Fintech firms and incumbent banks: competition or collaboration?

What factors impact how and why fintech firms and traditional banks decide the extent to collaborate with each other in the peer-to-peer lending sector in Norway?

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Preface

We are currently master students at the business administration program, specializing in international management at the University of Agder in Kristiansand, Norway. We decided to write our master thesis about the Norwegian fintech sector, since it has grown from a narrow area of interest to become a major area of interest in Norway.

We are grateful to our supervisor, Rotem Shneor, for stimulating discussions, comments on early drafts, patience, advice and guidance throughout the research process. Additionally, we could not have accomplished our master thesis without our enthusiastic readers, Pricilla Serwaah and Olav Heggland, each of whom gave us valuable input during the writing process.

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Abstract

Introduction: The fintech sector has grown from a narrow area of interest to become a major area of interest in Norway. Fintech firms and traditional banks seem to have a symbiotic relationship, with their complementary strengths contributing to the success of both parties. This paper therefore studies the factors that impact the extent of collaboration between fintech firms and traditional banks, focusing on the peer-to-peer crowdlending sector in Norway.

Methods: We adopted a qualitative research design, using multiple-case study analysis. Through a purposive sampling technique, we identified and carefully selected four fintech firms and three incumbent banks. We selected three scenarios: (1) those who have been chosen to remain separate (no collaboration between fintech firms and traditional banks), (2) collaborate as allies, choosing a strategic alliance strategy, or (3) selected a Mergers and Acquisitions strategy. We conducted seven in-depth interviews in total, by using semi-structured interviews in an attempt to answer the research question. We created a coding tree that helped us to both analyze the studied cases and eventually aid in a cross-case comparison analysis. In order to achieve triangulation and consistency concerning our findings, we collected complementary information through multiple sources: in-depth interviews and archival documents such as company websites, business reports and the news.

Results: We have developed two research models from both the fintech firms' and the banks' perspective. Our final model, from the fintech firms' perspective, includes the following factors; regulation, trust, customer-centric approach, organizational cultural fit, strategic fit, innovation, capital, brand image, growth and expertise. From the banks' perspective, we have identified the following factors; regulation, customer-centric approach, financial inclusion, organizational cultural fit, strategic fit, innovation, survivability, brand image, growth, risk management, expertise and profitability.

Conclusions: Some identified factors support earlier findings in the academic

literature, while others contradict earlier findings. Additionally, we have identified factors that to the best of our knowledge, have not yet been identified in the literature, concerning the studied phenomenon. Hence, we suggest that these newly identified factors should be further investigated in a quantitative study.

Innholdsfortegnelse

Introduction

Fintech firms seek to develop and automate the use and distribution of financial services. The core of fintech is to help business owners, corporations and customers better handle their financial transactions, operations and lives by taking advantage of algorithms and specially designed software that are used in PCs and smartphones. (Kagan, 2019) The word fintech is a combination of two words which is “financial¨ and ¨technology”. Fintech is concerned with how banks operate and raising the stakes for competition between the parties (Kagan, 2019). According to Kagan (2019), the fintech sector includes activities such as: investment management, retail banking, lending and borrowing, money transfers/payments, fundraising, as well as making wealth management more efficient and effective and more.

Traditional banks have established a solid heritage of procedures in their activities. This applies to compliance, workflow and products, as well as their corporate culture. The culture of most traditional banks is not quite open to novelty, technology and innovation. A cultural change requires introducing a brand-new set of beliefs by the top management that might endanger banks’ most valuable assets: trust and reputation. (Gromek, 2018) Fintech firms compared to traditional banks do not share the same limitations. Fintech firms often have little to lose and are therefore more prone to defaulting. Their incomes are much thinner than that of banks and these incomes typically arise from a single source. Fintech firm’s software has also been coded recently, so they do not have to strive with steering through interoperability problems, which is usually associated with technologies developed decades ago. Fintech firms are more customer-centric, agile and creative, and has the ability to figure out customer complications in innovative ways. However, despite all these advantages mentioned above, the fintech sector have yet to gain the reputation and trust needed for its survival. This is where the traditional banks may come into play – with the fintech firms’ impressive innovation and the banks’ consistency and trustworthiness, they can both benefit from this symbiotic relationship and establish a successful collaboration. (Gromek, 2018; Ziegler, Shneor, Garvey, Wenzlaff, Yerolemou, Rui & Zhang 2018, p. 40)

There are two types of fintech firms. The ones which are willing to compete with traditional banks by offering substitute services, and the ones which are willing to collaborate by offering complementary services that will enhance the position of the traditional banks. Although a greater proportion of investments are going into competitive fintech companies, there is a clear growing trend worldwide towards a collaboration between fintech firms and traditional banks (Skan, Dickerson & Gagliardi 2016, p. 5)

Accordingly, we have conducted in-dept interviews with four fintech firms and three traditional banks, in attempt to study and identify what factors impact the extent of collaboration between fintech firms and banks, focusing on the peer-to-peer lending sector in Norway. Finally, we have developed two research models, one from the fintech firms' perspective and other from the banks' perspective. To the extent of our knowledge, we are perhaps one of the first to study this phenomenon from both perspectives. Thus, we have proposed factors that may have an impact on the extent of collaboration between fintech firms and banks, focusing on the peer-to-peer lending sector in Norway. Some identified factors support earlier findings in the academic literature, while others contradict earlier findings. Additionally, we have identified factors that, to the best of our knowledge, have not yet been identified in the literature, concerning the studied phenomenon. Hence, we suggest that these newly identified factors should be further researched in a quantitative study.

We believe our study can benefit both fintech firms and traditional banks on a potential collaboration decision. Secondly, we hope our research can contribute to help both parties understand which factors play a role, when the actual collaboration takes place. Thirdly, we hope this paper will contribute to increase the level of trust among the Norwegian regulators, and by that, help the Norwegian fintech sector with their longlasting battle in receiving a proper regulatory framework. Beyond that, we hope our master thesis can be informative for scholars and encourage further research.

Literature Review

Our research question is as follows:
What factors impact how and why fintech firms and traditional banks decide the extent to collaborate with each other in the peer-to-peer lending sector in Norway?

We started our literature review in order to identify dependent and independent variables. The first stage of the browsing process was using different keywords related to our problem statement, in order to find relevant academic articles and financial reports. We used keywords and phrases, such as crowdfunding, crowdfunding in Norway, relationship between banks and fintech firms, competition / cooperation / coopetition between banks and fintech firms, fintech firms in Norway, peer-to-peer lending in Norway, disruptive financial innovations, regtech, the impact of fintech on banking, etc. We conducted searches in the following databases: Ebsco, Scopus, ISI and Google Scholar, and ended up with 21 articles and reports. First, we looked for articles regarding crowdfunding as an alternative phenomenon, and whether it is perceived as a disruptive or a complementary service to the traditional lending services provided by the banks. Thereafter, in order to narrow it down and find articles which would shed more light on the current state between peer-to-peer lending platforms and the banking sector, we read various reports, such as “World Fintech Report 2018”, “The 3rd European alternative finance industry report” and ¨The Global Findex Database 2017¨. Additionally, in order to have a better understanding and overview of the different players in the Norwegian crowdfunding industry in particular, we attended the conference “Crowdfunding 2019” in Oslo, Norway.

Based on our literature review we would like to examine whether the following factors: regulation, growth, risk management, customer-centric approach, financial inclusion, organizational cultural fit, strategic fit and innovation, have an impact of how and why do fintech firms and banks, decide to what extent to collaborate with each other, while focusing on peer-to-peer lending sector.

Literature review table

Our literature review table includes the literature we found relevant concerning potential factors for our tentative research model. During our literature review, this table helped us having a better overview on factors that may have an impact regarding our research question. Additionally, readers may have a better understanding of what literature we specifically used when developing our tentative model. The following are the articles we ended up with, and they are presented in the literature table below:

Author	Year	Title	Dependent variable	Independent variables			Factor	Context	Type	Method	Theory	Comments
				variable	effect	significance						
Anirban, D.	2016	Live and let live: Fintech and banks chant the collaboration mantra. From unbundling to rebuilding; competition to collaboration	The transformation from competition to collaboration between fintech firms and incumbent banks.	Scaling up (growth): lack of customer trust, brand name, established distribution infrastructure, capital, and expertise in handling regulations.	N/A	N/A	Growth, Risk management	The relationship between fintech firms and banks. From competition to collaboration.	Financial magazine	N/A	N/A	An article in a branch magazine that emphasizes the promising future of bank-fintech collaboration.
Haddad, C. and Hornuf, L.	2019	The emergence of the global fintech market: economic and technological determinants	The emergence of new fintech start-ups	1) A country´s economies and capital markets level. 2) A country´s technology and supporting infrastructure level	H1: positive H2: positive	H1: p<0.01 H2: p<0.05	Growth	The emergence of new fintech firms on each year, for the period 2005-2015, covering 107 countries around the world.	Quantitative analysis	A negative binomial regression model.	N/A	A quantitative research study regarding the impact of economic and technological determinants on the emergence of fintech firms, followed by interesting recommendations for Fintech firms, entrepreneurs and investors, banks and regulators.
Anirban, B., Price, P. and Bastid, V.	2018	World Fintech Report 2018 (p. ,15-32, 37-43, 46, 55-56)	The collaboration´s efficiency	The complementary relationship between fintech firms and banks	N/A	N/A	Growth, Innovation, Risk management, Organizational cultural fit, Customer-centric approach, Strategic fit	World FinTech Report provides a data-driven look at global financial technology investment trends.	Consultancy report	A global survey conducted among several leading industry executives from fintech firms and traditional firms.	N/A	The report discusses the potential of the symbiotic relationship between fintech firms and traditional financial institutions for a win-win collaboration.

EY	2017	Unleashing the potential of FinTech in banking	Fintech firms and banks strategy decision: competitive vs collaborative strategy with traditional banks	Collaboration, Competition	N/A	N/A	Innovation, Regulation	The fintech industry attracted over US$13.1b in VC-backed investments in 2016, about five times more than investments four years earlier.	Consultancy report	N/A	N/A	The growth of the industry has strengthened the common belief that fintech will disrupt banking. But collaboration - not competition - will be the primary driver of disruption.
Li, Y., Spigt, R., and Swinkels, L.	2017	The impact of FinTech start-ups on incumbent retail banks' share prices	Stock returns of incumbent retail banks	Growth in FinTech funding or deals	Positive	$p<0.05$	Regulation, Growth, Innovation	The impact of US fintech start-ups on the performance of 47 US retail banks, for the period 2010 to 2016.	Quantitative analysis	Regression analysis	Consumer theory	This paper concludes that funding of FinTech start- ups is more likely to have a positive effect on the incumbents´ stock returns than a negative effect. This suggests complementarity between fintech firms and traditional banking, rather than substitution and disruptive innovation. However, it must be noted that the study has several limitations, such as limited necessary data, too short sample period, various shortcomings in its model, etc.
Gomber, P., Koch, J. A., & Siering, M.	2017	Digital finance and fintech: current research and future research directions	N/A	N/A	N/A	N/A	Regulation	This article reviews the current state of research in digital finance.	Exploratory research design	Literature review, meta-analysis	N/A	This paper provides a systematic analysis of the top-published research around Digital Finance with a focus on business functions that are adapted by FinTech companies. To base the literature review on a structured approach, the newly developed ¨Digital Finance Cube¨ was applied. This Digital Finance Cube encompasses the main Digital Finance business functions, the Digital Finance institutions, and the underlying technologies and technological concepts.
Skan, J., Dickerson, J. and Gagliardi, L.	2016	Fintech and the evolving landscape: landing points for the industry	Fintech firms' strategy decision: competitive vs collaborative strategy with traditional banks	Regulatory environment (RegTech)	N/A	N/A	Regulation	The difference of the competitive vs. collaborative investments ratio between UK and U.S..	Consultancy report	N/A	N/A	This report has been done by Accenture- a leading global professional services. The report shows hoe more favorable regulatory environment stimulates investments from those who looking to compete directly with the industry.

Zalan, T. and Toufaily, E.	2017	The promise of fintech in emerging markets: Not as disruptive	The relationship between fintech firms and banks in the MENA region	Competition and disruption from fintech firms, segments at risk of disruption, challenges in ecosystem development, complementary of assets and capabilities, strategies to face disruption.	N/A	N/A	Regulation	Exploratory study with stakeholders from the financial ecosystem in the Middle East and North Africa (MENA).	Exploratory research design	Semi structured interviews (coding)	N/A	A proposed model is based on a literature review and semi structured interviews. In that model the collaboration between fintech firms and banks located in the center, while the regulation aspect located as one of the four factors located in the frame.
Navaretti, G. B., Calzolari, G., and Pozzolo, A. F.	2017	Fintech and Banking: Friends or Foes?	Fintech sector	A free market economy vs financial stability	N/A	N/A	Regulation	The relationship between fintech firms and banks.	Exploratory research design	Literature review	Econo mic regulati on theory	This article discusses the uncertainty that underlies the whole debate on FinTech and how to regulate it. The crucial question is whether Fintech will induce a healthy competitive process, enhancing efficiency, or rather cause disruption and financial instability.
Buchak, G., Matvos, G., Piskorski, T. and Seru, A.	2018	Fintech, regulatory arbitrage, and the rise of shadow banks	Shadow banks´ mortgage lending market share, particularly fintech lenders market share fraction	1) Regulatory restrictions on traditional banks. 2) Technological advantages.	H1: positive H2: positive	H1: $p<0.01$ H2: $p<0.01$	Regulation	The residential mortgage market in the U.S., for the period 2007-2015.	Quantitative analysis	Regression analysis	Econo mic regulati on theory	A quantitative model of mortgage lending suggests that the share of shadow banks has increased from roughly 30% in 2007 to 50% in 2015, while fintech firms account for a substantial part of its growth. The results indicate that regulation accounts for roughly 60% of shadow bank growth, while technology, especially the ease of online origination, accounts for roughly 30%.
Iyer, R., Khwaja, A. I., Luttmer, E. F., & Shue, K.	2015	Screening peers softly: inferring the quality of small borrowers	Predicting default (borrower creditworthiness)	Screening softly by non-expert market participants lenders in peer-to-peer lending markets in comparison with screening by borrower's exact credit score, or by using other hard information typically available to banks.	Positive	Various	Risk Management	New online lending markets that rely on soft information vs hard information screening, using bank´s credit score as a benchmark, regarding predicting default.	Quantitative analysis	Regression analysis	N/A	This study argues that even markets with non-expert individuals can effectively screen for borrower creditworthiness. Additionally, relying on nonstandard or soft sources of information in the screening process seems to be relatively more important when screening borrowers of lower quality.

Moenninghoff, S. C. and Wieandt, A.	2013	The future of peer-to-peer finance	The future of peer to peer lending market	1) Peer-to-peer participants´ risk management preferences. 2) Macroeconomic and Microeconomic implications (regulatory environment).	N/A	N/A	Risk Management. Regulation	Peer-to-peer lending market worldwide.	Exploratory research design	Literature review	Risk manag ement approa ch	The role of risk needs to be future researched.
Ziegler, T., Shneor, R., Garvey, K., Wenzlaff, K., Yerolemou, N., Rui, H. and Zhang, B.	2018	Expanding Horizons: The 3rd European Alternative Finance Industry Report	N/A	N/A	N/A	N/A	Risk management, Regulation	The size and growth of the alternative finance market across in Europe.	Quantitative analysis	Survey, descriptive analysis	N/A	This report investigating the development of crowdfunding, peer-to-peer lending and other alternative finance intermediation across Europe.
Härle, P., Havas, A., Kremer, A., Rona, D. and Samandari, H	2015	The future of bank risk management	N/A	N/A	N/A	N/A	Risk management	A consultancy report present how bank risk management will look by 2025	Consultanc y report	N/A	N/A	This report made by McKinsey & Company and describe the six structural trends the banking sector will go through in the coming years and their implications on risk management.
Sarma, M. and Pais, J	2011	Financial inclusion and development. Journal of international development	Human development	Financial inclusion	Positive	N/A	Financial Inclusion	Examining the relationship between financial inclusion and human development in 49 countries	Quantitative analysis	Regression analysis	Financi al inclusio n theory	This quantitative study examined the relationship between financial inclusion and human development.
Hannig, A. and Jansen, S.	2010	Financial inclusion and financial stability: Current policy issues	N/A	N/A	N/A	N/A	Financial Inclusion	The current state of financial inclusion globally, the relationship between poverty and financial inclusion and the positive impact innovation has on financial inclusion.	Consultanc y report	Literature review	Financi al inclusio n theory	Literature review on the current state of financial innovation worldwide, the relationship between poverty and financial inclusion and the positive implications innovation has on financial inclusion.
Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J.	2018	The Global Findex Database 2017: measuring financial inclusion and the Fintech revolution	N/A	N/A	N/A	N/A	Financial Inclusion	The current state of 140 economies regarding financial inclusion and the fintech revolution.	Word bank report	Literature review	Financi al inclusio n theory	The 2017 Global Findex data describes the contribution of fintech services to the continued evolution of financial inclusion in more than 140 countries.

Ozili, P. K.	2018	Impact of digital finance on financial inclusion and stability	Financial inclusion and stability	Digital finance	N/A	N/A	Financial Inclusion	The role of government, fintech, and banks in digital finance and financial inclusion.	Exploratory research design	Conceptual review	Financial inclusion theory	This study examines the impact of digital finance on financial inclusion and financial system stability.
Mills, K., & McCarthy, B.	2017	How Banks Can Compete Against an Army of Fintech Start-ups	N/A	N/A	N/A	N/A	Customer-centric approach	A suggestive strategy that traditional banks could pursue when either competing or collaborating with emerging online players.	Financial magazine	N/A	N/A	An article from Harvard business review magazine regarding suggestive strategies banks can pursue when competing or collaborating with online emerging players.
Philippon, T.	2016	The fintech opportunity	N/A	N/A	N/A	N/A	Growth	The potential impact of fintech on the finance industry.	Exploratory research design	N/A	N/A	Incumbent banks want to be big for many purposes. One of the reasons is to better the cost efficiency.
Avgouleas, E., & Cullen, J.	2015	Excessive leverage and bankers' incentives: refocusing the debate	N/A	N/A	N/A	N/A	Growth	The banking industry worldwide. Focus on leverage and incentives.	Exploratory research design	Literature review	N/A	High leverage levels can lead to virtually limitless expansion of bank asset size, which maximizes, in the short to medium term, banks' return on equity.

During our literature review, we identified several research articles regarding fintech firms, their implications for the traditional banking sector and their potentially contribution to expand financial inclusion. We found several articles regarding regulation, risk management and financial inclusion. Regulatory framework, perhaps, received the highest attention both in the academic literature and in the public media. We realized this in particular when attending “Crowdfunding 2019” conference, where the need for a favorable regulation in the Norwegian fintech sector was highly debated on and raised high engagement from the different actors. We have identified multiple articles suggesting that digital finance services provided by fintech firms may have positive impact on financial inclusion. It may also facilitate risk management, but regarding this factor, contradictions have been identified. We have encountered a number of non-academic articles concerning the evolution of fintech firms, the growing trend from competition to collaboration and the implications of fintech sector in different aspects. However, our literature review suggests that there is a research gap regarding the relationship between fintech firms and traditional banks, and the factors that impact the extent of collaboration between both parties.

Regarding the context of our literature review, we identified several articles concerning the fintech revolution globally, their implications on the banking sector, the future of risk management and their potential to expand financial inclusion. We have also identified several academic articles and financial reports concerning the relationship between traditional banks and fintech firms, and the way fintech firms are perceived by traditional banks; whether as disruptive or complementary service providers. These articles and reports suggest a possible fruitful collaboration where the complementary strengths can be beneficial to both parties and emphasize the huge need for a regulatory framework in the fintech sector. Some previous studies have also focused on the current state of the fintech sector in different areas, particularly in the peer-to-peer lending market worldwide, and the influential determinants on the emergence of fintech firms. Our literature review provides evidence on the undeniable fintech revolution globally and its significant growth such as the increase in fintech investments by both number and volume in various fintech segments. However, the literature review suggests a gap concerning the relationship between the Norwegian fintech sector and the traditional banking sector, and factors that may impact the extent of collaboration between both parties.

Concerning the methodology of the reviewed elements, it spans from both qualitative and quantitative research articles to consultancy reports and articles from financial magazines and papers. They have used different methods for data collection and analysis such as: literature reviews, regression analysis, surveys, interviews and questionnaires.

Economic regulation, risk management, financial inclusion and consumer theory were the theories we identified during our literature review. The following factors: growth, customer-centricity approach, organizational cultural fit and strategic fit, were identified several times in our literature review. However, they have been mentioned mainly in important financial magazines and papers but have not been identified in academic articles – thus, lacking theoretical anchoring.

Dependent variable

Our dependent variable is: "Extent of collaboration between fintech firms and traditional banks". Based on our literature review, we have chosen to focus on the following three different modes of collaboration; remain separate (no collaboration), strategic alliances and ownership fully/partly owned (mergers and acquisitions).

Strategic alliances refer to voluntary collaborative agreements across companies (Parkhe, 1993, p. 794; Haberberg & Rieple, 2008, p. 238). Alliances normally incorporate a legal contract that defines the areas of the partnership (Haberberg & Rieple, 2008, p. 238). A strategic alliance can be in form of licensing, franchising, distribution rights, development agreements or manufacturing agreements

(Haberberg & Rieple, 2008, pp. 238-239). Alliances enable the involved parties to gain new complementary knowledge that can help creating new products and services that could have not been developed separately. It may also help overcoming access restrictions when entering to new markets by collaborating with a local partner, who understands the specific market requirements. Thus, it provides a great opportunity to collaborate with organizations with different organizational structure and culture that focus on innovation and creativity. (Haberberg & Rieple, 2008, p. 240) The study by Eisenhardt & Schoonhoven (1996, p. 136), attempted to examine the strategic and social factors that motivate firms to enter into an alliance formation, in addition to transaction cost explanations. Their findings suggest that firms decide to partner in a strategic alliance because of strategic needs and social opportunities. Strategic needs can be either due to a highly competitive industry or because of their innovative strategies. Social opportunities refer to utilizing their strong social positions for fruitful collaborations. (Eisenhardt & Schoonhoven, 1996, p. 136)

An empirical study made by Rai, Borah & Ramaprasad (1996, p. 141) examined the success factors of a strategic alliance in sectors that are characterized by rapid change and short innovation cycles. Their findings suggest that strategic alliance practitioners should ensure a win-win collaboration for both parties. Secondly, managers should establish an information system based on the partnership experiences, which can be shared within the organizations. They also recommend the alliances not to be seen as a temporary settlement. In addition, they emphasize the importance of the partner evaluation process, especially in cases that the involved parties have no history of collaboration. In case of partner dominance, they suggest that a neutral unit can assist in managing the alliance. In case of an unsuccessful alliance, the authors claim that an exit strategy should be formulated, in order to avoid long legal disputes. (Rai et al., 1996, p. 152)

Another strategic method is mergers and acquisitions (M&A), a strategy that requires more resources and commitment compare to the strategic alliance agreements (Haberberg & Rieple, 2008, pp. 513 & 517). Mergers refers to the creation of a new legal entity between two or more independent companies, while acquisitions refer to the acquiring of a company by another (Haberberg & Rieple, 2008, p. 513). M&A are the most common practice in the United Kingdom and the United States, regarding business expansion, and it is considered as a relatively cheap and quick way to expand into new markets, or into new product areas. It can also be initiated by the desire of having control of specific strategic resources, such as raw materials or even top management. (Haberberg & Rieple, 2008, pp. 516-517) M&A have received a considerable focus from a varied part of management disciplines over the last decades. The literatures on M&A are mostly concerned with the challenges of organizational fit and strategic fit in the integration process (Cartwright & Cooper, 1993, p. 1). Although mergers and acquisitions may imply growth and knowledge synergies, they are also fraught with high risk, and it has been stated that half of all mergers and acquisitions are not successful and do not add value to the companies involved (Bergamin & Braun, 2018, pp. 1-2). Bergamin & Braun (2018) investigated the behavioral patterns of successful and less successful organizations during the integration process. Their findings conclude the following as the most important factors for an integration process: *1. outline vision and kick-start the integration project 2. ensure effectiveness of future organization 3. nominate management 4. align management and staff 5. address the merger on an operative level* (Bergamin & Braun, 2018, p. 6).

Suggested independent variables

The followings are the critical factors identified in our literature review, hence, our independent variables:

Regulation

In our literature review, the economic regulation theory has been mentioned multiple times. The economic regulation theory explains the role of the government as an industrial regulator, and the four main contributions the different industries are seeking from a body with such coercive powers. The state is able to protect traditional banks from rivalrous war-prices by controlling entry of competitors, substitutes and complements, imposing price controls, and/or granting direct subsidies to legalized industries. With its power, the government may either hinder or facilitate new entrants´ expansion into desired markets. (Stigler, 1971, pp. 3-6) Navaretti, Calzolari & Pozzolo (2017) note that the future of fintech solutions is dependent on the attitudes of politicians and regulators towards the new developments. However, they believe that the tension between financial stability and healthy competition among fintech firms makes the decision concerning regulation or no regulation so challenging (Navaretti et al., 2017, p. 9). Yet demanding, regulatory framework is considered as perhaps the most important factor necessary for the fintech industry´s evolution. (Navaretti et al., 2017, p. 27; Zalan & Toufaily, 2017, p 421; Gomber, Koch & Siering, 2017, p. 574).

According to Navaretti et al. (2017, pp. 9-10), although the fintech sector provides more efficient and customer-centered services, compared to the traditional banking sector they should not be seen as a disruptive innovation threat. The researchers further posit that fintech companies should rather be seen as service providers who can co-exist with traditional banks in a harmonious way. Regulatory framework should thus, be concerned with the service provided rather than with whom is providing it due to this trend towards convergence between the banking- and fintech sector. (Navaretti et al., 2017, pp. 9-10, 21, 27-28)

The study made by Li, Spigt & Swinkels (2017), supports the claim of complementarity between fintech and banks. These authors studied the impact of US fintech on the performance of 47 US retail banks from 2010 to 2016. They conclude that funding of fintech startups is more likely to have a positive effect on the traditional banks´ stock returns. This suggests complementarity between fintech firms and traditional banking rather than substitution and disruptive innovation (Li et al., 2017, pp. 1 & 11).

All articles mentioned previously, conclude that regulatory framework for the fintech sector is necessary and vital for its prosperity. However, a quantitative study made by

Buchak, Matvos, Piskorski & Seru, (2018), shows that in some markets like the American residential mortgage origination market, the ‘shadow banks’ lack of regulatory activity compared to the banks regulatory pressure was a contributory factor to its tremendous growth. The term “shadow bank” is referring to non-bank lenders. Their study examined whether regulatory differences and technological advantages contributed to the shadow banks expansion into this market. Their findings suggest that both regulation and technological advantages were crucial to the significant growth of the ‘shadow banks’ market share. The favorable regulation the shadow banks enjoyed versus the regulatory restrictions traditional banks have been dealing with since the economic crisis were responsible for the significant growth of 30 to 50 percent market share between 2007 and 2015. The fraction of the fintech lenders´ market share by itself was responsible for roughly 9 percent of its growth. (Buchak et al., 2018, pp 453, 454, 476 & 482)

When developing alternative finance industry in the European countries, regulation remains a core challenge amid the lack of coherence which characterizes the regulatory framework at a cross-national European level. Eleven countries in the European Union have already established national level regulation framework for both equity-based and lending-based crowdfunding. However, these existing regulations vary significantly across the countries, highlighting the need for a more homogenous regulatory framework within the European union. (Ziegler et al., 2018, p. 51)

The regulatory framework among the Nordic countries differs significantly as well. Finland, where crowdfunding regulation has been ratified in 2015, is considered the Nordic market leader both by volume and per capita contributions. Sweden has adopted an observational regime where the different platforms are allowed to operate under the supervision of the authorities except peer-to-peer consumer lending platforms, which is under a stricter governmental surveillance. Denmark has an adequate regulation for peer-to-peer business lending, while the peer-to-peer consumer lending lacks a solid foundation. Iceland on the other hand, suffers from strict regulations due to its previous financial crisis and its limited domestic market size. Unlike the success of its reward crowdfunding other models have not been established yet. Norway holds a relatively conservative approach among the Nordic countries. Peer-to-peer lending was prohibited by the government until 2017. Currently, there are only a few platforms who enjoy governmental approval, yet limited, for operating under governmental supervision. Therefore, adequacy regulatory framework is still needed. (Ziegler et al., 2018, pp. 79-80)

Although not statistically significant, a clear positive trend between perceived adequacy of national regulatory framework to industry performance indicators has been identified. This suggests that, the existence of regulatory framework in a country increases the chances of platforms in the country to achieve a larger share of business funding out of total alternative finance volumes in the country and higher levels of alternative finance per capita. (Ziegler et al., 2018, p. 54) Geir Olsen, state secretary of the Ministry of Finance in Norway, noted in the ¨2019 Crowdfunding conference¨ that the development of the crowdfunding in Norway is positive but still accounts for a very small proportion of the total financing in terms of consumer loans and financing of corporate loans. Thus, according to Olsen, the finance department is still debating whether to regulate the sector or not (Weldeghebriel, 2019). The trend mentioned previously contradicts the assertion made by Olsen, as it indicates the positive impact of regulation on market growth and thus explains why the implementation of regulatory framework should not be considered only after volumes will require it (Ziegler et al., 2018, p. 54). It also supports the claim that favorable regulations are perhaps the most important factor necessary for the fintech industry´s evolution. (Navaretti et al., 2017, p. 27; Zalan & Toufaily, 2017, p. 421; Gomber et al., 2017, p. 574).

As indicated earlier, there are two types of fintech companies. The ones who are willing to compete with traditional banks by offering substitute services, and the ones who are willing to collaborate by offering complementary services that will enhance the position of the traditional banks. Indeed, a greater proportion of investments are going into competitive fintech companies. However, there is a clear growing trend from both fintech firms and banks to collaborate. (Skan et al., 2016, p. 5) In New York, the shift to collaborative relationships have been particularly stronger over the last five years where the proportion of investments into collaborative fintech have grown from 37 to 83 percent, between 2010 and 2015. However, in the UK where the regulatory framework is more favorable for companies who are willing to compete with the industry the trend is reversed, with more than 90 percent of investments going into fintech companies who would like to compete with the traditional banks (Skan et al., 2016, p. 6). Accordingly, we propose the following:

Proposition 1a: The more favorable the regulatory framework is towards fintech firms, the more likely they will go for a looser collaboration with banks.

Skan et al. (2016, pp. 8-9), postulate that when regulatory framework is more favorable towards fintech firms, the more changes will occur in the banking landscape. They further emphasize that a friendlier regulation will help fintech firms achieve the scale and capabilities they are thriving for, and consequently become true competitors and real threats to banks. Google, Apple, Facebook, Amazon and Alibaba are examples of companies who also have started to offer innovative financial services such as loans to small businesses, online purchases via email, free peer-to-peer payments services among others. These new digital services are resetting the benchmark for customer experience and have become a big threat for the future of the banking sector. Consequently, customers may also perceive this gap from their bank as a service failure. According to Skan et al. (2016, pp. 8-9), banks who will continue use their legacy platforms rather than sourcing them from better providers will struggle to compete.

An engagement research made by EY (2017, p. 10), examined 45 large banks across three geographic regions; North America, Europe and Asia-Pacific (excluding Japan). They examined four different types of engagements: investment, collaboration, in-house development of products and mergers and acquisitions. Investments refer to a situation where banks invest their own capital in fintech firms. Collaboration is defined by teaming up with fintech firms in order to develop new products or services, either alone or with a group of banks. Referral arrangements or joint ventures are also fall under the strategy of collaboration. The third engagement is in-house development of fintech products and services, which means that banks will have their own department for developing fintech solutions. This strategy might challenge the banks´ legacy systems and in some cases will require hiring specialists. Lastly, mergers and acquisitions, which are the most exclusive engagement strategy, might speed up the development of new technology and boost the banks digital footprint. The research findings show that Europe has a slightly higher tendency for mergers and acquisitions as part of their fintech strategy compared to North America and Asia-Pacific. North-American banks prefer investments strategy rather than in-house product development, while the Asia-pacific region has a higher percentage in developing products in-house. However, in all the regions collaboration between banks and fintech companies is the most applied engagement strategy (EY, 2017, pp. 10-11). Thus, we propose that:

Proposition 1b: The more favorable the regulation is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

Growth

Although lacking theoretically anchoring, growth factor as a reasoning for a collaboration between banks and fintech firms has been mentioned several times in the literature. According to Philippon (2016, p. 12), traditional banks might seek for growth due to the following reasons: a better cost efficiency, a higher political influence and a more market power. The downsides of growth are that traditional banks tend to increase their leverage and consequently become more opaque – hence, evaluating their operations riskiness might be more difficult (Avgouleas & Cullen 2015, p. 7). A study made by Haddad and Hornuf (2019), investigated economic and technological determinants that have boosted fintech firms' formations. Their findings suggest that fintech startups formations occur more frequently in countries with well-established economies, functional capital markets, and where the latest technology and supporting infrastructure are in place (Haddad & Hornuf, 2019, pp. 81, 83-84). Regarding growth, both Haddad and Hornuf (2019, p. 96) and Philippon (2016, p. 15) argue that traditional banks can provide fintech firms access to an enormous customer-base and customer data. Additionally, Haddad and Hornuf (2019, p. 96) note that traditional financial institutions are also able to create new ecosystems that require new financial services. These ecosystems can be provided by fintech firms and by that contribute to their growth (Haddad & Hornuf, 2019, p. 96). Philippon (2016, p. 15) is also highlighting the traditional banks knowledge to current financial regulations and the ability to forecast the evolution of the industry. Additionally, when collaborating with traditional financial institutions, fintech firms can enjoy the traditional banks' capital impacting their ability to take up large-scale projects.

According to Anirban (2016, p. 13), since fintech companies are under pressure from their venture capital investors to show growth, collaborating with financial institutions might be the ultimate solution. In addition to capital and access to a broader customer-base, Anirban (2016, p. 13) emphasizes that fintech firms may also benefit enormously from banks experience and expertise regarding risk management and regulatory compliance. According to Anirban, Price & Bastid (2018, pp. 36 & 40), fintech firms and banks complementary strengths are ideal for a mutually beneficial collaboration between both parties. Thus, they conclude that in order to achieve the next level of high-growth and scale, fintech firms should consider collaborating with traditional financial institutions (Anirban et al., 2018, pp. 36 & 40). In accordance with the above, we propose the following:

Proposition 2a: The more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

Agility, innovation level, cost reduction applications, customer experience, new products and a better data handling are a few of the advantages banks can enjoy from collaborating with fintech companies (Anirban et al., 2018, pp. 36 & 40). In addition, fintech firms are not held back by current systems and are often eager to make risky choices (Philippon 2016, p. 15). According to a report by EY (2017, p. 3), the biggest threat for traditional banks are not from fintech firms but rather from traditional banks, who are better in collaborating and leveraging fintech firms. Thus, we propose:

Proposition 2b: The more banks seek for growth, the more likely they will go for a tighter collaboration with fintech firms.

Risk management

One of the major objectives of financial intermediaries' management is to increase returns for its owners. However, it often involves an increased exposure to risk for the different stakeholders (Saunders, Cornett & McGraw 2011, p. 181). Saunders et al. (2011) mention the following type of risks: interest rate risk, market risk, credit risk, off-balance sheet risk, technology and operational risk, foreign exchange risk, country or sovereign risk, liquidity risk and insolvency risk. According to Moenninghoff & Wieandt (2013), peer-to-peer lending involves most of the risks mentioned above. In particular, credit risk, interest rate risk, market risk, liquidity risk, foreign exchange risk and operational risk are largely associated with peer-to-peer lending. Peer-to-peer lending platforms provide similar banking functions provided by traditional banks. However, this is not the case concerning risk management. Peer-to-peer participants cannot fully perform the risk management function as traditional banks. These functions may involve evaluating and bearing the risks emanating from their financial transactions. Therefore, it raises the question; what are their motivations for doing so? (Moenninghoff & Wieandt, 2013, pp. 478 & 480).

From a microeconomic perspective, certain questions may be raised: to what extent are the factors that are not attributed to banking functions, such as usability, convenience and lower administrative cost account for choosing peer-to-peer platforms? To what extent is risk assumed unconsciously and against the participants´ preferences? To what extent are users consciously accepting risk due to the reward compensating for taking that risk? From a macroeconomic view, regulators can have reasons to either promote or limit this risk by regulation that will depend on the regulatory tradeoff between economic growth and economic stability (Moenninghoff & Wieandt 2013, pp. 481 & 482).

A quantitative study made by Iyer, Khwaja, Luttmer & Shue (2015) contradicts the claim that peer-to-peer participants cannot fully perform risk management as traditional banks. Iyer et al. (2015) examined the efficiency of online lending markets that rely on soft information screening compared to hard information screening by using banks credit score as a benchmark to predict default. Their results suggest that even markets with non-expert individuals can effectively infer borrower's creditworthiness, in other words predict default. Additionally, relying on nonstandard or soft sources of information in the screening process seems to be relatively more important than hard screening information when screening the quality of borrowers. Moreover, they conclude that banks should design better mechanisms to include soft information in their own banking systems. (Iyer et al., 2015, p. 31)

When considering Europe in general and the Nordic countries in particular, the major risks seem to concern the platforms. Thus, are risks associated with fraud, and risk associated with collapse of one or more platforms as a result of malpractice? The risk of increased levels of defaults or business failures, which are typical of young industries characterized by uncertainties, have also been mentioned extensively. Additionally, potential changes to regulatory environment either for making the regulatory framework stricter than it already is, resulting in making it even tougher for the existing platforms, or by making it easier and resulting in reduced entry barriers for new entrants and hence harder competition. Lastly, possibilities for cybersecurity breaches have reached some level of concern. (Ziegler et al., 2018, pp. 81-82) As mentioned previously, Anirban (2016, p. 13) emphasizes that when collaborating with banks, in addition to capital and a broader customer-base, fintech firms may also benefit enormously from the banks experience and expertise, regarding risk management. Also, Anirban et al. (2018, p. 40), posit that collaboration between fintech firms and banks may benefit both parties. Thus, enhanced risk management practices can be a major source of advantage that fintech firms will enjoy when collaborating with traditional banks (Anirban et al., 2018, p. 40). Accordingly, we propose the following:

Proposition 3a: The higher the risk, the more likely fintech firms will like to go for a tighter collaboration with banks.

According to Härle, Havas, Kremer, Rona & Samandari (2015, pp. 6-17), the traditional banks risk-management strategies can be transformed due to certain trends. These trends are as follows: *(1) regulatory changes, (2) customer expectation changes, (3) technology and new risk-management techniques, (4) the emerge of additional (non-financial) risk types such as contagion risk, cyber risk and model risk, (5) better de-bias decision making techniques and (6) the need for strong cost savings*. Härle et al. (2015, p. 18), further note that by 2025 due to these mentioned six fundamental trends, risk management will probably be even more critical for banks success. Therefore, they suggested five potential initiatives that will help banks risk mitigation. Among the initiatives suggested is the digitization of core processes. They believe that digitizing core processes that affect the risk function often creates a win-win situation. It also increases efficiency, lower costs, and usually also improves customer experience and sale volumes (Härle et al., 2015, pp. 21-22).

Although collaborating with fintech firms facilitates the traditional banks' risk management in some respects, it may expose them to other risks as it gives their fintech partner access to intellectual property and customer data (Härle et al., 2015, pp. 21-22). Integrating new services and products developed by their fintech partner may also be risky and harm their well-established brand name (Anirban et al., 2018, p. 47). In accordance with the above, we propose the follow:

Proposition 3b: The higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

Customer-centric approach

The lack of customer-centric products and services by the banking sector encourage fintech firms to develop and fill those gaps with innovative solutions. Fintech firms unlike banks design new services while keeping the customer journey in mind as they understand the importance of becoming truly customer-centric organizations. (Anirban et al., 2018, pp.15-17) The following factors have been identified to have a positive impact on customer experience: higher personalization, increased speed of service, high convenience, intuitive interaction, better functionality and proactive insights. These factors have been reported to also have positive impact on firms' brand and customer-trust. (Anirban et al., 2018, pp.17-18). Fintech firms use data to have a better understanding of their customers. Data-focused technologies, operational excellence, front-end interface and infrastructural enablers, are example of emerging technologies that enjoy increased attention among fintech firms. These technologies will become essential in the near future, concerning boosting the customer journey. (Anirban et al., 2018, p .20).

Traditional banks understand today the importance of being more focused on customer-centricity and are also aware of the negative consequences if they do not cope with this transformation (Anirban et al., 2018, p. 28). The World fintech report (Anirban et al., 2018) suggested the following steps to help banks improve their customer journey: *1. Empathize with customers. 2. Build and maintain customer trust. 3. Keep it simple. 4. Strive for operational excellence. 5. Invest in digital capabilities. 6. Align customer and business goals. 7. Adapt agile principles. 8. Nurturing the right culture and talent* (pp. 28-32). Indeed, it is believed that by following these steps banks can enhance their customer journey and minimize the threat of being left behind (Anirban et al., 2018, p. 28). According to Mills & McCarthy (2017), in order to cope with the competition with online lenders, banks may consider investing time and resources in designing more customer friendly services to improve their customer satisfaction. We therefore propose the following:

Proposition 4a: The more fintech firms want to become customer-centric oriented, the more likely they will go for a tighter collaboration with banks.

Proposition 4b: The more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

Financial inclusion

Financial inclusion can be defined as the availability and equal access to financial services for all members of an economy (Sarma & Pais, 2011, p. 613; Dev, 2006, p. 4310). Its aim to include the ¨unbanked¨ population by providing them equal access to the formal financial systems (Hannig & Jansen 2010, p. 1). Financial inclusion has many advantages such as reducing cost of capital, improving day-to-day financial applications and helping to reduce the growth of informal sources of credit (Sarma & Pais 2011, p. 613).

The study by Sarma & Pais (2011) examined the relationship between financial inclusion and human development. They computed financial inclusion values for 49 countries and compared it to the corresponding human development index. Financial inclusion was computed based on three dimensions; accessibility, availability and usage of banking services. Their findings suggest a strong positive correlation between financial inclusion and human development. Additionally, the study confirms that GDP, income inequality, physical and electronic connectivity, information availability, and telephone and internet usage are important factors, which have positive impacts on financial inclusion (Sarma & Pais 2011, pp. 615, 619 & 626).

Many governments have implemented new policies in attempt to expand financial inclusion (Demirguc-Kunt, Klapper, Singer, Ansar, & Hess 2018, p. 13). Consequently, a global improvement towards financial inclusion has been detected in the last years. However, half of the world's population still do not have access to financial services (Hannig & Jansen, 2010, pp. 4 & 8). According to the global findex database 2017 by

Demirguc-Kunt et al. (2018), digital technology may expand financial inclusion significantly. Digital payments have the potential to increase both the number of bank account ownerships and the bank account usage. By providing fast and convenient services while treating all customers equally, digital financial providers will be able to gain back the customer-trust that financial services are thriving for. Additionally, the global findex database reveals that among the 1.1 billion unbanked adults globally, two-thirds own mobile phones. Therefore, it is believed that moving from regular cash payments to digital payments, has a great potential for increasing the number of bank account ownerships and bank account usage. It may also help overcome the disproportion between the different genders and socio-economic groups regarding the percentage of account ownership hence, the need to expand financial inclusion. (Demirguc-Kunt et al., 2018, pp. 89-95)

A study by Ozili (2018), examined the impact of digital finance on financial inclusion and financial stability. He postulates that fintech companies have an important role in the digital finance economy, either by competing with the traditional banks or by providing complementary services (Ozili, 2018, p. 332). Fintech firms provide faster services that make it easier for all members of the economy to manage their financial procedures. Secondly, since fintech firms deal with fewer regulations than banks, they are able to focus on technology improvement and reduction costs. Additionally, he mentions that traditional banks who collaborate with fintech firms may enjoy cost reduction, quality improvement and increased convenience by providing equal access to financial services for all customers. Lastly, he notes that fintech firms are better providers of small amount emergency loans to both low- and middle- income individuals, than traditional banks who require going through tiring credit-risk assessment processes. (Ozili, 2018, p. 332). On the other hand, he also emphasizes the challenges and risks digital finance have, such as its dependency on digital devices and internet connection, its limited regulatory framework constraints and the possibility for systemic black-swan risks and cyber security breaches. Despite its challenges and risks, the findings of the study suggest that digital finance services provided by fintech providers have positive impact on financial inclusion, in both emerging and advanced economies (Ozili, 2018, p. 339). Accordingly, we propose the following:

Proposition 5a: The more fintech firms want to expand financial inclusion, the more likely they will go for a tighter collaboration with banks.

Proposition 5b: The more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

Organizational cultural fit

Organizational culture can be defined as beliefs, philosophies and assumptions made or developed by a group, that guide and assist with challenges of external adaptation and integration within the group, that has proved its validity, and, therefore, must be perceived by new group members as the right way of dealing with external adaptation and integration within a group (Schein, 1990, p. 7). One of the most efficient ways for making an organizational culture change is to combine it with two or more organizational cultures. Unfortunately, when different companies collaborate, in many cases, they do not pay attention to the cultural differences, until they have already engaged formally. Cultural differences between organizations can create challenges in the integration process and can even jeopardize the collaboration (Schein, 1990, p. 27).

According to Schein (1990, p. 27), members of an organization are, in fact, not always aware or do not attribute an importance to the organization's culture until they have to deal with an organization that holds a different culture. It is therefore crucial for companies to evaluate their partners' organizational culture and assess whether there is an organizational cultural fit before establishing a collaboration (Schein, 1990, p. 27). The success of the collaborative marriage depends on the ability to create a culture that combines elements from both partnering organizations. Therefore, it is important that the shared perception of both partners is that elements of the other culture are necessary and worth preserving under the unite culture. Hence, the greater the cultural differences are the longer and the more challenging the integration process is. (Cartwright & Cooper, 1993, pp. 67-68)

Anirban et al. (2018, p. 45) claims that more than 30 percent of fintech executives perceive cultural fit as a potential challenge, when looking for a partner in the traditional banking sector. Both parties should be aware of the importance of having a cultural fit and its implications for the collaboration success. The combination of rigid and highly hierarchical banks, and agile and innovative centered fintech firms might be a big challenge for the collaboration success, and therefore flexibility and cultural alignment is required. (Anirban et al., 2018, pp. 46 & 56) We therefore propose the following:

Proposition 6a: The better the organizational cultural fit, the more likely fintech firms will go for a tighter collaboration with banks.

Proposition 6b: The better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

Strategic fit

The concept of ¨fit¨ is not novel. Miles and Snow (1984, p. 10) argued that the concept of fit refers to the intercorrelation between the following elements; an organization's strategy, structure and managerial processes. According to Chorn (1991, p. 20), the concept of strategic fit refers to the degree of appropriateness of the interaction between the competitive situation, strategy, organizational culture and the style of leadership. Several researchers have examined the relationship between organizational performance and strategic fit. Some of these findings suggest that the higher degree of strategic fit an organization enjoy, the better it performs (Chorn, 1991, p. 20) Due to the dynamic nature of the competition between organizations achieving strategic fit should be a target companies continually strive for (Chorn, 1991, p. 23).

Therefore, according to Chorn (1991, p. 23), achieving strategic fit should be a primary task for an organization and it should be monitored and modified over time.

The study of Douma, Bilderbeek, Idenburg & Looise (2000, p. 579), identified new aspects of fit. They claim that collaboration requires a different approach to fit and that its success depends heavily on the degree of alignment between the partnering organizations (Douma et al., 2000, p. 581). They developed a general fit framework that includes the following areas; strategic-, organizational-, cultural-, human- and operational fit. In order to achieve collaboration success, they show that both partners should secure fit in all the five aspects (Douma et al., 2000, p. 581). According to Douma et al. (2000, pp. 583 & 584), a good strategic fit requires that both partnering organizations have a shared vision of the future developments of the industry, compatible corporate strategies, common understanding of the importance of the alliance, mutual dependency, collaboration that adds value to the opposite partner and/or to their customers and that the alliance receives market acceptance.

The World Fintech Report also suggests that common vision is an important key factor for a successful organization, as 70 percent of fintech firms rated it as a highly important key factor (Anirban et al., 2018, p. 55). In accordance with the above, we propose the following:

Proposition 7a: The better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

Proposition 7b: The better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

Innovation

Khraisha & Arthur (2018) studied whether it is possible to construct a general theory of financial innovation process. Their study suggests a new theoretical approach using a meta-theoretic method that defines financial innovation process as the interaction between the four following theories: life cycle theory, evolutionary theory, economic theory and institutional theory since none of these theories can explain by itself the complexity of the financial innovation process. (Khraisha & Arthur, 2018, pp. 14, 21 & 22)

Developing financial innovative solutions that improve customer journey are fintech´s core competence. Thus, innovation is engraved in their DNA, and is vital for their survivability and growth. By collaborating with traditional banks, fintech firms may enjoy access to an enormous customer-base, customer data, capital, regulatory expertise, and core infrastructure. However, according to Anirban et al. (2018, p. 55), both cultural differences and technical challenges must take into consideration when fintech firms and traditional banks collaborate. These challenges are reported as major concerns for both entities that can jeopardize the collaboration. Lack of agility, legacy systems and IT compatibility are the primary concerns that fintech firms face while working with traditional banks. Fintech firms, therefore, must evaluate the right traditional bank partner by ensuring it does not hamper their innovation level. (Anirban et al., 2018, pp. 55-56) In accordance with the above, we propose the following:

Proposition 8a: The more fintech firms have innovative mindset, the more likely they will go for a looser collaboration with banks.

Absorptive capacity defined by Cohen & Levinthal (1990), as a ¨firm's ability to recognize the value of new external information, assimilate it, and apply it to commercial ends¨ (p. 128). The absorptive capacity, according to Cohen & Levinthal (1990, p. 129), is a function of the firm's prior related knowledge which means that prior knowledge may enhance innovation.

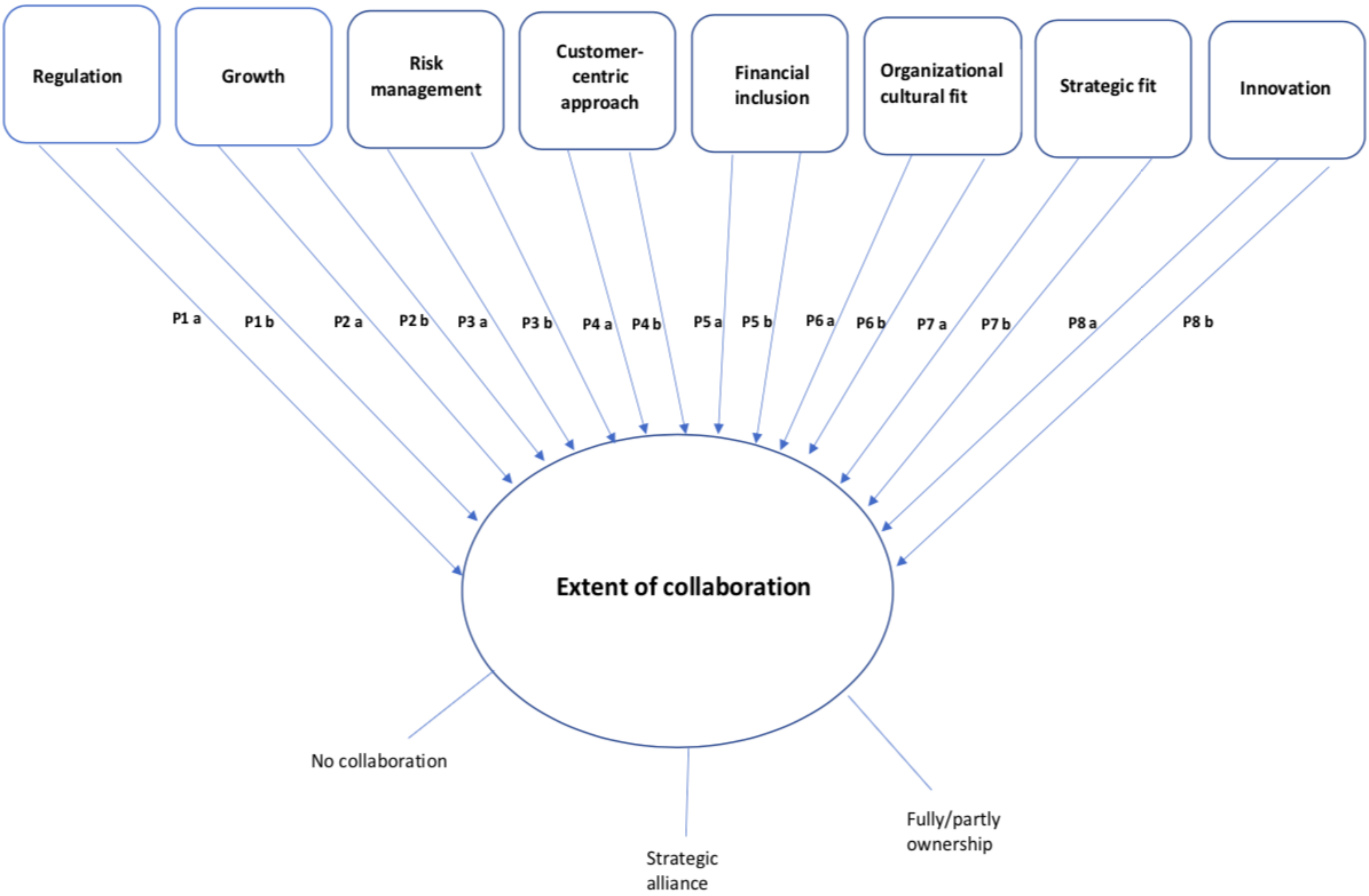
The fintech sector is known for being innovative, compared to the traditional banking sector. Fintech firms’ constant effort of coming up with new customer-centered products and services, that have not been addressed by traditional banks, requires an innovative mindset and technological expertise (Anirban et al., 2018, p. 38). Traditional financial institutions are aware of the growing demand for innovation yet find it challenging to identify the proper fintech partner due to their weak innovation cultures (EY, 2017, p. 5). Therefore, guidelines for how to cooperate with fintech firms should be developed. It is important that this process is handled from the top of the organization. The top management should use prior knowledge when facilitating the development process to boost innovation. However, banks that may not be familiar with fintech solutions or collaborations with innovative partners may lack the absorptive capabilities needed. Such a situation will require an innovation adoption framework. The proposed innovation framework should have clear criteria for success to encourage innovation and have well-defined responsibilities for both parties. (EY, 2017, p. 7)

Obliging to grasp each other's perspectives, traditional banks and fintech firms can possibly ensure a prosperous partnership (Anirban et al., 2018, p. 32). Thus, being aware of the innovation model, preserved technology functions, procurement and the range and directive for improvement, banks can cooperate with fintech firms and deliver truly transformative value (EY, 2017, p. 6). From the preceding discussion, we propose the following:

Proposition 8b: The more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

Tentative research model

Based on our extensive literature, our tentative research model is presented below:



Methodology

Context

The fintech sector has grown from a narrow area of interest to become a major area of interest currently in Norway. Its segments include: investment management, retail banking, lending and borrowing, money transfers/payments, fundraising, as well as making wealth management more efficient and effective (Kagan, 2019).

The total volume of the online alternative finance market in the Nordic countries, as for 2017, was € 449 million – the third largest volume in mainland Europe, following France and Germany. Its growth in the Nordic countries between 2016 and 2017 was 39 % increase in market volume, while the growth in Norway, during the same period was the fastest among the Nordics with 141 % increase. However, the Norwegian market is still considered as a relatively small market, with less than 3% of the total regional market. (Ziegler, Shneor, Wenzlaff, Orodovic´ & Johanson 2019, p. 74, 77)

The fintech segments in Norway, mention by size, are as follows (Ziegler et al., 2019):

- *Donation based crowdfunding*: donors that provide funding to individuals, projects or companies based on philanthropic motivations.
- *P2P property lending*: securities, typically a bond or debenture at a fixed interest rate.
- *Reward-based Crowdfunding*: backers that provide funding to individuals, projects or companies in exchange for non-monetary rewards or products.
- *Equity-based Crowdfunding*: Individuals or institutional funders that purchase equity issued by a company.
- *P2P Business Lending*: Individuals or institutional funders that provide a loan to a business. (p. 31)

Concerning the overall total volume in Europe, the *P2P Consumer Lending*, which is individuals or institutional funders that provide a loan to a consumer, is the segment that enjoys the highest volume, with more than double than the second highest volume segment. However, perhaps due to the lack of a regulatory framework, the *P2P Consumer Lending* has a relatively small volume in Norway. (Ziegler et al., 2019, p. 76) We chose to focus on the peer-to-peer lending sector in Norway, because we believe this sector might become a real competitor towards the traditional banking sector in the future. Secondly, by focusing on the peer-to-peer lending sector our research can contribute both fintech firms and traditional banks on a collaboration decision, and by that may help individuals and SMEs that struggle to get a loan.

The fintech sector is characterized by being innovative, agile, customer-centric oriented, but also by its desperate need for capital and its lack of customer-trust, which is particularly crucial in the financial services industry. Traditional banks, on the other hand, enjoy high level of customer-trust, a good reputation of being safe, huge customer-base and expertise in various field. However, they are lacking innovative capabilities, agility, creativity, new-coded systems and the ability to figure out customer pain points in innovative ways. Therefore, it presents opportunities for fruitful collaborations and symbiotic relationships where the complementary strengths can contribute and benefit both parties.

However, while some banks do collaborate to some extent with fintech firms, other traditional banks, still perceive the fintech sector as a threat or disruptive, rather than a complementary service provider. Such collaborative ventures include; Danske bank, which established alliances with some fintech firms, and DNB, which partly owns Vipps and even invests in accelerator program for fintech startups.

Therefore, we would like to conduct a multiple case analysis to study what factors impact how and why fintech firms and traditional banks decide the extent to collaborate with each other in the peer-to-peer lending sector in Norway?

Research design

A Multiple case analysis is based on specific cases, but the collection of these cases is of utmost importance. The cases included in the multiple case analysis should be related in a certain way, perhaps cases that exist in a particular phenomenon, a "quintain". (Stake, 2006, p. 1) They may share a common characteristic or condition, and may categorically be linked together (Stake, 2006, p. 4-6). Each case must be carefully examined and needs to be fully understood, before studying the similarities and differences between them. A single case is significant to some extent, but it cannot be fully comprehended if similar cases have not already been known. So even when there is no attempt to be comparative, the single case is studied with attentiveness to other cases. (Stake, 2006, p. 4)

A multi-case study usually has at least one research question. It attempts to understand the most important characteristics of a quintain. It studies the concept or idea that bound all the cases together and will later become the conceptual infrastructure for the study. (Stake, 2006, p. 9) Each study case is complex in its own context and has a special background and circumstances. Both historical, cultural and physical contexts are of interest, but other contexts such as political, economic and social, may also be of interest at times. One purpose of the multiple case study is to examine a phenomenon that exists in many various contexts, by illuminating some of them, especially the challenging ones (Stake, 2006, p. 12). It aims to increase the theoretical generalizability of the multiple cases, by ensuring that the events in one context are not peculiar. By that, it attempts to develop a more sophisticated description of many cases and provide explanations that are more powerful. (Miles & Huberman, 1994, p.172)

Researchers attempt to find first-hand direct answers that come from observing the individual cases. They will observe activities by themselves, and when needed, ask others for their own observations. They will then study these observations and gather facts that, together with the other study cases, will constitute the findings of the multi-case study. (Stake, 2006, p. 27) The observations and impressions of the researchers can be good data, but they must ensure that they are not oversimplifying, and that the meaning they intended to convey will be gained by the readers. This assurance process is called ¨triangulation¨. (Stake, 2006, p. 33)

The triangulation process aims to support a finding by proving that independent measures do not contradict it (Miles & Huberman, 1994, p.172). The metaphor of triangulation was originally used as a military navigation strategy, using multiple references in order to detect a location of an object (Jick, 1979, p. 602). Researchers must ensure that each discovery has at least three promises that key meanings are not ignored, and that every important interpretation is supported by the data and is not easily misinterpreted by readers (Stake, 2006, p. 33).

The aim of triangulation is to increase the internal validity of the study, and it can be accomplished in several ways (Marschan & Welch, 2004, p. 130). Denzin (2017, p 63) notes that triangulation can be achieved by using different sources that have different biases and strengths, in attempt to support and complement each other. According to the synchronic method, in order to assure that the right information and interpretations have been obtained, triangulation through primary data collection can be achieved by interviewing various respondents on the same topic (Marschan & Welch, 2004, pp. 129-130). Another method for triangulation is to combine primary and secondary sources of data (Marschan & Welch, 2004, p. 130).

Case selection

Multiple case analysis provides more robustness when applying between four to ten cases. According to Stake, including two or three cases is not enough to explain the interrelation between them, whereas 15 to 30 cases might be too complex for the researcher and the readers to understand. The selection process in the multiple case study varies from study to study. (Stake, 2006, p. 22) Sometimes all the cases are known in advance, sometimes all existing cases are studied, sometimes only representative cases are studied, sometimes they are chosen by the researcher and sometimes they are selected by a third party. However, at all events, the selected cases are chosen carefully, and they represent diverse contexts within a quintain, in attempt to understand what concept or idea binds them together. (Stake, 2006, pp. 22-23)

Purposive sampling is widely used in qualitative research for the selection and identification of information-rich cases related to the phenomenon of interest (Emmel, 2013, p. 3; Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood, 2015, p. 534). The purposive sampling design involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with the phenomenon of interest. The selected individuals or groups must be eager and accessible to participate and be able to communicate the experiences and know-hows in thoughtful and reflective ways. (Palinkas et al., 2015, p. 534)

According to Palinkas et al. (2015, p. 534) there exist several determined sampling designs. One type involves looking at extreme or rare cases, for the function of studying and learning from the extraordinary events of phenomena of importance. Alternatively, you can look at a selection of cases with maximum variation. By doing this you can document exclusive or different variations that have appeared in adapting to changing conditions. This method can also identify essential collective patterns that cut through variations. In contrast, it can be a selection of homogeneous cases in order to lower variation and simplify the analysis. Rooted in each approach is the ability to match and contrast between the cases, identifying affinity and disparity in the phenomenon of interest. (Palinkas et al., 2015, p. 534)

In order to study our research question, we would like to conduct a criterion-i purposive sampling strategy of six information-rich cases that represent diverse contexts within the phenomenon of interest. Following criterion-i, we will detect and choose potential participants that meet our criteria of importance, and that we are able to compare and contrast, for identifying likenesses and contrasts in the phenomenon of concern. (Palinkas et al., 2015, p. 535) We will, therefore, identify and carefully select three fintech firms and three traditional banks. We will select three scenarios, those who have chosen to remain separate, collaborate as allies, or selected a mergers and acquisitions strategy, and that are able to provide detailed and generalizable information, regarding our research question.

Data sources

There are several types of qualitative interviews for the purpose of gathering information regarding a phenomenon (Qu & Dumay, 2011, p. 243). Qualitative interviews include questions that “differ in the degree of emphasis on culture, in the choice of arena or boundaries of the study, and in the specific forms of information that are sought” (Rubin & Rubin, 1995, p. 19). Thus, the interview technique is an art that built on questions and interpretations (Qu & Dumay, 2011, p. 243).

According to Qu and Dumay (2011, p. 243) an interview can be applied either as an individual interview or as a focus group. Convenience and time savings are perhaps the main advantages of the focus group. However, a focus group is not ideal when studying sensitive topics that people do not like to talk about in public. (Qu & Dumay, 2011, p. 243)

There exist three interview methods; structured-, semi-structured- and unstructured interviews (Alvesson, 2003, p 15). According to DiCicco-Bloom and Crabtree (2006, p. 315) interviews cannot be completely unstructured, some are considered to be relatively unstructured, as a kind of informal direct conversation. The unstructured informal interview originated from anthropology and is common in anthropological contexts, such as when ethnographers gather information through participant observations (DiCicco-Bloom & Crabtree, 2006, p. 315). The unstructured interview adjusted to the participant context and situation, in attempt to make him or her comfortable and unassessed (Qu & Dumay, 2011, p. 245). The structured interview is when the interview is conducted with a series of pre-prepared questions that allow the participants answer by a limited number of responses. All participants are interviewed in an equal way, hence, the same questions in the same order. This type of interview is rigid as the interviewers strictly following it as much as possible. (Qu & Dumay, 2011, p. 244)

Lastly, the semi-structured interview is an in-depth interview, and perhaps the most common used type in the qualitative research design. The semi-structured interview is usually conducted once, either to an individual, or to a focus group, and it has normally a duration between 30 minutes to several hours. (DiCicco-Bloom & Crabtree, 2006, p. 315) This type of interview includes pre-prepared questions on identified contexts in a consistent and systematic way, with purpose of evoking more elaborated responses. The interview guide includes all the topics the interviewer wants to cover during the interview, and by that, it helps navigate the conversation towards the phenomenon the interviewers want to study. The interview guide stretches from highly to loosely scripted, but all share the same aim, which is to ensure the same thematic approach is applied, and that all topics are covered. (Qu & Dumay, 2011, p. 246)

The semi-structured interview is commonly used, perhaps due to its flexibility, accessibility and comprehensibility, and it is a method that enables revealing important aspects of human- and organizational behavior. Unlike the structured interviews, this method allows the interviewer to change the style and order of questions in purpose of eliciting the most adequate responses, on behalf of the interviewees. Additionally, it allows the interviewees to freely respond by using their own language. Thus, both parties are active participants in the interview, that create questions and answers through a disclosed conversation. (Qu & Dumay, 2011, pp. 246-247)

DiCicco-Bloom and Crabtree (2006, p. 316) states that during in-depth interviews, hence structured- and semi-structured interviews, a positive relationship between the interviewer and the interviewee is necessary. The process of creating rapport or bond is vital for the success of the interview, as it enhances trust between the parties and respect to the information that has been provided. The four stages of creating rapport between the interviewer and interviewee, are the following: apprehension, exploration, cooperation and participation. (DiCicco-Bloom & Crabtree, 2006, p. 316)

According to Kvale (1996, p. 30), the aim of the qualitative research interview is to get descriptions of the lived world by the interviewees, regarding interpretations of the meaning of the described phenomenon. The main task of the interviewer is to note and interpret the meaning of the interviewees´ descriptions (Kvale, 1996, p. 30). The qualitative interview is particularly appropriate and a powerful design for understanding experiences and meanings of an individual's everyday world. Interviews enable the participants to explain to others their situation, by their own words and in the way they perceive it. (Kvale, 1996, p. 70)

Interviews are often applied in case-studies. It can be either in order to gain knowledge about a person or an organization, or in order to study a more general phenomenon (Kvale, 1996, p. 98).

With an attempt to examine our research question, we will conduct in-depth interviews with four fintech firms and three traditional banks. Our aim is to identify what factors impact how and why fintech firms and traditional banks decide the extent to collaborate with each other in the peer-to-peer lending sector in Norway. We therefore believe, that the appropriate way is to apply semi-structured interviews where we will be able to modify questions quickly during the interview and allow the interviewees to answer freely, in attempt to address our major concerns. The semi-structured interviews will be held together with our supervisor onsite. Immediately after each interview, we will discuss our initial impressions and potential identified relations, to keep insights and memory as fresh as possible. Notes from these discussions will be used together with interview transcripts in each of the case analysis. In order to achieve triangulation and consistency concerning our findings, we will collect complementary information through multiple sources; company websites, business reports and the news.

DiCicco-Bloom & Crabtree (2006) mention the following ethical concerns when conducting the interview procedure: *1) reducing the risk of unanticipated harm; 2) protecting the interviewee's information; 3) effectively informing interviewees about the nature of the study; 4) reducing the risk of exploitation* (p. 319). Following these ethical standards will secure trust, encourage the interviewees to properly share their experiences, and by that, contribute to the success of the interview (DiCicco-Bloom & Crabtree, 2006, p. 319).

Data processing

The constant comparative method and the theoretical sampling are, perhaps, the core applications in the qualitative analysis (Boeije, 2002, p. 391). The constant comparison is a powerful method, in particular, when developing a theory that is anchored by the data (Boeije, 2002, pp. 392-393). This method suggests that the researcher decides what information should be further gathered, and where it should be identified. The researcher analyses the information that is in place, by comparing it to the new discovered information. This cycle of comparison between the old to the new information can be repeated several times. The chosen cases, therefore, need to be selected carefully, with the purpose of enabling the comparative process to proceed. (Boeije, 2002, p. 393)

The constant comparative method can be applied by different tools such as coding, memo writing, displays and data matrices (Boeije, 2002, p. 391). Coding or categorizing plays a vital role when analyzing the findings. It includes subdividing the data and assigning it into categories. (Basit, 2003, p. 144)

According to Miles and Huberman (1994, p. 56), codes and categories are applied, in order to allocate meanings to the descriptions. Codes are usually linked to a group of words, phrases, sentences or even paragraphs, that are related or unrelated to a specific theme. They argue that generating a list of codes previous to fieldwork is beneficial and will motivate the researcher to link conceptual interests or research questions directly to the data (Miles & Huberman, 1994, p. 65). Seidel and Kelle (1995, p. 53) agree that codes represent the link between the original data and the researcher's theoretical concepts. However, they distinguish between two types of coding; either as a denote of a text that contains specific information, in order to enable its retrieval, or as a denote of a fact. These two types of coding can also be seen as indexing or summarizing. (Seidel & Kelle, 1995, p. 53)

Seidel and Kelle (1995, p. 58) states that coding helps organizing and making sense of the data, by considering the phenomenon found in the material and gathered by the mechanical operation of cutting and pasting. It is managed by comparison of the different data chunk in order to identify commonalities, differences or linkages between them (Seidel & Kelle, 1995, p. 58). Seidel and Kelle (1995, p. 57) further claim that the coding process is similar to assembling a jigsaw puzzle, when the researcher starts by collecting pieces that are similar in a certain respect. If it becomes a landscape picture of a tree, a building and a sky, the researcher can attach these data pieces, the codes: 'Tree', 'Building' and 'Sky'. Then, more inspections of the data pieces will be necessary, in order to examine, compare and look for features that suggest linkages between them. (Seidel & Kelle, 1995, p. 57)

In this type of analysis, focusing almost fully on the codes and not on the raw data, is crucial. Still, this is only achievable if the codes can be seen as true representations of certain facts described by the raw data. (Seidel & Kelle, 1995, p. 54)

Subsequently, the following necessities have to be accomplished (Seidel & Kelle, 1995): 1. there has to be a high degree of inevitability that the codes have been applied in a methodical and reliable way; it is fundamental that every text passage that is coded as declaration of for example an event X, actually contains a positive statement about this occasion, 2. the coding of the raw data needs to be comprehensive and thorough; hence, that every single detail of the investigated phenomenon that is mentioned in the raw data is coded, especially when frequency of the occurrence of codes are used to draw inferences, for example for the support or rejection of the hypotheses (p. 54).

Initial code-tree

Our initial code-tree is presented below:

1) *Regulation*
   - regulatory framework
   - governmental approval
   - restrictions
   - laws
   - substitutes
   - governmental support
   - favorable regulation
   - unfavorable regulation
   - governmental initiatives
2) *Growth*
   - expansion
   - development
   - scaling up
   - new products
   - customer-base
   - customer data
3) *Risk management*
   - risk mitigation
   - default
   - bankruptcy
   - cybersecurity breaches
   - creditworthiness
   - risk mechanisms
   - fraud
   - platform collapse
4) *Customer-centric approach*
   - customer journey

- customer experience
- customer-trust
- better functionality
- high convenience
- increased speed of service
- higher personalization
- digital platforms

5) *Financial inclusion*
   - human development
   - including the unbanked population
   - equal access to financial services
   - digital payments
6) *Organizational cultural fit*
   - beliefs
   - philosophies
   - assumptions
   - flexibility
   - cultural alignment
   - cultural differences
7) *Strategic fit*
   - company strategy
   - company structure
   - managerial process
   - degree of alignment
   - shared vision
   - mutual dependency
   - common vision
8) *Innovation*
   - innovative products
   - innovative services
   - financial innovation

- innovative mindset
- technological expertise
- innovation culture
- innovation guidelines
- absorptive capabilities
- innovation adoption framework
- innovative business model

Data representations

According to Miles and Huberman, it is essential to secure that the meanings identified in the qualitative data are correct, valid and repeatable. They highlight 13 different strategies that illustrate the importance and meaning of the qualitative data. (Miles & Huberman, 1994, p. 245)

The strategies listed below are presented from the tangible to the more intangible, and from descriptive to more explanatory techniques (Miles & Huberman 1994): *1. noting patterns, themes, 2. seeing plausibility, 3. clustering, 4. making metaphors, 5. counting, 6. making contrasts/comparisons, 7. partitioning variable, 8. subsuming particulars into general, 9. factoring, 10. noting relations between variables, 11. finding intervening variables, 12. building a logical chain of evidence and 13. making conceptual/theoretical coherence* (pp. 245-262).

Miles and Huberman are then discussing important strategies for avoiding biases, corroborating meanings and ensuring excellence of the conclusions (Miles & Huberman, 1994, p. 245).

The strategies for confirming and testing the findings are presented below (Miles & Huberman 1994): *1. checking for representativeness, 2. checking for researcher effects, 3. triangulating, 4. weighting the evidence, 5. checking the meaning of outliers, 6. using extreme cases, 7. following up surprises, 8. looking for negative evidences,* *9. making if-then tests, 10. ruling out spurious relations, 11. replicating a finding, 12. checking out rival explanations and 13. getting feedback from informants (pp. 262-277).* These strategies are either to ensure basic quality of the gathered data, examine exceptions to early tendencies and directions or to reveal doubtful and challenging attitudes to emerging clarifications. (Miles & Huberman 1994, p. 262)

The strategies mentioned above will be of help when analyzing and presenting our data, while securing correct meaning of the data, avoiding biases and ensuring appropriateness of the conclusions.

According to Bazeley and Jackson (2013, p. 218), visualization facilitates understanding of huge amount of data, by forcing the researcher to clarify categories and concepts and identifying commonalities, differences or linkages between them. Visualization is also an effective way that support communication of the study to an audience (Bazeley & Jackson, 2013, p. 218).

Since visual tools play a significant role in the analysis, we will use NVivo software as it provides a range of displays where we can visualize our data (Bazeley & Jackson, 2013, p.p. 2-3). In addition to its visual tools, NVivo also assists in managing data and provides set of tools that help answering research questions from the data. Secondly, it enables managing ideas, hence, organizing and providing an easy access to conceptual and theoretical knowledge generated by the interview, without losing access to the context from which the data has been provided. Thirdly, it allows to ask simple or complex questions of the data, using the program´s database for determining an answer. (Bazeley & Jackson, 2013, p.p. 2-3)

In accordance to our initial code tree, we will use the modeler to visualize theoretical connections in our data. We would like to present our data in form of a table, where the rows will include the independent variables identified in the study cases and the columns will include our interview objects. Hence, the cells will indicate the type of relationship identified. Using a table, we will present commonalities and differences across our cases, that may provide generalizable information, regarding our research question.

Quality

When starting our research process, we applied to NSD - Norwegian Centre for Research Data, to receive their approval. Before conducting the in-depth interviews, all our participants were required to sign on our participation agreement. The participation agreement is a form where the interviewees agreed to contribute in this research by participating in an in-depth interview. It confirms that they were informed about their rights such as an access to their personal data that is being processed and their rights to request that incorrect personal data is rectified. It is worth mentioning that all interviews were conducted together with our supervisor's presence. Immediately after each interview, we discussed our initial impressions and potential identified relations to keep insights and memory as fresh as possible. Notes from these discussions were then used together with interview transcripts in each of the case analysis. We have sent the respective interview analysis summary to each participant, before submitting the research in order to receive their feedback. That was a way to ensure that we properly interpreted the information provided by our respondents, and in order to reduce any subjective biases on our own behalf. Additionally, all the participants agreed to be mentioned in our study by their registered company name and their current job title.

Included in appendix: NSD approval, participation agreement and the interview guides from both the fintech firms' perspective and the banks' perspective.

Data analysis

Analysis of study cases - fintech firms

Study case 1 - Kredd

About the company: Kredd is a peer-to-peer crowdlending / crowdfunding company operating in the private lending market. At the moment they are specializing towards unsecured consumer loans. Through their user-friendly platform, they connect borrowers and lenders together - without costly intermediaries (i.e. traditional banks). Kredd challenges the Norwegian financial market that is characterized by unhealthy competition, high prices and lack of innovation. (Kredd, 2019)

Kredd has set stringent requirements for safety and has good routines to ensure a safe experience at all levels. Kredd believes that by combining new technologies with its deep team´s insights and extensive experience from the financial service industry, the power in the consumer loan market may move to where it belongs - the consumer. (Kredd, 2019)

Interview object: Chief executive officer of Kredd

Type of collaboration (dependent variable): Currently Kredd has no collaboration with any traditional bank.

The detected independent variables:
1. Regulation, from the fintech firms' perspective, has a negative impact on the extent of collaboration - the more favorable the regulatory framework is towards fintech firms, the more likely they will go for a looser collaboration with banks.

The chief executive officer of Kredd explains that once that regulation will become favorable towards the fintech sector in Norway, then fintech firms will prefer to remain separate, unless they need capital and resources.

Direct quote: *"… if the EU regulation will be approved here, which means that you can do so [treat client account as fund], then you don't have the functionality argument for going into a corporation with a bank, then it is just about the money basically."*

The chief executive officer of Kredd claims that once it will be legal in Norway to have a sort of funds structure, as in Sweden or the UK, where you can treat your client account as a fund where everybody is able to put money and own a certain part of every loan, the functionality argument for collaborating with banks won't be relevant anymore, and then it will be only the need for capital that will motivate fintech firms to collaborate with banks. Therefore, in addition to the direct negative impact regulation has on extent of collaboration, we see it also has an indirect effect - regulation mediates the effect of capital availability on extent of collaboration.

Direct quote: *"...you can't have a funds structure, you can´t be like in Sweden or the UK where you can treat your client account as a sort of a fund... That is illegal in Norway, unless you go to a bank and the banks will construct the fund for you... They will give you some functionality which you don't have, but when you go to banks you also have capital requirements, balance requirements which you don't have as a crowdfunding company..."*

Thus, we propose that:
P1 a. The more favorable the regulatory framework is towards fintech firms, the more likely they will go for a looser collaboration with banks.

P1 (Mediation). Regulation mediates the effect capital availability has on the extent of collaboration.

2. Stealing ideas, from the fintech firms' perspective, has a negative impact on the extent of collaboration - the more fintech firms are afraid that banks will steal their ideas, the more likely they will go for a looser collaboration with banks.

The chief executive officer of Kredd highlights the fact that stealing ideas is among fintech firms' concerns, when opening up for a collaboration with a traditional bank.

Direct quote: *¨Everybody concerns that they are going to steal their ideas..."*
"For example, before Vipps, it was another company that tried to sell the same application to DNB, but DNB said ok just to connect the account to the mobile phone, that's easy, we can do it by ourselves, thank you. It is about stealing your ideas...¨

Accordingly, we propose the following:
P2 a. The more fintech firms are afraid that banks will steal their ideas, the more likely they will go for a looser collaboration with banks.

3. Trust, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms want to build trust, the more likely they will go for a tighter collaboration with banks.

The chief executive officer of Kredd highlights that fintech firms that can be associated with traditional banks, can enjoy increased trust in the financial service sector.

Direct quote: *¨Of course if you need trust, which is a big thing in finance, you can piggy back ride on a large bank with a lot of trust...¨*

Direct quote: *¨...It is a lot do with trust; you have to build trust…. nothing is going to grow by itself, and you have to be careful, not to have a scandal, because trust takes a lot of time to build, and can be possibly be gone overnight...¨*

Direct quote: ¨...the bank's main arguments for being preferred were that they are safe and that the customers trust them…¨

We therefore propose the following:
P3 a. The more fintech firms want to build trust, the more likely they will go for a tighter collaboration with banks.

4. Customer-centric approach, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms want to become customer-centric oriented, the more likely they will go for a tighter collaboration with banks.

According to the Chief Executive Officer of Kredd, the banks currently handle and provide loans faster than Kredd is able to. However, he believes that this will change in the upcoming fall, as they will be able to fund the loan within seconds as well, once the PSD2 regulation reform initiative will be applicable. Additionally, he said that banks are not really as customer-centric oriented as they say they are, and therefore, collaborating with them won't serve the fintech firms´ customer centric agenda.

Direct quote: ¨*It is all about the functionality basically. The biggest difference between us and the banks is that the banks can offer to give you the money into the account within seconds, while we need several days for that to happen because we have to go out to the market and collect the money for you.* ¨

Direct quote: ¨*And so like the bank that say also that they have a customer-centric approach, I didn't really see it... It is only the same old stuff back in, and it is the PSD2 that is going to sort of revolutionize the market.* ¨

From the banks' perspective, customer-centric approach has a positive impact on the extent of collaboration - The more banks want to become customer-centric, the more likely they will go for a tighter collaboration with fintech firms.

During the interview, the chief executive officer of Kredd mentioned that they offer less costly services, better returns and lower interest rates than those provided by the banks. He also mentioned that Kredd`s platform creates a better customer journey as it is more agile and user friendly than the legacy systems of the banks.

Direct quote: *¨So I think that because we have lower cost, they can have better returns and lower interest rates than they have in a bank and we can create a better user experience to them because we have more agile platforms than they have."*

Direct quote: *"...we provide a solution for consumers that have been paying too much on their loans, and lenders which have been given negative returns, or the option to go to the stock market, which is huge risk."*

Direct quote: *¨The [banks´] motivation for having an innovative department is low, because it is too risky. ¨*

Thus, we propose the following:
P4 a. The more fintech firms want to become customer-centric oriented, the more likely they will go for a tighter collaboration with banks.

P4 b. The more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

5. Financial inclusion, from the fintech firms' perspective, has a negative impact on the extent of collaboration - the more fintech firms want to expand financial inclusion, the more likely they will go for a looser collaboration with banks.

According to the Chief Executive Officer of Kredd, banks today exclude people, their customers are subordinated as they feel they need to come with their hat in their hand when asking for a mortgage. Therefore, in accordance to this interview, if fintech firms want to enhance financial inclusion, they should go for a looser collaboration with the traditional banks.

Direct quote: *¨The banking sector is, perhaps, the least liked sector in Norway, they like looking down at you... when you ask for a mortgage, you have to come with your hat in your hand and ask politely..., and things are going to change there, and we sort of want to change it. As long as we can go and make something that people feel like they are back in control, then we have sort of done it. If we get trust and people feel that they are in control over their sort of data, what interest rate they pay, that everything is more transparent, then I think we've done it."*

From the banks' perspective, financial inclusion has a positive impact on the extent of collaboration - the more banks want to expand financial exclusion, the more likely they will go for a tighter collaboration with fintech firms.

During the interview, the Chief Executive Officer highlights that Kredd as peer-to-peer crowdlending / crowdfunding platform provides opportunities for companies that didn't have the possibilities to receive a loan before.

Direct quote: *"Our approach, compare to the other lending platforms, that we provide opportunities for companies that didn't have the possibility to receive a loan before"*

Accordingly, we propose the following:
P5 a. The more fintech firms want to expand financial inclusion, the more likely they will go for a looser collaboration with banks.

P5 b. The more banks want to expand financial exclusion, the more likely they will go for a tighter collaboration with fintech firms.

6. Organizational cultural fit, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the better the organizational cultural fit, the more likely they will go for a tighter collaboration with banks.

According to the Chief Executive Officer of Kredd, the banks might make you stay in their business model, contradicting the fintech firms' mindset of being innovative, proactive and agile. Additionally, fintech firms may enjoy trust and access to capital from collaborating with banks. However, this might be at the cost of losing control and selling your freedom. Regarding Kredd´s situation, he states that they don´t have an organizational cultural fit. He says that while banks are focusing on high margins to accommodate the investors return requirements, Kredd is aiming to give the best offers to their customers, and by that, is not expected by the market to deliver the same high returns. This is perhaps the reason for deciding not to collaborate with a bank.

Direct quote: *"... we had a seminar recently, Finance Norway, and it was a guy from the UK that said to not collaborate with existing bank if you can afford not to, because they will try to put you in the same sort of business-model that they have already have. Then you are stuck in that ecosystem in a way."*

Direct quote: *"Of course if you need trust, which is a big thing in finance, you can piggy back ride on a large bank with a lot of trust then of course that's good from that perspective and of course if they give you money it is good from that perspective too, but then again, what happens culturally in the next couple of years could be something quite different that it is not so good. You don't know, it is like you sell your freedom in a way."*

Additionally, organizational cultural fit has also indirect impact, as it mediates regulation. During the interview, he said that banks and fintech firms have different concepts. According to him, there is a political risk, where banks may lobby towards the politicians, in order to make the them become more negative or unfavorable towards the fintech firms. Consequently, it will become costlier to fintech firms to operate under unfavorable regulations, and therefore, they will collaborate with traditional banks in order to enjoy their capital and resources.

Direct quote: ¨*Banks may be a political threat to the platforms.... We had a lot of difficulties getting our license, as it took two years. Although we are like regulated, we are in the same sort of interest groups as the banks, but then again there are so many different banks and some of them are positive and some of them are negative. ... they [the banks who are negative towards fintech firms] can then put pressure on the politicians because they have more money and then you can sort of meet some barriers here and there due to that.* ¨

In accordance with the above, we propose the following:
P6 a. The better the organizational cultural fit, the more fintech firms will go for a tighter collaboration with banks.

P6 (mediation). Organizational cultural fit mediates the effect regulation has on the extent of collaboration.

7. Strategic fit, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the better the strategic fit, the more likely fintech firms and banks will go for a tighter collaboration with each other.

According to the Chief Executive Officer of Kredd, as long as the fintech provides complementary capacities to the banks, rather than competing with it, then there is a positive willingness from both parties to collaborate.

Direct quote: ¨*So yes, we will like working with a bank, but we will like to work with banks with regards to our business model, in a way, and not the banks business model. That's why if we will have a collaboration with a bank it will be more likely with a bank that is not in our market. Or maybe they have like a small segment there, but* *they don't want to go in there because of different brand reasons more or less, or an external bank which will like to go into the Norwegian market. ¨*

Direct quote: *¨... we [Kredd] said we will offer lower interest to their good customers and we asked them why you don’t just lower your interest, and they said no, we have our stock value depending on us having high margins because of the Price/Earnings. Therefore, we would rather go up in interest rate because of stricter legal matters, so we need to have a higher income in order to justify our stock prices. So, we are not afraid of them in that way.”*

Direct quote: *¨Our [Kredd´s] market approach is that we want to offer good customers half the interest rate, and then of course give lenders the opportunity to save in those loans. But the consumer finance banks want us to take the good customers and keep the bad customers themselves... because they have higher returns on them. We don't want to give them credit anyway, so the consumer finance banks feel as we might have synergy effects by working together, but we don't like the way they do business... so we don't want to be a part of that, for principle reasons although it will be maybe be more economically reasonable short term.”*

Additionally, strategic fit has also an indirect impact on the effect brand image has on the extent of collaboration. Namely, traditional banks and fintech firms that complement each other, rather than competing or destroying each other’s existing business models, hence, having a good strategic fit, enhancing the banks´ brand image, and by that impact the extent of collaboration.

In accordance with the above, we propose the following:
P7 a. The better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

P7 b. The better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

P (mediation). Strategic fit has an indirect impact on the effect brand image has on the extent of collaboration.

8. Innovation, from the fintech firms' perspective, has a negative impact on the extent of collaboration - The more fintech firms have an innovative mindset, the more likely they will go for a looser collaboration with banks.

According to the Chief Executive Officer of Kredd, unlike fintech firms, banks use innovation more as a marketing approach, rather than actually investing in an internally innovative department. Therefore, he believes that fintech firms might risk their innovative capabilities when collaborating with banks.

Direct quote: *¨Basically, you [banks] just want to market it and if somebody finds out something very smart you just buy the company, because you have so much money, you have your own fund for doing that, why should you invest in something that is so unsecure when you can just buy something that you say with a more certainty that it is going to be worth a lot of money in a couple of years... The motivation for having an innovative department is low, because it is too risky."*

From the banks' perspective, innovation has a positive impact on the extent of collaboration - the more banks want to become innovative, the more likely they will go for a tighter collaboration with fintech firms.

According to the Chief Executive Officer of Kredd, banks believe that being associated with fintech firms, might have a positive marketing effect. Therefore, they would like to go for a tighter collaboration with fintech firms, usually in the form of an acquisition.

Direct quote: ¨...they usually use the ¨innovative¨ sort of word more for marketing perspective¨

Direct quote: *¨Basically, you just want to market it and if somebody finds out something very smart you just buy the company because you have so much money...¨*

Accordingly, we propose the following:
P8 a. The more fintech firms have an innovative mindset, the more likely they will go for a looser collaboration with banks.

P8 b. The more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

9. Survivability, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks struggle to survive, the more likely they will go for a tighter collaboration with fintech firms.

The chief executive officer of Kredd believes that the current business-model of the banks in Norway will not last. He argues that banks will have difficulties with coping with the competition, as fintech firms and banks will become more and more homogenic in the future. Therefore, he says, banks should find new ways for making money, by differentiating themselves from fintech firms. They can do so by moving more into the insurance business, as we have already started to see, or by new collaborations with fintech startups.

Direct quote: *¨I think the banks will struggle; they have to find out another way to make money. ¨*

Direct quote: *¨We don´t think the banks business-model will last. It is the same with cellular companies. A GB is A GB! They have to find different ways to make money. ¨*

Direct quote: *¨...some banks say that they will create very good API´s, in order to be the preferred sort of daily bank. It is like the cell phone, if you don't get a lot of apps* *on your cell then nobody wants to buy your cell phone. So, they have to change their business model going to other segments that it is not so easily competitive. ¨*

Accordingly, we propose the following:
P9 b. The more banks struggle to survive, the more likely they will go for a tighter collaboration with fintech firms.

10. Capital, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

According to the chief executive officer of Kredd, the need for capital is perhaps the most crucial for the survivability of a fintech start-up, as he mentioned it multiple times during the interview. However, he stated that capital may also have bad consequences, in case that the bank's investment happens to be too little before you can grow by yourself.

Direct quote: *"... they [banks] can give you capital, hence, secure available funds at any time…"*

Direct quote: *¨… this is a huge barrier for the fintech here, because you need millions with regards to lawyers, applications, IT structure and everything..., but the only reason why you should collaborate with banks, is because of legal reasons or if you pre-decide that they have a lot of money that can help you along the way. ¨*

Direct quote: *"In other words, as a startup you need a lot of money, but if you get money and it turn to be too little money, before you can grow by yourself and you need a huge amount of money, it can actually stop the funding, because other investors won´t like to go in because one bank is already investing .... It can be good, it can be negative, it depends…"*

Direct quote: *"...and of course if they give you money, it is good from that perspective…"*

Additionally, capital also has an indirect impact, as availability of capital moderates the effect innovation has on the extent of collaboration. Namely, the higher the fintech firms' need for capital, the more they will compromise their innovative capabilities, and by that will go for a tighter collaboration with banks.

Thus, we propose the following:
P10 a. The higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

P10 (Moderation). Availability of capital moderates the effect innovation has on the extent of collaboration.

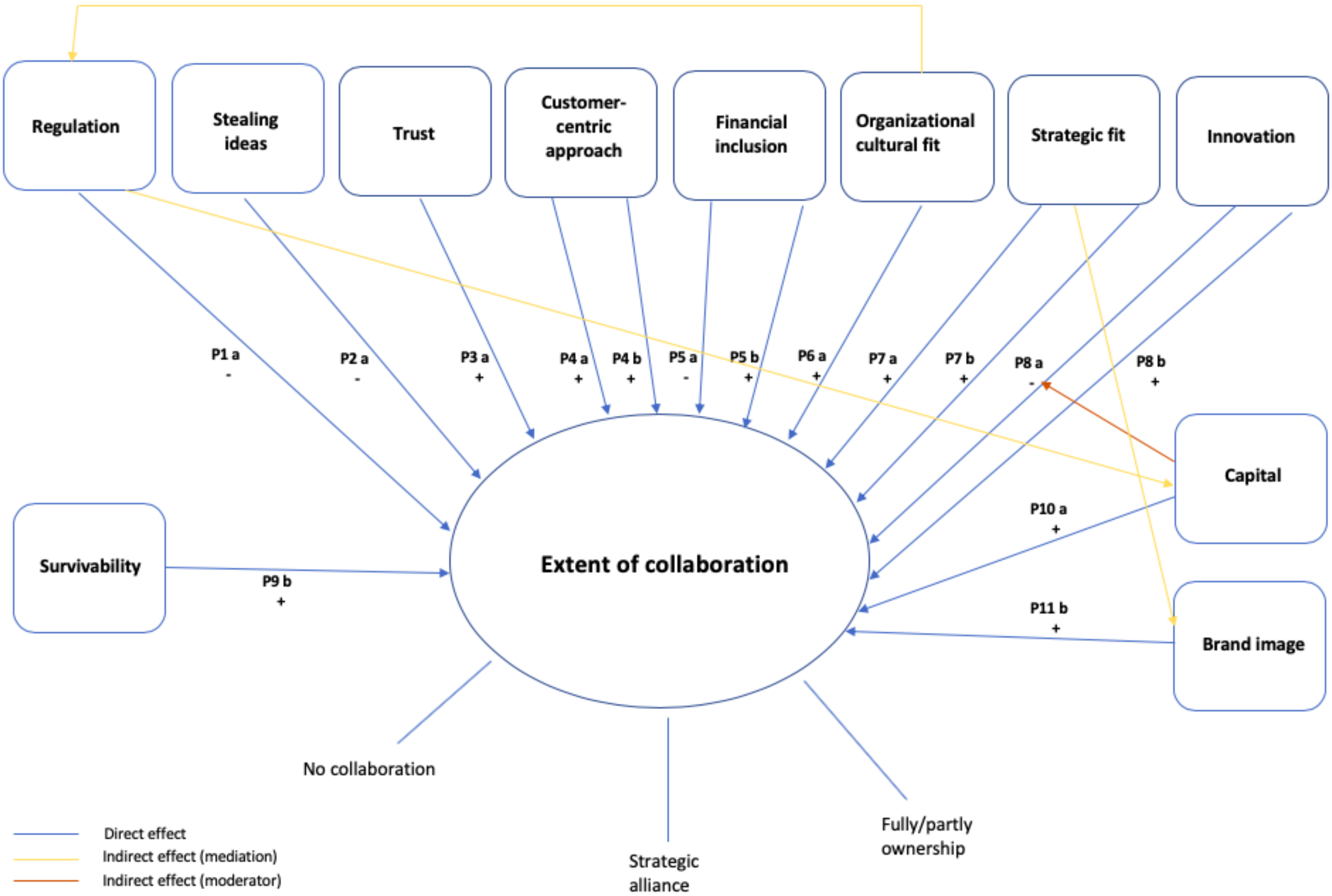
11. Brand image, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks struggle with branding issues, the more likely they will go for a tighter collaboration with fintech firms.

According to the chief executive officer of Kredd, from a business perspective, it is less risky to acquire a startup where you can say with more certainty, that it would benefit your company, rather than invest internally in an innovation department, that has really unsecure outcomes, unless you are using it for a marketing perspective.

Direct quote: *¨My experience from larger corporations, in general, is that they usually use the ¨innovative¨ word more for marketing perspective, than actually do it…"*

In accordance with the above, we propose the following:
P11 b. The more banks struggle with branding issues, the more likely they will for a tighter collaboration with fintech firms.

Kredd research model



Study case 2 - Perx

About the company: Perx is a peer-to-peer crowdlending / crowdfunding company operating in the private lending market. Perx enables lenders and borrowers to meet without costly intermediaries, for refinancing of expensive personal loans. Doing this, without taking part in the transaction, benefits all parties. (Perx, 2019)

Perx uses safe and trustworthy technology - the same systems as traditional banks use in their deposits and loans, when matching and bundling borrowers and investors. The company provides borrowers better terms than from a traditional bank unsecured loan provider, but also provides the lenders (investors) higher returns than from a traditional savings account. Perx's vision is to democratize finance in a safe way. (Perx, 2019)

Interview object: Co-founder and chief marketing officer of Perx

Type of collaboration (dependent variable): Currently Perx has no collaboration with any traditional bank.

The detected independent variables:
1. Regulation, from the fintech firms' perspective, has a negative impact on the extent of collaboration - the more favorable the regulatory framework is towards fintech firms, the more likely they will go for a looser collaboration with banks.

The co-founder and chief marketing officer of Perx claims that the fact that they use a service provider for the payments (3rd party provider), which has agreements with the traditional banks, is what makes it easier for Perx to remain separate and not be obliged to collaboration with a bank. Ironically, he explains that Perx got their legislation from Finansdepartementet, due to an error in the translation from the EØS regulations into Norwegian language, while their competitors do not get the same permission to facilitate money in that way (3rd party provider).

Direct quote: ¨*...we did not really outsource the payments, because we do not have the license to operate payments, but we bought payment services from a third part company… it is quite good, because then we have an advantage on top of our competitors, or other crowd lenders, because we can hold money within the system, we do not send money from borrowers and lenders back and forth for each payment, we hold it within the e-currency system, at the third-party supplier... we don't need to* *have a bank, because the service provider for the payment has the bank accounts and they have the agreements with their bank. So, that is a very easy way of actually handling the lack of cooperation with banks for us. ¨*

Direct quote: *¨We got the license… and then we saw that we could do this with e-currency, and we established that later on… they [competitors] tried to do the same, but they did not get the permission from Finanstilsynet… [we got the license] because of an error done by Finansdepartementet when translating the EØS regulations into Norwegian... meanwhile, they [Finansdepartementet] have blocked our competitors using e-currency. ¨*

From the banks' perspective, regulation has a positive impact of the extent of collaboration - the more favorable the regulation is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

The co-founder and chief marketing officer of Perx highlights in the interview, that the unfavorable regulation towards the fintech firms, is probably, the biggest problem fintech firms deal with, and perhaps the reason why traditional banks are a bit anxious and scared to collaborate with the fintech firms.

Direct quote: *"I think the most problem that we have had, the whole industry I think it, is related to regulations, that also influence our communications towards financial institutions like banks… they know very well what we are doing and who we are, but they do not want to get too close or too involved. In general, I think that most of the financial institutions has a bit of anxious towards the fintech industry…"*

Additionally, regulation has also an indirect effect, as it mediates customer-centric approach. Namely, the more unfavorable regulations towards fintech firms, the more difficult for them to be customer-centric oriented, and by that, go for a tighter collaboration with a bank.

The co-founder and chief marketing officer of Perx states that the unfavorable regulation makes it impossible for the fintech firms to use a diversified portfolio of loans, where the lenders´ investment goes into a ¨basket¨ of a collection of loans. They are not allowed to do that, and they are obliged to have one-to-one connections. However, a collaboration with a bank, according to him, will solve that challenge.

Direct quote: *¨We are back into regulation again, because we are not allowed to mitigate the risk for the lenders, like they do in Sweden, where they can bundle everything into a bond. We are not allowed to do that, we need to, more or less have one-to-one connections, and we can´t put borrowers into a basket and give that piece of the basket to the lender. So, that is the tricky part for us. So that is where we see that a collaboration with a financial institution is spot on for us… doing a collaboration with the bank will solve that. ¨*

Thus, we propose:
P1 a. The more favorable the regulatory framework is towards fintech firms, the more likely they will go for a looser collaboration with banks.

P1 b. The more favorable regulatory framework is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

P1 (mediation). Regulation mediates the effect customer-centric approach has on the extent of collaboration.

2. Growth, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

The co-founder and chief marketing officer of Perx claims that collaborating with a bank, will speed up the growth. He explains, that instead of relying on the internal distribution of money and grow slowly, a collaboration with a bank/financial institution, can assist Perx deploy the distribution of money more efficiently and in a much larger scale, and by that, make them grow significantly faster.

Direct quote: ¨*We do not borrow money, but we get an access to it. This is the problem today, we do not dare to do marketing, because we are afraid that our lag on the borrower side will be too enormous, and that we have too little on the lending side… off course, you can grow and scale-up, a bit every year, very steadily… but if you have a financial institution that can assist you on taking deposit into the bank and then deploy that into the platform, you can easily take a big jump*¨

From the banks' perspective, growth, has a positive impact on the extent of collaboration - the more banks seek for growth, the more likely they will go for a tighter collaboration with fintech firms.

The co-founder and chief marketing officer of Perx, see the collaboration as a great opportunity for the banks as well. By collaborating with fintech firms, he says, banks can create a new segment to their existing business model, and by that stimulate their growth.

Direct quote: ¨*This is a good incentive for us, but we are also telling the banks that this is a very good incentive for them as well… when you push the interest wheel up and down, when you are at 2,14 %, it is like coming in tons of funds into your account, and if you turn it down to 2,10 %, it stops. So, you can easily maneuver funds into your bank, related to how much borrowing you interested in doing… It is a very easy combination to tick on those two wheels. For us it is very interesting, as it can deploy a lot of funds, because we have by far the lowest interest rate in the market, but also for the bank, because they can run a small bank, using a crowdfunding platform as deployment area for the banks money, and operating in a totally different way than what they are doing today.* ¨

In accordance with the above, we propose the following:

P2 a. The more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

P2 b. The more banks seek for growth, the more likely they will go for a tighter collaboration with fintech firms.

3. Risk management, from the banks' perspective, has a negative impact on the extent of collaboration - the higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

The co-founder and chief marketing officer of Perx explains that traditional banks need a lot of security in the way they are doing business. He further explains that although there suddenly start to pop up fintech firms, which declare that they are able to provide the same services in a much more efficient way, banks perceive as a disruptive element. He says that banks are afraid collaborating with fintech firms, because they are not familiar with them, the way they do business, and the way they are handling the information they obtain. Additionally, he says that there exist some banks that are willing to do some changes and eager to digitize their services and introduce innovative solutions to the market by collaborating to some extent with fintech firms. However, in many cases, the real challenge, is convincing the board and the top management for going into a collaboration with fintech firms.

Direct quote: ¨*… they are really afraid of doing business with us, because they do not really know who we are, what we are doing… how are we getting there and how are we actually handling all the information that we have. So, they are more afraid, and I also think they are a bit reluctant on getting into our sphere and start to ask us really what we are doing.* ¨

Direct quote: ¨*… there are many eager financial institution startups, like small banks that wants to do a lot of change, and their mindset is totally different than Rune Bjerkes, or other CEO´s or chair members in the bank… every bank has, like I mentioned, a* *handful of good guys that want to do some changes, and they really push hard to get involved with startups, but at the end of the day, it is the top management that are either accept or decline a collaboration – do you like to take the risk or do you like to go on Easter vacation?¨*

Direct quote: Q*: ¨So, this will be the motivation for the bank to work with you, as you will do what they can´t? ¨*
A: ¨Yeah, more or less, but again, this is more or less too new or too scary. ¨

Additionally, risk management has also an indirect effect, as it moderates the effect financial inclusion has on the extent of collaboration.

The co-founder and chief marketing officer of Perx tells that they are developing, at the moment, lending possibilities for SMEs within the start-up sector - a sector that he considers as unbanked. He further explains that banks tend not to lend out money to start-ups in their early phases, and therefore, he thinks that Perx can close that gap and expand financial inclusion. He believes this will motivate banks to collaborate with them in the near future, however, he states that it will happen only when the banks will not perceive it as a too risky or a too novel opportunity.

Direct quote: *¨we are now developing an area of lending to SMEs, within the start-up sector, where we see that you are not able to have a loan when you are a start-up, you are unbanked… banks do not know what you are doing, and they see what kind of registration you have in Brønnøysund and you are in the sector or in a field they do not allow and you are thrown out… we are now developing a product where we let the start-ups borrow money from other people. I really think that it is a good idea, no banks can handle that today, but we can. ¨*

Direct quote: Q*: ¨So, this will be the motivation for the bank to work with you, as you will do what they can´t? ¨*
A: ¨Yeah, but again, this is more or less too new or too scary. ¨

In accordance with the above, we propose the following:
P3 b. The higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

P3 (moderator). Risk management moderates the effect financial inclusion has on the extent of collaboration.

4. Customer centric approach, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms want to become customer-centric oriented, the more likely they will go for a tighter collaboration with banks.

The co-founder and chief marketing officer of Perx states that the unfavorable regulation makes it impossible for the fintech firms to become as customer centric oriented as their vision. He says that in Norway, fintech firms cannot use a diversified portfolio of loans, where the lenders´ investment goes into a ¨basket¨ of a collection of loans. They are not allowed to do that, and they are obliged to have one-to-one connections. However, a collaboration with a bank, according to him, will solve that challenge.

Direct quote: *¨We are not allowed to do that, we need to, more or less have one-to-one connections, and we can´t put borrowers into a basket and give that piece of the basket to the lender. So, that is the tricky part for us. So that is where we see that a collaboration with a financial institution is spot on for us… doing a collaboration with the bank will solve that. ¨*

Thus, we propose:
P4 a. The more fintech firms want to become customer-centric oriented, the more likely they will go for a tighter collaboration with banks.

5. Financial inclusion, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

Regarding financial inclusion, the co-founder and chief marketing officer of Perx tells that, at the moment, they are developing lending possibilities for SMEs within the start-up sector - a sector that he considers as unbanked, as banks tend not to lend out money to start-ups in their early phases. He believes this will motivate banks to collaborate with them in the near future.

Direct quote: ¨*we are now developing an area of lending to SMEs, within the start-up sector, where we see that you are not able to have a loan when you are a start-up, you are unbanked… banks do not know what you are doing, and they see what kind of registration you have in Brønnøysund and you are in the sector or in a field they do not allow and you are thrown out… we are now developing a product where we let the start-ups borrow money from other people. I really think that it is a good idea, no banks can handle that today, but we can.* ¨

Direct quote: *"Q: So, this will be the motivation for the bank to work with you, as you will do what they can't?* ¨
A: ¨Yeah, but again, this is more or less too new or too scary. ¨

Accordingly, we propose the following:
P5 b. The more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

6. Organizational cultural fit, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the better the organizational cultural fit, the more fintech firms and banks will go for a tighter collaboration with each other.

According to the co-founder and chief marketing officer of Perx, regarding organizational cultural fit, fintech firms and banks should not have any concerns and hesitations towards a possible future collaboration. He states that there is an organizational cultural fit, where the fintech firms operate with cloud solutions, connect people and stream information to the bank, while the banks are doing the actual monetary operations. Namely, he does not expect any integration challenges, and thus, anticipates a future possible collaboration between both parties.

Direct quote: *¨No concerns at all… as crowdlending platforms, we operate very lean, with cloud solutions, we operate connection with people, and not connection with money… it is actually the banks that are doing the reconnection with real money… we are only do math… we just send out the streaming information towards the bank, and they do the handle, so I think that we in the future will not have any problem with operating with two different structures, technical structures. "*

We therefore propose the following:
Proposition 6a: The better the organizational cultural fit, the more fintech firms will go for a tighter collaboration with banks.

Proposition 6b: The better the organizational cultural fit, the more banks will go for a tighter collaboration with fintech firms.

7. Strategic fit, from both fintech firms and banks' perspective, has a positive impact on the extent of collaboration - the better the strategic fit, the more fintech firms and banks will go for a tighter collaboration with each other.

Regarding strategic fit, the co-founder and chief marketing officer of Perx explains that Perx and banks do not have strategic fit, since Perx are directly challenging the consumer lending sector. Perx is one of the pioneers within the private peer-to-peer crowdlending sector and has currently launched their lending services to SMEs as well, pricing approximately 50 percent of their traditional banks competitors.

Direct quote: ¨*We are challenging consumer lending banks directly… we have just launched lending also to SME´s… but we run loans day-to-day business now within the private sector… with interest rate cost of approx. 50% of what it is today from Komplett Bank and Bank Norwegian and so forth.* ¨

Accordingly, we propose the following:
P 7a: The better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

P 7b: The better the strategic fit, the more likely banks will go for a tighter collaboration fintech firms.

8. Innovation, from the fintech firms' perspective, has a negative impact on the extent of collaboration - the more fintech firms have an innovative mindset, the more likely they will go for a looser collaboration with banks.

The co-founder and chief marketing officer of Perx tells about the innovative collaboration Perx has with an e-currency payment provider. This third-party collaboration enables Perx to have a competitive advantage, as they can handle money transactions between lenders and borrowers, without the need of a collaboration with a traditional bank.

Direct quote: *"...we bought payment services from a third part company. And it is also a bit fintech about that, because, how we handled this was with e-currency. And that is quite good, because then we have an advantage on top of our competitors…"*
Additionally, a bad historical experience mediates the effect innovation has on the extent of collaboration.

We therefore propose the following:
P8 a. The more fintech firms have an innovative mindset, the more likely they will go for a looser collaboration with banks.

9. Market size, from the banks' perspective, has a positive impact on the extent of the collaboration - the bigger the fintech market is, the more likely banks will go for a tighter collaboration with fintech firms.

According to the co-founder and chief marketing officer of Perx, the change in the market structure, will encourage banks to collaborate with fintech firms. He states that once the fintech firms will become significant players in terms of size, and become real competitors, traditional banks will like to go into a collaboration to some extent with fintech firms.

Direct quote: *¨I think the market itself will push banks closer to wanting to cooperate with us… There are two ways of getting into collaboration with financial institutions, one is that size really matters, second is that we actually are getting real competitors, but that will take a really long time… ¨*

Accordingly, we propose the following:
P9 b. The bigger the fintech market is, the more likely banks will go for a tighter collaboration with fintech firms.

10. Survivability, from the banks' perspective, has a positive impact on the extent of the collaboration - the more banks struggle to survive, the more likely they will go for a tighter collaboration with banks.

During the interview, the co-founder and chief marketing officer of Perx explains the challenges the consumer lending banks are facing these days. He says that the share prices of the consumer lending banks have dropped dramatically last autumn, due to the decreased return on equity. He believes that if they will not collaborate with fintech firms, traditional banks will end up in a bankruptcy. He emphasizes that it is not that traditional banks are so eager to collaborate with fintech firms, but it is the fact that fintech firms are perhaps their only way to survive.

Direct quote: *“They [banks] have a really big problem… Otherwise the bank is bankrupt”.*

Direct quote: *“regarding a collaboration with fintech firms, I think it will solve their problem. So, it is not that they are so eager to collaborate with us, but they need to find a solution. So, it is not that we are really sexy, and they are running after us, but we are the solution to the problem”.*

We therefore propose the following:
P10 b. The more banks struggle to survive, the more likely they will go for a tighter collaboration with banks.

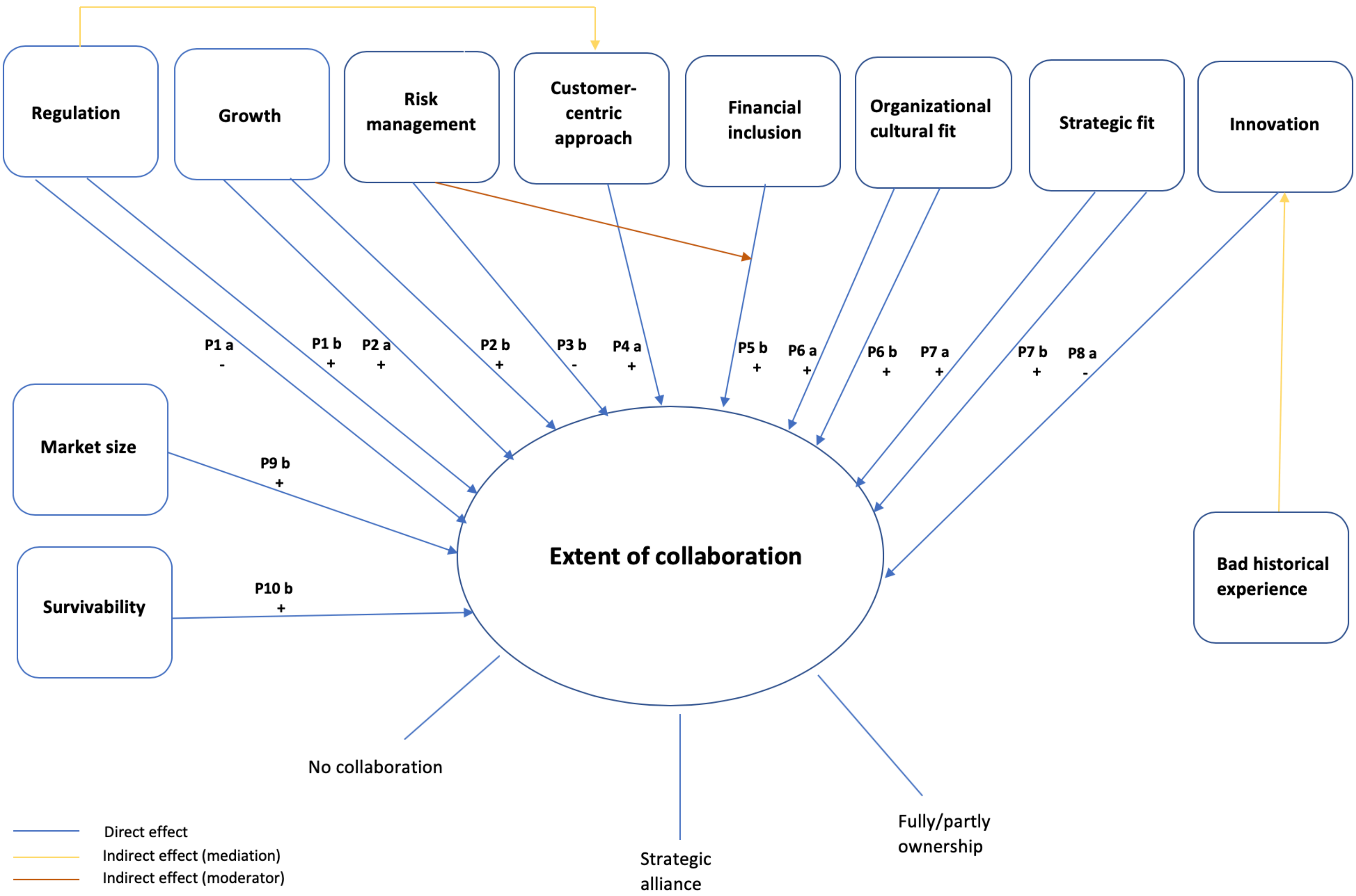
11. Bad Historical experience, has an indirect effect on the extent of collaboration - A bad historical experience mediates the effect innovation has on the extent of collaboration.

The co-founder and chief marketing officer of Perx explains that the negative historical experience led Perx to remain separate from the banks and innovate this new type of collaboration with an e-currency payment provider. Namely, the negative historical experience led them to this innovation, that motivates them to remain separate.

Direct quote: *“...we were really afraid of the legislation from the bankrupt and the problems with the Trustbuddy company for a couple of years ago, so we decided very early to take the stand where we outsourced… we bought payment services from a third part company.”*

P11 (mediation). A bad historical experience mediates the effect innovation has on the extent of collaboration.

Perx research model



Study case 3 - FundingPartner

About the company: FundingPartner is a peer-to-peer crowdlending / crowdfunding company operating in the business lending market. FundingPartner was established because they identified that profitable businesses didn't get the funding, they needed to grow bigger, and that ordinary people were getting too small returns on their savings. FundingPartner had a simple idea - to let them help each other. (FundingPartner, 2019)

FundingPartner connects people who want good and stable returns with companies that need loans. FundingPartner is a loan provider that allows private persons to lend money to a wide range of companies across different sectors and risk profiles. All companies seeking loans through the platform of FundingPartner must pass their comprehensive credit process and be evaluated by their credit team. The result is better returns for investors, and better financing for Norwegian companies. (FundingPartner, 2019)

Interview object: Co-founder and chief executive officer of FundingPartner

Type of collaboration (dependent variable): Currently Funding Partner is partly owned by DNB and Schibsted. Before that, Funding Partner and DNB was engaged in a strategic alliance.

The detected independent variables:

1. Regulation, from the banks' perspective, has a positive impact on the extent of collaboration - the more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

The co-founder and chief executive officer of FundingPartner explains that in order to enter into a formal collaboration with a traditional bank, they required them to obtain the operational license from the Norwegian financial authorities.

Direct quote: ¨*That was also a requirement from the bank, namely, in order to go into an official partnership with them, we needed the license to operate.* ¨

Direct quote*: "Q: What do you think will be the future of corporations between platforms and banks…?"*

"A: … it is of course up to regulation. Namely, what the regulators do?!"

Thus, we propose that:

P1 b. The more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

2. Growth, from the fintech firms' perspective, has a positive impact on the extent of the collaboration - the more fintech firms seek for growth, the more likely they will go for a tighter collaboration with traditional banks.

According to the co-founder and chief executive officer of FundingPartner, getting access to a big customer-base that may boost their growth, one of the main reasons they decided to collaborate with DNB, but also with Schibsted. The companies own 25 percent and 10 percent equity stakes respectively in FundingPartner.

Direct quote: ¨ *...that is one of the reasons why we got them on board; we wanted to work with both of them [DNB and Schibsted], in terms of distribution.* ¨

In accordance with the above, we propose the following:
P2 a. The more fintech firms seek for growth, the more likely they will go for a tighter collaboration with traditional banks.

3. Risk management, from the banks' perspective, has a negative impact on the extent of collaboration - the higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

The co-founder and chief executive officer of FundingPartner explains that traditional banks perceive the fintech sector as too novel and scary. Therefore, they hesitate a lot before engaging in some type of collaboration with fintech firms.

Direct quote: *¨...it is challenging for any bank to even consider owning a piece of something so scary as crowdfunding… ¨*

We therefore propose the following:

P3 b. The higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

4. Customer-centric approach, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the more fintech firms and banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with each other.

The co-founder and chief executive officer of FundingPartner explains that when collaborating with each other, both banks and fintech firms may enhance customer journey. He explains that traditional banks are eager to expand their types of products and services. They want to be able to serve any customer that contacts the bank, asking for a type of product or service. The co-founder and chief executive officer of FundingPartner further explains that this type of collaboration enable fintech firms to enhance their customer experience as well. It is much more convenient to the banks customers as they can be referenced to FundingPartner when they ask for crowdfunding services.

Direct quote: *¨DNB wants to be a shopping mall and they want to have everything in that shopping mall. They don't have crowdfunding and they want to help the client… so, they want us to be a product in their shelf of products, and their client can be referenced to our services. ¨*

In accordance with the above, we propose the following:

P4 a. The more fintech firms want to become customer-centric oriented, the more likely they will go for a tighter collaboration with banks.

P4 b. The more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

5. Financial inclusion, from both fintech firms and banks side, has a positive impact on the extent of collaboration - the more fintech firms and banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with each other.

The co-founder and chief executive officer of FundingPartner explain they attempt to serve all customers that are declined a bank loan, but still considered good customers. Therefore, he believes that a collaboration between a fintech firm and a traditional bank can serve this unbanked segment.

Direct quote: *¨… So, we are basically targeting the customers who are not getting bank loans, whom are still considered good customers… ¨*

Thus, we propose that:
P5 a. The more fintech firms want to expand financial inclusion, the more likely they will go for a tighter collaboration with banks.

P5 b. The more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

6. **Organizational Cultural fit**, from both fintech firms and banks side, has a positive impact on the extent of collaboration - the better the organizational cultural fit, the more likely fintech firms and banks will go for a tighter collaboration with each other.

The co-founder and chief executive officer of FundingPartner believes that DNB, like themselves, are good at targeting talented and extraordinary people, and therefore, he argues that there is a good match regarding human resources. However, he also claims that there are some challenges when working with a bank. Regarding decision-making processes, for instance, he explains that banks, with their multiple-level organizational structure, tend to be much slower compared to the lean and agile organizational structure of the fintech startups. However, he says that overall there are more similarities than differences between FundingPartner and DNB, and that there is an organizational fit that benefits both parties.

Direct quote: *¨I really like DNB, in terms of organizational fit, because DNB is among the top five most popular companies in terms of hiring, so they are very good at hiring top talents… which I think we do as well in Funding Partner. Therefore, when we need to talk to the bank, it is both convenient and inspiring to collaborate with talented people, whom you learn from. So, I think there is a good match there. ¨*

Direct quote: *¨I think the cultural fit is good. Of course, it is a bank, that is relatively slow, compared to a startup, of course there are many differences, yet there are still more similarities and advantages that arise from this collaboration ¨*

Therefore, we suggest the following:
Proposition 6a: The better the organizational cultural fit, the more likely fintech firms will go for a tighter collaboration with banks.

Proposition 6b: The better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

7. Strategic fit, from both fintech firms and banks side, has a positive impact on the extent of collaboration - the better the strategic fit, the more likely fintech firms and banks will go for a tighter collaboration with each other.

The co-founder and chief executive officer of FundingPartner argues that there is a strategic fit between FundingPartner and DNB. He says that they are targeting supplement markets of unsecured loans, as they are serving a new market that banks are not serving today. He further explains that DNB are willing to be like a shopping mall, that is able to offer their customers a large scale of products and services. Therefore, they wanted to collaborate with FundingPartner - a supplement service provider in their mall of services. He also explains that FundingPartner built their technology on top of the bank's solution, rather than building it from scratch, hence, supporting the strategic fit. Additionally, he explains that one of the main reasons that DNB, among all the participants in DNB accelerator program, chose FundingPartner to continue working together with, is that they truly believed in their overall strategy and the strategic fit they have.

Direct quotes: *¨...we are targeting a supplement market of unsecured collateral (non collateral) - a new market that the banks are not serving today anyway… ¨*

Direct quote: *¨DNB wants to be a shopping mall and they want to have everything in that shopping mall. They don't have crowdfunding and they want to help the client…*

Direct quote: *¨…they believed in our strategy overall. ¨*

Direct quote: *¨We also built our tech on top of their solution, which was easier and better, compared to if we had to build the tech from scratch as a start-up company¨*

We therefore propose the following:
Proposition 7a: The better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

Proposition 7b: The better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

8. Innovation, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

According to the co-founder and chief executive officer of FundingPartner, DNB has a very innovative mindset, compared to other traditional banks. He says that DNB truly believes that staying ahead is a success criterion that is becoming more and more important in today's constant changing world, and that is why they decided to collaborate with FundingPartner.

Direct quote: ¨*I think they [DNB] are innovative, they want to do new things, and that is why they are investing in us. Therefore, I think the cultural fit is good.* ¨

In accordance with the above, we propose the following:
P8 b. The more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

9. Fintech sector size, from the banks' perspective, has a positive impact on the extent of collaboration - the bigger the fintech market is, the more likely banks will go for a tighter collaboration with fintech firms.

The co-founder and chief executive officer of FundingPartner argues that the market size of the fintech sector has a significant impact on the willingness of traditional banks to collaborate. He states that traditional banks are reactive, rather than proactive, and that they do not take initiatives before they feel obliged to. Additionally, he highlights that one of the main reason DNB decided, in the accelerator program, to go to a further collaboration with them, is because they believed in their ability to continue to scale up.

Direct quote: ¨*…if you look at the numbers, we had 205 million in crowdfunding last year, and even if we will double it this year to 400, it will still consider a small market.*

I don't think any of the banks will do anything. So, it will, perhaps, take two more years, before the banks even bother to get into a collaboration. They need to feel it; they need to see they lose several cases. They not going to do anything before they actually have to. Banks, in general, are reacting, they are not proactive. ¨

Direct quote: ¨*…our ability to continue growing, partnering with others, and the vision we had, were, perhaps, the reasons DNB decided to further collaborate with us, after the accelerator program. So, they truly believed in our ability.* ¨

In the accordance, we suggest the following:
P9 b. The bigger the fintech market is, the more likely banks will go for a tighter collaboration with fintech firms.

10. Trust, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms want to build trust, the more likely they will go for a tighter collaboration with banks.

According to the co-founder and chief executive officer of FundingPartner, one of the biggest benefits FundingPartner gets from the collaboration with DNB is an increased trust, which is essential in the financial service sector.

Direct quotes: ¨*Our main benefits from that collaboration are trust, acknowledgement and competence.* ¨

Direct quote: ¨*Q: …what do you think you are taking out of the collaboration with DNB and Schibsted, compare to standing alone?"*
"A: Money, competence, they really good in what they do, and I can call them anytime, credibility/trust, basically only by having them assessed all the players decided to work with us. These are the top three for sure."

We, therefore, propose the following:

P10 a. The more fintech firms want to build trust, the more likely they will go for a tighter collaboration with banks.

11. Capital, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

The co-founder and chief executive officer of FundingPartner explains that one the reasons they decided to join for the accelerator program, is due to their need for capital.

Direct quote: ¨*…we joined the accelerator program at spring 2017, which gave us funding, and also access to startup lab, access to DNB, which is basically an open-door policy, talk to everyone, interview whenever you want.* ¨

Accordingly, we propose the following:
P11 b. The higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

12. Brand image, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms struggle with branding issues, the more likely they will go for a tighter collaboration with banks.

The co-founder and chief executive officer of FundingPartner explains how beneficial the collaboration has been to their brand-image. Being associated to DNB helped them strengthen their name, reputation and position in the fintech landscape.

Direct quote: ¨*Our main benefits from that collaboration are trust, acknowledgement [brand image] and competence.* ¨

Direct quote: ¨*…basically, only by being associated with DNB, made other players* *interested in working with us. So, it really contributed to our brand image building…¨*

We, therefore, propose the following:
P12 a. The more fintech firms struggle with branding issues, the more likely they will go for a tighter collaboration with banks.

13. Expertise, from both fintech firms and banks' perspective, has a positive impact on the extent of collaboration - the more expertise the potential partner possesses, the more likely fintech firms and banks will go for a tighter collaboration with each other.

According to the co-founder and chief executive officer of FundingPartner, getting access to experts inside of DNB have been crucial for a startup company like Fundingpartner.

Direct quote: ¨*We got also competence. We got a positive response from everyone we requested to meet us in the banks. The tax or finance products sector, for instance, is a very niche sector. However, DNB has experts on that… so, having this type of access to experts, on topics that I would have spent a lot of money on, it is a huge advantage. DNB has even better experts than some of the external services that you have bought… Additionally, it gave us insights, which comes with the competence; the ability to interview various regional offices, the ability to understand the market and the product-market fit.* ¨

Direct quote: ¨*Both of Schibsted and DNB have strengths, and a fantastic position in their own markets. It is a real privilege which we benefit from.* ¨

In the accordance, we suggest the following:
P13 a. The more expertise the potential partner possesses, the more likely fintech firms will go for a tighter collaboration with banks.

The co-founder and chief executive officer of FundingPartner explains that one of the reasons traditional banks decide to go for a collaboration with fintech firms, is in order to gain knowledge and insights of the fintech sector. Secondly, he tells that their own ability to achieve and deliver fast results in the accelerator program truly impressed DNB and distinguished them from the other participants. Finally, their proven expertise motivated DNB to a further collaboration with FundingPartner.

Direct quote: *¨...why do banks collaborate with fintech firms? …banks see that the market is almost 15 percent of the SME lending in the UK. If you are smart, you evolve, you don't just stay steady put. Currently, there are four platforms in the business lending. Among the 120 different banks that exist in Norway, only 3 banks directly involved in us. So, the other 117 banks, do not have the insights these 3 banks possess. So, although they are investing much, they get an access to a valuable information and understanding of a market that has the potential to become big. ¨*

Direct quote: *¨I think the main thing that highlighted us, is our execution ability. I mean they met us every week, and they were very impressed with what we could have achieve, every week, during the three months program. So that was the execution ability. ¨*

We, therefore, propose the following:
P13 b. The more expertise the potential partner possesses, the more likely banks will go for a tighter collaboration with fintech firms.

14. Prior collaboration, from the banks' perspective, has a positive impact on the extent of collaboration - the longer traditional banks have experienced working together with fintech firms, the more likely they will go for a tighter collaboration with fintech firms.

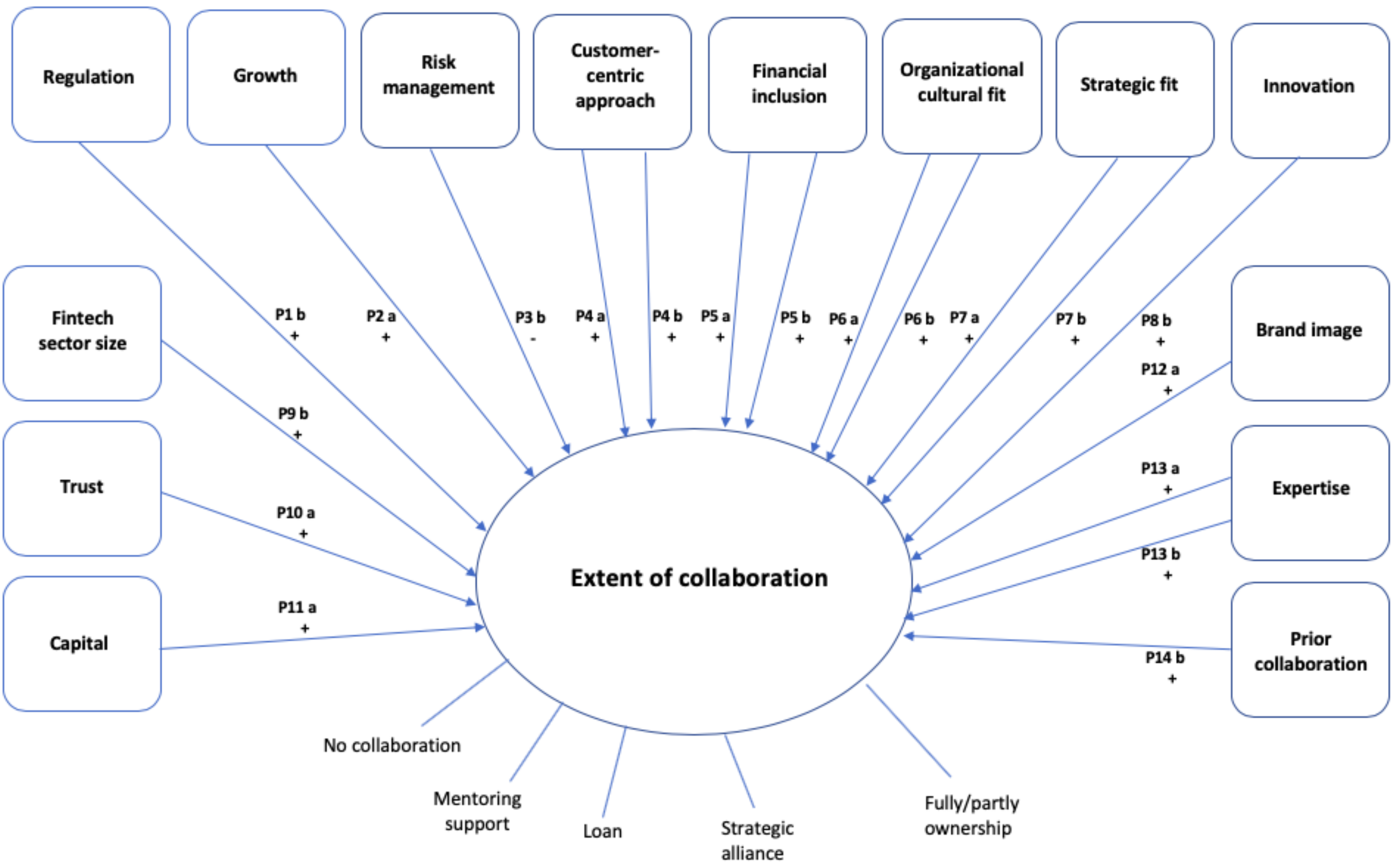
The co-founder and chief executive officer of FundingPartner says that first DNB was investing in them during the accelerator program. After the program, they decided to further collaborate and established the strategic alliance. Thereafter, DNB decide to purchase equity stakes in FundingPartner. He explains that it was a very gradual development, hence, the longer DNB has experienced working together with them, the more DNB was willing to go for deeper the extent of collaboration.

Direct quote: *¨Q: Why and how do you think DNB dares to be associated with FundingPartner?"*
"A: They have not gone one round to decide on that, right? They have gone many rounds. It was a very gradual development¨

Direct quote: *¨Q: What happened after the accelerator program, did you ended up Strategic Alliance with them, before they bought ownership stakes of Funding Partner?"*
"A: I would argue yes. ¨

Accordingly, we propose the following:
P14 b. The longer traditional banks have experienced working together with fintech firms, the more likely they will go for a tighter collaboration with fintech firms.

FundingPartner research model



Study case 4 - Monner

About the company: Monner is a peer-to-peer crowdlending / crowdfunding company operating in the business lending market. It is a digital platform that put companies with growth ambitions in direct contact with investors, without taking part in the actual transaction. Monner has identified that a lot of business owners in small- and medium sized enterprises have to provide their own personal security for getting loans in a traditional bank. This is often a slow process and the risk of being denied the loan is also great. Additionally, they know that many individuals have an excess of money, which could have played a bigger role and given greater returns if they were invested in a different way. Through their platform, Monner arranges for companies with growth ambitions to come into direct contact with people who want to focus on development. (Monner, 2019)

With a high level of expertise in digital technology, financial services and marketing, Monner offers services that provide the basis for economic growth, jobs and other positive effects. (Monner, 2019)

Interview object: Co-founder and chief executive officer of Monner

Type of collaboration (dependent variable): Currently Monner is partly owned by SR bank.

The detected independent variables:
1. Regulation, from the banks' perspective, has a negative impact on the extent of collaboration - the more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a looser collaboration with fintech firms.

According to the co-founder and chief executive officer of Monner, the involvement of SR-Bank in Monner, was looked upon with suspiciousness and negativity by the Norwegian financial authorities. He says that the authorities perceived it as SR-Bank encountered a way around the regulations, rather than promoting the importance of rule of law among new players.

Direct quote: *"…the Norwegian financial authorities - Finanstilsynet, viewed our investors involvement in Monner as a negative, because… they viewed it with suspicion as a way of; oh, so they are trying to find ways around our regulation, rather than helping and making sure that these new players are actually playing by the rules.* *"*

Accordingly, we propose the following:

P1 b. The more favorable the regulation is towards fintech firms, the more likely banks will go for a looser collaboration with fintech firms.

2. Growth, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

The co-founder and chief executive officer of Monner explains that the initial investment provided by SR-Bank was essential in order to scale up, as it helped them to build their team, their product as well as licenses needed.

Direct quote: *¨That initial investment gave us the financial road way in order to build the team, develop the product and get the license. ¨*

Thus, we propose:
P2 a. The more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

3. Risk management, from the banks' perspective, has a negative impact on the extent of collaboration - the higher the risk, the more likely banks will like to go for a looser collaboration with fintech firms.

The co-founder and chief executive officer of Monner explains that before SR-Bank made their initial investment in Monner, they conducted a thoroughly analysis regarding brand risk and market perception risk for being associated with a fintech startup.

Direct quote: *¨From the banks' perspective, one of the things we analyzed in detail, together with the bank people and advisors, was the brand risk and market perception risk for the bank, before they made their investment in Monner. ¨*

Accordingly, we propose the following:
P3 b. The higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

4. Customer-centric approach, has an indirect impact on the extent of collaboration - customer-centric approach moderates the effect strategic fit has on the extent of collaboration.

According to the co-founder and chief executive officer of Monner, SR-Bank realized that they can allow them to better focus on their end-customers, and by that, create a stronger relationship. Additionally, SR-Bank perceived Monner as a complementary service provider, rather than a disruptive one, and therefore, the interaction effect between their customer orientation and the shared strategic fit, is what motivated them to go into a further collaboration.

Direct quote: ¨*When we came in… the answer was not to say no; the answer was to say how about you do it this way. You can actually put Monner in place and actually finance the loan, and by doing it you are actually focus on your end-customer, rather than just financial vehicle. By doing that, you basically create a much stronger relationship. That was the rationale behind their investment. They saw this as a complementary to their high margin business. So, it fits very well.* ¨

We therefore propose the following:
P4 (moderator). Customer-centric approach moderates the effect strategic fit has on the extent of collaboration.

5. Financial inclusion, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the more fintech firms and banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with each other.

The co-founder and chief executive officer of Monner predicts that in the future, providing a loan via crowdfunding platforms would be a common investment option. Therefore, SMEs will benefit enormously from this change, as they will be able to receive capital more easily by also individuals or small investment companies who wish to invest.

Direct quote: *“Q: Where do you see the future of the relationship between banks and the platforms, especially in the lending field?”*
“A: I think in terms of loans to SMEs, that is going to be a common part of any person or small investment company’s portfolio. So, in terms of lending in crowdfunding platforms, I think it will available as an investment option.”

In accordance with the above, we propose the following:
P 5a: The more fintech firms want to expand financial inclusion, the more likely they will go for a tighter collaboration with banks.

P5 b. The more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

6. Strategic fit, from both fintech firms and banks side, has a positive impact on the extent of collaboration - the better the strategic fit, the more likely fintech firms and banks will go for a tighter collaboration with each other.

The co-founder and chief executive officer of Monner explains that since the beginning they have seen Monner as a collaborative player, and that the collaborative plate is where the crowdfunding sector needs to go. He argues that the reason Funding Circle- the most successful fintech firm in Europe is struggling to make profits, is due to the competitive model it possesses, instead of embracing a collaborative model. Secondly, he explains that when SR-Bank decided to collaborate with Monner in order to diversify their product matrix, SR-Bank was struggling with providing loans to businesses. Therefore, behind their investment was the rationale that there is a really good fit with Monner, a complementary service provider to their high margin business. Additionally, he says that SR-Bank has established a corporate venture arms, that enables them to preserve a distance from their line business. They have a kind of portfolio strategy, with three different horizons; close-to-core investments, more niche investments and more exploratory investments. Thereafter they measure the vectors, to see whether the alignment become stronger or weaker from the core interest of the bank.

Direct quote: *¨...we [Monner] believe that the collaborative plate is where crowdfunding type financing needs to go. It needs to be a part of the solution and not the only solution as a competitive to banks… Look at the biggest and most successful player in Europe- funding circle! They are still not making money. They become a very valuable company, but they are not a cash making machine yet, which is surprising given the volume and the size of it. I think one of the problems is that it is a competitive model rather than a collaborative model, and it only solves a specific part of the end-to-end need for the SMEs. I think that's something that crowdfunding players needs to take in - they are not the center of the universe. ¨*

Direct quote: *"I think it was from a realization that this was a pain point for them. They [SR-Bank] were struggling with providing loans for businesses, at that point in time."*

Direct quote: *¨… SR bank has established a corporate venture arms, that is called FinStart Nordic… The reason for doing that is to make sure that there is a distance from their line business. I think what the bank has as a strategy is very much a portfolio strategy, where you have three different horizons, you have close to core investment, more niche products and a more exploratory place… then you follow and see: is the alignment becoming stronger, is the alignment becoming weaker? It is too out away from the core interest of the bank? ¨*

We therefore propose the following:

P6 a. The better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

P6 b. The better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

7. Innovation, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

The co-founder and chief executive officer of Monner emphasizes that the Norwegian fintech firms are specialized in technology-driven solutions, rather than customer-based products. He further explains that these technology-driven solutions may contribute and help the Norwegian banking sector overcome the challenges they are dealing with.

Direct quote: *¨the Norwegian´s skill set, in terms of both engineers and the players in tech field, we are generally better at providing technology driven solutions rather than consumer driven solutions… We are very well positioned for the next wave of fintech firms at providing efficiency gains, providing technology solutions, solving bigger problems within the Norwegian banking sector, and there are a lot of them…"*

Thus, we propose:
P7 b. The more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

8. Open Banking Initiative, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the existence of the open banking initiative, motivates fintech firms and banks to go for a tighter collaboration with each other.

The co-founder and chief executive officer of Monner explains that most banks are currently building an access to their APIs, in addition to the PSD2 reform. In addition to the PSD2 obligations, many Norwegian banks are opening up even further, by implementing an open banking initiative. This initiative provides a much deeper and richer interface of the banking system. Therefore, he argues that when collaborating with traditional banks, fintech firms may enjoy an access to the banks' APIs, which the banks are not legally obliged to provide, but will provide as part of partnerships.

Direct quote: ¨*I am on purpose distinguish very clearly between PSD2 implement and open banking implement, because PSD2 as a regulation, is very limited in terms of what the information is required to be providing. Most of the banks are actually building a much more sophisticated access-level, which is called open banking and provides a much deeper and richer interface to the banking system, and most of the banks are more or less in the process of building that access. Therefore, I think collaborative models where the bank has a role to play, is going to be much more valuable, because then fintech firms can get access to their open banking (APIs), which banks are not legally obliged to provide, but they may do that as part of partnerships.* ¨

We therefore propose the following:
P8 a. The existence of the open banking initiative motivates fintech firms to go for a tighter collaboration with banks.

The co-founder and chief executive officer of Monner further explains that it is also in the interest of the banks to share their information in a meaningful way. He claims that banks are able and should redefine themselves as intermediaries of data, rather than just monetary data.

Direct quote: ¨It is not in the interest of the banks to keep the data for themselves. The interest of the banks is to provide the data in a meaningful way. I think most of the banks are going to be interested in that. They are already providing data to other systems; they just need to be financial data. Banks can redefine themselves as also intermediaries of data, rather than just monetary data, and they should. I think it is going to take a while, but I think it will be a much more valuable and interesting position for the banks to take. ¨

Accordingly, we propose the following:
P8 b. The existence of the open banking initiative motivates banks to go for a tighter collaboration with fintech firms.

9. Brand image, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms struggle with branding issues, the more likely they will go for a tighter collaboration with banks.

Regarding brand image, the co-founder and chief executive officer of Monner claims that collaboration with traditional banks can benefit fintech firms. He says that traditional banks have a reputation of being safe, trustworthy and stable, and therefore, being associated with them may benefit fintech firms' image.

Direct quote: ¨Banks can contribute to the brand image by providing, some sort of, trust and longevity, but we don't act as we´re owned by SR bank and therefore people should trust us. We must build our own brand, by being solid, truthful, transparent and proper, and if we do that and we aligned with the bank´s brands strategy, then we're good. ¨

In accordance with the above, we propose the following:
P9 a. The more fintech firms struggle with branding issues, the more likely they will go for a tighter collaboration with banks.

On the other hand, he argues that from the banks' perspective, it is rather the opposite. Traditional banks are much more cautious about their brand reputation risk, than the fintech firms, and therefore, they tend not to make new investments before they conduct a thoroughly analysis that assures it is a safe investment.

Direct quote: ¨*… one of the things we analyzed in detail, together with the bank people and advisors, was the brand risk and market perception risk for the bank, before they made their investment in Monner.* ¨

Direct quote: ¨*From the banks' perspective, it is much more important to make sure that Monner behaves, because brand reputation risk for the bank is a big deal. For example, SR bank, I can say with certainty, will never ever invest in a consumer lending crowdfunding business. It is not necessarily because it is not a good idea, but it is because it is not the kind of brand they want to be associated with. So that is extremely important for the banks, while for Monner it is almost the opposite.* ¨

We therefore propose the following:
P9 b. The more traditional banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms.

10. capital, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

The Co-founder and Chief Executive Officer of Monner explains that the need for capital was essential for their development. Additionally, he says that the collaboration is mainly driven by the opportunities it brings to the table. Lastly, he states that the Norwegian fintech firms have a big challenge, regrading is in the venture capital sector.

Direct quote: ¨*I think it is primarily driven, as it should be, about where the opportunity lies. I think the business opportunity for fintechs, especially… again if you look at the Norwegian VC market- the venture capital sector, we don´t do big tickets, and we certainly don't do big tickets in consumer-based technologies.* ¨

Direct quote: ¨*…we got our first funding with a PowerPoint and some trust, and that funding came from a bank. It wasn't easy, it took a long time to do it, but we didn't* *scale the team until we had that funding¨*

Direct quote: *¨That initial investment gave us the financial road way, in order to build the team, develop the product and get the license. ¨*

Thus, we propose:
P10 a. The higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

11. Profitability, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms.

According to co-founder and chief executive officer of Monner, banks main focus on margins, may lead banks to lose the whole ecosystem of a customer, because the customer will simply receive both the loan and other services as pensions, salaries and payment services from a different bank. Therefore, he explains that a collaboration with crowdlending fintech firms enables banks to retain the customers and utilize the whole ecosystem.

Direct quote: *¨If you look for at a banking model for a business, it is purely a margin play on the interest rate… a loan of 1 million NOK is going to yield, for the sake of the argument, around NOK 100,000 in margin, and a loan of 10 million NOK is going to yield a margin of 1 million kroner. Now, the cost of admin is exactly the same, the only different is if you are going to be making 10 times as much money on the margin for the larger loan…. by saying no to a small loan, you are also saying no to the ecosystems of other services like payment services, pensions, salaries and a lots of stuff that you as a bank are earning money from... and the other bank that takes that loan is going to take the entire customer relation over, so you lose the rest of the business. So, this is the dilemma that the bank is struggling with. ¨*

Accordingly, we propose the following:
P11 b. The more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms.

12. Technical dependency, from the fintech firms' perspective, has a negative impact on the extent of collaboration - the more fintech firms are technically dependent on the banking system, the more likely they will go for a looser collaboration with banks.

The co-founder and chief executive officer of Monner explains, due to his previous experience, that he understands the technical challenges that may arise when integrating two different systems. Therefore, he says that Monner has built their own technical system on top of the SR-Bank's system, in order to minimize technical dependency on the banks system.

Direct quote: ¨we build our own services, we have our own tech team, so we have our own services to make sure that we minimize technical dependency on the banking systems. ¨

We therefore propose the following:
P12 a. The more fintech firms are technically dependent on the banking system, the more likely they will go for a looser collaboration with banks.

13. Network, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the better network fintech firms holds, the more likely they will go for a tighter collaboration with banks.

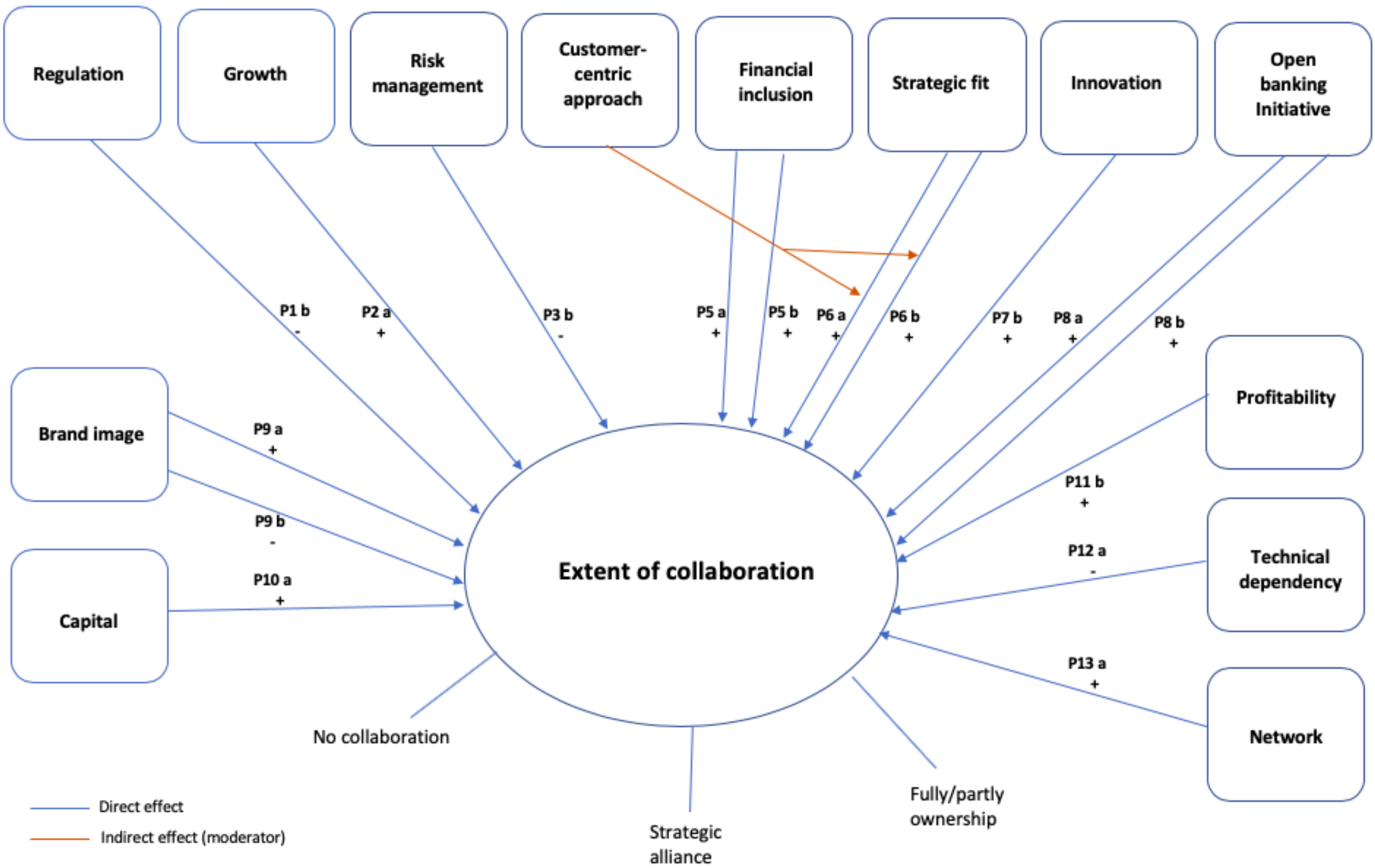
The co-founder and chief executive officer of Monner, highlights during the interview the importance their network had on the extent of the collaboration with SR-Bank.

Direct quote: *¨… we [CEO and chairman of the board] have many years of experience from the industry, so we had a network, we knew where we were going. ¨*

In accordance with the above, we propose the following:

P13 a. The better network fintech firms holds, the more likely they will go for a tighter collaboration with banks.

Monner research model



Analysis of study cases – banks

Study case 5 - Sparebanken Sør

About the company:

Sparebanken Sør is one of the country's largest regional saving bank with its head office in Kristiansand, Norway. The bank has a total of 34 offices in Vest-Agder, Aust-Agder, Telemark and Rogaland. The bank has total assets of approximately NOK 90 billion and has approximately 500 employees. (Sparebanken Sør, 2019)

Sparebanken Sør seeks to be the first choice for private individuals and businesses in the bank's market area. The added value is delivered through expertise, decision-making and proximity to the market. (Sparebanken Sør, 2019)

Interview Object: Head of strategic development at Sparebanken Sør

Type of collaboration (Dependent variable): Currently Sparebanken Sør has no collaboration with a fintech firm, besides partly ownership in Vipps.

The detected independent variables:

1. Growth, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

According to the head of strategic development at Sparebanken Sør, fintech firms that collaborate with traditional banks, may enjoy an access to a large customer-base, that can stimulate their development.

Direct quote: ¨*… we have a large customer base… it is a lot easier to get the product, or new services into a market through us and other banks like us.* ¨

Accordingly, we propose the following:

P1 a. The more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

2. Risk management, from the banks' perspective, has a negative impact on the extent of collaboration - the higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

The head of strategic development at Sparebanken Sør explains that they are very risk focused, and before going into any kind of collaboration, they do a thoroughly risk assessment process.

Direct quote: ¨*we are very risk focused, so, that is part of our nature, being a bank, being focused on risk, so off course, we would pay a lot of attention of evaluating the risk before working together with someone.* ¨

Thus, we propose:
P2 b. The higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

3. Customer-centric approach, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

According to the head of strategic development at Sparebanken Sør, one of their main focus is to enhance their customer experience, by providing more customer-oriented products.

Direct quote: ¨ *we are getting better at creating customer-oriented products. So, all products we go into today, we want them to be customer oriented. We are not always succeeding, off course, but that is the main goal for us and the main goal for new fintech firms.* ¨

Direct quote: *¨If someone comes to us with, let's say, ¨ready-to-plug in¨ service, it is much more important for us to secure that we have the services that our clients want and what they need. ¨*

We therefore propose the following:
P3 b. The more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

4. Organizational cultural fit, from the banks' perspective, has a positive impact on the extent of collaboration - the better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

The head of strategic development at Sparebanken Sør emphasizes that they are focusing on preserving their current state of business, rather than exploring new potential collaborations with fintech startups. Additionally, regarding the integration process itself, he explains that the tighter the extent of collaboration between fintech firms and traditional banks, the more complex and challenging it becomes.

Direct quote: *¨… there are quite a few of us that try to be a least somehow updated, we spend a bit of time figuring out what is happening…. you can't go into detail of everything. ¨*

Direct quote: *¨Sparebanken Sør is, let's say, is more conservative... ¨*

Direct quote: *¨there would be challenges to do it, but it depends on what kind of partnership we would go into together and how we set it up. To just integrate a service, would obviously be easier than if we go in the market together, with partly ownership and so on, that brings into more complexity and so on into the corporation¨*

In accordance with the above, we propose the following:

P4 b. The better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

5. Strategic fit, from the banks' perspective, has a positive impact on the extent of collaboration - the better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

According to the head of strategic development at Sparebanken Sør, a collaboration with fintech firms may help Sparebanken Sør to become more efficient and will enable them to navigate through all the different products and areas they are targeting.

Direct quote: *¨… it can help us to speed up development within areas that we are not able to ramp up ourselves. We have a lot of products within different areas, and in the future, we hope to glue all these products together, but we will not be able to produce all of them by ourselves. ¨*

Accordingly, we propose the following:
P5 b. The better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

6. Bank size, from the banks' perspective, has a positive impact on the extent of collaboration - the larger the size of the bank, the more likely they will go for a tighter collaboration with fintech firms.

The head of strategic development at Sparebanken Sør explains that size has a big role in the decision whether to collaborate to some extent or not. He says that unlike DNB, which is a big bank that is able to invest in different directions, Sparebanken Sør has fewer workers, and therefore, it is more challenging to do so.

Direct quote: *¨…one of the reasons is obviously size. We have fewer people working with this, so it is more difficult for us to differentiate here and kind of go into a lot of different services. ¨*

Thus, we propose:
P6 b. The larger the size of the bank, the more likely they will go for a tighter collaboration with fintech firms.

7. Prior collaboration, from the banks' perspective, has a positive impact on the extent of collaboration - the longer traditional banks have experienced working together with fintech firms, the more likely they will go for a tighter collaboration with fintech firms.

According to the head of strategic development at Sparebanken Sør, sorting out among the different fintech firms, is a challenging task. It requires time and resources and involves high risk. Therefore, when evaluating the different fintech companies, they emphasize those who had a prior successful collaboration, either with them or with other traditional banks.

Direct quote: *¨it is important who is behind it, of course. If we know something about them before, and obviously if they have succeeded before. ¨*

We therefore propose the following:
P7 b. The longer traditional banks have experienced working together with fintech firms, the more likely they will go for a tighter collaboration with fintech firms.

8. Brand image, from the banks' perspective, has a negative impact on the extent of collaboration - the more banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms.

The head of strategic development at Sparebanken Sør states that brand image has a significant weight in the decision whether to collaborate to some extent, or not. He claims that Sparebanken Sør always act cautiously before being associated to any external company, in order to protect their brand name and reputation.

Direct quote: *¨Q: Regarding image, does image play a role in this decision?*
A: Off course, yes. ¨

Direct quote: *¨So, we will always be very careful when it comes to what kind of brand, we want to be associated together with… ¨*

Accordingly, we propose the following:
P8 b. The more banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms.

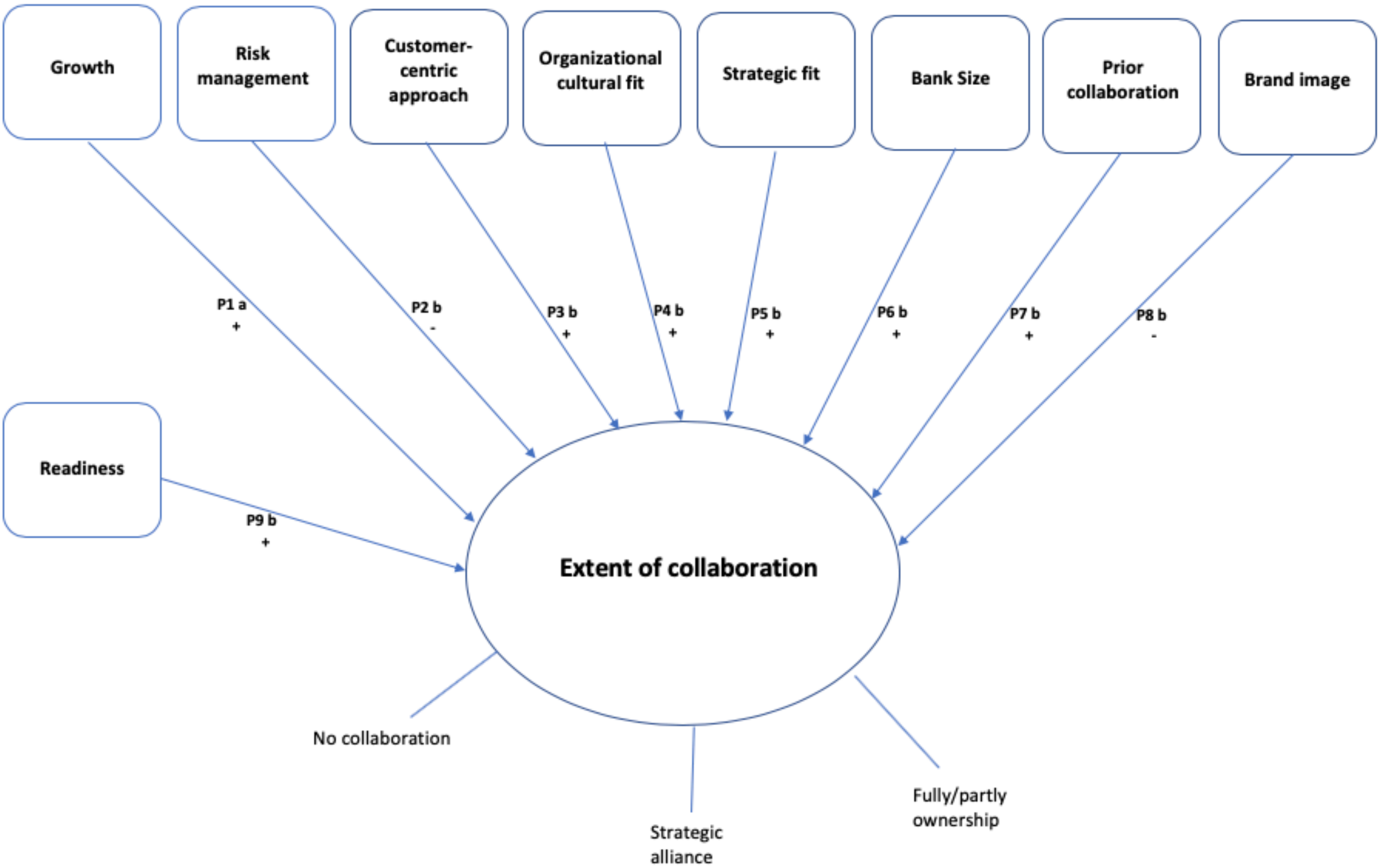
9. Readiness, from the banks' perspective, has a positive impact on the extent of collaboration - the readier ¨to plug in¨ a fintech company is, the more likely the bank will go for a tighter collaboration with fintech firms.

According to the head of strategic development at Sparebanken Sør, the bigger effort the bank will have when integrating a new fintech firm to its current business model and technological system, the more likely they will have an ownership stake of the fintech company.

Direct quote: *¨...it depends on where in the life-cycle they are as well. If they need us in a way, and nothing is ready, we need to put in a lot of effort than it makes sense to us to also have an ownership in new cooperation. ¨*

Thus, we propose:
P9 b. The readier ¨to plug in¨ a fintech company is, the more likely banks will go for a tighter collaboration with fintech firms.

Sparebanken Sør research model



Study case 6 - DNB

About the company:

DNB is Norway's largest financial group with head office in Oslo, Norway. The bank has total assets of approximately NOK 2898 billion and has approximately 9000 employees. (DNB, 2019)

As Norway's largest bank and one of the Nordic region's largest financial groups, DNB offers a complete range of financial services through online banking, mobile, bank offices and international offices. They do also offer banking services in “Post in store” and post offices across Norway. In addition, they have 17 international offices as well. (DNB, 2019)

Interview Object: Innovation and sales developer at DNB

Type of collaboration (Dependent variable): DNB owns multiple fintech firms and invests in new fintech start-ups through their ¨NXT¨ accelerator program. They have among other companies a partly ownership in the crowdlending company, FundingPartner. Before the ownership stake, they were engaged in a strategic alliance with the same company.

The detected independent variables:

1. Regulation, from the banks’ perspective, has a positive impact on the extent of collaboration - the more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

The innovation and sales developer at DNB tells that DNB and FundingPartner agreed during the accelerator program, that only after FundingPartner will get their license to operate, they will consider going into a further collaboration.

Direct quote: *“They developed their entire platform during the three months program, and we agreed that in the day they will get a license, we will enter into a cooperation agreement. A week after they got their license, we wrote the cooperation agreement.”*

Accordingly, we propose the following:

P1 b. The more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

2. Growth, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks seek for growth, the more likely they will go for a tighter collaboration with fintech firms.

According to the innovation and sales developer at DNB, one of DNBs most important mantras is "More than just a bank". DNB is constantly seeking for new business areas and services that other banks have yet to discover. Therefore, he argues, that fintech firms with their innovative mindset may contribute to DNB´s agenda.

Direct quote: *¨Being more than just a bank, means that we should be able to offer services that no one had never thought a bank can offer. Then the fintech initiatives are a very central theme. ¨*

Thus, we propose:
P2 b. The more banks seek for growth, the more likely they will go for a tighter collaboration with fintech firms.

3. Risk management, from the banks side, has a negative impact on the extent of collaboration - the higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

The innovation and sales developer at DNB explains that DNB allocated in total NOK 200 million for giving loans to fintech startups, due to the high risk it involves. Secondly, DNB has established DNB Ventures, which set aside NOK 250 million for investments in fintech startups. He emphasizes that they don´t necessary establish corporate agreements, rather invest in startups that operate in the same business areas as DNB. Additionally, they started an accelerator program with a partnership with StartupLab. The program provides the participating fintech startups, both StartupLabs facilities and a mentor/sponsor from DNB.

Direct quote: *¨...we have chosen to spend NOK 200 million... with the understanding that these NOK 200 million we can afford to lose, because we have taken substantially higher risk with these firms…"*

Direct quote: *¨We have a company within DNB called DNB ventures, where DNB's corporate management has set aside NOK 250 million, for investments in companies with which we have some form of interaction. It does not have to be a cooperation agreement, but it can be companies that we believe are within the area we work with. ¨*

Direct quote: *¨ it's an accelerator program that we have created with StartupLab. So, this is a partnership with StartupLab… they have access to all the StartupLabs facilities, but in addition they get a mentor and a sponsor in DNB who helps companies with everything they wonder about, things that the bank can really help them with. ¨*

We therefore propose the following:
P3 b. The higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

Additionally, risk management has an indirect impact on the extent of collaboration - risk management mediates the effect strategic fit has on the extent of collaboration.

According to the innovation and sales developer at DNB, fintech firms operate in areas with higher risk than traditional banks´ risk appetite and tolerance. Therefore, fintech firms can be perceived by the traditional banks as a supplement to the services they provide. A collaboration with fintech firms enables traditional banks to enter into higher risk type of loans, that otherwise they would have not gone into. Namely, this type of complementarity motivates DNB to extent the collaboration.

Direct quote: *¨The biggest motivation for us is that today we do not offer unsecured loans and unsecured debt. These loans are risky and are not provided by other banks* *at all. Today, we see that there are more people who are asking for these loans, and as we did not want to have our own crowdfunding platform, we wanted to have a place where we could send our customers to, and where we could know those who receive our customers, in advance. ¨*

Thus, we propose:
P3 (mediation). Risk management mediates the effect strategic fit has on the extent of collaboration.

4. Customer-centric approach, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

According to the innovation and sales developer at DNB, fintech firms can help them reach their ¨more than just a bank¨ agenda, by enhancing their customer experience with more customer-oriented products and services.

Direct quote: ¨The fintech initiatives are a very central theme in creating more customer-oriented solutions. ¨

In accordance with the above, we propose the following:
P4 b. The more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

5. Financial inclusion, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

The innovation and sales developer at DNB explains that there is a growing trend towards unsecured loans. These loans are not provided by DNB, or in any other traditional banks today. Therefore, by collaborating with crowdlending fintech platforms, he believes DNB will be able to solve this gap.

Direct quote: ¨*Today, we see that there are more people who are asking for these loans [unsecured loans], and as we did not want to have our own crowdfunding platform, we wanted to have a place where we could send our customers.* ¨

We therefore propose the following:
P5 b. The more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

6. Organizational cultural fit, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the better the organizational cultural fit, the more likely fintech firms and banks will go for a tighter collaboration with each other.

The innovation and sales developer at DNB states that while fintech firms are very agile and are able to make fast decisions, banks are characterized by many levels, rigidity and long decision-making processes. He further explains that these differences may jeopardize a collaboration, by providing an example where DNBs´ tedious and rigid procedures had negative consequences on the fintech firms' development that eventually led DNB to withdraw from that collaboration.

Direct quote: ¨*we have to be a little faster when we work with these fintech companies. However, it is a big challenge for the bank, since there are many opinions and meanings of people that the traditional banks need to take into consideration before making a decision. Therefore, banks have relatively long decision-making processes.* ¨

Direct quote: ¨*… banks have a lot of levels, many people working with the same things. We have extremely many security mechanisms that should prevent us from hurting* *our business or doing things that are wrong…. This means that collaborations with such fintech companies are very difficult, because we have very different ways of working. The straightforward quick fintechs can make decisions within an hour, while in DNB that decision may take two months. ¨*

Direct quote: *¨we have had examples of companies with which we have signed a letter of intent, but where we have seen that the processes take too long within our company. It slows down and prevents the founder or fintech company to recover and grow further, so we had to say we are sorry, we are unable to make a decision in such a short time, and that means you can't sit waiting for us, so you have to go further and seek other opportunities...¨*

Direct quote: *¨We had an experience with a fintech company who came to us with a great idea three years ago, and we thought it was exorbitant, but we could not do it, because we were not rigged internally in DNB for this, so we were unable to enter into a collaboration with them. ¨*

Thus, we propose:
P6 a. The better the organizational cultural fit, the more likely fintech firms will go for a tighter collaboration with banks.

P6 b. The better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

7. Strategic fit, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the better the strategic fit, the more likely fintech firms and banks will go for a tighter collaboration with each other.

According to the innovation and sales developer at DNB, fintech firms operate in areas with higher risk than traditional banks´ risk appetite and tolerance. Therefore, fintech firms can be perceived by the traditional banks as a supplement to the services they provide. A collaboration with fintech firms enables traditional banks to enter into higher risk type of loans, that otherwise they would have not got into. Namely, this type of complementarity motivates DNB to extent the collaboration.

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We therefore propose the following:
P7 a. The better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

P7 b. The better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

8. Innovation, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

The innovation and sales developer at DNB explains that DNB perceives the fintech sector, both as a threat, that challenge the market and encourage them to become more modern, and also an opportunity. He said that DNB even acquires fintech firms that they perceive as exciting, technological advanced and disruptive.

Direct quote: ¨*we [DNB] have to look at fintech firms as a threat, because they come with lots of services that are likely to challenge us as a bank, but we also look at them as opportunities, where we can work with them, or even buy those that come with technology and things that we find exciting. At the same time, they also challenge the* *bank, in many areas, that make us have to improve and work to become more modern in the things we do. ¨*

Accordingly, we propose the following:
P8 b. The more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

9. Social responsibility, from the banks' perspective, has a positive impact on the extent of collaboration - the more socially responsible the bank is, the more likely they will go for a tighter collaboration with fintech firms.

According to the innovation and sales developer at DNB, together with profitability, social responsibility is also a main driver for traditional banks to go into a collaboration with fintech firms. He claims, that DNB invests in fintech firms, simply as an act of responsibility, in order to help them develop and succeed.

Direct quote: ¨… at the same time, it is a social perspective here, and we really take responsibility and help such companies up and forward. ¨

Direct quote: *¨… we also take a social responsibility with helping founders up in the market… ¨*

In accordance with the above, we propose the following:
P9 b. The more socially responsible the bank is, the more likely they will go for a tighter collaboration with fintech firms.

10. Brand image, from the banks' perspective, has a negative impact on the extent of collaboration - the more banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms.

The innovation and sales developer at DNB explains that reputation risk is an important component that DNB take into consideration when they evaluate a potential collaboration. He says that it takes a lifetime to build a good reputation, but you can lose it within seconds. Therefore, they conduct a thoroughly assessment process before entering into a new collaboration.

Direct quote: *¨The biggest concern for us is reputation risk. This is what is most important for DNB when we consider such cooperation…. So, what is extremely important to us is that we cooperate with serious players who are not doing any nonsense, and which can lead to that DNB gets a bad reputation through poor press coverage among other things, which is certainly not desirable for DNB. ¨*

Direct quote: *¨it is very, or most importantly, for us, evaluating reputation risk when we enter into such cooperation. But it is clear, there are lots of other things too, but it is mainly reputation risk, which means that neither DNB nor almost any other bank around the world have started such crowdlending platforms under their own name. ¨*

Thus, we propose:
P10 b. The more banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms.

11. Profitability, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms.

According to the innovation and sales developer at DNB, profit seeking is one of DNB´s main focus when selecting between the different fintech candidates for the accelerator program.

Direct quote: *¨DNB make these investments, mainly to make money from the investment. They pick out companies that are good investments. ¨*

Direct quote: *¨We want to find companies with which we can cooperate with, with which we can do a commercial cooperation with in the future ...¨*

Accordingly, we propose the following:
P11 b. The more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms.

12. Competitive advantage, from the banks' perspective, has an indirect effect on the extent of collaboration - competitive advantage mediates the effect innovation has on the extent of collaboration.

According to the innovation and sales developer at DNB, identifying fintech firms that can give DNB a competitive advantage, is their main focus, when targeting fintech firms to collaborate with. He gives an example, where they could have benefited a competitive advantage, by being the first bank collaborating with a fintech specializing in receipt scanning. However, due to organizational-cultural differences, they failed to go into a collaboration, and lost the opportunity to be the first in the market using their innovative solutions.

Direct quote: *"It can be companies that can give DNB an edge in relation to others."*

Direct quote: *¨it is clear that if we had managed to enter into a collaboration with this receipt scanning specialized fintech company three years ago, we had a product out in the market long before everyone else. Now all the banks have this already, so we were late, because we failed to enter into such a cooperation. ¨*

We therefore propose the following:
P12 (mediation). Competitive advantage mediates the effect innovation has on the extent of collaboration.

13. Expertise, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the more expertise the potential partner possesses, the more likely they will go for a tighter collaboration with each other.

The innovation and sales developer at DNB tells that one of the reasons that fintech firms decide to join their accelerator program, is the fact that they provide mentoring and sponsoring services, who may assist with developing the fintech company further.

Direct quote: *¨they [fintech firms] would then be able to join in to the accelerator program, where they have three months of full access to DNB's expertise¨*

Direct quote: *¨in addition, they get a mentor and a sponsor in DNB who helps companies with everything they may wonder about, things that the bank can really help them with. ¨*

Direct quote: ¨ I have been mentor in two accelerator programs. Fintech firms need legal help very often, they need to see how processes work within the industry they are in, they may need help with payment, cash management, how to handle the networks with all the different players around the payment world. So, there are many things, but there is much more than just capital that they need help with. ¨

We therefore propose the following:
P13 a. The more expertise the potential partner possesses, the more likely fintech firms will go for a tighter collaboration with banks.

From the banks' perspective, expertise has also a positive impact on the extent of collaboration. According to the Innovation and sales developer at DNB, one of the motivations for collaborating with fintech firms is the opportunity to gain knowledge regarding the fintech industry.

Direct quote: ¨we should learn from these companies and these entrepreneurs, who have a lot of new ideas, a lot of good things going on. ¨

Direct quote: ¨*We had no knowledge of this before, we wanted to learn more about this industry.* ¨

Accordingly, we propose the following:
P13 b. The more expertise the potential partner possesses, the more likely banks will go for a tighter collaboration with fintech firms.

14. Capital, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

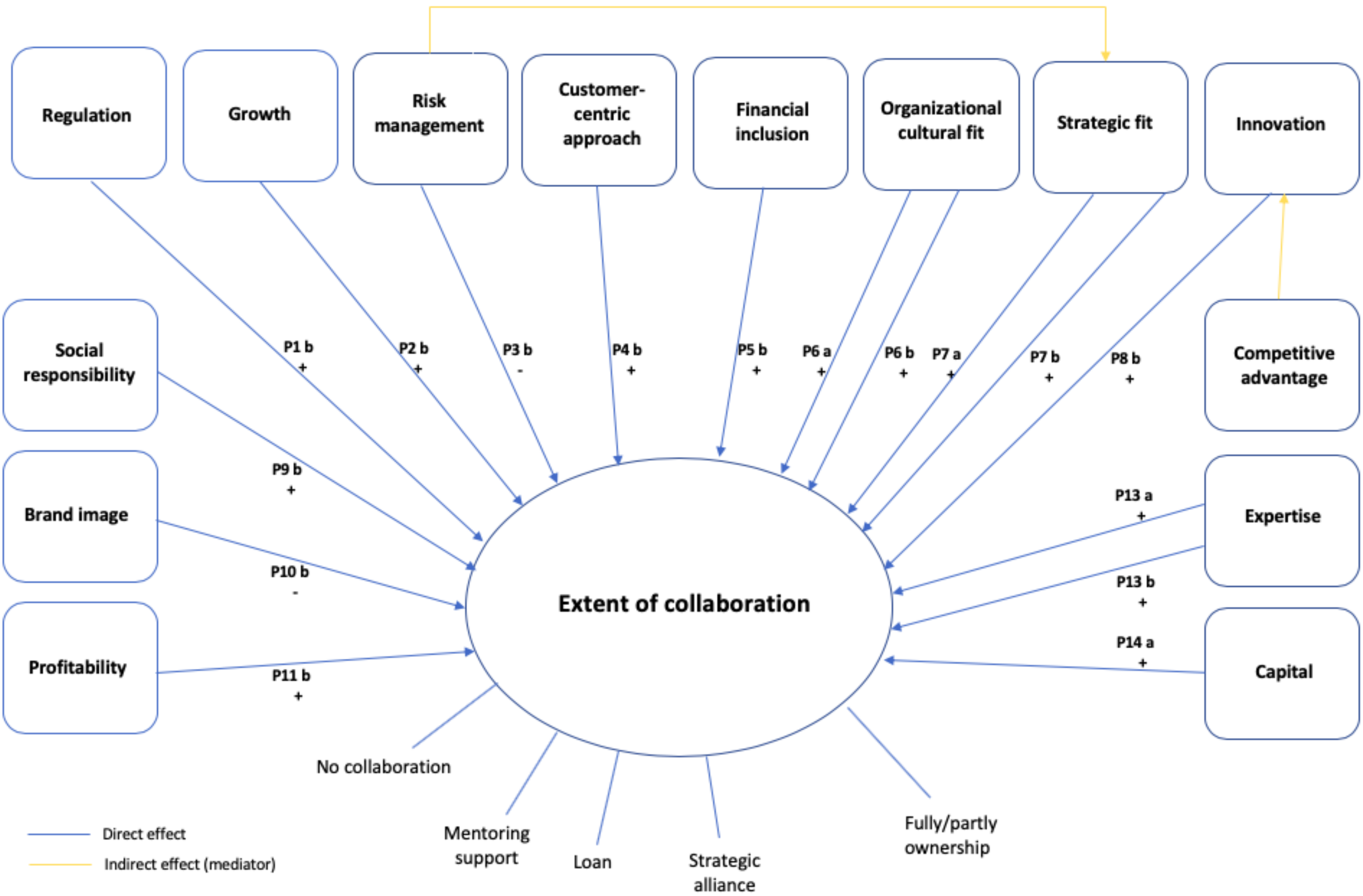
According to the innovation and sales developer at DNB, the need for capital in the fintech sector is huge. He emphasizes that there is a gap in Norway, between fintech firms who are seeking for growth and development, and early-stage financing. He gives the example of the interest their accelerator enjoys as an indicator for the need of capital within the fintech sector.

Direct quote: ¨in Norway, we have not managed to help them [fintech firms] further. There is a really big gap between those who get money in the early stages, and those who are ready to grow…. the biggest obstacles for Norwegian growth companies are to come out in the market - it is to get the next step in financing...¨

Direct quote: ¨*we have had over 100 applicants for these accelerator programs, and now, it is the third program that is starting, and we have over 100 applicants on all three rounds, so it enjoys a high level of interest."*

We therefore propose the following:
P14 a. The higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

DNB research model



Study case 7 - Danske Bank

About the company: Danske Bank is Denmark's largest banking and finance group. The bank is headquartered in Copenhagen. The Group has a total of 662 branch offices in 16 countries. The bank has total assets of approximately DKK 3484 billion and has more than 20 000 employees. (Danske Bank, 2019)

Danske Bank is a Nordic universal bank with a strong local base. Today, Danske Bank provides services to both private individuals, small and medium-sized companies, and larger institutions. In addition to banking services, they also offer insurance, pension products, asset management, real estate and leasing. (Danske Bank, 2019)

Interview Object: Chief commercial officer of Danske Bank Norway

Type of collaboration (Dependent variable): They partly own Spiir together with DNB. Additionally, they are having a continuous dialog with a lot of fintech firms.

The detected independent variables:
1.Regulation, from the banks' perspective, has a positive impact on the extent of collaboration - the more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

According to the chief commercial officer at Danske Bank in Norway, a regulation framework is crucial for banks when they decide whether to collaborate or not, with fintech firms. He claims that PSD2 regulation reform initiative is a great deal, not because he believes this initiative might solve the biggest pains of the financial services sector, but because it gives clear boundaries for where you can and cannot go.

Direct quote: *¨I would say, positively, because regulation is kind of set the framework and groundwork for what you can and cannot do. ¨*

We therefore propose the following:
P1 b. The more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms.

2. Growth, from the fintech firms' perspective, has a positive impact on the extent of collaboration - the more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

The chief commercial officer at Danske Bank in Norway gives an example of a Swedish fintech solution for aggregating subscription data, that decided to collaborate with Danske bank, in order to utilize their distribution and penetrate both the Danish, the Norwegian and the Finnish markets.

Direct quote: ¨they use us as a way to enter the Danish-, Norwegian- and Finnish market. ¨

Accordingly, we propose the following:
P2 a. The more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

3. Risk management, from the banks' perspective, has a negative impact on the extent of collaboration - the higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

The chief commercial officer at Danske Bank in Norway claims that collaborating with fintech firms involves, naturally, high risk, as it becomes more complicated to have different initiatives ongoing at the same time, both across the value chain and the different platforms and segments. Secondly, he emphasizes that a strong local presence is very important, when deciding whether to collaborate or not. Danske Bank´s headquarter is located in Copenhagen, and therefore it may become risky, because they don´t have the full insights and knowledge about the Norwegian local ecosystem, that is needed when making such important strategic decisions. Lastly, he mentions the threat of cyber security that arise when integrating an external fintech firm into their systems. A threat that, according to him, becomes bigger and bigger, and therefore must be monitored.

Direct quote: ¨*…things tend to, obviously, be more complicated, when you have more* *initiatives ongoing on the same time and across the whole value chain, across different platforms and segments. ¨*

Direct quote: *¨it is very difficult to drive ecosystem´s agenda in Norway from Copenhagen. So, you need a strong local presence, in order to understand the ecosystem that developing up, and the opportunities that lie within it. So strong collaboration between central and local is important for universal banks, or for Nordic banks, as Danske¨*

Direct quote: *¨as a bank, when we are integrating a third-party solution, IT security is a big factor, and it is a threat that becomes bigger and bigger, and therefore it is very important¨*

Thus, we propose:
P3 b. The higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

4. Customer-centric approach, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

According to the chief commercial officer at Danske Bank in Norway explains that Danske Bank learns its customer pains by listening to their feedbacks. Accordingly, they actively look for fintech firms that may solve these pains and enhance their customer journey.

Direct quote: *¨Another partnership we have gone live with, or about to go live with, had created a very good solution… where the customer feels more in control of the recurring payments that goes out of the account... So, they get a better overview, but also the ability to administer them… ¨*

Direct quote: *¨you need to understand what your customers´ pains are, so you can actively go look for solutions that can help you heal customers' pains, and help you be on the forefront of the realization that way. It is basically to listen to your customers´ feedback, and learn where you can improve on the digital side, and thereby go actively look for solutions that are in that space¨*

In accordance with the above, we propose the following:
P4 b. The more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

Additionally, Customer-centric approach has also an indirect effect on the extent of collaboration - customer-centric approach moderates the effect innovation has on the extent of collaboration. Accordingly, the chief commercial officer at Danske Bank in Norway refers to Steve Jobs famous quote: *"Do not ask customers what they want, because they do not know it yet",* to explain that Danske Bank, while learning about their customers pain points, is also making room for creativity to arise from the fintech sector. A creativity that may go beyond their customers´ imagination.

Direct quote: *¨On another side, I think, that there is also a lot of creativity out there, so only listening to what the customers might want, is not necessarily the way to go, because I think you need the creativity from the fintech side, that actually can think beyond what the customers can imagine. ¨*

Accordingly, we propose the following:
P4 (moderator). Customer-centric approach moderates the effect innovation has on the extent of collaboration.

5. Organizational cultural fit, from the banks' perspective, has a positive impact on the extent of the collaboration - the better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

The chief commercial officer at Danske Bank in Norway explains that cultural differences between traditional banks and fintech firms may arise when collaborating together. Regarding development strategy, he says that both parties may face challenges. Secondly, he claims that a small fintech firm may expect their partner bank to be more involved and supportive regarding technical issues and daily maintenance, than a big bank can manage.

Direct quote: ¨*between viewing it as an opportunity, and actually pursuing and doing stuff with it, is very tricky for a large organization with the development agenda that is ahead of us.* ¨

Direct quote: ¨*f you collaborate with a small tech team of a 5-7 people, what type of support, what type of uptime, what type of maintenance…* ¨

We therefore propose the following:
P5 b. The better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

6. Strategic fit, from both fintech firms' and banks' perspective, has a positive impact on the extent of collaboration - the better the strategic fit, the more likely fintech firms and banks will go for a tighter collaboration with each other.

The chief commercial officer at Danske Bank in Norway argues that there is a clear growing trend among the fintech firms to collaborate with traditional banks rather than to compete with them. Additionally, he says that fintech firms genuinely want banks to integrate their fintech solutions in their systems, rather than being another investment in their portfolio.

Direct quote: ¨*Initially, I think there were a lot of fintechs coming that wanted to compete with banks. Now I see that there is more who want to form a symbiosis with banks. Fintechs figured out, that pursuing the ultimate dream of having a front-end* *solution with millions of users, obviously is very profitable if you can get there, but I think they will much rather ride piggyback on the banking distribution power and get a slice of the pie instead of trying to eat the whole pie. ¨*

Direct quote: *¨fintechs are much more interested in you integrating their solution to your business and making it a strategic investment, rather than being a part of a portfolio of tech companies that happens to be within the financial services sector. ¨*

Thus, we propose:
P6 a. The better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

The chief commercial officer at Danske Bank in Norway tells that Danske Bank is willing to cooperate with fintech players that operates in business areas that they are not willing to operate in. Additionally, they tend to collaborate with fintech firms that are complementing and utilizing their services, rather than competing with them.

Direct quote: *¨…it is not something that we as a bank want to .do but that is something we are going to partnership with a tech player. ¨*

Direct quote: *¨I think we are more open to collaborating with fintechs that wants to utilize our systems...¨*

We therefore propose the following:
P6 b. The better strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

7. Innovation, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

The chief commercial officer at Danske Bank in Norway tells that Danske Bank has a constant dialog with fintech players who pops up in the market, in order to be updated on the latest technologies and also for potential future collaborations.

Direct quote: ¨*we are as a bank, both in local and group initiatives ongoing, together scan the market for interesting players that are popping up; do interviews, take meetings, etc., in order figure out what is out there. I think a lot of my knowledge comes from talking to young eager individuals that want to do something extraordinary. We have so much to learn from them.* ¨

Accordingly, we propose the following:
P7 b. the more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

8. Brand image, from the banks' perspective, has a negative impact on the extent of collaboration - the more banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms.

According to the chief commercial officer at Danske Bank in Norway, although collaborating with fintech firms may be perceived as trendy and innovative, it is risky, and customers do not really mind whether the services are provided by a third party or by the bank itself.

Direct quote: ¨also regarding image… working with smaller companies involves a greater risk, that are not there when you work with bigger companies… *However, it is very hot to be collaborating with fintech today, and, therefore, you can have some positive mentions. But, I think, that it will hit you on the consumers side, because they will only judge you on the service that you provide. If they are delivered by a third party or by the bank, it doesn't really matter. I think that's where the risk is.* ¨

Thus, we propose:

P8 b. The more banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms.

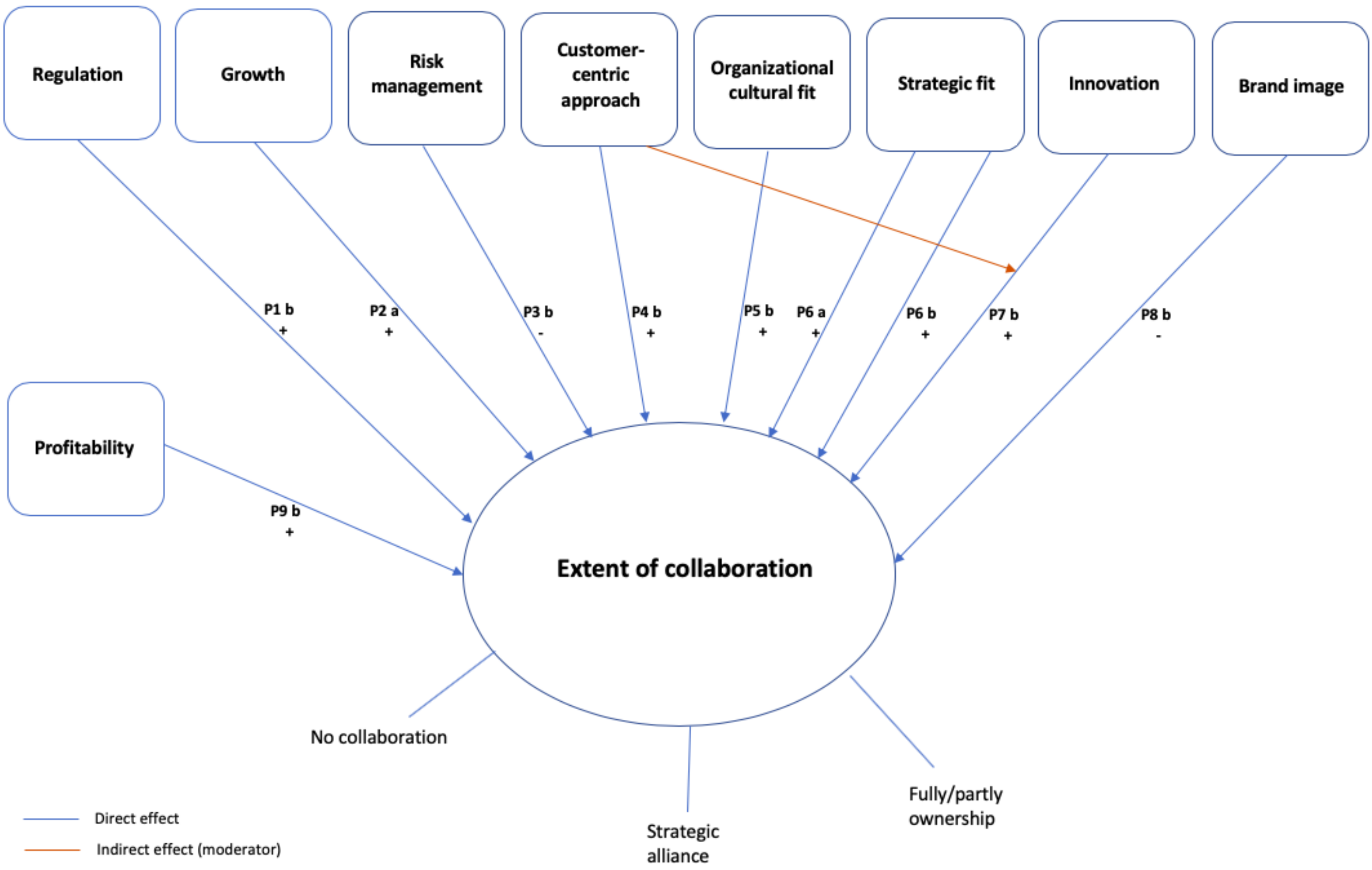
9. Profitability, from the banks' perspective, has a positive impact on the extent of collaboration - the more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms.

The chief commercial officer at Danske Bank in Norway explains that some banks are only focusing on a small niche, that allows them to set a better offer on their products and services. Therefore, Danske Bank can grow their market shares, by collaborating with fintech firms.

Direct quote: *¨we [Danske Bank] might even need to go look for them [fintech firms], because the margins will probably be tighter going forward on all products, that is due to niche actors that come in and do only deposits, only consumer loans, only credit cards, only house loans, and they will kind of set the scene for a new price. Then you might need to go for alternative income sources, or you can kind of grow your market shares based on the platforms that we subscribed to in Danske, and kind of be aggressive in that way. ¨*

In accordance with the above, we propose the following:
P9 b. The more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms.

Danske Bank research model



Cross-case analysis

The constant comparative method has been adopted by using a coding tree. Our initial code tree helped us to organize and make sense of the data that has been provided by our participants. Moreover, it enabled us to compare the different data between the seven different study cases in order to identify commonalities, differences or linkages. Our cross-case table shows the factors identified in the study cases. Furthermore, it illustrates whether these factors have been perceived with a positive- or negative impact, and whether it has been identified from the fintech firms' perspective or the banks' perspective. In addition, we added the frequency of the identified factors, their direction and perspective, among the different study cases, in order to identify commonalities between our participants. Thereafter, before presenting our final research models, we elaborated on the two studied perspectives – the fintech firms' perspective and the banks' perspective. In the end of this chapter, our final code tree is presented.

Cross-case analysis – table

Factors	Fintech firms				Traditional banks			Frequency
	Kredd (no collaboration)	Perx (no collaboration)	FundingPartner (Previous strategic alliance. Currently partly owned)	Monner (partly owned by a bank)	Sparebanken Sør (No collaboration, besides Vipps)	DNB (Fully and partly owns multiple fintech firms)	Danske Bank (Partly owns a fintech firm)	
Regulation	Pa - / P (mediates the effect capital has on the extent of collaboration)	Pa - / Pb + / P (mediates the effect customer-centric approach has on the extent of collaboration)	Pb +	Pb -	n/a	Pb +	Pb +	Pa - (3) Pb + (5) Pb - (1) P (mediator - Kredd) (1) P (mediator - Perx) (1)
Stealing ideas	Pa -	n/a	n/a	n/a	n/a	n/a	n/a	Pa - (1)
Trust	Pa +	n/a	Pa +	n/a	n/a	n/a	n/a	Pa + (5)
Customer-centric approach	Pa + / Pb +	Pa +	Pa + / Pb +	P (moderates the effect financial inclusion has on the extent of collaboration)	Pb +	Pb +	Pb + / P (moderates the effect innovation has on the extent of collaboration)	Pa + (4) Pb + (9) P (moderator - Monner) (1) P (moderator - Danske Bank) (1)
Financial inclusion	Pa - / Pb +	Pb +	Pa + / Pb +	Pa + / Pb +	n/a	Pb +	n/a	Pa - (1) Pa + (2) Pb + (5)
Organizational cultural fit	Pa + / P (mediates the effect regulation has on the extent of collaboration)	Pa + / Pb +	Pa + / Pb +	n/a	Pb +	Pa + / Pb +	Pb +	Pa + (9) Pb + (12) P (mediator - Kredd) (1)

Strategic fit	Pa + / Pb + / P (mediates the effect brand image has in the extent of collaboration)	Pa + / Pb +	Pa + / Pb +	Pa + / Pb +	Pb +	Pa + / Pb +	Pa + / Pb +	Pa + (14) Pb + (15) P (mediator - Kredd) (0)
Innovation	Pa - / Pb +	Pa -	Pb +	Pb +	n/a	Pb +	Pb + /	Pa - (2) Pb + (6)
Survivability	Pb +	Pb +	n/a	n/a	n/a	n/a	n/a	Pb + (5)
Capital	Pa + / P (moderates the effect innovation has on the extent of collaboration)	n/a	Pa +	Pa +	n/a	Pa +	n/a	Pa + (10) P (mediator - Kredd) (0)
Brand image	Pb +	n/a	Pa +	Pa + / Pb -	Pb -	Pb -	Pb -	Pa + (3) Pb + (1) Pb - (7)
Growth	n/a	Pa + / Pb +	Pa +	Pa +	Pa +	Pb +	Pa +	Pa + (5) Pb + (2)
Risk management	n/a	Pb - / P (moderates the effect financial inclusion has on the extent of collaboration)	Pb -	Pb -	Pb -	Pb - / p (mediates the effect strategic fit has on the extent of the collaboration)	Pb -	Pb - (12) P (moderator - Perx) (2) P (mediator - DNB) (1)
Market size	n/a	Pb +	n/a	n/a	n/a	n/a	n/a	Pb + (1)
Bad historical experience	n/a	P (mediates the effect innovation has on the extent of collaboration)	n/a	n/a	n/a	n/a	n/a	P (mediator - Perx) (1)
Fintech sector size	n/a	n/a	Pb +	n/a	n/a	n/a	n/a	Pb + (2)
Expertise	n/a	n/a	Pa + / Pb +	n/a	n/a	Pa + / Pb +	n/a	Pa + (5) Pb + (4)
Prior collaboration	n/a	n/a	Pb +	n/a	n/a	n/a	n/a	Pb + (2)
Open banking initiative	n/a	n/a	n/a	Pa + / Pb +	n/a	n/a	n/a	Pa + (1) Pb + (1)
Profitability	n/a	n/a	n/a	Pb +	n/a	Pb +	Pb +	Pb + (4)

Technical dependency	n/a	n/a	n/a	Pa -	n/a	n/a	n/a	Pa - (1)
Network	n/a	n/a	n/a	Pa +	n/a	n/a	n/a	Pa + (1)
Bank size	n/a	n/a	n/a	n/a	Pb +	n/a	n/a	Pb + (1)
Readiness	n/a	n/a	n/a	n/a	Pb +	n/a	n/a	Pb + (1)
Social responsibility	n/a	n/a	n/a	n/a	n/a	Pb +	n/a	Pb + (2)
Competitive advantage	n/a	n/a	n/a	n/a	n/a	P (mediates the effect innovation has on the extent of collaboration)	n/a	P (mediator - DNB) (2)

Pa = proposition from the fintech firm' perspective
Pb = proposition from the banks' perspective
n/a = no proposition has been detected
+/- = direction of the proposition
Frequency = number of times the independent variable has been detected

Cross-case analysis - fintech firms

Regulation

Two fintech firms on three occasion noted that favorable regulatory framework towards fintech firms has a negative impact, from the fintech firms' perspective, on the extent of collaboration. Hence, the more favorable the regulatory framework is towards fintech firms, the more likely they will go for a looser collaboration with banks. Although this impact was noted by two out of our seven interviewees, we believe it is appropriate to add it to our final model, due to the fact that regulatory framework was identified several times during our literature review – both in the academic literature and the public media. Additionally, when attending "Crowdfunding 2019" conference, the need for a favorable regulatory framework to the fintech sector in Norway was highly discussed and also raised high engagement from the different actors. It must be noted that four out of our seven interviewees (two fintech firms and two banks) suggest that a favorable regulation has a negative impact on the extent of collaboration. Thus, fintech firms and banks seem to have an opposite view regarding regulation.

Accordingly, we would suggest that the following proposition be included in our final research model: P1 a. The more favorable the regulatory framework is towards fintech firms, the more likely they will go for a looser collaboration with banks.

Trust

Two fintech firms emphasized on five occasions that the need for trust from the fintech firms' perspective has a positive impact on the extent of collaboration. Hence, the more fintech firms want to build trust, the more likely they will go for a tighter collaboration with banks. Although this impact was identified from only two out of our seven interviewees, we believe it is appropriate to add it to our final model due to the importance of trust in the financial services sector. The importance of trust, within the financial sector, was also been mentioned several times in our literature review.

Therefore, we would suggest that the following proposition be included in our final research model: P2 a. The more fintech firms want to build trust, the more likely they will go for a tighter collaboration with banks.

Customer-centric approach

Our cross-case analysis shows a relative consistency regarding customer-centric approach as three fintech firms on four occasions posit that the willingness of becoming more customer-centric oriented has a positive impact, from the fintech firms' perspective, on the extent of collaboration. Therefore, the more fintech firms want to become customer-centric oriented, the more likely they will go for a tighter collaboration with banks. Additionally, one fintech suggests that customer-centric approach has an indirect impact on the extent of collaboration. It is worth mentioning that customer centric approach has an even stronger positive impact from the banks' perspective, as five out of seven interview objects corroborated it.

We therefore recommend that the following proposition be included in our final research model: P3 a. The more fintech firms want to become customer-centric oriented, the more likely they will go for a tighter collaboration with banks.

Organizational cultural fit

Three fintech firms and one bank mentioned nine times that organizational cultural fit from the fintech firms' perspective has a positive impact on the extent of collaboration. Thus, the better the organizational cultural fit, the more likely fintech firms will go for a tighter collaboration with banks. Furthermore, as noted by one fintech firm, organizational cultural fit also has an indirect impact on the extent of collaboration.
According to five out of our seven interview objects, organizational cultural fit has an even stronger positive impact from the banks' perspective.

Therefore, we would suggest that the following proposition be included in our final research model: P4 a. The better the organizational cultural fit, the more fintech firms will go for a tighter collaboration with banks.

Strategic fit

Our cross-case analysis shows a consensus regarding strategic fit. Four fintech firms and two banks noted on 14 occasions that strategic fit, from the fintech firms' perspective has a positive impact on the extent of collaboration. Hence, the better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.
Moreover, from the banks' perspective, this was corroborated by all our seven interview objects. Thus, strategic fit seems to have a strong impact on the extent of collaboration, as it was the most identified factor in our research being mentioned 29 times in total.

Accordingly, we recommend that the following proposition be included in our final research model: P5 a. The better the strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

Innovation

Two fintech firms mentioned twice that innovation from the fintech firms' perspective has a negative impact on the extent of collaboration. Hence, the more fintech firms have an innovative mindset, the more likely they will go for a looser collaboration with banks. It must be noted that the two fintech firms that suggested a negative impact, are those who currently do not collaborate to some extent with a bank. This indicates perhaps that their willingness to remain innovative had an impact on their decision not to collaborate. Secondly, these two fintech firms operate in the private lending market, unlike the other two fintech firms who operate in the business lending market and do collaboration with a bank. Therefore, we suggest that the innovation factor from the fintech firms' perspective should be further researched.

Thus, we suggest that the following proposition be included in our final research model: P6 a. The more fintech firms have an innovative mindset, the more likely they will go for a looser collaboration with banks.

Capital

Our cross-case analysis shows a level of consistency regarding capital as three fintech firms and one bank on ten occasions noted that capital has a positive impact, from the fintech firms' perspective, on the extent of collaboration. Therefore, the higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks. Additionally, capital has an indirect effect, as the availability of capital moderates the effect innovation has on the extent of collaboration.

Hence, we propose that the following proposition should be included in our final research model: P7 a. The higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

Brand image

Two fintech firms on three occasions postulated that brand image has a positive impact, from the fintech firms' perspective, on the extent of collaboration. Hence, the more fintech firms struggle with branding issues, the more likely they will go for a tighter collaboration with banks. It is worth mentioning that the two fintech firms that suggested that brand image has a positive impact are those that currently collaborate to some extent with a bank and operate in the business lending market. The other two fintech firms who currently do not collaborate did not mention brand image during the interview. Moreover, regarding brand image, all the three banks and one fintech firm, indicated on seven occasions, that brand image has a negative impact. Thus, fintech firms and banks seem to have an opposite view regarding brand image.

Therefore, we recommend that the following proposition be included in our final research model: P8 a. The more fintech firms struggle with branding issues, the more likely they will go for a tighter collaboration with banks.

Growth

Our cross-case analysis shows consistency regarding growth, as three fintech firms and two banks mention five times that growth has a positive impact, from the fintech firms' perspective, on the extent of collaboration. Hence, the more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks. Again, we should like to emphasize that according to the cross-case analysis, growth has a stronger impact from the fintech firms' perspective than from the banks' perspective.

Accordingly, we would suggest the following proposition to be included in our final research model: P9 a. The more fintech firms seek for growth, the more likely they will go for a tighter collaboration with banks.

Expertise

Moving on, one fintech firm and one bank mentioned on five occasions that expertise, from the fintech firms' perspective, has a positive impact on extent of collaboration. That said, the more expertise the potential partner possesses, the more likely fintech firms will go for a tighter collaboration with banks. It is also important to mention that the fintech firm and the bank, which indicated that expertise has a positive impact from the fintech firms' perspective also noted that it has a positive impact from the banks' perspective. Indeed, these two companies were previously engaged in a strategic alliance with each other, and currently collaborate through a partly ownership strategy. Although expertise from the fintech firms' perspective, has not been mentioned from any other interview objects, it has been mentioned five times in total. Therefore, we suggest that the expertise factor from the fintech firms' perspective should be further researched.

Therefore, we propose that the following should be included in our final research model: P10 a. The more expertise the potential partner possesses, the more likely fintech firms will go for a tighter collaboration with banks.

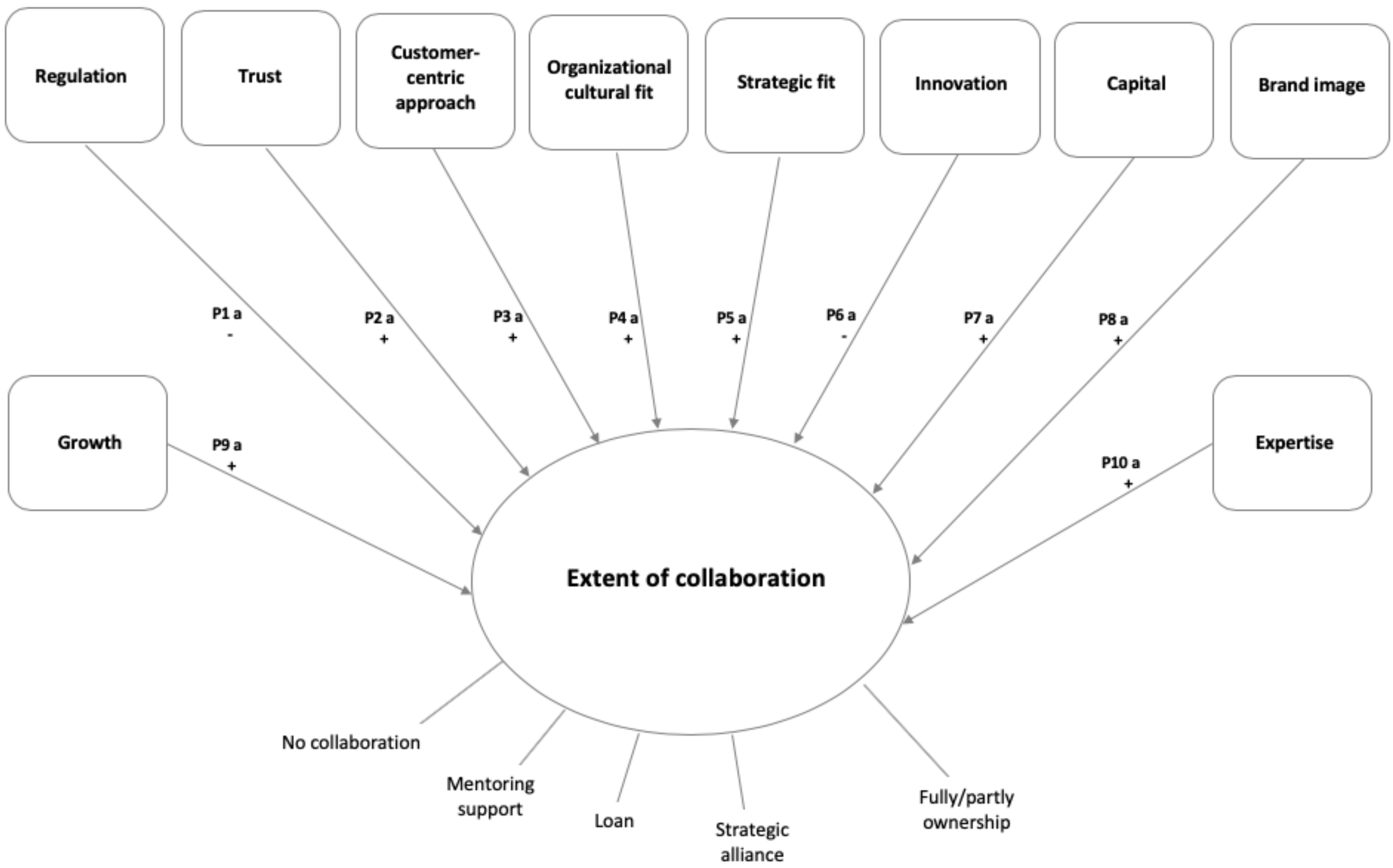
Financial inclusion

While two fintech firms mentioned twice that financial inclusion has a positive impact, from the fintech firms' perspective, on the extent of collaboration, one fintech firm mentioned one time that it has a negative impact. Therefore, we decided not to include financial inclusion in our final model.

Factors not to be included in the final model

Our cross-case analysis suggests that the following factors; stealing ideas, open banking initiative, technical dependency and network, from the fintech firms' perspective, have a weak impact on the extent of collaboration. These factors were mentioned once from one interviewee. Therefore, we decided not to include them in our final model.

Final research model - fintech firms



Cross-case analysis - banks

Regulation

Our cross-case analysis shows consistency regarding regulation. Two banks and two fintech firms mentioned five times that favorable regulatory framework towards fintech firms has a positive impact, from the banks' perspective, on the extent of collaboration. Hence, the more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a tighter collaboration with fintech firms. However, it is worth mentioning that one fintech firm suggested the opposite. However, most of our interview objects suggested a positive impact and we therefore believe that it is appropriate to include a positive proposition in our final research model.

Accordingly, we suggest that the following proposition be included in our final research model: P1 b. The more favorable the regulatory framework is towards fintech firms, the more likely banks will go for a looser collaboration with fintech firms.

Customer-centric approach

Our cross-case analysis reveals a wide agreement regarding customer-centric approach. Two fintech firms and all the three interviewed banks argued on nine occasions, that customer-centric approach has a positive impact, from the banks' perspective, on the extent of collaboration. Thus, the more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms. Furthermore, two participants suggested that customer-centric approach also has an indirect effect on the extent of collaboration.

Thus, we propose that the following be included in our final research model: P2 b. The more banks want to become customer-centric oriented, the more likely they will go for a tighter collaboration with fintech firms.

Financial inclusion

From the cross-case analysis, some level of consistency was noted concerning financial inclusion. All the four fintech firms and one bank mentioned five times that financial inclusion has a positive impact, from the banks' perspective, on the extent of collaboration. Hence, the more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

Therefore, we suggest that the following proposition be included in our final research model: P3 b. The more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

Organizational cultural fit

Our cross-case analysis presents some level of consistency concerning the factor – organizational cultural fit. Two fintech firms and all the three interviewed banks, mentioned during 12 instances that organizational cultural fit has a positive impact, from the banks' perspective, on the extent of collaboration. This indicates that, the better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms. Additionally, one fintech firm emphasized the indirect impact that organizational cultural fit has on the extent of collaboration.

Hence, we propose that the following be included in our final research model: P4 b. The better the organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

Strategic fit

Concerning the strategic fit factor, our cross-case analysis presented higher level of consistency among the interviewees. All our interview objects mentioned on 15 occasions that strategic fit has a positive impact, from the banks' perspective, on the extent of collaboration. Thus, the better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms. However, one fintech firm suggested that strategic fit has an indirect impact on the extent of collaboration.

Therefore, we recommend that the following proposition to be included in our final research model: P5 b. The better the strategic fit, the more likely banks will go for a tighter collaboration with fintech firms

Innovation

Our cross-case analysis indicates a higher level of consistency among interviewees concerning innovation. Three fintech firms and two banks, mentioned on six different occasions that innovation has a positive impact, from the banks' perspective, on the extent of collaboration. Hence, the more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

Accordingly, we propose that the following be included in our final research model: P6 b. The more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

Survivability

Two fintech firms noted on five instances that survivability has a positive impact, from the banks' perspective, on the extent of collaboration. Therefore, the more banks struggle to survive, the more likely they will go for a tighter collaboration with fintech firms. Yet, both fintech firms who emphasized that survivability has a positive impact on the extent of collaboration, do not collaborate to some extent with any bank as they currently operate in the private lending market. Although only two out of our seven interview objects supported survivability from the banks' perspective, we deem it appropriate to add it to our final model, considering the credibility of information provided by these two interview objects.

We therefore propose that the following be included in our final research model: P7 b. The more banks struggle to survive, the more likely they will go for a tighter collaboration with fintech firms.

Brand image

On brand image, the cross-case analysis shows relative consistency among interviewees. One fintech firm and all our three interviewed banks, mentioned on seven instances that brand image has a negative impact, from the banks' perspective, on the extent of collaboration. Thus, the more banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms. However, it should be noted that one fintech firm that do not collaborate with any bank and currently operating in the private lending market, posits that brand image has a positive impact on the extent of collaboration. Meanwhile, most of our interview objects talked about a negative impact. Therefore, we believe that it is appropriate to include a negative proposition in our final research model.

Accordingly, we recommend that the following proposition be included in our final research model: P8 b. The more banks struggle with branding issues, the more likely they will go for a looser collaboration with fintech firms.

Growth

One fintech firm and one bank mentioned five times that growth has a positive impact, from the banks' perspective, on the extent of collaboration. Hence, the more banks seek for growth, the more likely they will go for a tighter collaboration with fintech firms. Although only two out of our seven interview objects identified this impact, we deem it appropriate to be add it to our final model, due to credibility of information provided by these two interview objects.

We therefore propose that the following proposition be included in our final research model: P9 b. The more banks seek for growth, the more likely they will go for a tighter collaboration with fintech firms.

Risk management

Furthermore, the cross-case analysis also shows uniformity in answers provided by interviewees concerning risk management. Three fintech firms and all the three interviewed banks, mention on 12 occasions that risk management has a negative impact, from the banks' perspective, on the extent of collaboration. This implies that the higher the risk, the more likely banks will go for a looser collaboration with fintech firms. In addition, two participants suggested that risk management has an indirect effect on the extent of collaboration.

Hence, we would suggest that the following proposition to be included in our final research model: P10 b. The higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

Expertise

The positive impact of expertise, from the banks' perspective, on the extent of collaboration was corroborated by one fintech firm and one bank. Thus, the more expertise the potential partner has, the more likely banks will go for a tighter collaboration with fintech firms. It is important to note that the fintech firm and the bank that suggested that expertise has a positive impact from the banks' perspective also suggested that it has a positive impact from the fintech firms' perspective. Indeed, these two companies were previously engaged in strategic alliance with each other and currently are collaborating through a partly ownership strategy. Even though other interviewees did not mention expertise from the banks' perspective, we believe it is appropriate to add it to our final model, due to the credibility of information provided by these two interview objects. We therefore advocate a further investigation of the expertise factor from the banks' perspective.

Accordingly, we recommend that the following proposition be included in our final research model: P11. The more expertise the potential partner has, the more likely banks will go for a tighter collaboration with fintech firms.

Profitability

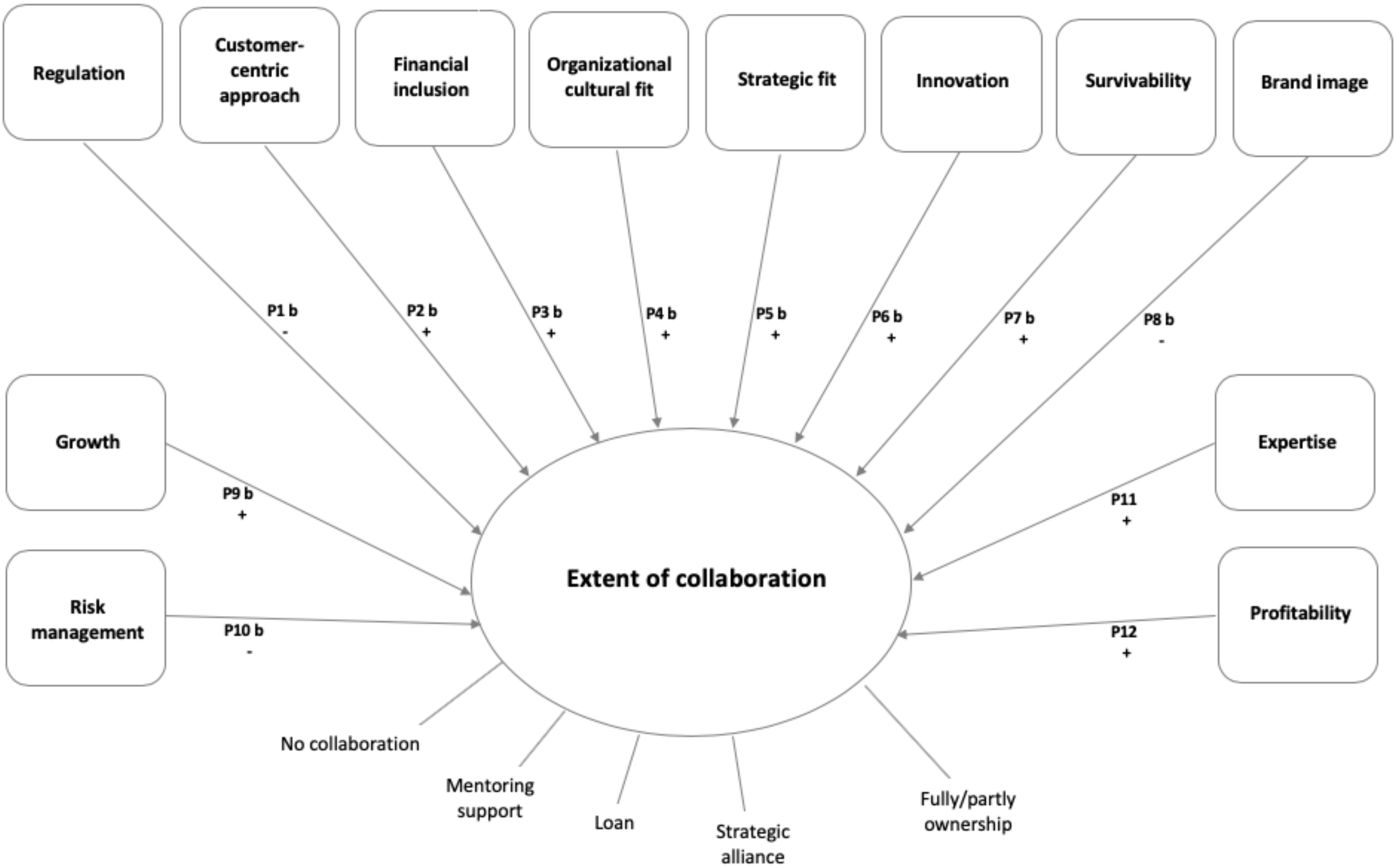
One fintech firm and two banks mentioned on four occasions that profitability has a positive impact, from the banks' perspective, on the extent of collaboration. This implies that, the more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms. Therefore, we recommend that profitability factor from the banks' perspective should be further researched.

Hence, we propose that the following be included in our final research model: P12. The more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms.

Factors not to be included in the final model

Our cross-case analysis suggests that the following factors; trust, market size, fintech sector size, prior collaboration, open banking initiative, bank size, readiness and social responsibility all coming from the banks' perspective have a weak impact on the extent of collaboration. This is because they were not mentioned more than twice from one interview object only. Therefore, we have decided not to include them in our final model.

Final research model - banks



Final code-tree

Our final code-tree is presented below:

1) *Regulation*

- regulation
- regulatory framework
- Permission
- license
- governmental approval

- favorable regulation
- unfavorable regulation

2) Growth

- *growth*
- distribution
- development
- scaling up

3) *Risk management*

- safety
- risk
- cybersecurity breaches
- risk mechanisms
- fear

4) *Customer-centric approach*

- funds to SMEs
- customer experience
- better functionality
- high convenience
- increased speed of service

5) *Financial inclusion*

-including the unbanked population
- equal access to financial services

6) *Organizational cultural fit*

- structure
- similarities
- long processes
- integration
- cultural alignment
- cultural differences
- beliefs

7) *Strategic fit*

- supplement
- synergy effects
- degree of alignment
- company strategy
- biosis

8) *Innovation*

- innovative products
- innovative mindset
- technological expertise
- innovative business model

9) *Trust*

- trust

10) *Survivability*

- survivability

11) *Stealing ideas*

- stealing ideas

12) *Social responsibility*

- social responsibility

13) *Size*

- size

14) *Readiness*

- readiness

15) *Profitability*

- profitability

16) *Prior collaboration*

- prior collaboration

17) *Expertise*

- expertise
- mentoring
- knowledge
- execution ability

- competence

18) *Competitive advantage*

- edge

19) *Capital*

- capital

20) *Brand image*

- marketing perspective
- image

21) *API initiative*

- API initiative

Discussion

During our cross-case analysis we have identified three different scenarios; supporting earlier findings, contradicting earlier findings and discovery of new findings. The supporting of earlier findings scenario is when our cross-case analysis supports the factors and their impacts that have been identified during our literature review and presented in our tentative model. The contradicting of earlier findings scenario is a scenario where factors identified in our literature review have not been identified in our study cases, or a scenario where they have been identified with an opposite impact. Lastly, the new findings scenario is when factors identified in our cross-case analysis and, to the best of our knowledge, have not been studied in that context in the literature before.

Fintech firms' model

Supporting earlier findings

Regulation

Our cross-case analysis, regarding regulation, supports earlier findings. As we stated in our literature review, in the UK where the regulatory framework is more favorable towards fintech firms, more than 90 percent of investments going into fintech companies who would like to compete with the traditional banks (Skan et al., 2016, p. 6). Namely, both our tentative model and our final model indicate that the more regulatory framework towards fintech firms has a negative impact on the extent of collaboration.

Growth

Concerning growth, our cross-case analysis shows consistency that confirms earlier findings presented in our literature review. Both Haddad and Hornuf (2019, p. 96) and Philippon (2016, p. 15) argue that traditional banks can provide fintech firms an access to an enormous customer-base and customer data. Additionally, Haddad and Hornuf (2019, p. 96) note that traditional financial institutions are able to create new ecosystems that require new financial services. These ecosystems can be provided by fintech firms and by that contribute to their growth. Thus, both our tentative model and our final model suggest that the willingness for growth, from the fintech firms' perspective, has a positive impact on the extent of the collaboration.

Customer-centric approach

Our cross-case analysis, regarding customer-centric approach, shows a relative consistency that support earlier findings presented in our literature review. According to Anirban, the lack of customer-centric products and services by the banking sector, encourage fintech firms to develop and fill those gaps with innovative solutions. Fintech firms, unlike traditional banks, design new services while keeping the customer journey in mind as they understand the importance of becoming truly customer-centric organizations. (Anirban et al., 2018, pp.15-17) Accordingly, both our tentative model and our final model argue that the willingness for becoming more customer-centric oriented, from the fintech firms' perspective, has a positive impact on the extent of collaboration.

Organizational cultural fit

Regarding organizational cultural fit, our cross-case analysis confirms earlier findings presented in our literature review. Anirban et al. (2018, p. 45) claims that more than 30 percent of fintech executives perceive cultural fit as a potential challenge, when looking for a partner in the traditional banking sector. Therefore, he claims that both parties should be aware of the importance of having a cultural fit and its implications for the collaboration success (Anirban et al., 2018, pp. 46). Namely, both our tentative model and our final model indicate that the more organizational cultural fit, the more fintech firms will go for a tighter collaboration with banks.

Strategic fit

Our cross-case analysis shows a consensus regarding strategic fit that support earlier findings presented in our literature review. As mentioned previously, the World Fintech Report 2018 suggests that common vision is an important key factor for a successful organization, as 70 percent of fintech firms rated it as a highly important key factor for a successful collaboration with traditional banks (Anirban et al., 2018, p. 55). Thus, both our tentative model and our final model argue that the more strategic fit, the more likely fintech firms will go for a tighter collaboration with banks.

Innovation

Regarding innovation, our cross-case analysis confirms earlier findings presented in our literature review. According to Anirban et al. (2018, p. 55), lack of agility, legacy systems and IT compatibility are the primary concerns that fintech firms face while working with traditional banks. Therefore, he argues that fintech firms must evaluate the right traditional bank partner by ensuring it does not hamper their innovation level (Anirban et al., 2018, p. 56). Namely, both our tentative model and our final model indicate that fintech firms' innovative mindset has a negative impact on the extent of collaboration.

Contradicting earlier findings

Risk management

Our cross-case analysis contradicts earlier findings presented in our tentative model, since risk management as a factor, from the fintech firms' perspective, has not been detected during any of our seven study cases.

Financial inclusion

Regarding financial inclusion, our cross-case analysis challenges earlier findings presented in our tentative model. Our cross-case analysis reveals inconsistency, regarding financial inclusion, as two fintech firms suggest a positive impact and one fintech firm suggests a negative impact on the extent of collaboration. Therefore, we decided that even though it has been identified in our literature review, and included in our tentative model, it is appropriate not to include it in our final model.

New findings

Trust

Trust, from the fintech firms' perspective, has been detected by two interview objects several times, indicating that trust, as a factor, has a positive impact on the extent of collaboration. It was not included in our tentative model, since it was not identified in our literature review. However, our cross-case analysis illustrates that it is appropriate to include trust as a factor from the fintech firms' perspective in our final model, though it should be furthered researched. Accordingly, we suggest that the willingness for trust, from the fintech firms' perspective, has a positive impact on the extent of collaboration.

Capital

Capital, from the fintech firms' perspective, has been detected by four interview objects several times, indicating that capital, as a factor, has a positive impact on the extent of collaboration. It was not included in our tentative model, since it was not identified in our literature review, but our cross-case analysis illustrates that it is appropriate to include capital as a factor from the fintech firms' perspective in our final model, though it should be furthered researched. Accordingly, we suggest that the higher the fintech firms' need for capital, the more likely they will go for a tighter collaboration with banks.

Brand image

Brand image, from the fintech firms' perspective, has been detected by two interview objects several times, suggesting that brand image, as a factor, has a positive impact on the extent of collaboration. It was not included in our tentative model, since it was not identified in our literature review. However, our cross-case analysis indicates that it is appropriate to include brand image as a factor from the fintech firms' perspective in our final model, though it should be furthered researched. Accordingly, the more fintech firms struggle with branding issues, the more likely they will go for a tighter collaboration with banks.

Expertise

Expertise, from the fintech firms' perspective, has been detected by two interview objects several times, suggesting that expertise, as a factor, has a positive impact on the extent of collaboration. It was not included in our tentative model, since it was not identified in our literature review, but our cross-case analysis indicates that it is appropriate to include expertise as a factor from the fintech firms' perspective in our final model, though it should be furthered researched. We therefore suggest, the more expertise the potential partner possesses, the more likely fintech firms will go for a tighter collaboration with banks.

Banks’ model

Supporting earlier findings

Growth

Regarding growth, our cross-case analysis confirms earlier findings presented in our literature review. As mentioned previously, Anirban et al. (2018, pp. 36 & 40) claims that agility, innovation level, cost reduction applications, customer experience, new products and a better data handling, are a few of the advantages that banks can enjoy from collaborating with fintech companies. In addition, fintech firms are not held back by current systems and are often eager to make risky choices and by that can stimulate traditional banks’ growth (Philippon 2016, p. 15). According to a report by EY (2017, p. 3), the biggest threat for traditional banks are not from fintech firms but rather from traditional banks, who are better in collaborating and leveraging fintech firms. Namely, both our tentative model and our final model indicate that the willingness for growth, from the banks’ perspective, has a positive impact on the extent of the collaboration.

Risk management

Furthermore, the cross-case analysis also shows uniformity regarding risk management that supports earlier findings presented in our literature review. Referring to our literature review, Härle et al. (2015, pp. 21-22) argues that although collaborating with fintech firms facilitates the traditional banks’ risk management in some respects, it may expose them to other risks as it gives their fintech partner access to intellectual property and customer data. In addition, integrating new services and products developed by their fintech partner may also be risky and harm banks’ well-established brand name (Anirban et al., 2018, p. 47). Accordingly, both our tentative model and our final model suggest that the higher the risk, the more likely banks will go for a looser collaboration with fintech firms.

Customer-centric approach

Regarding customer-centric approach, our cross-case analysis reveals a wide agreement that supports earlier findings presented in our literature review. As we highlighted in our literature review, traditional banks understand today the importance of being more focused on customer-centricity and are also aware of the negative consequences if they do not cope with this transformation (Anirban et al., 2018, p. 28). According to Mills & McCarthy (2017), in order to cope with the competition with online lenders, banks may consider investing time and resources in designing more customer friendly services to improve their customer satisfaction. Hence, both our tentative model and our final model argue that the willingness for becoming more customer-centric oriented, from the banks' perspective, has a positive impact on the extent of collaboration.

Financial inclusion

From our cross-case analysis, some level of consistency was noted concerning financial inclusion that supports earlier findings presented in our literature review. Ozili (2018, p. 332) postulates that fintech firms provide faster services that make it easier for all members of the economy to manage their financial procedures. Additionally, he mentions that traditional banks who collaborate with fintech firms may enjoy cost reduction, quality improvement and increased convenience by providing equal access to financial services for all customers. Lastly, he notes that fintech firms are better providers of small amount emergency loans to both low- and middle- income individuals, than traditional banks who require going through tiring credit-risk assessment processes (Ozili, 2018, p. 332). Namely, both our tentative model and our final model indicate that the more banks want to expand financial inclusion, the more likely they will go for a tighter collaboration with fintech firms.

Organizational cultural fit

Our cross-case analysis shows some level of consistency regarding organizational cultural fit that confirms earlier findings presented in our literature review. Referring to our literature review, Cartwright and Cooper (1993) claim that the success of the collaborative marriage depends on the ability to create a culture that combines elements from both partnering organizations. Therefore, it is important that the shared perception of both partners is that elements of the other culture are necessary and worth preserving under the unite culture. Hence, the greater the cultural differences are the longer and the more challenging the integration process is. (Cartwright & Cooper, 1993, pp. 67-68) Accordingly, both our tentative model and our final model suggest that the more organizational cultural fit, the more likely banks will go for a tighter collaboration with fintech firms.

Strategic fit

Concerning the strategic fit factor, our cross-case analysis presents higher level of consistency among the interviewees that confirms earlier findings presented in our literature review. According to Douma et al. (2000, pp. 583-584), a good strategic fit requires that both partnering organizations have a shared vision of the future developments of the industry, compatible corporate strategies, common understanding of the importance of the alliance, mutual dependency, collaboration that adds value to the opposite partner and/or to their customers and that the alliance receives market acceptance. Namely, both our tentative model and our final model argue that the more strategic fit, the more likely banks will go for a tighter collaboration with fintech firms.

Innovation

Our cross-case analysis indicates a higher level of consistency among interviewees concerning innovation that supports earlier findings presented in our literature review. As mentioned previously in our literature review, obliging to grasp each other's perspectives, traditional banks and fintech firms can possibly ensure a prosperous partnership (Anirban et al., 2018, p. 32). Thus, being aware of the innovation model, preserved technology functions, procurement and the range and directive for improvement, banks can cooperate with fintech firms and deliver truly transformative value (EY, 2017, p. 6). Hence, both our tentative model and our final model indicate that the more banks have an innovative mindset, the more likely they will go for a tighter collaboration with fintech firms.

Contradicting earlier findings

Regulation

Our cross-case analysis contradicts earlier findings presented in our tentative model, as it suggests regulation has an opposite impact. We identified during our literature review that favorable regulation towards fintech firms has a positive impact on the extent of collaboration, while our cross-case analysis presents a strong agreement that regulation rather has a negative impact on the extent of collaboration. Namely, the more favorable the regulation is towards fintech firms, the more likely banks will go for a looser collaboration with fintech firms.

New findings

Survivability

Survivability, from the banks' perspective, has been detected by two interview objects several times, indicating that survivability, as a factor, has a positive impact on the extent of collaboration. It was not included in our tentative model, since it was not identified in our literature review. However, our cross-case analysis illustrates that it is appropriate to include survivability as a factor from the banks' perspective in our final model, though it should be furthered researched. Accordingly, we suggest that the more banks struggle to survive, the more likely they will go for a tighter collaboration with banks.

Brand image

Brand image, from the banks' perspective, has been detected by four interview objects several times, suggesting that brand image, as a factor, has a negative impact on the extent of collaboration. It was not included in our tentative model, since it was not identified in our literature review. However, our cross-case analysis indicates that it is appropriate to include brand image as a factor from the banks' perspective in our final model, though it should be furthered researched. Accordingly, the more banks struggle with branding issues, the more likely they will go for a tighter collaboration with fintech firms.

Expertise

Expertise, from the banks' perspective, has been detected by two interview objects several times, suggesting that expertise, as a factor, has a positive impact on the extent of collaboration. It was not included in our tentative model, since it was not identified in our literature review, but our cross-case analysis indicates that it is appropriate to include expertise as a factor from the banks' perspective in our final model, though it should be furthered researched. We therefore suggest, the more expertise the potential partner possesses, the more likely banks will go for a tighter collaboration with fintech firms.

Profitability

Profitability, from the banks' perspective, has been detected by three interview objects several times, suggesting that profitability, as a factor, has a positive impact on the extent of collaboration. It was not included in our tentative model, since it was not identified in our literature review, but our cross-case analysis indicates that it is appropriate to include profitability as a factor from the banks' perspective in our final model, though it should be furthered researched. We therefore suggest, the more banks are focusing on margins, the more likely they will go for a tighter collaboration with fintech firms.

Dependent variable

As mentioned above, our dependent variable is: "Extent of collaboration between fintech firms and traditional banks". Based on our literature review, we have chosen to focus on the following three different modes of collaboration; remain separate (no collaboration), strategic alliances and ownership fully/partly owned (mergers and acquisitions). However, during our cross-case analysis we have identified two additional modes of collaboration, namely, mentoring support and loan. Due to the credibility of information provided by our interview objects, both from the fintech firms' and banks' perspective, we believe it is appropriate to add these two modes to our final model.

Conclusion and further research

The fintech sector has grown from a narrow area of interest to become a major area of interest currently in Norway. The fintech sector is known to be innovative, agile and customer-centric oriented. However, inadequate capital and customer-trust, which is particularly crucial in the financial services industry, is peculiar to this sector. Traditional banks, on the other hand, enjoy high level of customer-trust, a good reputation of being safe, huge customer-base and expertise in various fields. Nonetheless, these banks usually lack innovative capabilities, agility, creativity, new-coded systems and the ability to figure out customer pain points in innovative ways. Thus, potential collaboration and symbiotic relationship between the fintech sector and banks will contribute to the success of both sectors due to the complementary strengths that both parties will bring on board. Accordingly, we conducted in-depth interviews with four fintech firms and three traditional banks in an attempt to study and identify the factors that impact the extent of collaboration between fintech firms and banks focusing on the peer-to-peer lending sector in Norway.

In the end, we developed two research models, one from the fintech firm's perspective and one from the banks' perspective. By this, we sought to propose factors that may have an impact on the extent of collaboration between fintech firms and banks focusing on the peer-to-peer lending sector in Norway.

Accordingly, our final model, from the fintech perspective includes the following factors; regulation, trust, customer-centric approach, organizational cultural fit, strategic fit, innovation, capital, brand image, growth and expertise. Meanwhile, we identified the following factors from the banks' perspective; regulation, customer-centric approach, financial inclusion, organizational cultural fit, strategic fit, innovation, survivability, brand image, growth, risk management, expertise and profitability.

Some identified factors support earlier findings in the academic literature, while others contradict earlier findings. Moreover, we identified some factors that have not been identified in the study context in the academic literature to the best of our knowledge. We therefore recommend that further quantitative research be conducted into them.

We are aware that the purposive sampling technique employed in this study might be inadequate to capture both breadth and depth. Secondly, purposive selection research design is extremely prone to researcher bias and also to potential manipulation of the collected data by participants. Thirdly, there is no randomization involved in purposive sampling, which means that the population being studied do not always have equal chances of being selected. Lastly, we are aware of the fact that we are master students who research a field that we have never worked in or studied before.

Hopefully, our master thesis will contribute to the theory as it is built upon a framework that emerges from the actors themselves. Additionally, we hope that our master thesis will contribute and guide regulators in their decisions on how to promote the fintech sector in Norway. Regarding implication for practice, we hope that our proposed framework will be found useful as a roadmap of consideration for both parties to review when engaging in discussions and negotiations with each other about prospective collaboration, and by doing so, will achieve a more constructive dialog where both parties can address each other's concerns and objectives.

We encourage other researchers to study our findings more deeply using quantitative methods. In addition, during our literature review we identified a research gap regarding the fintech sector in Norway. Therefore, we hope our master thesis can encourage further research models in different national contexts for cross-country comparison and validity, as well as in different crowdfunding models for cross-model comparison and validity beyond P2P lending.

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Appendixes

NSD confirmation letter

NSD sin vurdering

Prosjekttittel
What factors impact how and why fintech firms and traditional banks decide the extent to collaborate with each other in the peer-to-peer lending sector in Norway?

Referansenummer
659076

Registrert
27.03.2019 av Håvard Heggland - haavh12@student.uia.no

Behandlingsansvarlig institusjon
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Prosjektperiode
01.01.2019 - 03.06.2019

Status
04.04.2019 - Vurdert

Vurdering (1)

04.04.2019 - Vurdert
Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet den 04.04.2019 med vedlegg, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte. MELD VESENTLIGE ENDRINGER Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke typer endringer det er nødvendig å melde:

https://nsd.no/personvernombud/meld_prosjekt/meld_endringer.html Du må vente på svar fra NSD før endringen gjennomføres. TYPE OPPLYSNINGER OG VARIGHET Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 03.06.2019. LOVLIG GRUNNLAG Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a. PERSONVERNPRINSIPPER NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om: - lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen - formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke behandles til nye, uforenlige formål - dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet - lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet DE REGISTRERTES RETTIGHETER Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20). NSD vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13. Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned. FØLG DIN INSTITUSJONS RETNINGSLINJER NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32). For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og/eller rådføre dere med behandlingsansvarlig institusjon. OPPFØLGING AV PROSJEKTET NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet! Kontaktperson hos NSD: Mathilde Steinsvåg Hansen Tlf. Personverntjenester: 55 58 21 17 (tast 1)

Participation agreement

Introduction

We are currently master students at the University of Agder in Kristiansand, Norway. We are attending the Msc. Business Administration program, and specializing in international management. We decided to write our master thesis about the Norwegian fintech sector, since it has grown from a narrow area of interest to become one of the hottest topics in Norway at the moment. We would like to conduct a multiple case analysis to study what factors impact how and why do fintech firms and banks decide to what extent to collaborate with each other.

Participation

You are kindly asked to participate in this research/interview because you are representing the fintech/bank sector in Norway via your company. You will contribute to this research by participating in an in-depth interview. Participation in the project is voluntary. If you choose to participate, you may at any time withdraw your consent without giving any reason. All information about you will then be anonymized. It will have no negative consequences for you if you do not want to participate or later choose to withdraw.

Information

The information will be used only for the purposes we have mentioned above. We will treat the information confidentially and in accordance with the privacy policy. The only members who will have access to the information is our supervisor and the external sensor.

The project is scheduled to end June 3th. At the end of the project, the personal data and any recordings will be deleted. Only the results of the research will be included to our final term paper and will eventually archived at the university database.

Your rights as a participant

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability)
- and send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

University of Agder is the responsible university for this master thesis.
If you have any questions about the study or would like to exercise your rights, please contact:

Universitetet i Agder
Postboks 422
4604 Kristiansand
970 546 200
post@uia.no

Contact info project responsible: Rotem Shneor, rotem.shneor@uia.no, 38142311

Contact info data protection officer: Ina Danielsen, ina.danielsen@uia.no, 45254401
Contact info student: Håvard Heggland, haavh12@student.uia.no, 48123246
Contact info NSD: Norsk senter for forskningsdata AS, personverntjenester@nsd.no, 55 58 21 17

NSD - Norwegian Center for Research Data AS has concluded that the processing of personal data in this project is in compliance with privacy regulations.
Best regards,

Master supervisor student 1 student 2

Statement

- To participate in a depth interview.
- For the interview to be recorded and transcribed.
- Allow the information I provide through the interview to be analysed and examined for the purpose of the research.
- I agree that my information is processed until the project is completed, approx by the end of June 2019.
- To answer additional follow-up questions by email after the interview.

(Signed by interview participant, name, company, date)

Interview guide - Fintech firms

Questions	Respondent	Code
Designation		
Name		
Name of Fintech		
Business		
Age of fintech		
Local / foreign		
Nationality/ Citizenship		
Age		
Section 1: Strategy, Disruption, business models		
1. How do you perceive the state of the fintech industry in Norway?		
2. How do you believe your company is set to disrupt the financial sector in Norway – now and in future? How significant is this threat for banks?		
3. How would you describe your business model?		
4. What challenges are you facing with your current business model in Norway and why? How are you planning to overcome these challenges?		
5. Which factors are critical for a successful fintech, in your opinion?		
6. What works and what doesn't work among fintech start-ups, in your experience?		

Section 2: Value and advantages		
7. What is the value proposition of fintech firms in Norway?		
8. What do you believe are the advantages of banks over Fintech firms? Where do you think the traditional financial institutions are most vulnerable to the attacks of fintech companies?		
9. What do you believe are the advantages of Fintech firms over banks? How fintechs can build on that in the future to gain competitive advantage and increase their market share?		
Section 3: Challenges and future of the sectors: Banks and fintechs		
10. How do you perceive the future of fintech in Norway?		
11. How well does your business model stand up to any regulatory risks that may impact client targeting, and capital requirements?		
12. What are the risks to lending platforms in Norway? Why? (Probe: Competition, interest rate increase, credit cycle, regulation)?		
13. What do you believe will be the future relationship between FinTech companies and banks in Norway? (Probe: Will it be a more competitive or collaborative relationship?)		
14. If you are a partner to some extent with a bank, can you explain what factors had an importance when deciding to collaborate?		
15. What factors will have an importance when you decide to collaborate in the future?		

Section 4: Technology / customer journey and trust		
16. What are your latest digital initiatives? Please provide examples.		
17. Are your current technological capabilities supporting customer journey? How? Please provide an example.		
18. How do you think fintech firms can increase customer acceptance and relevance?		
19. Consumer trust is a major issue for the financial sector. How do you build trust with customers? (Probe: security, convenience, regulation, lower fees)		
20. How do you currently deal with the issue of customer data security?		
21. To what extent does technology impact relationship with banks?		
22. To what extent does customer journey and trust impact relationship with banks?		
Section 5: Regulation / Government support		
23. Do you believe that current laws for the financial sector are helping or hindering innovation in fintechs in Norway?		
24. Is the government enabling the change? Why and why not? (probe: What is the role of government regulations in supporting the fintech revolution)?		
25. What is the largest regulatory obstacle for fintechs?		
26. To what extent regulation issues influence relationship with banks?		
Section 6: Supporting entrepreneurs/		

innovation and expanding financial inclusion		
27. How do you perceive the role of fintech sector in supporting innovation?		
28. To what extent is your platform supports the development and growth of startups? and why?		
29. To what extent does supporting entrepreneurs/innovation influence relationship with banks?		
30. To what extent does financial inclusion impact relationship with banks? (Probe: the availability and equal access to financial services for all members of an economy)		
31. Other comments?		

Interview guide - traditional banks

Questions	**Respondent**	**Code**
Designation		
Name		
Bank		
Type of bank		
Role in Bank		
Years of experience		
Nationality/ Citizenship		
Age		
Section 1: strategy, disruption, business models		
1. How do you perceive the state of the traditional banking sector in Norway?		
2. How is the financial digital revolution affecting your established institution? How do new entrants affect your business (revenues, market shares, scales, customers)?		
3. What are the products and client's segments most at risk from disruption from fintechs as new entrants in Norway?		
4. On a scale of 1-5, how likely do you perceive the threats for your business from new market participants in these areas: 1=Very unlikely; 2 = Unlikely; 3 = neutral; 4 = likely; 5= very likely · Simple savings products · Current account · Consumer credit · Structured savings · Home loans · Corporate loans		

5. How well does your business model stand up to this disruptive change? What should be changed or adapted? Why or why not?		
6. What are your strategies to face the disruption? (Human talent, business models, technology infrastructure?) What challenges must your business model overcome to adopt this digitization?		
7. How important is digitization to your bank? What are your digitization priorities?		
Section 2: Competition		
8. Who do you perceive will be your major competitors today and in the future? Do you think that non- banks, technology providers and platforms (e.g. Facebook, Amazon, Google, Apple, Silicon Valley startups or local startups) may be your future competitors? Why and why not?		
9. How are you planning to face the competition? (Probe: By using what kind of digital strategies?)		
10. What do you believe are the advantages of banks over fintech firms? How banks can build on that in the future as a competitive advantage? Where do you think the traditional financial institutions are most vulnerable to the attacks of fintech companies?		
11. What do you believe are the advantages of fintech firms over banks?		
Section 3: Future of the sectors: banking and fintech		
12. How do you perceive the future of the fintech sector in Norway?		
13. What do you believe will be the relationship between fintech companies and		

banks in the future in Norway? (Probe: Is it more one of competition or collaboration?)		
14. How will you ensure you will stay relevant to new customers, and particularly the Millennials?		
15. Do you plan to invest in fintech? Why or why not?		
16. If you are a partner to some extent with a fintech firm, can you explain what factors had an importance when deciding to collaborate?		
17. What factors will have an importance when you decide to collaborate in the future?		
Section 4: Technology/ customer journey and trust		
18. What are your latest digital initiatives? Please provide examples.		
19. Is your current infrastructure ready to support innovation? (e.g., peer-to-peer lending, mobile payments or other fintech solutions)? Why or why not?		
20. What is the level of channels' integration that your institution offers to its customers and partners?		
21. How do you perceive your current capabilities (technological legacy, software providers, support) in supporting customer service across different channels online, offline and mobile?		
22. What are your future strategies to offer a consistent customer experience across different channels?		
23. To what extent does technology impact relationship with fintech firms?		

24. To what extent does customer journey with fintech firms?		
Section 5: Regulation / government support		
25. Do you believe that current laws for the financial sector are helping or hindering innovation in fintech firms?		
26. Do you believe that current laws are restraining or facilitating your digitization strategies and business models and why?		
27. To what extent regulation issues impact relationship with fintech firms?		
Section 6: Supporting entrepreneurs/ innovation and financial inclusion		
28. How do you perceive the role of traditional banking sector in supporting innovation?		
29. To what extent is your platform supports the development and growth of startups? and why?		
30. To what extent does supporting entrepreneurs/ innovation influence relationship with fintech firms?		
31. What will be your role in supporting innovation and entrepreneurs when fintech firms start providing access to capital (e.g., via peer to peer lending)?		
32. To what extent does financial inclusion impact relationship with fintech firms (probe: the availability and equal access to financial services for all members of an economy)?		
33. Other comments?		

Reflection paper 1

Wow, writing a master thesis is a lot of hard work! I have learned to dig deep within my own area of research interest, and I have needed to be dedicated and hardworking to successfully accomplish my thesis in a proper way within the deadline. Eventually, after four and a half year of intensive studies, I have now had the pleasure of spending five months on doing my own master thesis. But, as a master student in business administration and economics, I had to write my master thesis together with a fellow student. My fellow student and I had the preference of choosing within a wide range of research areas and topics, when deciding on what to write our thesis about. I have learned a lot about myself during this extensive work, but also, a lot about how it is to work together with a companion for such a long period of time.

Our master thesis is written within the field of the fintech sector and banking sector in Norway, with a special focus on the peer-to-peer crowdlending sector. Our research question is: *"What factors impact the extent of collaboration between fintech firms and traditional banks, focusing on the peer-to-peer crowdlending sector in Norway?"*

In this reflection note, I will first summarize briefly what has been our main theme of our thesis as well as our main findings and conclusions. I will then shortly discuss how our thesis topic relates to the three broad themes within the world of business: international, innovation and responsibility.

Briefly summary

Our master thesis is concerned about the fintech firm industry and the traditional banking industry in Norway. Fintech firms seek to develop and automate the use and distribution of financial services, assisting both private individuals and businesses better to handle their financial transactions, operations and lives. Traditional banks have established a solid heritage of procedures in their activities, but the culture of most traditional banks is not quite open to novelty, technology and innovation.

Even if fintech firms are more customer-centric, agile and creative than traditional banks, the fintech sector has yet to gain the reputation and trust needed for its survival. This is where the traditional banks may come into play – with the fintech firms' impressive innovation and the banks' consistency and trustworthiness, they can both benefit from this symbiotic relationship and establish a successful collaboration. Fintech firms and traditional banks seem to have a synergetic relationship, with their complementary strengths contributing to the success of both parties. Our master thesis has therefore studied the factors that impact the extent of collaboration between fintech firms and traditional banks, focusing on the peer-to-peer crowdlending sector in Norway.

Main findings and conclusions

In our master thesis we developed two research models. One research model from the fintech firms' perspective and one research model from the banks' perspective.

Our final model developed from the fintech firms' perspective regarding factors impacting the extent of collaboration towards incumbent banks includes; regulation, trust, customer-centric approach, organizational cultural fit, strategic fit, innovation, capital, brand image, growth and expertise. Our final model from the banks' perspective regarding factors impacting the extent of collaboration towards fintech firms includes; regulation, customer-centric approach, financial inclusion, organizational cultural fit, strategic fit, innovation, survivability, brand image, growth, risk management, expertise and profitability.

Some identified factors support earlier findings in the academic literature like regulation, organizational cultural fit and strategic fit, while others contradict earlier findings like regulation from the banks' perspective and risk management from the fintech firms' perspective. Additionally, we have identified factors that to the best of our knowledge, have not yet been identified in the literature before like trust and brand image from the fintech firms' perspective and expertise and profitability from the banks' perspective.

How does the master thesis topic relate to broader international trends?

There are many international forces that may influence fintech firms' and traditional banks' operating environment. Related to the master thesis topic, I will highlight and shortly discuss internet and globalization as international trends below.

We live in a world that is much "smaller" today, than for just 20-30 years ago. Because of the strong forces and implications of internet. Furthermore, financial markets, businesses and countries have become interconnected to an extent that diminishes national differences. People can now live in one country and be an employee of a company in another country and communicate with each other directly through internet. What is happening around the world is much more transparent, because of internet. If a natural disaster occurs, everybody will know about it instantly. If a financial market is crashing, everybody will know about it straightaway.

Because of internet, consumers and businesses can also explore, connect and do business with each other, abroad, in a much more convenient way. This is one of the reasons why companies like fintech firms and also traditional banks will feel more pressure from the outside world in the near future. I think a lot of people do not mind doing business with strangers from abroad and this will be a danger for more local business ahead. In other words, a company is not only competing against other local or national companies, they are competing against the rest of the world! To survive and continue to prosper, business leaders will have to keep in mind and pay close attention to what is happening in the rest of the world and be aware of the strong forces of internet and globalization.

How does the master thesis topic link to innovation?

Regarding innovation, a lot is happening in the fintech- and the banking sector at the moment. Rapid change and short innovation cycles lead companies into demanding choices for how to handle the business ahead. Since the changes and the pace of innovation are so high at the moment, I will not try to identify gaps or needs in the market, I would rather reflect a bit on how fintech firms and traditional banks should navigate going forward.

Our analysis from the banks' perspective, indicated that innovation as a factor had a positive impact on the extent of collaboration between fintech firms and traditional banks. On the contrary, seeing it from the fintech firms' perspective, our analysis indicated that innovation as a factor had a negative impact on the extent of collaboration between fintech firms and traditional banks. Are fintech firms' afraid traditional banks will hamper their innovation level?

Where fintech firms are known for being agile, highly innovative and creative, most traditional banks have until now not been that open to novelty, technology and innovation. That being said, most traditional banks possess consistency and trustworthiness among their customers. By collaborating with each other, fintech firms may prosper on an access to the banks trust, reputation and enormous customer-base, while banks on the other side, might enjoy fintech firms' agility and their impressive innovation abilities. I think it will be necessary to find the spot-on partner to engage in when the market conditions are getting more and more competitive and internationally exposed. Succeeding in this, both parties may flourish and establish a collaboration with high growth potential where innovation, creativity and trustworthiness should be in focus.

<u>How does the master thesis topic relate to responsibility?</u>

In our master thesis we have researched factors that impact on the extent of collaboration between fintech firms and traditional banks. One factor, which was not discovered during our literature review, but identified during our in-depth interviews was the factor of social responsibility. Although not ending up in the final research models, social responsibility is really important in today's business world.

An ethical challenge that may arise in the field of financial services, could for instance be giving loans or credit cards with really high interest rates to individuals that obviously do not have the chance of repaying the loan, hence, ending up with payment remarks, debt collection and even personal bankruptcy.

Competitive advantages are obtainable when businesses seek to exercise corporate social responsibility - CSR. When doing this, businesses can stand out in the crowd, attract more customers, and do good for the environment. Also, when big companies start engaging in corporate social responsibility, the smaller firms will do the same. Social responsibility can occur in many ways like an environmentally friendly line of business, engage in charitable giving and volunteer efforts within the community, attending volunteer events and different kind of donations.

By completing my master's thesis, I have gained new insight and knowledge into an industry in great growth. I have learned how to structure such a large research project where the results and contribution to the research field is correct and credible. Further studies on the area seem very tempting.

Sincerely,
Håvard Heggland

Reflection paper 2

I am a master's student in the business administration program, specializing in international management at the University of Agder in Kristiansand, Norway.

Upon the completion of my master studies, I have gained thorough knowledge, skills and general competence in the field of financial economics. During the program we discussed extensively the impact of various international trends, the important role of innovation, and social and environmental responsibility. In the different course works, we covered topics such as population and demographic shifts, emerging markets' growth, increase in competition among businesses, the growing importance of innovation and customer-centric approach as a mindset for businesses, and the growing focus of different environmental and social responsibility aspects.

I reflected thoroughly on the different topics we discussed in class before deciding on a topic for my master thesis. It was important for me to choose a topic that I find interesting and relevant to the major themes explored in class. In addition, I decided on a topic that can contribute to academic literature. Therefore, together with my colleague Håvard Heggland, we decided to research on the Norwegian Fintech sector. Thereafter, together with our supervisor Rotem Shneor, we focused on the Norwegian fintech peer-to-peer lending sector.

The subsequent paragraphs will help me to explain how our thesis topic relates directly to the broad themes of University of Agder: international trends, innovation and social responsibility.

Firstly, fintech (financial technology) is an undeniable international trend as it is one of the most rapid growing sectors in the world. During the year 2018, China, United States and United Kingdom were still positioned as the top three respectively concerning total capital invested in the fintech sector. The Nordic market for fintech has the third largest volume in mainland Europe following France and Germany. Yet, the Norwegian market is still considered as a relatively small market in the total regional market.

Secondly, fintech firms seek to develop and automate the use and distribution of financial services. Therefore, innovation is also related directly to our thesis topic, as it is engraved in the DNA of the fintech sector. Given the rapid pace of change in the innovation, the implementation of innovative and more customer-centric solutions for financial services, it is quite difficult to predict the future of the financial services sector.

Thirdly, as more and more businesses acknowledge today that all of society will be affected to some extent by its operations, social responsibility of businesses and corporate ethics can no longer be taken lightly. Whether mobile payments or crowdfunding platforms, fintech solutions reflect the needs of a new generation of consumers who are looking for more convenient and customer-centric products and services. This invariably has helped the fintech sector to be perceived as not only innovative, but also as a sector that is socially responsibility since the two activities are key parts of their business operations. Additionally, the fintech sector may expand financial inclusion as it provides equal access to financial services for all customers and makes it easier for all members of the economy to manage their activities. Moreover, unlike traditional banks that marginalize low- income individuals, the fintech sector is a better provider of smaller emergency loans to such individuals.

As mentioned above, the fintech sector is characterized by being innovative, customer-centric oriented and agile. However, this sector is also characterized by its desperate need for capital and its lack of customer-trust which is particularly crucial in the financial services industry. Traditional banks, on the other hand, enjoy high level of customer-trust, a good reputation of being safe, huge customer-base and expertise in various field. However, they are lack innovative capabilities, agility, creativity, new-coded systems and the ability to figure out customer pain points in innovative ways. Therefore, this presents opportunities for fruitful collaborations and symbiotic relationships where the complementary strengths can contribute and benefit both parties.

However, while some banks do collaborate to some extent with fintech firms, other traditional banks perceive the fintech sector as a threat or disruptive rather than a complementary service provider. Therefore, in our master thesis, we conducted a multiple case analysis in an attempt to study and identify what factors impact how and why fintech firms and traditional banks decide the extent to collaborate with each other in the peer-to-peer lending sector in Norway. Accordingly, we developed two research models: one from the fintech firm's perspective and one from the banks' perspective. Our final model from the fintech perspective include the following factors; regulation, trust, customer-centric approach, organizational cultural fit, strategic fit, innovation, capital, brand image, growth and expertise. On the other hand, we identified the following factors from the banks' perspective; regulation, customer-centric approach, financial inclusion, organizational cultural fit, strategic fit, innovation, survivability, brand image, growth, risk management, expertise and profitability. Some of the identified factors support earlier findings in the academic literature while others contradict earlier findings. Moreover, we identified some factors that to the best of our knowledge have not yet been identified in academic literature concerning the study context.

Writing the master thesis was not an easy task as it required the execution of different steps in order to achieve the final result. However, it was an exciting as well as an enriching journey. It was also a great opportunity to go through all the topics we have discussed and explored during our master program.

Sincerely,
Omri Nadav