasjon-nkb-2020-til-nedlasting.pdf[Accessed: 6.03.2021]".

Botta, A., Ulissi, T. J., Sasia, E., Digiacomo, N., Jain, R., and Oakes, L. (2018). Psd2 : Taking advantage of open- banking disruption psd2 : Taking advantage of open- banking

disruption. (January). "https://www.mckinsey.com/industries/financial-services/our-insights/psd2-taking-advantage-of-open-banking-disruption[Accessed:17.02.2021]".

Boyd, J. H. and Prescott, E. C. (1986). Financial intermediary-coalitions. *Journal of Economic Theory*, 38(2):211–232.

Chen, S. C. and Dhillon, G. S. (2003). Interpreting dimensions of consumer trust in e-commerce. *Information technology and management*, 4(2):303–318.

Cortet, M., Rijks, T., and Nijland, S. (2016). PSD2 : The digital transformation accelerator for banks. *Journal of Payments Strategy and Systems*, 10(1):13–27.

Daft, R. L. and Lengel, R. H. (1983). Organizations as Information Processing Systems. *Research in Organizational Behavior*, 6:191–233.

Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *Review of Economic Studies*, 51(3):393–414.

Dierickx, I. and Cool, K. (1989). Asset Stock Accumulation and the Sustainability of Competitive Advantage: Reply. *Management Science*, 35(12):1514–1514.

Dodds, W. B., Monroe, K. B., and Grewal, D. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *Journal of Marketing Research*, 28(3):307–319.

Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., and Wagner, G. G. (2005). Individual Risk Attitudes: New Evidence from a Large, Representative, Experimentally-Validated Survey.

Doney, P. M. and Cannon, J. P. (1997). An examination of the nature of trust in buyer–seller relationships. *Journal of marketing*, 61(2):35–51.

Eidem, M. (2019). Nå får bankene kamp om adgang til lommeboken din | DN. "https://www.dn.no/privatokonomi/psd2/teknologi/bank/na-far-bankene-kamp-om-adgang-til-lommeboken-din/2-1-509782[Accessed:23.05.2021]".

Ellingsen, C. C. (2018). The shock that doesn't hurt (yet) : a case study of how the second payment service directive is changing the Norwegian banking industry. "https://brage.bibsys.no/xmlui/handle/11250/2560912[Accessed:15.02.2021]".

Ennew, C. and Sekhon, H. (2007). Measuring trust in financial services: The Trust Index. *Consumer Policy Review*, 17(2):62.

European Commission (2019). Payment services. "https://ec.europa.eu/info/business-economy-euro/banking-and-finance/consumer-finance-and-payments/payment-services/payment-services$_e$n[*Accessed* : 19.05.2021]".

European Union (2015). Directive (EU) 2015/2366. *Official Journal of the European Union*.

Fama, E. F. (1980). Banking in the theory of finance. *Journal of Monetary Economics*, 6(1):39–57.

Featherman, M. S. and Pavlou, P. A. (2003). Predicting e-services adoption: a perceived risk facets perspective. *International journal of human-computer studies,*, 59(4):451–474.

Flavián, C., Guinalíu, M., and Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information management*, 43(1):1–44.

Frame, S. W., Wall, L., and White, L. J. (2018). Technological Change and Financial innovation in Banking: Some implications for Fintech. *Federal Reserve Bank of Atlanta, Working Papers*.

Gefen, D., Karahanna, E., and Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS quarterly*, pages 51–90.

Gorton, G. and Winton, A. (2003). Chapter 8 Financial intermediation. In *Handbook of the Economics of Finance*, volume 1, pages 431–552. Elsevier B.V.

Grodal, S. and Suarez, F. F. (2015). The Coevolution of Technologies ans Categories During Industry Emergence. *Q Academy of Management Review*, 40(3):423–445.

Gurley, J. G. and Shaw, E. S. (1956). Financial Intermediaries and the Saving-Investment Process. *The Journal of Finance*, 11(2):257.

Hagiu, A. and Wright, J. (2015). Multi-sided platforms. *International Journal of Industrial Organization*, 43:162–174.

Hauklien, K. G. and Hansen, K. S. (2019). Er de gamle bankene fortsatt eldst ?

IBM (2021). Transforming different likert scales to a common scale. "https://www.ibm.com/support/pages/transforming-different-likert-scales-common-scale[Accessed: 19.05.2021]".

Itera and DNX (2020). Fra Hype til Handling. Technical report, Oslo.

Jensen, M. C. and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, pages 77–132.

Johnson, B. and Christensen, L. (2017). *Educational Research Quantitative, Qualitative, and Mixed Approaches*. Sage, Thousand Oaks, California, 6th edition.

Kaplan, S. (2008). Framing Contests: Strategy Making Under Uncertainty. *Organization Science*, 19(5).

Kaplan, S. and Tripsas, M. (2008). Thinking about technology: Applying a cognitive lens to technical change. *Research Policy*, 37(5):790–805.

Li, Y. (2014). The impact of disposition to privacy, website reputation and website familiarity on information privacy concerns. *Decision support systems*, 57:343–354.

Lien, L. B., Knudsen, E. S., and Baardsen, T. Ø. (2016). *Strategiboken*. Fagbokforlaget, Bergen.

Lorentzen, M. (2019). DNB-topp frykter Amazon mest av alle: At vi må jobbe hardt er det ingen tvil om. "https://e24.no/teknologi/i/Xg9wPm/dnb-topp-frykter-amazon-mest-av-alle-at-vi-maa-jobbe-hardt-er-det-ingen-tvil-om[Accessed:19.05.2021]".

Mayer, R. C., Davis, J. H., and Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. *Academy of Management Review*, 20(3):709–734.

McFall, L. (1986). Integrity. 98(1):5–20. "https://www.jstor.org/stable/2381289metadata$_i nfo_t ab_c ontents$ 13.05.2021]".

Merton, R. C. (1992). Financial Innovation and Economic Performance. *Journal of Applied Corporate Finance*, 4(4):12–22.

Mitchell, V. (1999). Consumer perceived risk: conceptualisations and models. *European Journal of Marketing*, 33(1/2):163–195.

Moran, K. and Cesaire, M. (2003). Bank Capital , Agency Costs , and Monetary

Policy. pages 1–45. "https://www.bankofcanada.ca/wp-content/uploads/2010/02/wp04-6.pdf[Accessed:29.04.2021]".

Norstat (2020). Personvernserklæring. "https://norstat.no/personvernerklaering[Accessed:28.04.2021]".

Oliveira, T., Alinho, M., and Dhillon, G. (2017). Modelling and testing consumer trust dimensions in e-commerce. *Computers in Human Behaviour*, 71:153–164.

Omarini, A. E. (2018). Banks and Fintechs: How to Develop a Digital Open Banking Approach for the Bank's Future. *International Business Research*, 11(9):23.

Roy, M. C., Dewit, O., and Aubert, B. A. (2001). The impact of interface usability on trust in web retailers. *Internet Research*, 11(5):388–398. "https://doi.org/10.1108/10662240110410165[Accessed:20.05.2021]".

Saebi, T., Knudsen, E. S., and Angelshaug, M. (2019). Nye forretningsmodeller i bank og finans: Muligheter og trusler - Magma. "https://www.magma.no/nye-forretningsmodeller-i-bank-og-finans-muligheter-og-trusler[Accessed:18.04.2021]".

Saunders, M., Lewis, P., and Thornhill, A. (2016). *Research Methods For Business Students*. Pearson Education Limited, seventh ed edition.

Scholtens, B. and Van Wensveen, D. (2000). A critique on the theory of financial intermediation. *Journal of Banking and Finance*, 24(8):1243–1251.

Siguaw, J. A., Simpson, P. M., and Baker, T. L. (1998). Effects of supplier market orientation on distributor market orientation and the channel relationship: the distributor perspective. *Journal of marketing*, 62(3):99–111.

Teece, D. J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*.

Tripsas, M. (1997). Unraveling the Process of Creative Destruction: Complementary Assets and Incumbent Survival in the Typesetter Industry. *Strategic Management Journal*, 18:119–142.

Tushman, M. L. and Anderson, P. (1986). Technological Discontinuities and Organizational Environments. *Administrative Science Quarterly*, 31(3):439–465.

van Esterik-Plasmeijer, P. W. and van Raaij, W. F. (2017). Banking system trust, bank trust, and bank loyalty. *International Journal of Bank Marketing*, 35(1):97–111.

Zand, D. E. (1972). Trust and Managerial Problem Solving. 17(2):229–239. "https://www.jstor.org/stable/2393957[Accessed:29.04.2021]".

Appendix

Table A0.1: Linear regression including dummies for savings and education

	Dependent variable:
	Behavioral intention
trust_int	0.317^{***}
	(0.098)
trust_ben	0.208^{***}
	(0.068)
trust_abi	0.238^{***}
	(0.090)
age	-0.011^{**}
	(0.006)
gender	-0.133
	(0.137)
cred	-0.199
	(0.191)
mort	-0.177
	(0.152)
brand_fam	0.045
	(0.042)
tech_fam	0.114
	(0.087)
fin_fam	0.004
	(0.057)
per_fit	0.134^{**}
	(0.053)
edu_high_d	0.498
	(0.313)
edu_bach_d	0.380
	(0.313)
edu_mast_d	0.292
	(0.327)
sav_100_250_d	-0.147
	(0.177)
sav_250_1000_d	-0.168
	(0.172)
sav_1000_d	-0.069
	(0.241)
Constant	-0.148
	(0.580)
R^2	0.472
Adjusted R^2	0.450
Residual Std. Error	1.343 (df = 408)
F Statistic	21.441^{***} (df = 17; 408)

Figure A0.1: Survey

Introductory message

Denne spørreundersøkelsen er laget i forbindelse med en masterutredning på Norges Handelshøyskole.

Formålet med undersøkelsen er å kartlegge grad av tillit og oppfattet risiko til ulike merker.

Spørreundersøkelsen er anonym, og det vil ikke bli mulighet til å identifisere svarene ved en senere anledning.

Det vil ta ca. 10 minutter å gjennomføre den.

Det anbefales at du sitter på et sted uten distraksjoner.

For å kunne få et presist resultat blir det satt stor pris på dersom alle spørsmålene blir svart på.

Dersom du har noen spørsmål, kan du sende mail til: kjersti.sveen@student.nhh.no eller ta kontakt via telefon: 41406110.

Tusen takk for hjelpen!

Med vennlig hilsen,
Nikolai Kaldahl-Miller
Aleksander Skugstad
Kristian Gjønnes
Kjersti T. Sveen

Description of the project

Beskrivelse av prosjektet

I dette prosjektet vil du bli presentert for ulike kjente merkevarer. Som respondent vil din rolle være å evaluere de forskjellige merkene ut ifra dine holdninger og tanker.

For å svare på spørsmålene må du oppgi i hvilken grad du er enig i påstandene du blir presentert for.

Det er ingen riktige svar på denne undersøkelsen. Målet er å fange din subjektive oppfatning av merkevaren.

For å få så gode resultater som mulig er det viktig at du svarer på alle spørsmålene.

Questions (Answered on a 7-point Likert-scale)

- Jeg opplever at dette merket klarer å levere det de lover kundene sine
- Jeg opplever at merket har ressursene som kreves for å levere tjenestene sine
- Jeg opplever at dette merket har svært høy kompetanse
- Jeg opplever at dette merket har kundenes interesser i fokus
- Jeg opplever at dette merket prøver å utnytte kundene sine
- Jeg opplever at dette merket bryr seg om ettervirkningene deres tjenester kan ha på kundene sine
- Jeg opplever at dette merket forsøker å oppfylle det de lover til kundene sine
- Jeg opplever at dette merket oppgir pålitelig informasjon
- Jeg opplever at dette merket opptrer på en transparent måte
- Mitt inntrykk er at merkets tjenester ikke alltid fungerer som den skal
- Mitt inntrykk er at dette merket har trege tjenester
- Mitt inntrykk er at teknologien til merket fungerer dårlig
- Mitt inntrykk er at jeg risikerer å tape penger dersom jeg velger dette merket
- Mitt inntrykk er at ved å velge dette merket vil det koste meg mer enn nytten det gir meg
- Tanken på å måtte benytte meg av merket skaper stress
- Jeg opplever at det er ikke trygt å oppgi personopplysninger til dette merket
- Mitt inntrykk er at dette merket bruker personopplysninger uten samtykke
- Mitt inntrykk er at dette merket ikke er flinke nok til å beskytte mot cyberangrep

Control variables

Alder

- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70+

Livssituasjon

- Skoleelev på VGS eller Ungdomsskolen
- Student
- I arbeid
- Hjemmeværende/arbeidsledig/uføretrygdet
- Pensjonist

År med fullført høyere utdanning

- Ingen
- 1 – 2
- 3 – 4
- 5 eller mer

Årlig inntekt

- < 300 000 kr
- 300 000 kr – 450 000 kr
- 451 000 kr – 650 000 kr
- > 650 000 kr

Se for deg at du vinner 10 000kr i et lotteri. Du får så muligheten til å investere disse pengene i et selskap med 50% sjanse for at du taper summen du investerer og 50% sjanse for at du dobler summen du investerer. Hvor mye av de 10 000kr du nettopp har vunnet ville du investert i dette selskapet?

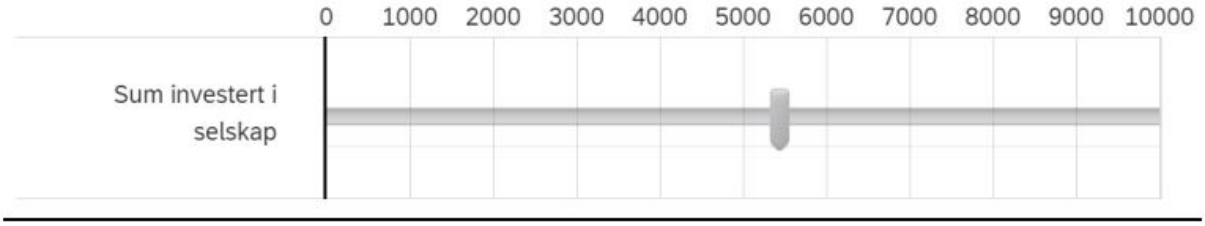


Figure A0.2: Experiment Questionnaire

Introductory message

Tusen takk for at du ønsker å delta i vår spørreundersøkelse. Denne undersøkelsen er laget i forbindelse med en masterutredning på Norges Handelshøyskole.

Formålet med undersøkelsen er å kartlegge kundereaksjoner og holdninger til en ny finansiell tjeneste.

Som deltaker kommer vi til å vise deg noen skjermbilder av den finansielle tjenesten. Det er viktig at du leser forklaringen til skjermbildene godt før du svarer på de tilhørende spørsmålene.

Spørreundersøkelsen er anonym, og det vil ikke bli mulighet til å identifisere svarene ved en senere anledning.

Undersøkelsen vil ta ca. 10 minutter å gjennomføre. Det er viktig at undersøkelsen gjennomføres alene på et sted uten distraksjoner.

For å kunne få et presist resultat blir det satt stor pris på dersom alle spørsmålene blir svart på.

Dersom du har noen spørsmål, kan du sende mail
til: kjersti.sveen@student.nhh.no eller ta kontakt via telefon: 41406110.

Tusen takk for hjelpen!

Med vennlig hilsen,
Nikolai Kaldahl-Miller
Aleksander Skugstad
Kristian Gjønnes
Kjersti T. Sveen

Control variables

Alder

- Drop down menu with ages 20 or under to 76 +

Høyest fullført utdanning

- Grunnskole
- Videregående skole
- Bachelorgrad
- Mastergrad eller høyere

Har du boliglån?

- Ja
- Nei

Har du kredittkort?

- Ja
- Nei

Hvor mye oppsparte midler har du? (oppgitt i NOK)

- 0 – 99 999
- 100 000 – 250 000
- 250 000 – 1 million
- > 1 million

Information on the following questions and how to answer them using a 7-point Likert-scale

Før du blir introdusert til den tenkte finansielle tjenesten, vil du få noen spørsmål om hvordan du er som person, og dine holdninger til teknologi, finansielle tjenester og den aktuelle merkevaren.

Spørsmålene skal besvares ved hjelp av en skala fra 1 (i svært **liten** grad) til 7 (i svært **stor** grad). Sett kryss i den ruten du mener stemmer best med din oppfatning.

Questions (Answered on a 7-point Likert-scale)

- Jeg kjenner godt til AI (Kunstig Intelligens)
- Andre folk kommer til meg for å spørre om råd angående nye teknologiske produkter
- Blant mine venner er jeg en av de første til å bruke produkter med ny teknologi
- Jeg liker teknologi som tilpasser seg mitt behov
- Av og til tenker jeg at teknologi ikke er laget for at vanlige folk skal kunne bruke det
- Det er generelt utrygt å gjøre finansielle transaksjoner over internett
- Jeg har høy kunnskap om finansielle tjenester
- Jeg har høy kunnskap om digitale finansielle tjenester
- Jeg pleier generelt å stole på andre
- Jeg pleier å tenke det beste om folk

Hypothetical scenario meant to measure Disposition to risk

Se for deg et spill der du starter med 6 000 kroner. Beløpet du velger under vil med 50% sannsynlighet legges til, og med 50% sannsynlighet trekkes fra de 6 000 kronene. Hvilket beløp velger du? (Flytt slideren til hvilket som helst beløp mellom 0 og 6000)

The brand providing the Fintech app is now presented with a logo and an explanation that the following questions the respondents attitude towards the brand.

For de neste kommende spørsmålene ønsker vi å kartlegge dine tanker og holdninger til **merket.**

[Picture of the brand logo]

Questions regarding attitudes towards brand (Answered on a 7-point Likert-scale)

- Hvor godt kjenner du til dette merket?
- Hvor godt kjenner du til produktene til dette merket?

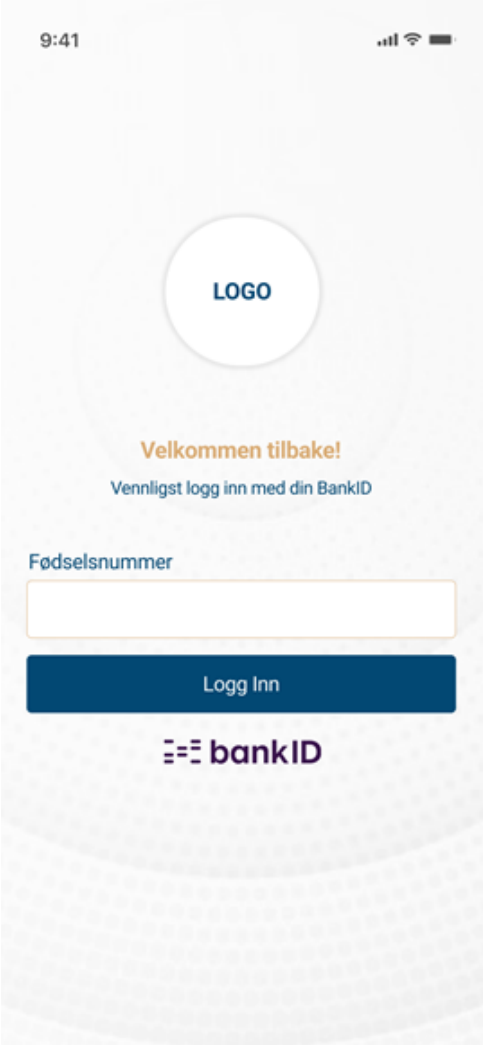
Explanatory text before presentation of the Fintech App

Forklaringstekst før visning av finansiell tjeneste

Du vil nå bli presentert for den finansielle appen. Appen kan ved hjelp av data og kunstig intelligens finne hvilket boliglån, kredittkort og sparing som er best for deg. Appen vil automatisk flytte dine lån, kredittkort og sparepenger mellom ulike tilbydere.

Presentation of the Fintech App

Her ser du påloggingssiden til den finansielle tjenesten. For å få tilgang må du logge deg på med BankID.



Skjermbildene nedenfor viser eksempler på handlinger som kan utføres av tjenesten.

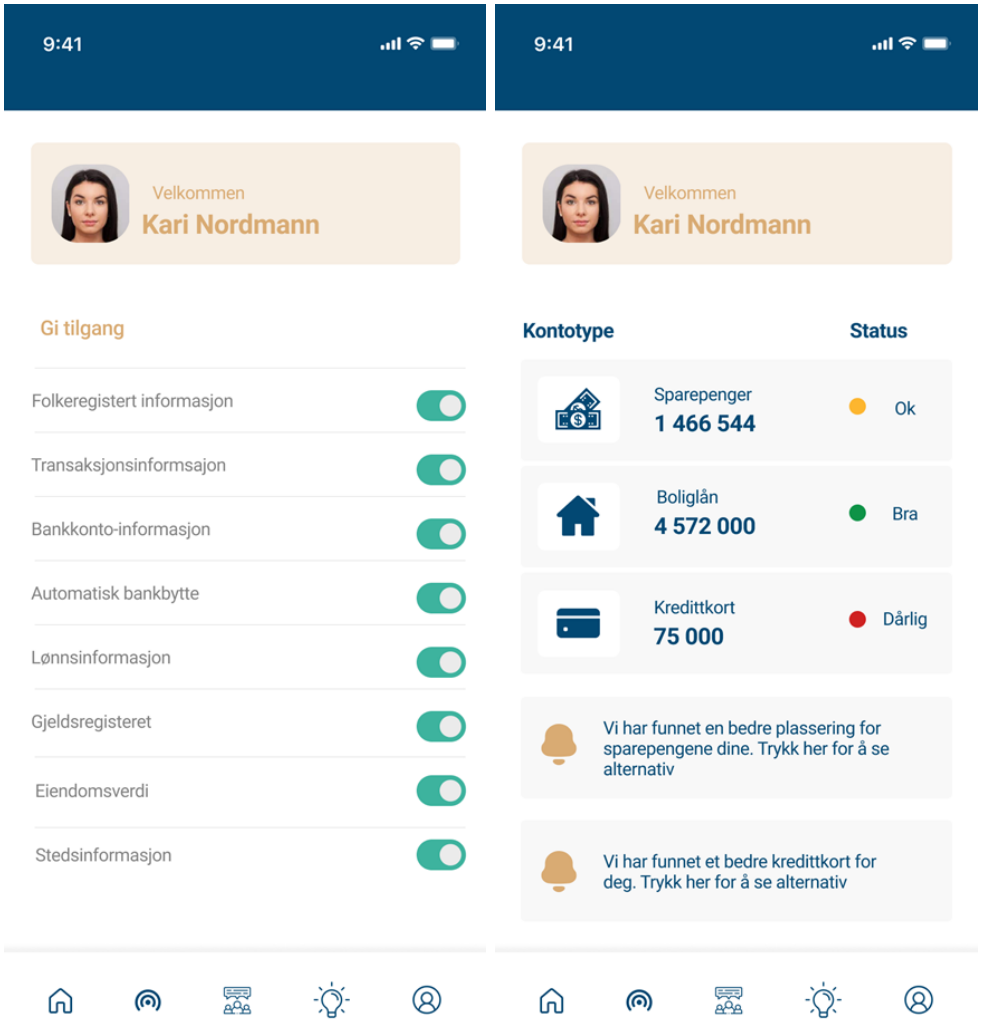
For å at tjenesten skal fungere optimalt **er det viktig at du gir appen tilgang til diverse informasjon om din finansielle situasjon**. Dette illustreres på bildet til venstre.
På bildet til høyre ser du **en oversikten over status på sparing, lån og kredittkort**. Her ser vi at sparing er tilfredsstillende, men at vilkårene på boliglån og kredittkort er dårlige.

Fortsett videre når du har blitt godt kjent med bildene.

Skjermbildene nedenfor viser eksempler på handlinger som kan utføres av tjenesten.

For å at tjenesten skal fungere optimalt **er det viktig at du gir appen tilgang til diverse informasjon om din finansielle situasjon**. Dette illustreres på bildet til venstre.
På bildet til høyre ser du **en oversikten over status på sparing, lån og kredittkort**. Her ser vi at sparing er tilfredsstillende, men at vilkårene på boliglån og kredittkort er dårlige.

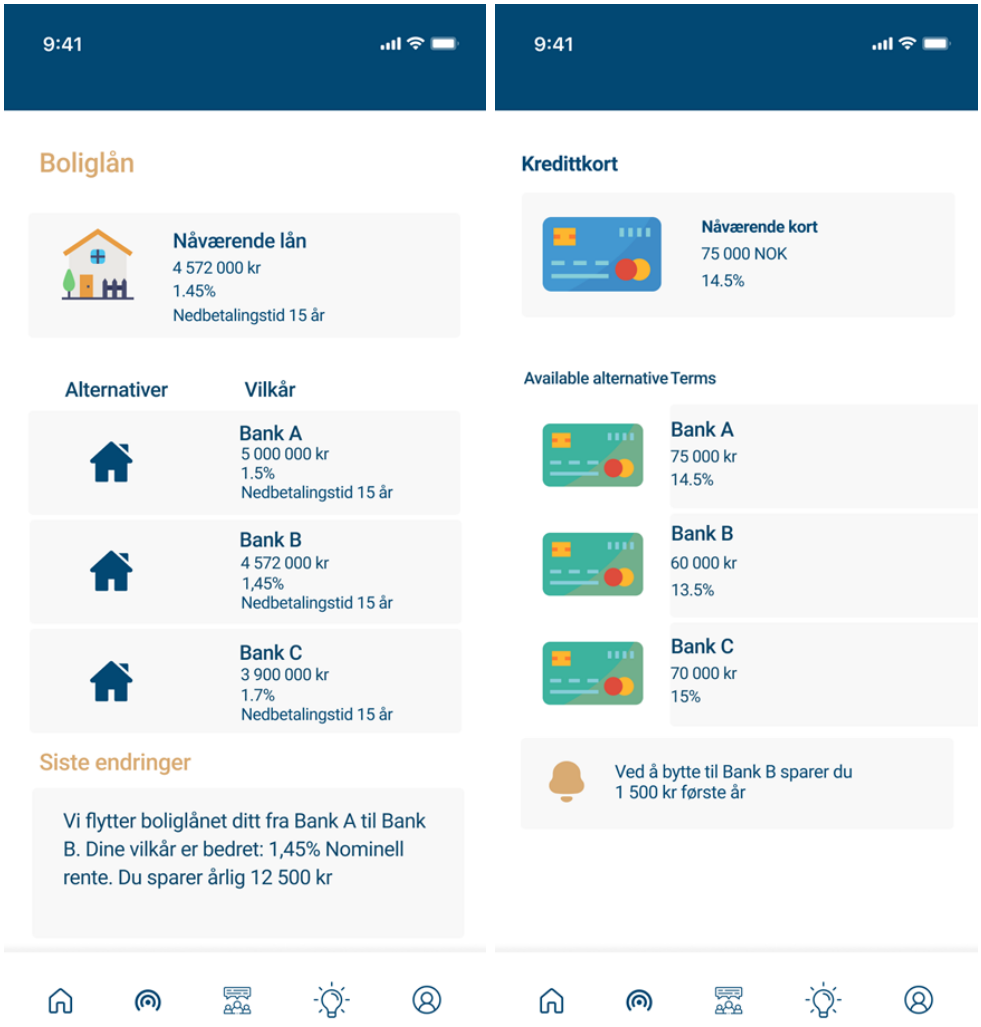
Fortsett videre når du har blitt godt kjent med bildene.



På bildet nedenfor til venstre: boliglånstjenesten ser at du kan få bedre vilkår ved å flytte lånet ditt, og **flytter boliglånet ditt automatisk** fra bank A til bank B.

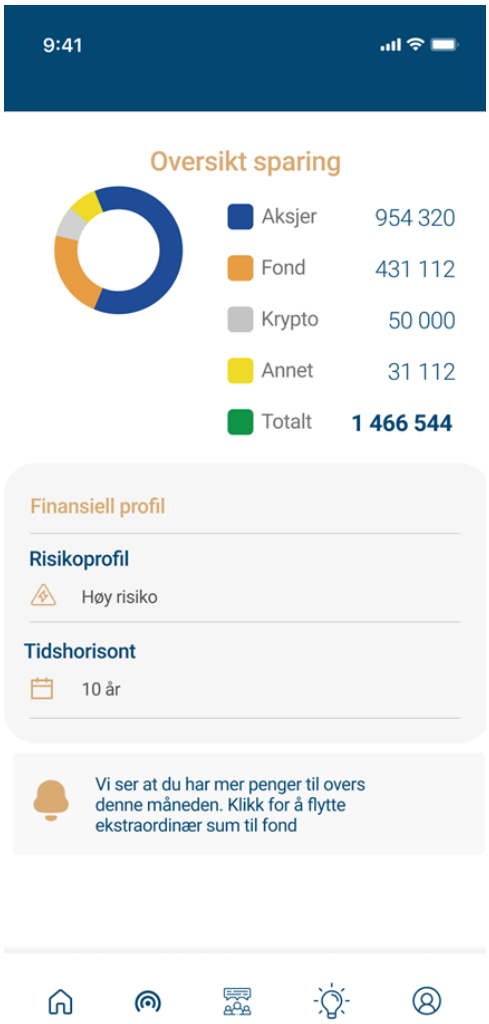
På bildet nedenfor til høyre: Kredittkorttjenesten ser at ditt nåværende kort ikke optimalt for deg, og **flytter kredittkortet ditt** fra bank A til bank B slik at du sparer penger.

Fortsett videre når du har blitt godt kjent med bildene.



Sparetjenesten til appen, som er på bildet under, har funnet at du har penger til overs denne måneden, og **investerer pengene dine automatisk** i fond der den tror du kan få bedre avkastning enn ved å ha pengene stående på konto.

Fortsett videre når du har blitt godt kjent med bildene og har forstått hva tjenesten gjør.


9:41
Oversikt sparing
Aksjer 954 320
Fond 431 112
Krypto 50 000
Annet 31 112
Totalt 1 466 544
Finansiell profil
Risikoprofil
Høy risiko
Tidshorisont
10 år
Vi ser at du har mer penger til overs denne måneden. Klikk for å flytte ekstraordinær sum til fond

Control question to confirm understanding of the Fintech app

For å kontrollere at du har forstått tjenesten du nettopp har sett over, skal du nå velge hvilken av disse setningene som best forklarer tjenesten

- Den finansielle tjenesten gir meg oversikt over min finansielle situasjon, og kan flytte mine lån, kredittkort og sparepenger
- Den finansielle tjenesten gir meg kun oversikt over mine kredittkort
- Den finansielle tjenesten kan kun flytte lånet mitt

Explanatory text on the following questions on the Fintech app

Du har nå blitt introdusert til en ny finansiell tjeneste levert av Prisjakt.
Videre i undersøkelsen ønsker vi å kartlegge dine holdninger til denne tjenesten.

[Logo of the brand]

Questions on the Fintech app (Answered on a 7-point Likert-scale)

- Jeg er positiv til denne tjenesten
- Denne tjenesten er attraktiv
- Jeg hadde tatt i bruk denne tjenesten hvis den kom på markedet
- Jeg er villig til å oppgi personlig informasjon til denne tjenesten, slik at den kan finne optimale produkter for meg
- Jeg kommer til å angre på å ha valgt denne tjenesten?
- Dersom det viser seg at jeg taper penger på denne tjenesten, i hvilken grad ville jeg ha angret på å ha tatt i bruk denne tjenesten?

Questions regarding the brand in relation to the Fintech app (Answered on a 7-point Likert-scale)

- Denne tjenesten passer til merkevaren
- Det er logisk at dette merket leverer denne tjenesten
- Jeg ser på dette merket som kreativt
- Jeg ser på dette merket som fremtidsrettet
- Jeg ser på dette merket som dyktig
- Jeg ser på dette merket som kompetent

Questions regarding the Fintech app (Answered on a 7-point Likert-scale)

- Denne tjenesten har tilstrekkelig med kompetanse for å finne de beste betingelsene for meg
- Denne tjenesten vil over tid tilpasse seg meg og mine finansielle behov
- Denne tjenesten oppgir pålitelig informasjon
- Denne tjenesten vil holde løftene den gir meg
- Denne tjenesten sin primærintensjon er å hjelpe meg
- Denne tjenesten ønsker genuint at jeg skal være fornøyd
- Det er en stor sannsynlighet for at jeg taper penger ved å bruke denne tjenesten
- Ved å bruke denne tjenesten vil jeg bekymre meg for å ha gjort en dårlig

- Jeg føler meg **ikke** trygg når jeg oppgir informasjon til denne tjenesten
- Denne tjenesten vil **ikke** evne å beskytte mine personopplysninger
- Denne tjenesten kan **ikke** garantere sikker flyt av min personlige informasjon
- Tjenesten har **ikke** ressurser eller kompetanse til å unngå at hackere får tilgang til systemet
- Overordnet er tillit til leverandøren viktig når jeg velger en tjeneste til å plassere mine penger

---

Closing message regarding the questionnaire, the brand and fictitious Fintech app

En beskjed før du kan trykke deg videre og avslutte undersøkelsen.

Vi informerer om at den finansielle tjenesten du ble presentert er fiktiv, og utviklet av masterstudenter ved NHH for å undersøke hvordan ulike ikke-finansielle merkevarer scorer på opplevd tillit og risiko når de leverer en finansiell tjeneste. Så langt vår kunnskap går, inngår det ikke i merkevaren sine planer å lansere en slik tjeneste og merkevaren har ingen tilknytning til dette eksperimentet.

- o Jeg har lest og forstått dette

Table A0.2: Analysis of moderating effects between brands and trust dimensions

	Dependent variable:					
	Behavioral intention					
	(1)	(2)	(3)	(4)	(5)	(6)
Amazondummy	0.129	0.051	−0.150	−0.418**	−0.417**	−0.425**
	(0.397)	(0.391)	(0.350)	(0.170)	(0.168)	(0.169)
Prisjaktdummy	−0.145	−0.149	−0.157	−0.578	−0.733*	−0.607
	(0.163)	(0.163)	(0.163)	(0.409)	(0.398)	(0.369)
trust_abi	0.254***	0.298***	0.248***	0.254***	0.197**	0.254***
	(0.090)	(0.099)	(0.090)	(0.090)	(0.095)	(0.090)
trust_ben	0.211***	0.209***	0.240***	0.206***	0.206***	0.170**
	(0.067)	(0.067)	(0.077)	(0.068)	(0.067)	(0.074)
trust_int	0.337***	0.286***	0.289***	0.260**	0.301***	0.292***
	(0.102)	(0.097)	(0.097)	(0.101)	(0.097)	(0.097)
age	−0.012**	−0.012**	−0.012**	−0.012**	−0.012**	−0.012**
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
gender	−0.154	−0.161	−0.153	−0.150	−0.156	−0.150
	(0.135)	(0.136)	(0.136)	(0.135)	(0.135)	(0.135)
cred	−0.218	−0.227	−0.212	−0.215	−0.208	−0.220
	(0.187)	(0.187)	(0.187)	(0.187)	(0.187)	(0.187)
mort	−0.194	−0.203	−0.198	−0.210	−0.214	−0.197
	(0.146)	(0.145)	(0.146)	(0.145)	(0.145)	(0.145)
tech_fam	0.136	0.128	0.118	0.117	0.121	0.118
	(0.087)	(0.086)	(0.086)	(0.085)	(0.085)	(0.085)
brand_fam	0.031	0.035	0.034	0.030	0.033	0.029
	(0.042)	(0.042)	(0.043)	(0.043)	(0.042)	(0.043)
fin_fam	0.004	0.008	0.008	0.010	0.011	0.012
	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)
per_fit	0.111**	0.115**	0.114**	0.114**	0.113**	0.111**
	(0.055)	(0.054)	(0.055)	(0.054)	(0.054)	(0.055)
Amazondummy:int	−0.156					
	(0.109)					
Amazondummy:abi		−0.130				
		(0.105)				
Amazondummy:ben			−0.073			
			(0.094)			
Prisjaktdummy:int				0.116		
				(0.106)		
Prisjaktdummy:abi					0.163	
					(0.105)	
Prisjaktdummy:ben						0.124
						(0.093)
Constant	0.272	0.314	0.423	0.665	0.690	0.684
	(0.553)	(0.552)	(0.542)	(0.538)	(0.533)	(0.536)
R^2	0.476	0.475	0.474	0.475	0.476	0.475
Adjusted R^2	0.458	0.457	0.456	0.457	0.458	0.457
Residual Std. Error (df = 411)	1.333	1.334	1.335	1.334	1.332	1.333
F Statistic (df = 14; 411)	26.636***	26.565***	26.437***	26.520***	26.688***	26.597***