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# Organizational Learning and Capabilities in Private Equity

A case study of Nordic Capital's[1] investment in Bambora*

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**ABSTRACT**

Our thesis aims to examine organizational learning and capabilities in a private equity setting: we examine how private equity firms gain, use, and transfer knowledge. We do this through a single case study of Nordic Capital's investment in payments, and in particular their successful investment case Bambora (2014-2017), where a new firm was created through an aggressive M&A and operational value creation agenda. We discover that in order to create a competitive advantage in the competitive private equity environment that exists today, one should view private equity firms' organizational learning and capabilities as a dynamic value creation component. One could see it as a way of operational knowledge maintenance, or even as an extension within operational engineering in terms of new industry specific knowledge and network accessibility. Hence, how a private equity firm learns is essential, and just as they seek to be experts in financial, governance and operational engineering, private equity firms should become experts in organizational learning in order to develop their capabilities. These findings contribute to the rather unexplored field of organizational learning and capabilities in a private equity setting. Additionally, our entrepreneurial private equity case study is contradictory to traditional private equity investment logics as idea creation occurred before sourcing. Our thesis might provide guidance for further research on organizational learning and capabilities, for instance in a setting where the case was not as successful as the one we look at.

**Keywords:** private equity, case study, organizational learning, organizational capabilities, entrepreneurial private equity

[1] "Nordic Capital" refers to any Nordic Capital branded or associated fund or vehicle (including any, or all, of its predecessor and successor funds or vehicles) together with its exclusive advisors, the NC Advisory entities and the Nordic Capital Investment Advisory entities.

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# 1 Introduction

In 2014, Nordic Capital[2] (NC) started a, for them and for traditional private equity investors, unique journey of creating a company. The business plan was to offer a one-stop-shop payments solution, covering the whole payments value chain, domestically and cross border. In three years, they acquired the firm Euroline through an SEB carve out, performed 12 additional acquisitions, launched the Bambora brand, and in 2017, successfully exited Bambora. NC had past experiences from investing in payments, and after creating Bambora, NC has made subsequent investments in technology and payment firms. Our thesis examines how a private equity firm gain and use learnings and capabilities. Research on organizational learning and capabilities in a private equity setting is scarce and to our understanding nonexisting in a Nordic context. Thus, we review and analyze literature on private equity value creation theories, and on organizational learning and capabilities.

How do private equity firms create value in their portfolio companies to get high returns on their investments? The literature on this subject that studied private equity in their early years has to a large extent answered through high leverage, restructuring of firm's financial structure and by financially incentivizing management to align interests (Jensen, 1989; Kaplan and Steven, 1989b; Kaplan and Steven 1989a). More recent literature states that apart from creating value in their portfolio companies through financial and governance engineering, private equity firms also do it through operational engineering (Kaplan and Strömberg, 2009).

Døskeland and Strömberg (2018) explain operational engineering as improvements in the operations of the portfolio firm. This could be done by professionalizing the management team by hiring professionals with operating backgrounds and specific industry knowledge, or by providing knowledge through strong networks of former executives and operating industry professionals. The authors also point out that private equity firms often have the possibility to use external consultants to a large degree to for instance form business plans and value adding programs, enabling them to get a good understanding of a particular firm's possibilities. Private equity firms themselves expect to create value in their portfolio companies by having a growth focus rather than by reducing costs (Gompers et al., 2016). To be able to do such improvements unique capabilities are required, and these capabilities are hard to imitate and acquire (Døskeland and Strömberg, 2018).

To summarize, it has been shown that private equity firms add value through different forms of engineering. Particularly, operational engineering seems to be and require a unique capability. How does a private equity firm obtain and use unique capabilities, and are there some types of private equity firms that are better at it?

Research suggest that a specialist might be better at obtaining and using unique capabilities. A research note by Zweig et al. (2014) shows that sector specialized private equity firms have a competitive advantage resulting in higher performance and Gompers et al. (2009) conclude that specialized investment firms tend to do more successful exits. Literature on scale diseconomies add to this finding. It has been suggested that the number of investments a private equity firm does is subject to diseconomies of scale and a great number of investments, however not larger investments, is negatively

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correlated with return (Lopez-de-Silanes et al., 2015). This supports the view on private equity as an industry where soft knowledge is needed to create value and the need of communication is high.

Whether diversification in private equity funds increases or decreases returns seems to depend on the situation. If the diversification is based on risk aversion, the return is negatively affected (Humphery-Jenner, 2013). But otherwise it could be beneficial as it might facilitate knowledge sharing between sectors, at least as long as staff is not spread too thinly across the industries (Humphery-Jenner, 2013).

Furthermore, because of a competitive private equity environment (Harris et al., 2014; Gompers et al., 2016; Næss-Schmidt et al., 2017), limited partners and potential target portfolio companies use a manager's deep expertise in a certain field as a differentiating factor when evaluating general partners (Zweig et al., 2014).

All in all, previous research suggests that soft knowledge is needed in private equity and a greater focus on some sectors and a few people focused on the same sector all the time should facilitate knowledge retention and transfer. Existing research also suggests that deep sector experience matters for LPs when they invest, that a great knowledge about the industry in which a GP invests increases the likelihood for good exit opportunities and better investment decisions, and that a generalist should earn lower returns than a specialist. It is very likely that a generalist with focused and specialized teams only investing in a particular sector should benefit from the same things as a single specialist, while at the same time benefit from diversification. This raises the question of how sector knowledge is developed, and we turn to literature about organizational learning to understand more.

Literature within organizational learning argue that how units identify themselves with each other and who or what they identify themselves with, in other words where boundaries of groups and units are drawn, affect the degree of knowledge sharing (Kogut and Zander, 1996; Argote et al., 2003; Kane et al., 2005). What kind of knowledge that exists within these units and the units' characteristics further affect what kind of knowledge can be shared in the first place: what you do not know, you cannot share. The administrative heritage of the firm both enables and can hinder new learning (Bartlett and Ghoshal, 1998). A firm's old paths allows, and restricts, the possible future paths the firm can take. Argote et al. (2003) argue that there are two dimensions in organizational learning, where one dimension deals with *knowledge management outcomes* and is split into knowledge *creation*, *retention* and *transfer*, while the other dimension forms *the context of the knowledge management* and entails *properties of units, properties of relationship between units* and *properties of knowledge.*

The fit to surrounding environments, as well as the fit between units within a firm affects the possibility for a firm to succeed with its quests (Sorenson, 2003; Song et al., 2003) Structural inertia, and the inability or ability to perform as well as recognize the need for reconfiguration impacts the possibility for a firm to adjust to a changing environment (Amit and Schoemaker, 1993; Langlois, 1994; Teece et al., 1997). Efficient dynamic capabilities plays a big role in whether a firm will survive, sustain a competitive advantage, and be able to compete in the long run (Teece et al., 1997).

The competitive advantage of a firm is highly dependent on the degree to which a firm learns new capabilities, and what kind of capabilities it manages to acquire (Teece et al., 1997).
How and to whom knowledge is transferred is very much affected by a firm's organizational processes and relationships (Bunderson and Sutcliffe, 2003; Edmondson, 1999; Weber and Camerer, 2003). The network and the ability to maintain and create key relationships further facilitates learning, in the end creating competitive advantage (Teece et al., 1997). Teece et al. (1997) argue that the competitive

advantage of a firm originates from its managerial and *organizational processes*. The functions of the organizational processes are (1) *the static process of coordination and integration*, (2) *the dynamic process of learning* and (3) *the transformational process of reconfiguration*.

Argote et al. (2003) argue that the location of embedded knowledge in organizations need to be studied more, as well as the impact it has on performance. How rules and routines embed organizational knowledge, and its effect on organizational and group outcomes is also a field in need of more research (e.g. Cohen and Bacdayan, 1994; March et al., 2000). This suggests a case study such as ours is needed, and we now describe the thesis in more detail.

The main purpose of this thesis is to identify and demonstrate how private equity firms develop and maintain organizational learning and capabilities. In highly dynamic environments such as the technology and payments industries, acting proactively and not just repeating old actions becomes increasingly important for private equity firms. To be more specific, historically, high leverage or cost cuttings could be the crucial ingredient for a successful deal. However, we have observed some private equity firms shifting from generalists to sector specific investors, which allows them to become more entrepreneurial in their approach. They contribute with clear perspectives on operational execution by having operational support teams and formal networks. In this way they can help management teams to drive the businesses more efficiently. We argue that this shift has evolved as a way for private equity firms to try to reuse and store sector specific knowledge. Contributing to the scarce literature on organizational learning and capabilities of private equity firms, the following research question is addressed by our thesis:

*How does a private equity firm develop and maintain organizational learning and capabilities?*

When linking private equity to literature on organizational learning in specialist firms (Haunschild and Sullivan, 2002; Ingram and Baum, 1997; Sorenson, 2003) one might draw the conclusion that private equity firms should create, retain and share more knowledge as a specialist than as a generalist.

Looking at private equity firms in relation to literature about the fit of the organization to its surroundings and the fit of its internal units to each other (Sorenson 2003)(Song, Almeida et al. 2003), one can think that a management team fitted for the task, fitted for the particular business environment of the portfolio firm, and a management team with individuals complementing each other with different kinds of knowledge, will perform well. It is also likely that a private equity firm that can complement a portfolio firm with knowledge that the portfolio firm is lacking, will make it easier for the portfolio firm to perform well.

Literature on identity and boundaries (Kogut and Zander, 1996; Argote et al., 2003, Kane et al., 2005) suggests that in order for private equity owners to learn from their portfolio companies, they have to create a feeling of being in the same team: they have to create a feeling of identification between them and the portfolio company.

Connected to identity and where boundaries are drawn, social relationship literature (e.g. Argote, McEvily et al., 2003; Bunderson and Sutcliffe, 2003; Edmondson, 1999; Weber and Camerer, 2003) can in a private equity setting mean that how the private equity owner communicates with its portfolio companies, how much the portfolio company trusts the PE owner, and the kind of relationship the private equity owner and the portfolio company have will impact the knowledge sharing.

In order to meet our main purpose - understanding how private equity firms develop and maintain organizational learning and capabilities - we investigate these hypotheses, by using NC's Fund VIII investment in Bambora as a case study. Our thesis also aims to provide a foundation for a case study at the Department of Finance at the Stockholm School of Economics to be used and taught as a case study. This limits the scope of our thesis to only include aspects of NC's investment in Bambora that contribute to our understanding of organizational learning and capabilities as well as value creation, and we will thus not address questions such as whether NC should or should not have invested in Bambora or whether private equity firms should or should not invest in technology and payments industries, etc.

We contribute to existing literature by first of all providing an understanding of organizational learning and capabilities development within private equity firms. This will also include an understanding of how a private equity firm can develop competence. In addition to that, we provide a greater understanding of high technological companies as well as insights from NC's experience of investing in fintech.

After having examined previous literature there are some questions that we find interesting to examine in the Bambora case. In line with what Teece et al. (1997) argue, if the knowledge and the capabilities that lead to the success of the Bambora investment were tacit, it should be hard to replicate these in another portfolio company, or in another division of the firm. It should also be hard to replicate knowledge and capabilities from previous similar payments investments. Has this been the case in the Bambora investment, and has NC and Bambora overcome these problems somehow? Apart from this, is there any evidence for reconfiguration in NC or Bambora that has been important for the outcome of the investment? What routines has been important in the dynamic process of learning, and how have coordination and integration been important? These are questions we examine in the analysis.

Using the framework of Argote et al. (2003), we look into what kind of knowledge has been created in relation to the Bambora investment, how it has been retained, and how and to where it has been transferred, if it has happened. Which units that have existed in the case of Bambora, and what kind of properties of them, of their relationship and of the type of knowledge in question existed that have affected the knowledge management outcomes, will also be examined in our thesis.

The Bambora case can be summarized as follows. After an exit of NC's successful Fund V investment in Point International (Point), NC, together with the former CEO of Point, Johan Tjärnberg, created a foundation and a concrete business plan to change the payments industry. The plan, first referred to as SuperPay and later as SuperPay 2.0, was disruptive in nature and focused on small- and medium-sized businesses (SMB). The plan identified a clear market gap and developed an innovative and customer-oriented vision where the need of a one-stop shop was met.

The plan realization started in 2014 with a carve-out of SEB's card acquiring business Euroline. As a merchants acquirer, Euroline managed the merchants' relation to the rest of the payments value chain and was responsible for signing up merchants to card acceptance agreements. Euroline was therefore a key player in the value chain and a good platform for the investment. Through vertical and horizontal integration, Euroline was developed into Bambora, a full-service end-to-end payments offering covering the whole merchants payments value chain. 12 add-on acquisitions were done as well as large investments into cross border and omni-channel payment capabilities. The management team was mainly built up of people with a long background within the NC network and thanks to the management team operational accomplishments such as an efficiently executed go to market program and the recruitment of top-talents were made, largely because of an implementation of a strong culture and branding, eventually leading to a strong market position. As they had created a scalable business model with solutions that would fit strategic buyers, an early exit could be pursued and the firm was exited already after two and a half years, in 2017.

Bambora was a pioneer in the payments industry. It took part in transforming the payments industry and by end of NC's ownership period, Bambora had about 500,000 merchant customers in Europe, APAC and North America, and was handling EUR 50 billion of transaction value. By then it had developed into a global omni-channel payments provider with a globally replicable payments product. Characteristic for Bambora was its performance culture, the many and rapidly made add-on acquisitions, and the fact that Bambora was like startup but created and backed by a private equity firm.

Bambora, created under NC ownership, was a clear success story. It was also unique in many ways. It is therefore interesting to analyze how this could happen. What unique capabilities did NC have, and how did organizational learning play a part in this story?

We find that identification/trust, deep sector knowledge, a high quality network, previous experience that improved confidence, a well-reasoned plan and both operational and financial skills were all highly essential in the creation of Bambora. Knowledge and understanding of the industry to develop the business plan, contacts with industry professionals to build the Bambora team, confidence to dare to execute the business plan, and trust from rest of NC to get permission to invest, were all necessary puzzle pieces needed to create Bambora.

Trust and/or identification is an essential aspect in private equity deals, in order for knowledge to be shared and transferred between individuals and organizations. Bambora is a clear example of how working close and together, sharing the same vision, identifying with the same idéa, have not only facilitated learning and capability creation in both NC and Bambora but also a smooth integration of add-on acquisitions while building Bambora. Private equity firms clearly benefit from establishing good relationships with different stakeholders.

A very clear example of creation, retention and transfer of knowledge was in the Bambora case the People & Performance (P&P) work tools, which entailed a unique way of working with HR questions. It was initially created for Bambora and then transferred from Bambora to NC as well as further transferred to other NC investments. We deem that it is very unlikely that such a knowledge transfer would have happened between organizations without NC as a common owner.

Building upon the acknowledged value creation theories of financial, governance and operational engineering (e.g. Kaplan and Strömberg, 2009), we extend the model of value-creation by viewing private equity firms' organizational learning and capabilities as a dynamic value creation component. We argue that private equity learning can be seen as a way of operational knowledge maintenance, or even as an extension within the operational engineering in terms of new industry specific knowledge and network accessibility. Hence, *how* private equity firms learn is essential, and just as they seek to be experts in financial, governance and operational engineering, private equity firms should become experts in (organizational) learning in order to develop their capabilities.

We also find that the Bambora investment helped increase NC's reputation of being innovative. This can benefit NC in several different ways, one being greater likelihood to attract young people, as entrepreneurship is something that many young and newly educated people find highly interesting and cool, another one being increased likelihood to attract entrepreneurs and partners and a third being an improvement of their reputation as an actor within the society as a value creating entity.

Our data indicates that NC and the management team at Bambora were able to make Bambora a self-fulfilling and fun working place for the management team by promoting being brave and bold. We believe that this approach allowed the existence of the startup notion within Bambora, reaching all employees of the organization. Furthermore, by recruiting the CEO Johan Tjärnberg, who recruited good people such as the Chief People Officer Antonia Brandberg Björk and COO Patrik Göthlin, NC facilitated a culture where only people who fit the culture stayed.

The possibility to have an M&A agenda and fast build a large company from scratch was a great competitive advantage of NC and Bambora. Our research findings suggest that private equity firms could take advantage of this opportunity more. By specializing in a field and acquiring deep knowledge, it will be possible to discover business opportunities and create an entrepreneurial business plan, perhaps one that will transform and even disrupt a market. Because of the financial strength a private equity firm has, a rapid M&A agenda in connection to an operational creation plan can be pursued in order to form a new company and be first in a certain field, and gain the benefits of being the first. A private equity firm can be agile on a large scale, and in a smart and well thought through way, if its organizational learning is efficient.

It is unlikely that the Bambora team would have been able to execute this transformation with any random private equity firm. A combination of past outcomes and relationship buildings enabled a high level of trust, confidence and sector knowledge as well as a large and high-quality network, all essential to build Bambora.

If private equity firms can truly turn into experts of organizational learning, and retain and transfer knowledge between their portfolio companies, they are in a position to create real operating value which benefits both owners and societal welfare. This might also be the only way to continue to produce high returns for their limited partners as intensity in the competition among private equity firms increase.

The rest of the thesis is structured as follows. Section two goes through previous literature within mainly the fields of private equity value creation and organizational learning and capabilities. Literature about diversification in private equity funds and venture capital versus buyouts is also discussed. Section three describes the empirical methodology, data collection and reliability and validity of our thesis. In section four the background to the case is described and an overview of the payments industry is given. Section five describes the case in question. Here he events leading up to the investment as well as the actual investment and the aftermath is described. This section also entails some information about NC and the private equity industry at the time of the case. Section six consists of our analysis of the case. Section seven provides our concluding remarks  and implications for the future both regarding research and practice. References and exhibits are found at the end.

# 2 Literature Review

This section reviews previous literature related to our study. First we review the literature on private equity value creation, where especially operational engineering connected to sector knowledge is of our interest. In order to understand how sector knowledge is developed, we then review literature on organizational learning and capabilities.

## 2.1 Private equity

### 2.1.1 Value creation theories

The work of Kaplan et al. (2009) suggests that private equity firms create value in portfolio companies mainly through financial engineering, governance engineering and also highly through operational engineering. *Financial engineering* entails how the capital structure of the portfolio company is set to maximize the value of a firm. This often involves high leverage, but also management stakes in the equity part. *Governance engineering* is the way in which private equity firms control the boards of their portfolio companies. The private equity investors are more actively involved in governance, the boards are smaller, and the meetings are more frequently held than comparable public companies (Gertner and Kaplan, 1996; Acharya et al., 2013; Cornelli and Karakaş, 2008). *Operational engineering* regards operational and productivity improvements done in the portfolio company, and this value creation method is becoming increasingly important as competition increases in the private equity world (Harris et al., 2014; Gompers et al., 2016; Næss-Schmidt et al. 2017). There is a large positive empirical evidence on the operating performance and productivity improvements of portfolio companies after leveraged buyouts. Kaplan and Strömberg (2009) argue against what critics say regarding private equity investors creating their return through deploying a large amount of people, gaining large tax benefits and benefits of asymmetric information.

Gompers, Kaplan, and Mukharlyamov (2016) analyze a survey with detailed answers from private equity firms about their operations. They find that private equity investors expect to add value to their portfolio companies through a greater focus on growth than on reducing costs. They also find that the management composition seems to be the second important factor when making  investment decisions.

In reference to operational engineering, Døskeland and Strömberg (2018) argue that the unique capabilities of a private equity firm can affect areas such as deal sourcing, execution and exits. Private equity firms often professionalize the management of their portfolio companies by hiring professionals with operating backgrounds and specific industry knowledge. Furthermore, they often have strong networks of former executives and operating industry professionals. It is also common that private equity firms use external consultants to, for instance, form business plans and value adding programs. Also, Bernstein and Sheen (2016) mean that private equity firms improve firm operations by bringing in industry expertise as they find that private equity owned restaurants have better operational practices on a store level after the buyout compared to before the buyout, especially when the private equity partners have previous experience from the industry.

Furthermore, Jensen (1989) elaborates on how leveraged buyout firms increase value by increasing operational efficiency, shareholder value and employee productivity. The author stresses the effect of organizational innovation followed by buyouts: the organizational structure of buyout firms solves the conflict regarding control and use of corporate resources between owners and managers in public firms, resulting in mentioned value creation. The author proposes that the clear benefits of leveraged buyout firms will lead to the disappearance of publicly traded stocks. Bloom et al. (2015) confirm this and state that private equity firms are especially good at people management practices, monitoring, continuous improvement and lean manufacturing.

Moreover, Hotchkiss, et al. (2014) show how private equity firms create value by handling financial distress efficiently. Even though private-equity backed firms usually are highly levered, they are not more likely to default than other leveraged loan borrowers/firms. This since private equity backed firms are better and faster at restructuring (more often out-of-court) and are more likely to retain control during the process. In connection to leverage, Huang et al. (2016) argue that private equity firms create value by reducing the cost of debt of their portfolio companies since their reputational concerns outweigh their wealth expropriations incentives. One can conclude that reputation is an important factor for private equity and impacts their behavior.

Acharya et al. (2013) study deal-level transactions data from major private equity firms and show that private-equity backed deals on average show a positive abnormal performance related to sales and operating margins improvements compared to listed peers. This positive outperformance the authors find to be correlated with combinations of value creation strategies and general partners' backgrounds. For instance, former consultants or industry managers contribute with value in "organic" deals, while former bankers or accountants drive successful M&A agendas and form "inorganic" strategy plans.

Næss-Schmidt et al. (2017) are convinced that private equity firms' value creation in the future must originate from operational improvements rather than macroeconomic factors such as low interest rates. This because of higher integration of capital markets across European countries and more mobile financial services.

However, Guo et al. (2011) find inconsistency in operating improvements in public-to-private transactions, and that operating performance improvements are small on average, with quite large variation in performance. Also Cohn et al. (2014) find limited evidence of operational gains after a leveraged buyout, on average. However, they do find such evidence for leveraged buyout where public financial statements are available.

Critics of private equity argue that leveraged buyouts result in large job losses. Davis et al. (2014) find that there tend to be job losses of 3-6% in two to five years after a buyout, with a concentration around public-to-private investments and investments in the retail and service sectors. However, the authors stress that portfolio companies also create new job opportunities. Taking this into account, the net job loss is less than 1%.

To summarize, it has been shown that private equity firms add value through different forms of engineering. Particularly, operational engineering seems to be and require a unique capability. How a private equity firm is able to obtain and use this capability is of our interest, which leads into the next section on specialization.

### 2.1.2 Generalist vs sector specialist

Literature on scale diseconomies and diversification risk may explain why some private equity firms create sector teams with specific sector focus rather than just calling themselves generalists.

Lopez-de-Silanes et al. (2015) show that a larger amount of investments (and not larger investments) performed at the same time are negatively correlated with return, showing a tendency of diseconomies of scale. This is in line with the view on private equity as an industry where soft knowledge is needed to create value and the need of communication is high. Moreover, the authors mean that the actions and returns of private equity firms do no seem to be easily scalable or mechanical.

Kaplan et al. (2010) have a view that top performance may be difficult to replicate if fund size increases. Holmström and Roberts (1998) find that diseconomies of scale may be affected by knowledge transferring problems.

Although there exists limited empirical evidence about the effect diversification has on private equity fund returns, the findings suggest that diversification could both benefit and harm a private equity firm. Humphery-Jenner (2013) argues that geographic and industry diversification in private equity funds could increase private equity fund returns. This is due to knowledge sharing and learning apart from risk reduction. However, if staff is spread too thinly over the industries diversification can reduce return, the same if the reason for diversification in a private equity firm is mainly risk aversion. Gompers et al. (2009) conclude that specialized investment firms tend to do more successful exits and that generalists tend to perform poorer as they tend to poorly select investments within industries and make inefficient funding allocation across industries. Looking at corporations rather than private equity funds, diversification seems to generally harm the firm value due to overinvestments (Berger and Ofek, 1995; Denis et al., 2002) and increased agency problems (Aron, 1988; Amihud and Lev ,1999).

Because of a competitive private equity environment (Harris et al., 2014; Gompers et al., 2016b; Næss-Schmidt et al., 2017), limited partners and potential target portfolio companies use a manager's deep expertise in a certain field as a differentiating factor when evaluating general partners (Zweig, et al., 2014).

A research note by Zweig et al. (2014) shows that sector specialized private equity firms have a competitive advantage resulting in higher performance. The authors define a sector specialist as a private equity firm that has invested more than 70% of its capital in either the consumer, financial services, health care, or technology sectors during 2001 to 2010. They find that sector specialists' investments within these sectors on average resulted in a gross IRR of 23.2% gross IRR and a 2.2x MOIC, compared to generalist's returns of an aggregate 17.5% gross IRR and a 1.9x MOIC. The authors believe that this outperformance is driven by sector specialists' ability to better source and select investments, create value after acquisition, and better exit investments. Their analysis also shows that sector specialists outperform generalists across all fund sizes, but the performance difference shrinks as the fund size exceeds USD 1 billion. The authors believe that the benefits of sector specific knowledge are offset because of higher market competition among larger funds, while we believe that this also may be consistent with theories of diseconomies of scale presented above.

All in all, previous research suggests that soft knowledge is needed in private equity, that a greater focus on some sectors and a few people focused on the same sector all the time should facilitate knowledge retention and transfer, that deep sector experience matters for limited partners when they invest, that a great knowledge about the industry in which a general partner invests increases the likelihood for good exit opportunities and better investment decisions, and that a generalist should earn lower returns than a specialist. It is very likely that a generalist with focused and specialized teams only investing in a particular sector should benefit from the same things as a single specialist, while at the same time benefit from diversification. This raises the issue of how sector knowledge is developed.

### 2.1.3 Buyout versus venture capital activity

The particular case we are looking at, the creation of Bambora, is in some ways similar to a venture capital investment, at least at a first glance. Therefore, we will provide a brief analysis of the similarities and the differences between private equity and venture capital in this case at the end of the thesis, connecting our thoughts to previous literature mentioned here below.

A large body of literature suggests that there are similarities but mainly differences between venture and buyout activity in terms of drivers of investment (e.g. Kelly, 2012; Schertler, 2003; Metrick and Yasuda, 2011). Both venture capitalists and buyout firms invest in private capital, take an active role, aim to generate high returns for their investors, and exit the investments by selling it to a strategic or industrial buyer, or through an IPO. However, venture capital firms are specialists who focus on risky early stage startup companies, usually in high-technological sectors, and solve information asymmetry issues associated with uninformed investors and informed entrepreneurs (Metrick and Yasuda, 2011). Metrick and Yasuda (2011) mean that on the other hand, the economic rationale behind buyouts is more ambiguous. Additionally, the authors criticize evidence on existence of outperformance as data is very limited which brings methodological challenges.

Another different aspect pointed out by Kelly (2012) is that venture capital investments oftentimes include the involvement of government investors, whose interest is economic benefits rather than financial benefits, and hence drive innovation more than buyouts. In line with this, Kortum and Lerner (1998) find that an industry significantly increases its patenting rate with venture capital activity, suggesting that venture capital contribution to industrial innovations is about 15%.

## 2.2 Organization learning and capabilities research

In order to understand more about how private equity firms create and learn unique capabilities, we look inte to literature of organizational learning, a field within organizational behavior, although this literature studies other organizations than private equity. However, we believe there should be similarities in how private equity organizations and other organizations learn.We will start by looking into capabilities and competitive advantage research, and then move on to literature about learning and knowledge management.

### 2.2.1 Capabilities: competitive advantage as competences and dynamic capabilities

There are three existing old paradigms in the field of competitive advantage, Teece et al. (1997) argue. The authors advocate for adding another paradigm, namely dynamic capabilities, to this list. The three older ones look at strategic management and competitive advantage from different angles. Firstly, there is a competitive forces paradigm, mainly using Porter's five forces framework and here the industry structure, positioning, and entry deterrence are the main focus areas. A second paradigm is one of strategic conflict, where game-theoretic models and the interaction between participants and expectations of each other's behavior are in the center. A third paradigm is one build on resource-based perspectives where the firm's assets and the exploitation of them is key.

Teece et al. (1997) argue that a firm's competitive advantage is determined by its competences and capabilities, and in particular its dynamic capabilities. The term dynamic is important here: it signifies that the competitive advantage depends on *processes*, which are in turn formed by the firm's *position* and its *possible paths.* The authors form a dynamic capabilities framework in which they use these categories (processes, position and paths), to organize more specific factors identified as determining dynamic capabilities and distinctive competencies in firms.

The distinctiveness of a firm's competencies or capabilities depends on how easy or difficult it is to replicate and imitate: the more difficult it is to replicate or imitate a competence, the more distinctive it is. This applies for competences both within the company (replication) and for its competitors (imitation).

Furthermore, the authors argue that the competitive advantage of a firm originates from its managerial and *organizational processes*, that is, the routines within the organization and the way of managing things in the firm. The functions of the organizational processes are (1) *the static process of coordination and integration*, (2) *the dynamic process of learning* and (3) *the transformational process of reconfiguration*. Regarding *coordination and integration*, the authors explain that there may exist a notion of rationality or coherence to an organization's processes and systems. When talking about the *process of learning* the authors highlight that organizational learning includes both organizational and individual accomplishments, and that generated organizational cognition lives in the routines of an organization, i.e. in new organizational activity patterns or logics. Recognizing the need of *reconfiguration* of an organization's asset structure is highly valuable in a rapidly changing environment (Amit and Schoemaker, 1993; Langlois, 1994), and in order to be able to recognize this need it is necessary for the firm to track dynamic markets and technologies. Replication can create strategic value by being able to perform geographical expansion and product expansion and have the necessary base to allow improvement and learning. Difficult self-replication often means difficult imitation (replication made by a competitor): replication by the firm itself and its competitors is more difficult the more tacit the firm's capabilities and knowledge are.

A firm's processes are formed by the *position* of its assets such as the present possession of intellectual property, technology, external supplier relationships, and customer base. Examples of asset categories are technological assets, complementary assets for the technological ones, financial assets, reputational assets, structural assets, institutional assets, market assets and organizational boundaries. These assets impact a firm's processes in different ways. For example, one can say that the direction and the rate of innovation, as well as how capabilities and competences evolve together, are highly dependent on the formal and informal organizational structure, in other words its structural assets (Argyres, 1995; Teece, 1996).

A firm's processes are also impacted by its possible *paths* to follow, each path representing a different strategic option. Together, a firm's current position and future paths determine where a firm can go. These future actions are constrained by the history and routines of the firm, as learning often occurs locally. And since learning oftentimes is a result of testing, receiving feedback and evaluating feedback, new learning happens near precedent activities. The authors also point out that increasing returns affect competition among technologies: increasing returns can amplify the benefits of being first (either by certain situation or good luck) (Arthur, 1983). The available paths are also very much dependent on the technological opportunities a firm possesses.

Administrative heritage both enables and can hinder new learning. Administrative heritage is the many different aspects of a company's past that impacts what it can do in the future. The competitive advantage lies here, as well as potential hinders to change (Bartlett and Ghoshal, 1998). This makes it vital to understand the administrative heritage. We will look at this by analyzing Bamboras processes, position and its paths.

Inertia is another aspect of organizational change. If a firm changes slower than what the environment does, it has high inertia (Hannan and Freeman, 1984). Hannan and Freeman (1984) mean that the timing aspect is very important, learning and structural inertia should be looked at through a dynamic lense. What is important is if an organization can learn and change as fast as its environment changes, and this will be interesting to look at in the Bambora case.

What position and what possible paths have affected the processes in this case, and how? Has it been how one would expect it to be in a private equity context? How has testing, feedback and evaluation of feedback impacted the outcome of the investment?

If the knowledge and the capabilities that lead to the success of the Bambora investment were tacit, it should be hard to replicate these in another portfolio company, or in another division of the firm. It should also be hard to replicate knowledge and capabilities from previous similar payments investments. Has this been the case in the Bambora investment, and has NC and Bambora overcome these problems somehow? Apart from this, is there any evidence for reconfiguration in NC or Bambora that has been important for the outcome of the investment? What routines has been important in the dynamic process of learning, and how has coordination and integration been important? These are questions we will examine in our analysis.

### 2.2.2 Learning: organizational learning and knowledge management framework

Argote et al. (2003) review the literature on organizational learning and knowledge management from different disciplines and in order to organize, summarize, formalize, and conclude the key findings they form a framework with two dimensions. One dimension deals with *knowledge management outcomes* and is split into knowledge *creation*, *retention* and *transfer***,** while the other dimension forms *the context of the knowledge management* and entails *properties of units, properties of relationship between units,* and *properties of knowledge.*

The *knowledge management outcomes* are fairly straightforward. Knowledge is *created* when an organization generates new knowledge. When an organization stores the knowledge in a repository, the knowledge is *retained***.** When an experience of one organizational unit affects another unit, knowledge is *transferred***,** and an organization's effort to transfer knowledge can result in the creation of new knowledge. What particular knowledge has been created in relation to the Bambora investment, how has it been retained, and how and to where has it been transferred, if it has happened?

The *knowledge management context* affects the knowledge management outcomes and the properties which forms the context can be rather abstract. A *unit* can be an employee, an organization or a group of several organizations and the *property of it* could be its status. A *property of the relationship between units* could be one that explains the dyadic relationship between social units or instead one that explains the pattern of connections between multiple units. The dyadic relationship can, for instance, vary in how socially similar the units are, how intense the connection is, or how frequent the contact or the communication is. The pattern of connections between multiple units can sometimes be explained as a dense web of third-party connections and at other times be determined by a connection to the same owner, the same parent organization. A *property of knowledge* could be if it is tacit or explicit, external or internal, well understood or high in causal ambiguity, codified or not codified. These traits affect how much of the knowledge is retained, the rate of the knowledge creation, and how easily the knowledge is transferred to different parts of the organization. Our thesis examines which units that existed in the case of Bambora, and what kind of properties of them, of their relationship and of the type of knowledge in question existed that affected the knowledge management outcomes.

If a unit has the property of expert status one can predict knowledge transfer, according to Borgatti and Cross (2003). Thomas et al. (2003) also talks about how the status of an expert can determine which information an individual shares with a group of people. It should have been easier to share knowledge between each other if people in the management team and/or in the deal team in NC have been regarded as having deep unique expertise in different fields.

Looking at the relationship aspect, Uzzi and Lancaster (2003) state that direct relationships are important for knowledge transfer. Reagans and McEvily (2003) show that a vast range of third-party connections can make it easier for knowledge to transfer through the organization. Independent organizations transfer knowledge between each other to a much lower extent than does organizations with the same owner or organizations within the same franchise web (Darr et al., 1995; Baum and Ingram, 1998). Therefore, the existence of direct relationships should have impacted the knowledge transfer between NC and Bambora, and NC should have facilitated knowledge transfer between their portfolio companies as they share the same owner.

Regarding properties of knowledge, Nonaka (1991) and Szulanski (1996) show that it is more difficult to transfer tacit, not well-understood, and ambiguous knowledge than it is to transfer explicit and less ambiguous knowledge. As the knowledge often is tacit in private equity it will be interesting to look at if they have been successful in transferring tacit knowledge in the case of Bambora, and if so, how.

Successful knowledge management depends on the impact it has on individuals' *ability*, *motivation* and *opportunity* to create, retain and transfer knowledge (Argote et al., 2003). If members of a unit are not incentivized for using internal knowledge, they are not likely to transfer the knowledge between units (Menon and Pfeffer, 2003). A pattern of relationship connections that entails a consensus of who knows what facilitates knowledge retention and knowledge transfer (Borgatti and Cross, 2003), and to be close to each other provides individuals with the opportunity to learn what others in an organization do in order to know who to ask regarding a certain knowledge (Borgatti and Cross, 2003). If the investment advisors team (in our case the payments deal team working with Bambora) work closely with the portfolio firm (in our case Bambora) it should impact the knowledge sharing process positively. What ability, motivation and opportunity to create, retain and transfer knowledge the individuals in the deal team and in the Bambora management team have had should also have impacted the knowledge sharing.

There are six themes from the literature of organizational learning that are highlighted by Argote et al. (2003), namely the significance of social relations, environmental factors, the embedding of knowledge in different reservoirs and repositories, the importance of where organizational boundaries are drawn, the fit of properties of contexts, and the nature of an experience. All these themes should be important for private equity firms wanting to excel in organizational learning, and some of these concepts will be elaborated on here below while some has already been touched upon before.

Social relationships are important in several different ways. One is how the dyadic relationship is with regards to trust. The level of trust can affect the degree to which individuals share, screen and disclose knowledge (Argote et al., 2003). Social networks, as well as other aspects related to social relationships also affect knowledge management. Mentioned to affect both firm performance and knowledge management are cultural aspects such as a firm's values and learning orientation (Bunderson and Sutcliffe, 2003; Edmondson, 1999), as well as firm-specific conventions and communication methods (Weber and Camerer, 2003). How the private equity owner communicates with its portfolio companies, how much the portfolio company trusts the private equity owner, and the kind of relationship that the private equity owner and the portfolio company have will impact the knowledge sharing. This is connected to identity and where boundaries are drawn, further elaborated on below.

Regarding where boundaries are drawn, Menon and Pfeffer (2003) state that organizational members are likely to value knowledge from external sources more than knowledge from internal sources. Looking from a different angle, Darr, et al. (1995) and Kane et al. (2005) argue that knowledge from units of the same organization is more likely to transfer and improve performance of the organization than knowledge coming from external units. This implies that where boundaries are drawn matters: who are part of one organization and who are part of another one has significance. Connected to where boundaries are drawn, Kogut and Zander (1996) state that identity is an important aspect in knowledge sharing. If one does not feel a connection to a firm, if one cannot identify oneself with a firm, one will not open up and share knowledge. To be able to share knowledge in the first place one needs to possess the knowledge, one needs to have acquired knowledge previously and have certain capabilities, but just having these capabilities are not enough to share them. To feel like you are part of a group, like you are on the inside and identify with the group, is necessary for knowledge sharing. This suggests that in order for private equity firms to learn from their portfolio companies they have to create a feeling of being in the same team, they have to create a feeling of identification between them and the portfolio company.

The fit of the properties of the units can be viewed from different angles. An organization and its surrounding environment benefit from having a good fit with each other. The design of a firm and its fit with surrounding turbulence can predict its likelihood of survival (Sorenson, 2003). One can also look at smaller units to analyze the concept of fitting in. If the engineers hired have different expertise than the rest of the organization that is hiring, in other words fitting the organization by complementing and bridging non-fitting units instead of adding the same, it increases firm knowledge creation and knowledge transfer within the firm (Song et al., 2003). Additionally, individuals with different backgrounds, forming heterogeneous groups, have been shown to be more creative than homogenous groups (e.g. Lant et al., 1992; Lapré and van Wassenhove, 2001; Williams and O'Reilly, 1998). Looking at private equity firms, one can think that a management team fitted for the task, fitted for the particular business environment of the portfolio firm, and a management team complementing each other with different kinds of knowledge, will perform well. It is also likely that a PE firm that can complement a portfolio firm with knowledge it is lacking will make it easier for the portfolio firm to perform well.

The nature of an experience impacts the knowledge learning process, and one perspective of this field looks at whether an organization is a generalist or a specialist. In fact, a specialist learns more from diverse experience than a generalist, according to Haunschild and Sullivan (2002). Reaching a similar conclusion, Ingram and Baum (1997) report that the likelihood of learning from one's own experience is greater among specialists with focus on a small geographical area, than among generalists focusing on a larger geographical area. And Sorenson (2003) shows that the learning of an experience in a turbulent environment is greater for vertically integrated firms than it is for non-integrated similar firms. According to this literature a private equity firm should therefore create, retain and share more knowledge as a specialist than as a generalist.

# 3 Methodology

In this section, we present our choice of methodology, data collection, and discuss reliability and validation of our method and collected data.

## 3.1 Empirical methodology

In order to in-depth understand a private equity firm's processes and development of organizational learning and capabilities, we choose to perform a single qualitative case study. Case studies have back and forth been both criticized and supported as a scientific empirical method. Critics against case studies argue that they are too specific and not generally applicable (Yin, 2013). Supporters mean that case studies are the best way to describe the dynamics of and the interaction between an event and its surroundings (Dubois and Gadde, 2002; Siggelkow, 2007). Moreover, by using a single case study rather than performing several case studies enables a deeper understanding of the dynamics (Dyer and Wilkins, 1991).

We use the methodologies of Teece et al. (1997) and Argote et al. (2003) to explain NC's process of learning and using its capabilities. Teece et al. (1997) suggest that the analysis of strategy has to be situational because of the nature of the creation of business opportunities, they are determined by a firm's unique processes. Consequently, a case study focusing on a particular event is suitable. Also, as the literature on organizational learning and capabilities in a private equity setting is limited, we find it even more suitable to in depth capture and analyze dynamics and relationships by performing a single case study.

## 3.2 Data

Our primary source of data is interviews. Since we want to analyze the organizational learning and capabilities of a private equity firm by looking at NC's investment in Bambora, our focus has been to interview individuals that have been directly involved in that specific investment, both from NC and from Bambora. To receive a complementary picture, other perspectives and to deepen our insight in the field, we have interviewed one of the limited partners of NC and an International Business Professor with expertise in organizational learning and capabilities.

**Figure 1**[3]

**Overview of interviewees**

| Interviewee | Company - role during the case | Current company - role | Dependence |
|---|---|---|---|
| Antonia Brandberg Björk | Bambora - Chief People Officer | IP Only - Chief People Officer | Dependent |
| Patrik Göthlin | Bambora - COO, Head of customer experience | Gardening leave | Dependent |
| Johan Tjärnberg | Bambora - CEO | Bambora - CEO | Dependent |
| Daniel Berglund | Nordic Capital - Director | Nordic Capital - Principal | Dependent |
| Fredrik Näslund | Nordic Capital - Partner | Nordic Capital - Partner | Dependent |
| Rickard Torell | Nordic Capital - Director | Nordic Capital - Director | Dependent |
| Investor | Major Swedish institution - Investment Director | Major Swedish institution - Investment Director | Independent |
| Udo Zander | n/a | Stockholm School of Economics | Independent |

[3] Dependent in Table 1 refers to people actively working with Bambora in one way or another at the time of the case, either as part of the portfolio company or as part of the general partner.

The interviews can be described as semi-structured (Merriam, 1994) in the sense that we put a lot of effort in preparing the interviews but depending on the situation, we developed an understanding of new perspectives and areas, and had the opportunity to ask follow-up questions. Regarding interviewees from Bambora and NC, some of the interview questions were the same, where the interviewees got to freely tell about their experiences and impressions. Other questions were more specific to the interviewee's role in the case. Since we during our research process picked up on themes that we found interesting to further understand and elaborate on, we extended our selection of interviewees (e.g. Udo Zander and a Major Swedish Institutional investor). The length of the interviews was between 60 and 90 minutes. All interviewees agreed to answer follow-up questions, and we had some subsequent interviews with individuals form NC and Bambora to enhance our understanding of the case and collect complementary data. All interviews were recorded and transcribed within three days in order to as much as possible retain impressions.

The interviews are supported with public and nonpublic data. The public data is secondary and tertiary data collected from Capital IQ, BCG, Deloitte, Accenture, PwC, OECD, Riksbanken, ECB, and Norges Bank, and private equity investors' published fund and investment information and data on their web pages. The nonpublic data consists of NC's internal investment documents, providing NC's predictions and expectations of market dynamics, descriptions of initial business plans as well as their M&A agenda.

## 3.3 Reliability and validity

The reliability of our study is in several ways affected by our choice of methodology. The interviews are affected by the interview setting. Moreover, the interviews are subject to interpretation, and thus subjective. To reduce this bias, both of us attended all interviews, all interviews were transcribed within three days, and we shortly discussed all interviews after they were held. Moreover, there may exist biases because of looking at a private equity deal that we know ex post has been highly successful. Also, the interviewees may be biased in their storytelling because of the success story. Because of these issues, our case analysis may not be representative of the average deal or private equity firm, why it should be viewed more as a "best practice case".

# 4 Case Background

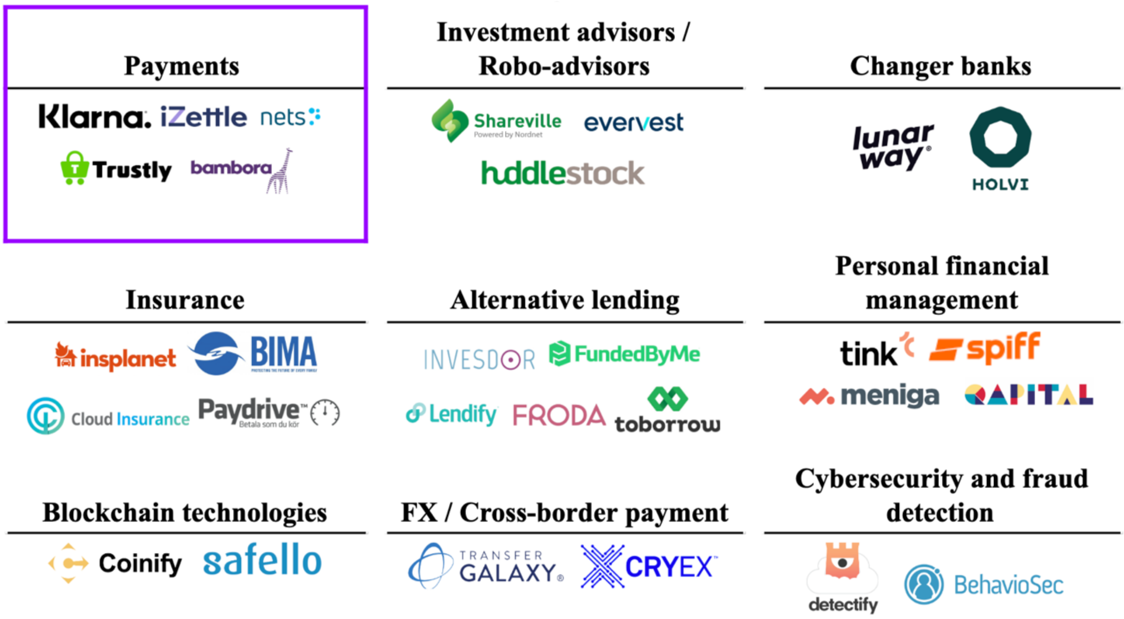
In this chapter, we provide some background information that might be helpful to better understand the Bambora case. We start by describing the payments industry. Then we describe the payment market in 2013/2014 when NC actively started to create the business plan of what became Bambora, and later the payments industry in 2017 when NC exited Bambora.

## 4.1 Understanding the payments industry[4]

### 4.1.1 Fintech and payments[5]

Financial technology - fintech - can be described as *"a business that aims at providing financial services by making use of software and modern technology"* (Fintech Weekly, 2019) The fintech industry can be divided into nine subsectors, one of which is payments. Other subsectors include innovative banking and insurance solutions, solutions for personal financial management, blockchain, and security solutions (Deloitte, 2017).

**Figure 2**
**Overview of fintech subsectors and major brands**




Looking back, several Nordic banks were pioneers in digital banking services (Deloitte, 2017). In 1996, as the second bank in the world, OP, a Finnish bank assurance group, launched its internet banking services, and in 1997 Swedish Handelsbanken launched their internet banking services (Deloitte, 2017).

Deloitte (2017) writes that Swedish investments in fintech are significantly more than investments in other northern European countries. This, they mean, is first of all, because there is a strong funding ecosystem in Sweden: the availability of other resources for startups is good and startup support

[4] See Exhibit 1 for a list over main payments abbreviations
[5] See Exhibit 2 for an overview of major payments players.

mechanisms exist all over Sweden. Furthermore, Deloitte (2017) argues that education and technology has been easily available for a long time and world class entrepreneurship programs has been set up at Swedish universities. But also, the culture seems to promote entrepreneurship as it is acceptable to be an entrepreneur after success stories such as Klarna, King and Spotify (Deloitte, 2017).

Accenture (2015) presents that global investment in fintech has substantially grown during last years, where the US has accounted for a large share both in dollar amount and in deal volume: in Europe, UK and Ireland account for the largest share, followed by the Nordics (Accenture, 2015). From 2008 to 2013, the global investments grew from around USD 1 billion to over USD 3 billion (Accenture, 2015).

### 4.1.2 Overview of the payments industry

Direct debit, credit transfer, and debit or credit card payments are three different non-cash ways to make payments (European Central Bank, 2019).

**Direct debit**. For recurring payments, it is common to use direct debit, however, it can also be used for one-off payments. A direct debit transfer is done via a payment service provider (PSP), usually a bank, and is initiated by the payee. The payment has to be authorized by the payer.

**Credit transfer**. When doing a credit transfer, the payer initiates the payment by sending an instruction to a PSP, usually a bank. The PSP of the payer will move the funds to the payee's PSP, sometimes through several intermediaries.

**Debit or credit card payment**. A credit card payment is drawn from a certain credit limit and the balance must be paid off within a certain time frame. If only part of the balance is paid, an interest is taken on the extended credit. A debit card payment is drawn directly from the payer's bank account.

The payments industry's main actors enabling the three above mentioned ways of payments are creditors, debtors and actors with processing roles. One can divide their work into three different categories, or three basic functions: credit transfer and direct debit, card payments, and lastly, clearing. First, credit transfer and direct debit generally involve a company or a consumer paying for a service or a product through a bank. They either use an automatic/recurring direct debit service or a single credit transfer. Second, the card payment function generally concerns a consumer buying a service or a product from a merchant using a credit or a debit card. And third, the clearing function concerns the settlement of all the debt and claims of the participating banks, aggregated and cleared a few times each day on a national scale.

In addition to these three main categories of services, there exist several other functions and systems for services. For example, functions and services such as identification through electronic-id or electronic signatures, document handling both in paper form, and for documents such as electronic invoices, and other in some way value adding services include customer relationship management (CRM) or loyalty services, and analysis of payment data.

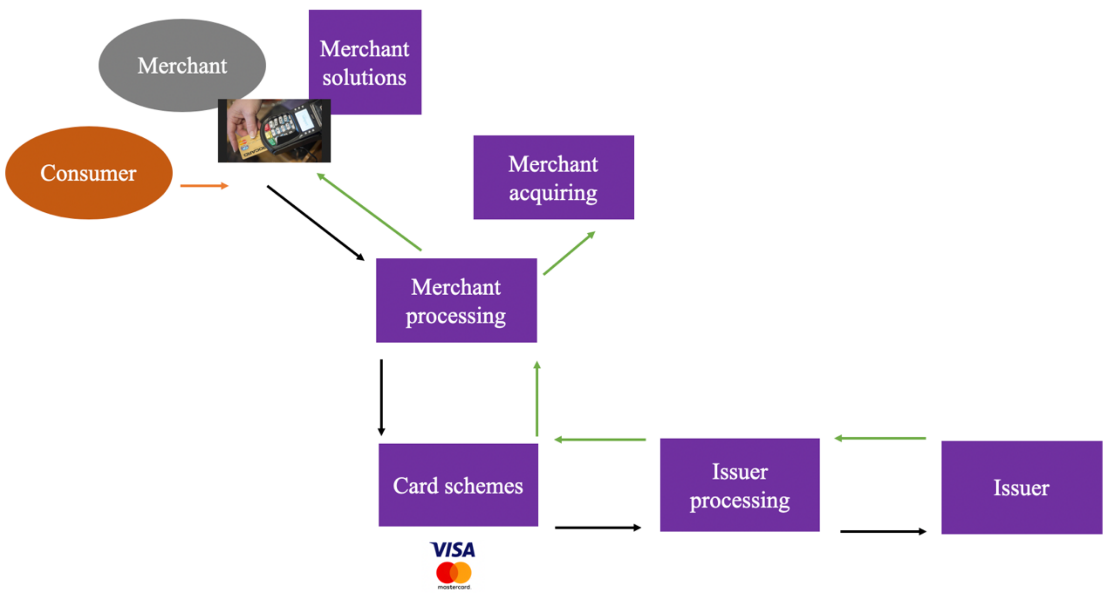
The value chain of credit transfer and direct debit basically only involves two banks. One could say that one of the two banks is acting as the issuer, the issuer processor and the merchant solution, while the other bank is acting as the acquirer and the acquirer processor. The "card scheme" would in this context instead be a payment scheme such as "Avtalegiro", "Betalingsservice" or "Bankgirot", and this payment scheme is normally national and indirectly owned by the banks or the postal offices.

## 4.1.3 Key value chain participants

The value chain of a consumer paying with card to a merchant is more complicated than the value chain of credit transfer and direct debit. Figure 3 illustrate the communication and contact flow between the payment value chain participants. When a consumer makes a card payment to a merchant, transaction data is transmitted to an acquirer through the help of the merchant processor. The merchant processor has to request authorization from a card scheme or network, which in turn sends an authorization request to an issuer through the help of an issuer processor. The issuer then decides that the issuer processor will receive authorization, and the issuer processor determines authorization of the transaction. The card scheme or network gets notified about the authorization by the issuer or the issuer processor, and the card scheme or network then in turn notifies the acquirer about the authorization through the help of the merchant processor. When the merchant processor confirms the authorization to the merchant, the transaction is completed. There are different business models. This was an explanation of the four-party system.[6]

**Figure 3**

**The communication flow between the payment value chain participants**




**Merchant solutions.** Merchant solutions provide equipment and services to merchants in order to be able to manage physical card payments in store. Terminals and software are used to connect the terminals to cash register and electronic communication within the value chain.

**Merchant acquiring.** The acquirer manages the merchants' relation to the rest of the value chain. The acquirer is responsible for signing up merchants to card acceptance agreements, and assumes the financial risk so that the consumer is held harmless in case the merchant fail to deliver. A key success factor is understanding the local market-specific risks as merchant relations are often held locally and the acquiring business is rather local in nature. One can say that acquiring is acting as the distribution

[6] See Exhibit 3 for an illustration of payments business models.

and sales agent within the payment industry. The acquirer is typically the merchant's first and most important point of contact.

**Merchant processing.** Acquirers outsource the management of the data flow to and from the acquirer to these specialist providers, in other words, to a data processing provider or a data center that provides authorization, data security, fee calculations, data transmission and settlement functions on behalf of the acquirer. There are only a few large players in this field as this business is scale driven, although scale benefits mostly exist within the same national banking system. In order to optimize profit, they also support the acquirer in segmentation and self-service services.

**Card schemes.** A global (e.g. Mastercard, Visa) or domestic (e.g. Dankort, BankAxept) card scheme granting licences to banks for the use of the logo. They set the rules and procedures, and perform issuer and/or acquirer services in a given card network.

**Issuer.** The issuer is responsible for marketing cards and distributing payment methods to the consumer. Oftentimes, this role is performed by banks, but other types of players also exist such as mobile phone operators and loyalty schemes. Similar to how the acquirer takes on the merchant risk on the acquirer side, the issuer takes on the risk on the consumer side, so that other parties are held harmless if a consumer should fail to honor a commitment for an issued card. The issuer earns an interchange fee from the acquirer.

**Issuer processing.** Issuers outsource the management of the data flow to and from the issuer to these specialist providers, in other words, to a data processing provider or a data center that on behalf of the issuer provides booking and authorization of transactions, clearing and settlement functions, fraud management and physical handling of cards and PIN-codes. They earn a fee per transaction and on number of cards.

### 4.1.4 Charges and money flow

The merchant service charge (MSC) is a charge paid to the acquirer by the merchant and the most significant source of revenue within the payment landscape. When a customer uses a debit card, the charge is normally set as a certain value per transaction, while when using a credit card, the charge is usually calculated as a fraction of the transaction value. When a merchant in a simple debit card transaction pays an MSC to the acquirer, approximately 5% of the MSC will be paid to the acquiring processor as a processing fee, 2.5% of the MSC to the scheme owner as a scheme fee, and 72.5% of the MSC to the issuer as an interchange fee or an ICF. The issuer will then pay 5% of the MSC to the issuer processor as a processing fee, and 2.5% to the scheme owner as a scheme fee, which means that the issuer keeps approximately 65% of the MSC. Effectively, the acquirer keeps approximately 20% of the MSC. After subtracting interchange and payment network fees the net acquiring revenue is obtained which is a fixed percentage of the sale amount and / or a fixed transaction fee. Card schemes are responsible for setting the interchange fee which is paid by the acquirer to the issuer. Other fees exist such as the cardholder fee, not very important in a debit card transaction, but in a credit card transaction this fee can be quite substantial as the issuer requires a fee for providing the credit. Regulation has basically forbidden the use of transaction fees charged on the cardholder, however. The amount of risk taken and the relative strength among the participants is reflected in the monetary flows.

# 4.2 Payments in 2013/2014

## 4.2.2 Drivers

### 4.2.2.1 GDP and consumer spending

Underlying growth is driven by a growing consumer spending. In Denmark, Finland, Norway and Sweden, GDP and consumer spending have been positively growing since 1990, except during the Nordic banking crisis in early-1990 and the global financial crisis in 2008/2009. Real GDP growth and consumer spending in Denmark and Finland are in 2014 still below pre-global financial crisis levels, while Norway and Sweden recovered in 2010/2011.[7]

### 4.2.2.2 E-commerce[8]

There is a substantial technological development taking place, facilitating a shift from physical to online payments, which will bring some significant changes in the future payments market (BCG, 2013). One being that revenue from online spending generally generates two to three times more for payments providers, as a result of the payment mix (i.e. cards and not cash or checks dominate online) and the additional services (e.g. fraud management) that are followed with every transaction. Thus, the growth in payments-industry revenue pools will be highly affected by the global shift towards more online payments (BCG, 2013).

Buying online is often more convenient for consumers and the e-commerce market is expected to continue to grow rapidly at about 15% per year. In fact, being estimated at USD 0.5 trillion in 2002, the e-commerce market has grown to an estimated USD 1.1 trillion in 2013 (BCG, 2013). E-commerce is increasing as a result of increased use of mobile devices and a general shift from physical to mobile (BCG, 2013).

### 4.2.2.3 Cash versus non-cash

Card usage levels are high in the Nordics and card usage per capita is high compared to rest of Europe.[9] New technology is adopted early and fast and smartphone and internet usage have penetrated the Nordic countries to a great extent impacting card usage levels. In Norway and Denmark, merchants have been encouraged to accept card payments as a result of an implementation of low-cost national debit schemes that are without interchange charge. In Sweden, card usage has been encouraged by bilateral interchange rates and an interest in technology leading to high levels of investments within the field. There is no national debit scheme in Sweden, at least not in the way we see in Norway and Denmark. During 2010 to 2011, a scheme was faced out in Finland.

Cash use is declining in all Nordic countries while electronic credit transfer is growing slightly. In Sweden and Finland, debit card is growing with historical high growth numbers and is increasing its share.[10]

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[7] See Exhibit 4 for a graphical overview of the Real GDP and Consumer spending growth for the Nordic countries.
[8] See Exhibit 5 for a graphical illustration of use of e-commerce.
[9] See Exhibit 6 for number of cards per capita in the Nordic countries and in EU.
[10] See Exhibit 7 for a breakdown of non-cash payment instruments per country.

The number of card transactions as a share of total number of non-cash payment instrument transactions has grown during 2007 to 2013 in all Nordic countries (with a slight decrease in Denmark and Sweden right after the financial crisis), except for Finland. Looking more in detail, the value of card payments as a percentage of total transaction value in Finland, Norway and Sweden has historically (between 2007 and 2013) been around 1%, 4% and 6%, respectively, while the share of number of card transaction of total number of transactions has been around 52%, 70%, and 63%, respectively. In Denmark, the value of card payments as share of total transaction value has historically been around 23%, and the share of total number of transactions around 68%.[11]

#### 4.2.2.4 Value added services

As the complexity in the industry intensifies, merchants will be willing to pay for extra services. Services that merchants will be willing to pay for, and in that way increase revenue streams for payment providers, are for example fraud prevention, currency conversion capability, access to local payment schemes, close integration to back-office systems, support for mobile-payment application program interfaces (APIs) and multichannel tokenization capabilities (BCG 2013). Such value-added services could for example be merchant reporting, point of sale (POS) management and direct currency conversion.

The payment mix is different online: cards dominate, naturally, over cash and checks. This, and the possibility to provide additional services such as fraud-management, contributes to the fact that online spending transactions generate two to three times more revenue for payment providers than do offline transactions. Consequently, growth in online payments is driving growth in the payment industry (BCG, 2013).

### 4.2.3 Factors impacting the drivers

#### 4.2.3.1 Technology

There is a substantial technological development taking place, facilitating a shift from physical to online payments, which will bring some significant changes in the future payments market. Digital communication infrastructure is continuously improving and at a rapid speed. Additionally, communication infrastructure is being adapted to commercial settings and smaller-sum payments have been easier to make[12]. This has led to an increased preference for non-cash payment methods instead of cash payments.[13] Third, the fact that more sophisticated cash management practices are being used by major creditors, payment frequency is increasing.[14]

Examples of other young and innovative payments technologies are mobile wallet (JPMorgan Chase & Co., 2019) and contactless payments. Contactless payments are made with cards and mobile devices that use either radio-frequency identifier (RFID) or near field communication (NFC) (Carr, 2019). NFC is a method of wireless data transfer, which enables the technology to communicate without the need of an internet connection when it detects technology in close proximity, i.e. a few centimeters between the devices. NFC is used by mobile wallet such as Apple pay, Android pay (later Google pay) and

[11] See Exhibit 7 for a breakdown of non-cash payment instruments per country.
[12] See Exhibit 8 for an overview of average value per card payment over time.
[13] See Exhibit 9 for graphical overview growth in electronic payment instruments per capita in the EU.
[14] See Exhibit 7 for number and value of transactions per Nordic country and for EU.

amiibo (a way to pay for Nintendo game content by buying plastic toys equipped with NFC) (Nintendo, 2019).

#### 4.2.3.2 Customers: merchants and their customers

In late 2013, retail commerce is changing dramatically. The digital revolution significantly changes the way consumers buy and pay for the goods and services they desire and consume. It is now possible to buy practically anything online if it can be bought in a store. Purely online retailers are challenging the brick-and-mortar retailers[15], and the latter are trying to guard their market shares by finding ways to incorporate online channels in their offerings. Different cross-channel offerings are arising, such as buying online while picking up in store and ordering in store for delivery at home and other inventions such as streamlining the checkout experience through tablets at the POS. Retailers back-office systems have to change to facilitate cross-channel selling, and merchants try to find solutions where inventory availability is visible both in store and online (BCG, 2013).

Retailers would like to have a single payment provider to work with, one that can help them with sales across all channels. This opens up for new revenue streams / pools for payment providers (BCG, 2013).

#### 4.2.3.3 Regulation

Since the 2008 global financial crisis there has been a pressure to increase regulation in the financial sector (Deloitte, 2017). There is a possibility that an EC directive could mandate capped interchange fees from 2016 to 2018 at the earliest. This directive is called the Multilateral Interchange Fee cap (MIF cap).

In order to ease international competition, regulation has mainly focused on driving harmonization across the national value chain. However, international competition is in early 2014 limited by local and national standardizations. Regulation initiatives that will increase national competition is likely to be taken, such as the MIF cap.

A regulation that will affect the financial sector is the Second Payment Service Directive (PSD2), which aims at promoting de-coupling of the currently integrated services in the market. After January 2018, third parties will have the right to initiate payment transactions and access account information straight from the account, as long as they have customer consent. This will mean that new value propositions and business models will be enabled: for example, account aggregation such as Numbrs, Bankin', and Spiir in Europe, collection of transaction data, alternative payment initiation services which pull funds directly from a customer's bank account and ecosystem development.

The EU legislation PSD2 will be transposed into national legislation in January 13, 2018. This means an opening of banks infrastructure to third parties, to increase competition and facilitate innovation within payments. This is blurring the traditional borders between the financial institutions. After PSD2 has come in effect, even more collaborative strategies might be seen as banks will be forced to open up their platforms to payment initiations by third parties (most likely fintech companies) (Deloitte, 2017). Overall, PSD2 will make outsourcing to third parties easier and increase the transparency of fees in the market (Deloitte, 2017).

[15] "Brick and mortar" refers to the traditional way of selling products and services, face-to-face, in a store or an office.

### 4.2.4 Market size

The global payment-related revenues amount to just over USD 1 trillion (transactions revenue of USD 425 billion, account-related revenues of USD 336 billion, and USD 248 billion in credit card related net interest income and penalty fees) in end-2013, roughly representing one quarter of total global banking revenues (BCG, 2014). Around one quarter of global payment revenues is generated in Europe, and the most advanced payment economies are found in the Nordic countries.

By end of 2013, banks manage USD 410 trillion in noncash transactions, corresponding to over five times the amount of global GDP (BCG, 2014).

In Sweden, the volume of online card transactions is around 5% of the volume of total card transactions. In 2014, the value of online card transactions in Sweden is estimated to SEK 30 billion by Euroline, who also says the growth going forward is estimated to be 7.9% per year on the back of an historic growth of 12.4% per year.

For European payment service providers alone, the expectation is that they in 2016 will have a revenue pool of around USD 1.5 billion, while in 2012 their revenue pool was approximately USD 0.8 billion (BCG, 2013).

### 4.2.5 Players

In this environment, new opportunities for payment providers are arising. Competition among payment providers will intensify, and this will probably create a pricing pressure, but the revenue from new additional services will more than make up for the price decrease. The industry is consolidating, and during the last years, M&A activity has been high. Acquirers, major payment schemes, and providers of terminals have been buying PSPs (BCG, 2013).

Main players in the Swedish acquiring market are Nets with roughly 5% of the market, Euroline with around 14% market share, Nordea and Handelsbanken with each about 15% of the market, and Swedbank with a market share of approximately 50%. Regarding the online market, Euroline has approximately 50%.

In areas such as online payment solutions where incumbent payment players have been fairly absent, players such as Klarna and PayPal have emerged and gained market share. More mature players are now increasing their presence in these areas as well, making investments and increasing their focus, and because of their competitive advantages in terms of scale, customer base, network etc. they are gradually gaining market share.

For fintech companies, there is a regulatory tradeoff between cost to enter and operate versus clear rules. Cost to enter in Denmark is up to EUR 1 million for a fintech company to go through a license process allowing for operations on the financial market, and also means a license process of ca 18 months. Cost to enter in Finland is over EUR 100,000, and the license process is over a year long (Deloitte, 2017). Regardless of scale, fintech companies are expected to follow the same rules, comply with the same regulation, as incumbents (BCG, 2016).

According to (BCG, 2018), the already ongoing technological and product development will continue, and the landscape and the value chain will change, in the end reaching an equilibrium that possibly only consists of a few business models. BCG further believes there will only be two niches of small independent PSPs left eventually: one specialist with highly differentiated products serving a particular kind of client and adapting their technology to their needs, and the other serving high-risk and online only customers. There will be a few successful large banks handling payments, and these have either built up new capabilities inhouse or done M&A. If one wants to succeed it is imperative to act now (BCG, 2013). All payments market actors have to adapt in order to survive, thrive and stay competitive in the new coming business environment, especially the acquirers who will face the biggest change (BCG, 2013).

## 4.3 Payments in 2016/2017

### 4.3.1 Drivers

#### 4.3.1.1 GDP and consumer spending

GDP and per capita income have overall slowed a little at this time. Growth in RDEs are higher than in mature markets (BCG, 2016).

#### 4.3.1.2 E-commerce

By end of 2016, 57% of Nordic citizens use mobile banking while European average is only 44% (Deloitte, 2017).

#### 4.3.1.3 Cash versus non-cash

Card payments in the Nordics are two and a half to four times larger than European average. Danish government has set a goal to be a cashless society in 2030. Sweden is likely to be the first cashless society, where in 2016 only about 20% of payments are done with cash. The corresponding average in the world is 75% (Alderman, 2015; Deloitte, 2017).

Rising payments transaction values and volumes, particularly in rapid developing economies (RDEs), will drive the transaction-related revenues the most, due to the shift from cash to e-payments and greater financial inclusion (BCG, 2016).

#### 4.3.1.4 Value added services

The value added services were the same as in 2013/2014.

### 4.3.2 Factors impacting the drivers

#### 4.3.2.1 Technology

Within merchant acquiring, an ongoing industry consolidation and digital transformation is taking place. SaaS is enabling easy integration and we see digital disruption with new value propositions offered to customers (BCG, 2016).

Several technological inventions are seen and being used at a larger scale than before. The internet of things is happening as payment solutions with other devices than smartphones are emerging. We see SaaS with, for instance, integrated POS systems. Especially SMB is going through a renaissance with advances in integrated POS and IPOS: systems where the cash register system, a POS terminal, and value-added services are combined. Data and service delivery between providers and their customers is changing through application-programming interfaces (APIs) (BCG, 2016).

Looking forward, the use of biometric techniques in authentication will increase. There is a willingness to adopt new forms of payment: m-wallet launches are responded to with little enthusiasm, but this could change in a few years, while contactless payment is more warmly welcomed in Europe. E-commerce, m-commerce, and in-app purchases are increasing. All online payments, the former mentioned plus proximity payments such as POS and m-wallets, are expected to grow from around 6% in 2016 to around 20% of total retail sales in 2020. It is also likely that we will witness more payments within social media networks (BCG, 2016).

#### 4.3.2.2 Customers: merchants and their customers

One particular customer/consumer group is particularly important, namely the “Millennials”. They are not very keen to visit bank branches, but rather use financial services through apps or the web browser. They will become the new core customers as they grow older and have stable salaries, while older customer segments will be less important. They are used to non-traditional service channels and expect the same from financial institutions. Services need to be design for them and their expectations. Perhaps even more important right now are the “Bridge millennials”. They are a little older than younger millennials and they already have stable and fairly large income, but still similar to millennials in the way they act (Deloitte, 2017; Abrams, 2018; Webster, 2018).

Shifting customer expectations and behaviors. Customers demand more and a seamless and transparent end-to-end experience is expected. Ease and convenience are important factors. Furthermore, banks are increasingly expected to help corporates with IT-infrastructure, as fintech firms are doing that more and more (BCG, 2016).

#### 4.3.2.3 Regulation

Regulatory initiatives strive to drive financial inclusion, increase competition, protect consumers and improve infrastructure (BCG, 2016). Governments in RDEs work hard to reduce rates of unbanked consumers and to shift from cash to e-payments. There is an opening of payment channels to non-bank players, e.g. PSD2 in Europe, UPI in India, and Measure for Payment and Settlement in China. Overall, regulation push for faster payments (BCG, 2016). Pressure to adapt regulation to support fintech is increasing, since it is likely to give economic benefit to the society as a whole. Additional examples of regulation to keep track of are the interchange regulation Master International Frequency Register (MIFR), the Payment accounts directive (PAD), and GDPR.

### 4.3.3 Market size

The payment sector within fintech has attracted the most capital, but other areas are now being invested in more and more. Especially personal finance solutions is almost reaching payments (Deloitte, 2017).

Payment transactions within retail is expected to continue to generate most of the revenue. Payment industry revenue account for 29% of global banking revenue, or USD 1.1 trillion in 2015, and it is expected to reach more than USD 2 trillion in 2025, implying a CAGR of 6%. Transaction-related revenue and account revenue will be driving the growth, with an estimated 40% and 34% of the total, respectively.

In 2015, 74% of the payments revenue was generated by retail payments. Until 2025, retail payments are expected to account for 71% of total revenue growth and reach USD 1.5 trillion (BCG, 2016).

SMB is the dominated revenue generator in most segments with roughly 65% of revenues, less than 30% of purchase value, and less margin compression than the large-merchant segment (BCG, 2016).

### 4.3.4 Players

By early 2017, there is a movement of digitization of payments and an ongoing rebalancing of power among fintech startups, incumbent banks, consumers and merchants, digital giants, and card networks. Whether fintech startups will drive a true shift in competitive dynamics is still uncertain, however, it is likely that a few of them will be successful in the long term. In China, the dominant payment players are now fintech and not banks - will that happen everywhere eventually? The digital giants are also worth keeping an eye on, as they try to take more space within the payments area (BCG, 2016).

Payments firms mostly use a co-operative collaboration strategy and utilize the existing payments infrastructure to a large extent. Many of the payments fintech firms are aiming to become intermediaries.

Swedish Klarna and iZettle are examples of substitution of traditional payment intermediaries to owning of the POSs. iZettle offers value added services such as overdraft loans to customers based on their cash flow history and it is the fastest growing fintech firm in the EMEA region during 2010 to 2015, with a reported 30% turnover growth in 2010 to 2015 (Deloitte, 2017). Incumbents, established financial institutions, have as a strategic response to the fintech disruption and PSD2 made direct investments and acquisitions.

There have been some long-term successful payment providers during the past 20 years: Alipay, WeChat Pay, PayPal, Square, and Stripe. However, it is more likely that partnership models between disruptors and incumbent banks will be more common going forward since scale and network effect are important factors within the payment industry (BCG, 2016).

Nordic banks and financial institutions have been profitable and managed to get out of the financial crisis in a relatively good state. This has made them reluctant to change, however, this will not hold any longer as change is inevitable if they want to survive. European banks have been forced to change earlier. However, change in large complex organizations is difficult. It is easier for new firms, fintech firms, to create innovative products designed for millennials as fintech firms are more agile. The fintech market is rapidly developing and there are now more than a hundred firms in the Nordic countries (Deloitte, 2017).

Banks have some competitive advantages such as scale and network though. There are mobile-banking apps successfully entering the small crowd of frequently used apps - to check account balances before purchasing a product is convenient for customers. Bank customer support is also oftentimes better than in fintech, however fintech firms are improving in these areas.

Going forward, we will experience new products benefiting customers in the near term, and in a medium long term (5-10 years) there will be stronger competition among cross-industry solutions, and incumbents will become technology providers if they lose the front-end (Deloitte, 2017).

### 4.3.5 Success factors for players

The key success factors are products and services that reduce complexity, maximize security, add value beyond pure payments and all in a compelling end-to-end customer experience. Payments will become faster and the order-to reconciliation process will become smooth and fast. And this faster payments momentum is already present and speeding up. Regulation and the private sector are driving this change. Time is short - one needs to be fast to innovate and implement new solutions, or lose. Market players should prioritize investments and reduce cost since there is a price pressure in the market. Over the next decade, customer engagement and brand image might be harder to control with the evolvement of Internet of Things, open banking and commercial customers interfacing more with third-party providers, and mobile wallet adoption might increase fast or slow. A reduction of decision layers in organizations in order to be agile is necessary to navigate uncertainty (BCG, 2016).

# 5 The Case

## 5.1 Private equity fund industry

As the case is about an investment done by the Swedish private equity firm NC, in this section we start by providing a description of the Swedish and Nordic private equity market during 2013-2017 which matches the time horizon of the case.

### 5.1.1 Overview of the private equity industry until 2017[16]

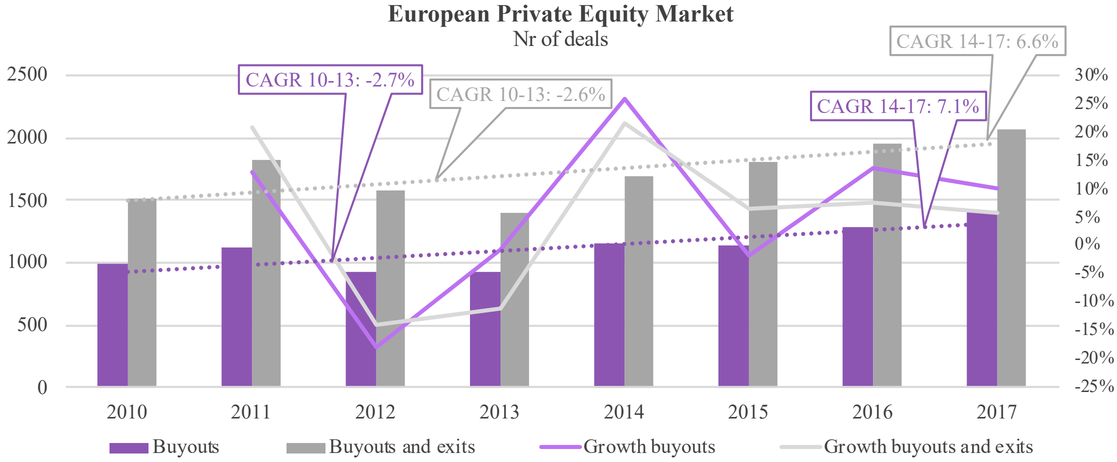
The Swedish private equity market is highly developed and large compared to other countries. One can say that a private equity competence cluster has emerged in Stockholm, Sweden, with large private equity actors such as EQT, Nordic Capital, Altor and Triton. The international focus is great and around 80% (Næss-Schmidt et al., 2017) of the LPs are from other parts of the world. Especially LPs from other Nordic countries and from the US provide Swedish private equity firms with capital. Around 35% (Næss-Schmidt et al., 2017) of investments are being made in non-Swedish firms.

Looking at the percentage of different sector investments, it is clear that tech deals, in particular technology, media, and telecom (TMT) deals, are proportionately more common in the Nordics than in other countries. Nordic buyouts consisted of around 26% TMT deals in 2017, while in the rest of Europe this number was 18%. The dealflow in Norway and Finland has been steadily increasing, and number of deals in Sweden is at record high numbers. There is a trend of a decrease in the number of early stage and growth deals, at the same time as the ticket sizes increases. The ticket size of the average equity investment has increased from the 2013 level of USD 6.5 million to EUR 27 million in 2017 (Delphi, 2018).

Figure 4 illustrate the European private equity market (buyouts and exits) from 2010 to 2017. In 2013, the European private equity market, both buyouts and exits, followed the declining trend from the year before. Deal volume amounted to 1,397 deals and transaction value to EUR 110 million. During 2014 to 2016, the market experienced positive growth in deal volume. Transaction value grew between 2014 and 2015 to EUR 210 million, and declined to EUR 200 million in 2016 (PwC, 2017). In 2017, the private equity market in Europe showed an improvement in terms of volume and value of buyouts and exits. Volume reached 2,183 deals and the value of transactions was EUR 250 million (PwC, 2018).

[16] See Exhibit 10 for an overview of major Nordic private equity players.

**Figure 4**



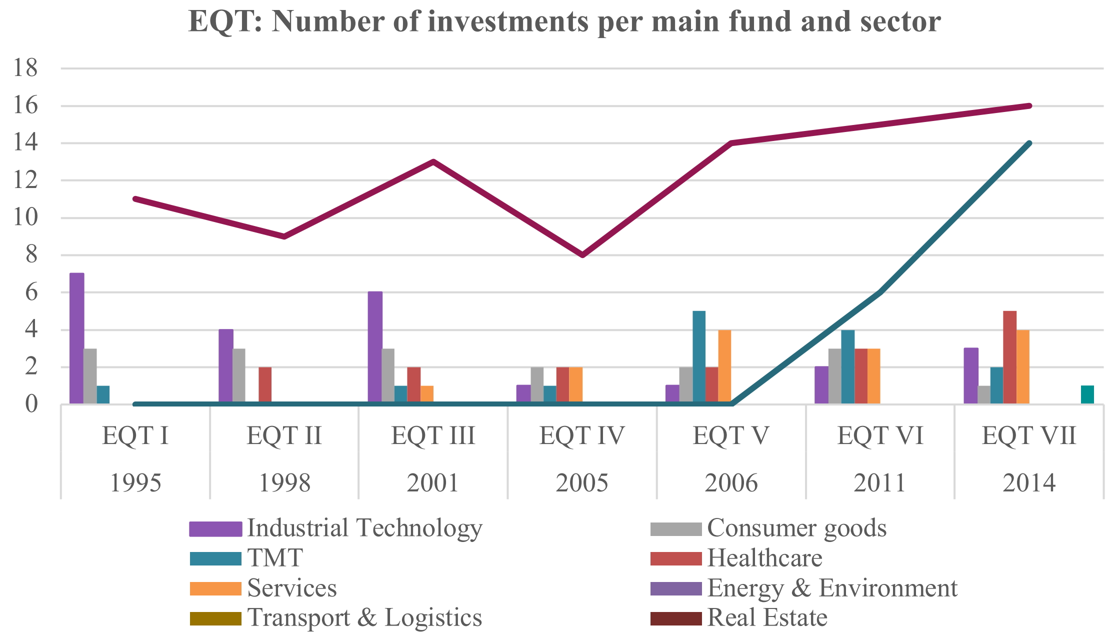

*Source: PWC Private Equity Trend Report 2016 and 2019*

## 5.1.2 Investment strategy development of private equity firms

Figure 5 to 8 below demonstrates the number of investments per sector and fund of some of the largest Nordic private equity firms. By studying this, we are able to see hints of changes in investment style and better understand their investment strategy.

The sectors are specified by the private equity firms themselves, hence, we have not chosen sectors for the investments. This limits the comparability but shows their own investment style and their own view of looking at their investments. Furthermore, we have limited the analysis to the number of investments and disregarded value of investments. The number of investments is more interesting than value of investments when looking at it form an organizational learning perspective. It is more likely that private equity firms will learn more from a large amount of investments within one field, than from one investment of very large value. Additionally, the amount of investment advisors needed per investment does probably not depend on the size of the deal. If the deals have been successful or not, and which funds have been the most successful ones, is not taken into account. This would anyhow be hard to compare as many factors that impact success of a deal changes over time. One issue in this argument is that the actual investment advisors working with a particular deal and sector is not visible. How many investment advisors per deal would also be interesting to look at? This could be something to investigate in future research.

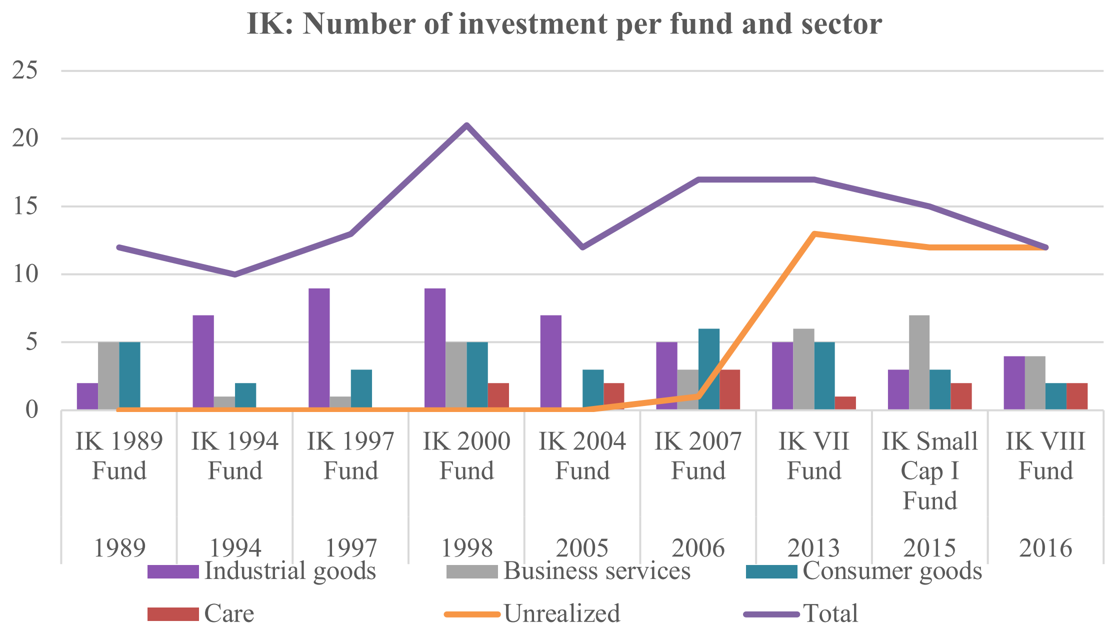
**Figure 5**




*Source: EQT*

EQT (Figure 5) initially had many industrial technology investments in their core funds. The later funds have a more balanced split between the sectors, with no more than 5 investments per sector. The amount of investments per fund seem to be increasing and has been over 15 lately. (The EQT graph below does not show all their funds, e.g. focus funds, like their Real Estate fund, are excluded.)

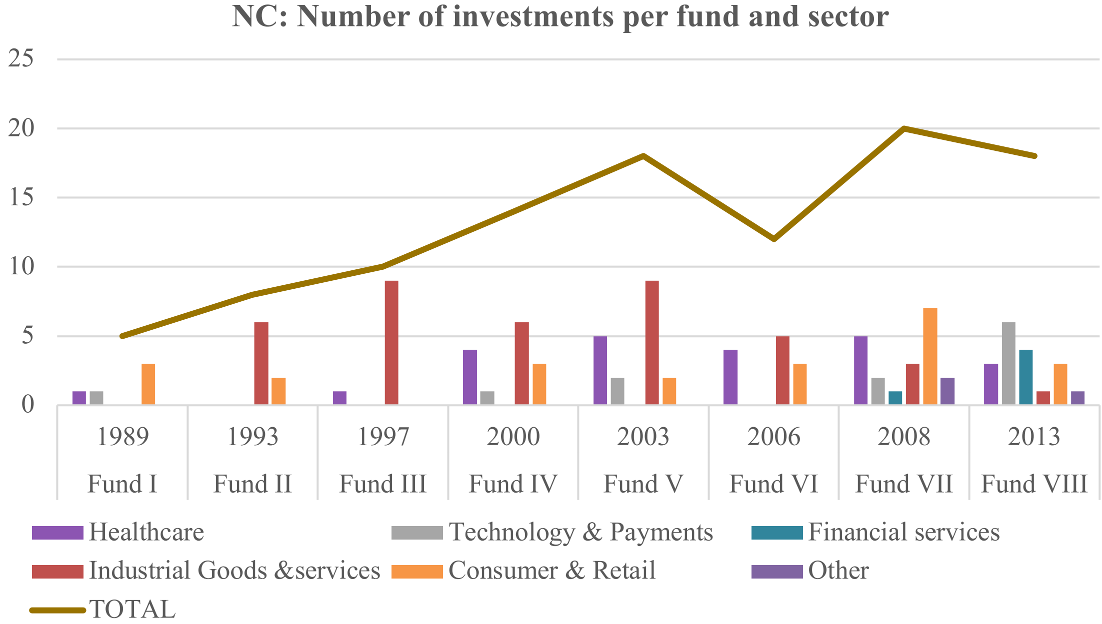
**Figure 6**




*Source: IK*

IK (Figure 6) had a lot of Industrial goods investments initially, now the balance between the sectors is greater. In their fund IK 2000, they introduced the sector Care. The amount of Business services investments has varied substantially, though the last funds have had quite many of them. The amount of investments per fund has no clear trend, though seem to be around 15 investments per fund.

**Figure 7**

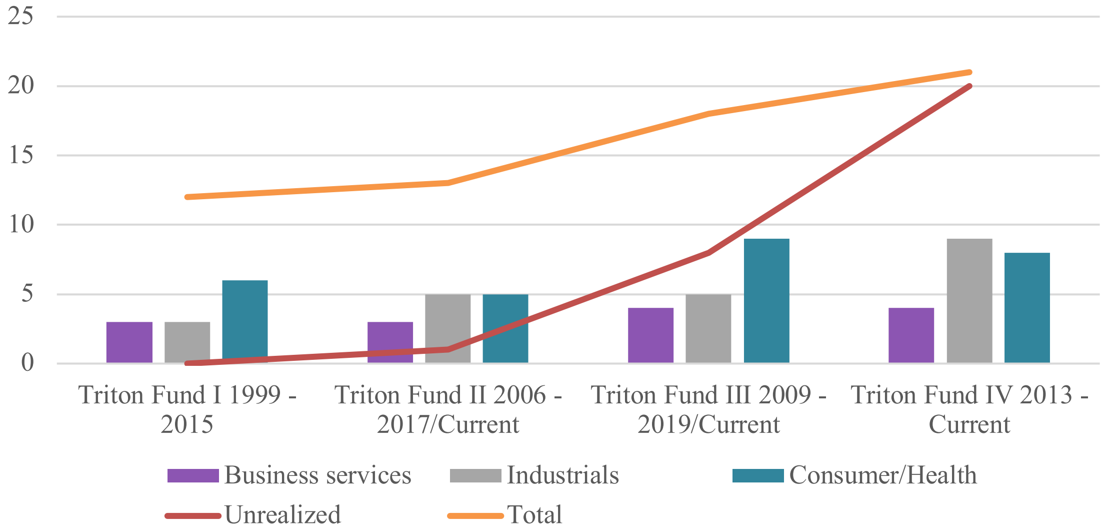



*Source: NC*

NC invested heavily in industrial goods and services initially, but this number has decreased substantially, and NC now has a more diversified portfolio in their funds. Number of financial services investments has increased in the last funds. Before 2008 they had no investments in this sector. The number of Tech & Payments investments has increased over time, and the number of Consumer & Retail investment has also increased slightly but been fairly stable. The number of healthcare investments was low in the first funds, but since 2000 this number has been stable at close to five healthcare investments per fund.

**Figure 8**

**Triton: Number of investments per fund and sector**




*Source: Triton*

Triton (Figure 8) has the least number of sectors. The amount of investments per fund seem to be increasing, and the last funds have had around 20 investments each. The two sectors Consumer/Health and Industrials have increased over time. To have both consumer and health in one sector category is making it hard to draw any conclusion about this sector, however. The sector Business services has had about the same amount of investments in each of their funds.

EQT, IK and NC all had more industrial investments initially and fewer of them in their later funds, while the opposite trend is visible in Triton. Especially Triton seem to increase number of investments per fund for each new fund, while a similar but less consistent trend is visible for NC and EQT. All firms seem to start with fewer investments when they invest in a new sector.

None of these private equity firms seem to decrease number of sectors over time, instead the opposite can be seen. However, they to seem to focus on more specific sectors over time and it is probable that the particular investment advisors are focusing on specific sectors to a greater extent now as opposed to before, when one investment advisor perhaps did many different kinds of investments.

## 5.2 Nordic Capital

### 5.2.1 Overview

Nordic Capital (NC)[17] was founded in 1989 by Robert Andreen and Morgan Olsson. The NC funds and their general partners are based in Jersey, while their advisory firms are based in Sweden, Denmark, Finland, Norway, Germany and the United Kingdom (Nordic Capital, 2019e).

[17] Examples of awards received: Nordic Deal of the Year by Real Deals Private Equity Awards (2019), Future 40 - Emerging PE Dealmakers by Real Deals (2019 and 2018), Operational Excellence Award in EMEA Large Cap by Private Equity International (PEI) (2018), Private Equity Rising Stars by Financial News and Private

As of November 2018, NC has 135 employees. Figure 9 below illustrates NC’s main fund history. EUR 13 billion has been invested in more than 100 companies since inception (1989)[18]. In 37 of those, the previous owners have invested together with NC, and of these are 15 families or founders. NC has done 83 exits of which 18 were IPOs and 27 of the exits were to strategic buyers. There are 37 companies in the current portfolio (Fund IX, Fund VIII and the CV1). More than 175 acquisitions have been made by the portfolio companies. 35% of the LPs in fund VIII have co-invested alongside NC (Nordic Capital, 2019d; Nordic Capital, 2019h).

**Figure 9**

**NC fund history**

| Fund | (million EUR) | Commentary | fund closing |
|---|---|---|---|
| Fund I | 55 | The first investments are made in partnership with vendors or with co-investors. | 1989 |
| Fund II | 110 | The fund has five investors, all based in Sweden. During this time, the Swedish buyout market is formed partly by NC. | 1993 |
| Fund III | 350 | Capital is sourced internationally. The investment advisory firm is established in 1998. During this time buyouts are made outside of Sweden. | 1997 |
| Fund IV | 760 | The fund invests across different industry sectors and in all Nordic countries. | 2000 |
| Fund V | 1,500 | The partner group consists of seven partners, and the advisor group is employing over 20 investment professionals. | 2003 |
| Fund VI | 1,900 | The primary geographical focus is the Nordic Region, with selected investments in Europe. | 2006 |
| Fund VII | 4,300 | Office opening in London, Frankfurt, Helsinki and Oslo. NC advisory network consists of ~75 employees. In 2011, NC sells the largest private equity deal in Europe and the third largest globally. | 2008 |
| Fund VIII | 3,500 | Employee base increases to 125 people. Establishment of operations team in 2015. Bambora is sold in 2017. | 2013 |
| Fund IX | 4,300 | NC is at the time of writing still investing in fund IX. | 2018 |
| CV1 | 2,500 | NC closes a continuation vehicle for its seventh fund which allows Nordic capital to continue to create value in the funds investments for an additional five years. | 2018 |

## 5.2.2 Industry and strategy

Today (in 2019) NC invests in the Nordic countries in its five core sectors: Healthcare, Technology & Payments, Financial Services, Industrial Goods & Services, and Consumer & Retail. They invest globally in Healthcare, and also selectively in Europe in the other core sectors, mainly in Technology & Payments and Financial Services (Nordic Capital, 2019). Prior to fund IX, NC marketed themselves as generalists with a special focus on healthcare. Figures 7 and 10 illustrate NC’s number of investments in each sector per fund (Fund IX is excluded since it is still active at the time of the writing of this thesis). As stated earlier, it is evident that NC has focused on investing in some sectors more than others. Investments in Technology & Payment has substantially increased its share, while the number of investments in Consumer & Retail and Industrial Goods & Services has markedly shrinked.

Equity News (2018) (sixth year in a row), Private Equity Hall of Fame Fund V by PEI (2017), Firm of the Year in the Nordics by PEI (2015), Nordic Deal of the Year for Permobil by Real Deals Private Equity Awards (2014), and Exit of the year for Permobil by the Swedish Venture Capital Association (2014).

[18] See Exhibit 11 for a detailed overview of NC’s investments over time.

## Figure 10

NC fund investments

| Fund | Fund I | Fund II | Fund III | Fund IV | Fund V | Fund VI | Fund VII | Fund VIII | CV1 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Fund closing | 1989 | 1993 | 1997 | 2000 | 2003 | 2006 | 2008 | 2013 | 2018 | spring 2019 |
| **Nr of investemnts per fund** | | | | | | | | | | |
| Healthcare | 1 | 0 | 1 | 4 | 5 | 4 | 5 | 3 | 3 | 26 |
| Technology & Payments | 1 | 0 | 0 | 1 | 2 | 0 | 2 | 6 | 1 | 13 |
| Financial services | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 5 |
| Industrial Goods &services | 0 | 6 | 9 | 6 | 9 | 5 | 3 | 1 | 1 | 40 |
| Consumer & Retail | 3 | 2 | 0 | 3 | 2 | 3 | 7 | 3 | 3 | 26 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 4 |
| **TOTAL** | **5** | **8** | **10** | **14** | **18** | **12** | **20** | **18** | **9** | **114** |
| | | | | | | | | | | |
| **Share of total nr of investments in the fund** | | | | | | | | | | |
| Healthcare | 20% | 0% | 10% | 29% | 28% | 33% | 25% | 17% | 33% | 23% |
| Technology & Payments | 20% | 0% | 0% | 7% | 11% | 0% | 10% | 33% | 11% | 11% |
| Financial services | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 22% | 0% | 4% |
| Industrial Goods &services | 0% | 75% | 90% | 43% | 50% | 42% | 15% | 6% | 11% | 35% |
| Consumer & Retail | 60% | 25% | 0% | 21% | 11% | 25% | 35% | 17% | 33% | 23% |
| Other | 0% | 0% | 0% | 0% | 0% | 0% | 10% | 6% | 11% | 4% |
| **TOTAL** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

NC proactively searches investments, is an active owner and focuses on long-term development. Its operations professionals and industrial advisors support the strategic development of acquired firms. To facilitate a partner relationship between NC and the management team in a particular investment, the management often invests in the firm together with NC (Nordic Capital, 2019f). NC has a large tech team build over 15 years. They have made 14 tech platform investments and 44 add-on acquisitions. NC also has a strong payments sector network.

Regarding the payment sector, NC has an in-house investment experts team within the payment sector as well as operational expertise in the Operations team. To create value through operational improvements and strategic development, NC uses a structured way to create the operational agenda. They have what they call the Playbook, a comprehensive and action-oriented "book" for driving technology and payments companies. It includes areas focusing on accelerating growth and commercial excellence, the tech organization, product management and time to market, and the later added areas People & Performance and fueling for growth. People & Performance was developed during and after Bambora and focuses on performance management driving a performance culture with engaged employees and driving culture through top-management engagement. These efforts may explain NC's increased Technology & Payments focus.

Figure 11 demonstrate NC's number of investments in Technology & Payments per fund (and over time). Going from at most one investments in Technology & Payments in Fund I to Fund VI, NC increased their number of investments in this sector to two, four and five in Fund VII, Fund VIII and Fund IX, respectively. Worth noting is that NC still invest in their Fund IX, why the number of Technology & Payments investments in that fund might further increase. In total, we see that NC has increased its investment focus towards the Technology & Payments sector.

**Figure 11**[19]

NC's Tech & Payments investments

| nr of investments | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| **Fund I** | **Intentia** (Computer Software Manufacturer) 1990-1996 Sweden | | | | |
| **Fund II** | | | | | |
| **FundIII** | | | | | |
| **Fund IV** | **Guide Konsult** (IT Consulting Services) 2001-2006 Sweden | | | | |
| **Fund V** | **Point International** (Electronic Payment Solutions Provider) 2004-2011 Sweden | | | | |
| **Fund VI** | | | | | |
| **Fund VII** | **EG A/S** (IT Solutions and Consultancy Services) 2008-2013 Denmark | **Itiviti** (Financial Technology and Services) 2012 & 2018 - current Sweden | | | |
| **Fund VIII** | **Bambora** (Payment Solution and Services) 2014-2017 Sweden | **Vizrt** (Professional Software for Real-Time Media) 2015 - current Norway | **ERT** (eClinical Solutions for the Pharmaceutical Industry) 2016 - current US | **Cint** (Market Research Technology) 2016 - current Sweden | |
| **Fund IX** | **Trustly** (Direct bank payments) 2018 - current Sweden | **Macrobond** (Financial software) 2018 - current Sweden | **Signicat** (electronic id) 2019 - current Norway | **BOARD International** (Cloud-based support software) 2019 - current | **Conscia** (Complex security and networking colutions) - 2019 - current Denmark |
| **CV1** | **Itiviti** (Financial Technology and Services) 2012 & 2018 - current Sweden | | | | |

Partnership examples in payments includes for example the collaboration between Swedbank and Point international and SEB with Bambora. This is in line with the long-term relationship approach NC has, they often work in partnership with previous owners, banks and families.

### 5.2.3 NC people

The employees at NC are either within a fund or vehicle management team, an investment advisory team, a specialist function team or in a portfolio company support team. The investment advisory teams are led by Kristoffer Melinder, who is the current Managing Partner (Co-Managing Partner since 2010, and sole Managing Partner since 2016). The specialist functions teams are led by Klas Tikkanen, who since 2019 is the Chief Operating Officer (COO) and Jesper Söderberg who is CFO since 2019. Klas Tikkanen was previously the CFO of NC during 2011 to 2018 (Nordic Capital, 2019g). The Operational Professionals team is led by the operating partner Olof Faxander who has worked with operational excellence since joining NC in 2016. Olof Faxander has been the CEO of Sandvik and SSAB (Nordic Capital 2019b).

NC aims to build strong and long-term businesses through a team that comprises high financial and operational expertise, combined with an entrepreneurial mindset (Nordic Capital, 2019a). A vast majority of the NC investment professionals employees are high-performing undergraduates or graduates and have experience from investment banking, management consulting or M&A departments. Some have core operational work experience, but most do not.

## 5.3 Sourcing: from Point to the Bambora Idea

This section will provide an understanding of how the idea of Bambora was created, and the events involved in this process will be described in chronological order.

[19] The marked investments are mentioned in the Bambora case.

## 5.3.1 The Point investment

In December 2004, Nordic Capital acquired Point as a Fund V investment. Point was founded in 1988 in Oslo and was mainly active in the merchant solutions business, offering equipment and services to merchants and enabling them to handle physical in-store card payments. In 2004, their revenue amounted to NOK 300 million and they around 150 employees.

This was NC's first investment within payments and was led by, among others, the long-time Partner Bo Söderberg and (at the time) Director Fredrik Näslund[20]. NC invested in Point as they saw strong market fundamentals such as an increasing card acceptance, increasing requirements and complexity in the market, and an expansion of the market as complexity and sophistication increased. Furthermore, Point had a strong market position as it was the number one or two player in the Nordic markets, and NC could see ways to make operational improvements such as changing the business model to subscription, investing in software development to go from reselling to a proprietary development, investment in maintenance and support in order to control the direct merchant relationship, and execute M&A to consolidate the market. Moreover, as the former CEO of Föreningsbanken, Bo Söderberg had personal preferences in investing in fintech and payment companies such as Point. He made possible a joint venture between Point and Swedbank, called Babs Paylink1, which was 51% owned by Swedbank and 49% by Point.

In 2005, Fredrik Näslund called Johan Tjärnberg[21] and asked him if he was interested in becoming the first assistant to the CFO and CEO of Point. Johan Tjärnberg, who at the time was working in the Transactions Team of PwC, knew nothing about payments. However, Fredrik convinced Johan to join Point in September 2005. After a while, Johan took over more and more of the CEO tasks and was promoted to CEO of the company, reflecting:

*"I was no more than 32, 33 [years old] maybe. It was nevertheless a pretty large company, so it was an incredible trust to receive that early." Johan Tjärnberg, 2019-03-11*

Point could be characterized as a sleeping beauty. The company was early in working with electronic payments and practically had no exposure towards e-commerce but more towards physical commerce. Under NC's ownership, with Johan Tjärnberg in the front, Point went through a lot of changes. Through heavy investments in R&D, strategic and synergetic acquisitions, investment in an own secure payment cloud, a transformation of the business model from "one off sales" to a recurring revenue model, Point turned into a full-service provider of card payments. NC invested in software developers in order to facilitate product innovation. The result was in the end the development of Payment as a Service (PaaS), a fully managed service model where software and applications, value added services, multichannel/e-commerce as well as terminals and support were the building blocks. That is, the business model was changed to a subscription-based recurring revenue model and it entered e-commerce.

Prior to PaaS, companies such as Point sold card terminals to merchants (sometimes with leasing agreements). The merchants paid a yearly license fee for the payment software of a couple of hundred SEK, and maybe had a support agreement, however, complementary services were restricted. To handle the payments the merchant contacted the bank. The PaaS allowed Point to rent out the terminal as well as the payment software on subscription to the merchants for a couple of hundred SEK and additional

[20] See Exhibit 12 for a biography.
[21] See Exhibit 12 for a biography.

services was included. To handle the payments the merchant still had to contact the bank, but it was all in a smoother setting than before.

Furthermore, the existing payment solutions were very messy for merchants. First of all, it took about two weeks before technical integration and compliance checks were done. Secondly, merchants in the Nordic countries would often have been in contact with up to eight vendors to solve all payment challenges. One for physical POS, one for communication, one for physical card acquiring, one for physical invoicing/consumer credit, and to be able to provide payment solutions online it was the same story. The current offering was slow and complex, and merchants wanted something faster and simpler. The PaaS model met merchants' increasing need of multichannel solutions and the increasing regulatory demands.

In early-2011, after almost seven years of ownership, NC started to actively work on the exit of Point. Point had strengthened its position in the Nordics and expanded in selected European countries (it had a local presence in Denmark, Estonia, Finland, France, Iceland, Ireland, Latvia, Lithuania, Norway, Sweden, and the UK). It was now the only full-service payment solution company with a European reach, offering card, non-card, multi-channel and cross-channel solutions to merchants. NC's investment in software developers resulted in that Point had gone from 5-10 developers to around 165 developers at exit.

In December 2011, after a one year long auction process, the American company and global leader in secure electronic payment solutions, VeriFone Solutions, acquired Point, paying around USD 1.1 billion, which resulted in a return of invested capital for NC of more than 10x.

### 5.3.2 The new idea: SuperPay

After divesting Point, the tech and payments team at NC continued to follow the payments industry and track acquisition opportunities. What NC experienced already at Point was that even though Point had approximately 630,000 payment terminals and over 475,000 individual merchant contracts, the card acquirers and card issuers were still receiving the clear majority of the value in the value chain. However, the NC team never invested in the idea of creating a card acquiring business at Point, due to several reasons. The payment industry was still very unexplored, and Point would with a card acquiring business compete with its customers, so NC did not dare to make the move. Perhaps most importantly, NC saw tremendous operational and value creation development during the ownership anyway, and they did not want to risk that.

In connection with leaving Point in September 2013, Johan Tjärnberg started to sketch on an idea that he thought was missing in the payments industry. He explains his thoughts:

*"What could you do that might be a bit more disruptive than Point was? How would we be able to change this industry and take advantage of the knowledge that I and also parts of the team I had worked with from my last trip [Point] had built up?" Johan Tjärnberg, 2019-03-11*

He wanted to become a game changer within the SMB segment and change the logic to something more reasonable from a customer perspective.

During the seven-year Point journey, Johan Tjärnberg developed a close relationship with NC, especially with Fredrik Näslund, but also with Daniel Berglund[22] (who joined NC in 2010 after just over two years of consultancy work at Bain Company), and the rest of NC. By end of 2013, Johan and NC had practically developed the plan and evaluated several potential building blocks and agreed to execute this plan to change and even disrupt the payment industry.

Johan Tjärnberg continued to spin on his plan and soon he had a clear business idea which also was backed by NC. Johan Tjärnberg explains:

*"And this [the business idea] was something that was completely different in the Nordic world, this was almost a venture kind of. It was almost like starting something from the beginning. We had nothing. We had an idea. A thought. (...) We have to change the product, we have to change the business model, we have to change the distribution model, and then also try to create a modern, cool brand." Johan Tjärnberg, 2019-03-11*

NC and Johan Tjärnberg created a document referred to as the strategic and value "Hexagons". At the time, the typical solution was to have different contracts with different parts of the payment transactions value chain, e.g. one contract with the hardware company, one with the software company, one with the card acquirer (often the bank), one with the service company, and sometimes one with the company that handled communication. Not only that it was complicated to deal with all different parties, it took the merchants 2-3 weeks from ordering card payment equipment to delivery, and it oftentimes took 30 days for card payment in store to be available in the merchant's bank account, while it was a completely different story for purchases online. Johan Tjärnberg and NC wanted to change this by offering a full-service payment solution for merchants. It would be much quicker for merchants to sign up as customer and get up and running with their payment systems. In fact, it would take only 24 hours from ordering the service to installation, instead of several weeks. And in addition to that merchants would have the money from customer payments on their account within 24 hours. This strategy included offline, online and mobile offering towards SMB.

The underlying market also seemed favorable to Johan and NC, and they believed in a bright future of the payments industry. Given that consumer spending in the Nordic countries overall had grown intactly with real GDP, they expected a growth rate for payment transactions of at least the real GDP growth rate. Furthermore, NC and the project team projected card payments to grow. They expected card transactions per capita in the Nordic countries to grow with a CAGR of between 4% and 8% during 2013 to 2017, and expected the downward trend in cash use to continue. In fact, they expected cash payments in 2018 to be one fifth of total payments, while it was one third of total payments in 2009. This because of a development where a facilitation of card usage for smaller-sum purchases in situations such as parking and public transport was done through a wide roll-out of chip-and-pin devices (payment terminals).

Average cards per capita in Norway was assumed to stabilize around three cards per capita, and average number of card transactions to grow by 3-5% annually. For Denmark, average cards per capita was assumed to increase by 3% annually towards 2017, and average number of card transactions to grow by 4-5% per year. Furthermore, in Finland, counted on an annual increase in average cards per capita by 3-4%, and that average number of card transactions grows by 3-4% annually. The average cards per capita in Sweden was assumed to increase by 1% annually towards 2017, and average number of card

[22] See Exhibit 12 for a biography.

transactions to annually grow by around 8%. For Norway, Denmark and Sweden, average transaction value was expected to decline as cards were used more often and for smaller amounts, while average transaction value was expected to be stable in Finland.

Card transactions were expected to grow at high single digit numbers for physical card transactions and at double digit numbers for online transactions. Going forward, between 2013 and 2018, they expected the CAGR for the volume of physical transactions to be 8.0% and for the volume of online transactions 12.3%. The corresponding expectation for the value of physical transactions was 6.2%, and for the value of online transactions 11.5%.

NC also discovered a price pressure in the market of about 1.0% to 1.5% p.a. Taken together, a market growth of mid-single digits for physical card transactions and ~10% for online transactions could be expected.

The team identified several commercial risks in this investment case connected to VISA and Mastercard. Money deposits were required by VISA if the company was not a highly rated institution. Discounts were only paid out for large volumes and there was a risk that one could lose the discount if volumes would go down. Mastercard required a banking guarantee. There was also a risk that one would not receive a license, or lose the license when having one. Both VISA and MC did an ownership assessment which had to be passed. There was also a "technical project" with SFSA ownership assessment and a voluntary SCA review that could take up to three months to complete. NC had in earlier cases successfully completed highly demanding ownership assessments. so these risks were seen as small or moderate.

The MIF cap would mean that credit transactions could be capped at 0.3% while domestic debit and prepaid cards could be capped at 0.2%. For intra-European cross-border payments caps already exist. Acquirers will eventually offer lower MSCs to merchants, but it is probable that an extra revenue increase can be enjoyed for acquirers during a limited time period. This since smaller and mid-sized merchants who do not know the regulation will continue to pay the same MSC for a while. Looking at similar situations in Spain and Australia, a period of three to six months is probable. After that, MSCs for all merchants will fall in line with interchange fees. However, large merchants with insight into the regulation will negotiate and benefit from a lower MSC early on.

The barriers to entry were especially high within the payments sector handling the travel industry and the online customer sector. The travel industry could not be accessed without advanced integration to the airlines due to risk elements such as the settlement of the cash which preferably was done first when the customer boarded the plane. In the e-commerce sector, the player had to be deeply integrated into the PSPs to be able to handle chargebacks and prepayments in multiple currencies.

In the SMB and mid-market segment, where most of the value in the acquiring sector were, the barriers to entry were fairly high as well. One needed distribution scale to be able to be competitive and to serve the customer base. Since processing costs were fixed and VISA and Mastercard had volume discounts, there were also cost-scale benefits.

Furthermore, the the overall barriers in the acquiring sector were regarded as medium to high. Emerging players were limited by license and approval regulation by SFSA and VISA/Mastercard due to demanding ownership assessments and large funding needs. These new players used "umbrella" solutions to overcome this obstacle by, for instance, using an external acquire while directly facing the merchant.

The value creation plan, the Hexagons, had three main parts. First, it was a buy and build case where a unique and local tailored end-to end payment acceptance value proposition suited for the merchant mass market was supposed to be the outcome. Second, a market leading and local tailored distribution model and price model would be developed, with the objective to aggressively win market shares in the traditional payment acceptance revenue pool. Third, they would lever the key and scalable acquired payments assets and experience in Northern Europe as well as expand to selected markets globally.

To create a significant competitive advantage in the market the plan was to create a solution for the merchant that would reduce the total cost of ownership, give the customer a new and lean service experience as well as provide access to new and unique payment services. The total cost of ownership would be reduced by creating a one-stop-shop with a single invoice and simple pricing, reduce the average cost per transaction and improve the risk management. The customer experience would be improved by having one customer support interface, create new digital tools and a lean boarding process so it was “easy to join and quick to use”. The new unique payment service would entail a new loyalty solution, merchant financing, data analytics as well as invoicing and credit services.

When talking to merchants, they were positive to the idea of a combined supplier. Cost was a critical factor, but other benefits of having one supplier was very important, even more important than cost to many. Furthermore, over time merchants had become more aware of the possibility to negotiate prices. Historically, there had been a downward pressure on both MSCs and interchange fees as markets matured and competition increased. In mature markets basic acquiring was now close to being a commoditized service, and therefore, acquirers were likely to turn their focus to value added services as a way to increase profitability.

In early-2012, NC had found a special interest in the payment giant Nets, which was a Nordic company based in Denmark and to a large extent owned by the Danish and Norwegian banks. The merchant phasing parts of the company had a payment terminal business but, in contrast to Point, also a merchant acquiring business that managed the merchant’s relation to the rest of the value chain, handling transaction settlement, risk of the merchant, etc.

One part of the value creation plan for Nets was connected to the creation of the innovative SMB solution for merchants and was called SuperPay. From Johan’s personal point-of-view, his interest in Nets was only the 30-40% of the business phasing the merchants. Most of the business was supporting/supplying banks rather than merchants and did not fit the SuperPay plan. NC ended up losing the Nets deal within a hair’s breadth in the early spring of 2014.

There was a timing aspect. The NC and consultancy team estimated that they did not have more than three years to complete their business idea before the market opportunity was lost. They also understood that building this from scratch and organically grow would most probably take too long, between 5 and 10 years. Instead they realized that they needed to form a plan to acquire different payment companies that they knew already had transaction flows between each other and through operational changes create something different. Such a plan could be described as a technology disruption M&A agenda.

### 5.3.4 SEB carve-out and SuperPay 2.0

During the Nets process, the NC team and Johan Tjärnberg approached SEB and asked them if they could buy SEB’s card acquiring business Euroline. NC had heard market rumors that Euroline was likely to be sold as it was not part of SEB’s core business. NC now started to think about how they could use their SuperPay plan, originally created for Nets, with Euroline as their platform investment instead and did due diligence on the firm and its technology.

Euroline was shaped in 1993 when the entity Servo was split up among the Swedish banks that jointly owned it. In 1996, it assumed the processing operations for SEB Group customers. Multi-currency support was launched in 1997, and in 2000, a central acquiring agreement with SAS was made. As SAS started to sell flight tickets online and wanted to be able to cross border sell in different home currencies, SEB's Euroline was a good partner for them. In contrast to other banks' acquiring platforms, Euroline now supported online commerce in addition to the traditional offline commerce. In 2001, global Mastercard and VISA licenses for airline was acquired and full central acquiring for airlines was launched. Two years later, in 2003, Euroline got general MC and VISA acquiring licenses for Europe for all sectors, and in addition to that launched 3DSecure in Sweden as the first one to do so. In 2008, Euroline was incorporated as a separate legal entity, and in 2009 it expanded its offering to Norway and Denmark.

The internal sales organization of Euroline had a salesforce of approximately 20 people and experience from large Nordic corporates and international merchants. Its services were part of SEB Group's customer offering and as the leading Nordic merchant banking organization, it was the only bank with such a large amount of big corporate customers. The exposure towards digital companies and e-commerce made Euroline very unique. Through its retail network, it also offered access to an attractive mid-corp and SMB distribution network in Sweden. The small merchants were handled through a sales channel outside of Euroline and were in this way indirect customers through the connected payment facilitators (e.g. Payson, Dibs, iZettle, Digital River).

Euroline had a partner network consisting of Nordic and international partners such as Adyen, Point, Amadeus, IATA and DIBS. They provided additional sales channels for domestic and international merchants and this had been important historically. In the Nordic countries, Euroline seemed to be the preferred partner, sometimes also in Europe.

Euroline had close and long-standing relationships with a number of large and growing merchants such as Spotify, H&M, SAS and Digital River. With Spotify it handled e-commerce, m-commerce and European and Latin American gift cards, with H&M POS and MOTO in Sweden and e-commerce in Europe, with SAS e-commerce it handled travel agents and direct and in-flight sales globally, and with Digital River Euroline had a relationship regarding e-commerce, partnership and payment facilitation. The larger customers could negotiate individual contracts based on volumes in value or number of transactions. The five largest merchants represented ~25% of total transaction value and ~30% of gross total income while the 20 largest merchants represented ~45% of the total transaction value and ~50% of gross total income. The largest share a single merchant represented was 11% of the total transaction value. Travel was an important part of the transaction value, although the size of this share was declining. In 2013, travel accounted for 35% of the total transaction value which was already lower than the share of 45% in 2012.

The main growth driver for Euroline was expected to be e-commerce. This business accounted for roughly 47% of Euroline's transaction value in 2013. As Euroline had a strong position within e-commerce, with roughly 50% of market share in Sweden, growing faster than the underlying market should be possible. A CAGR of approximately 12% was seen in the e-commerce market during the years 2008 to 2013, and the retail e-commerce was expected to increase its share of the total market by continuing to outperform POS growth. However, in 2014, with approximately 200 new customers per month, the business was almost not growing at all.

In 2014, Euroline's e-commerce (excluding travel) accounted for 41% its net income and 37% of total transactions, which made them keep their position of the largest actor in the market, with a market share of around 50%.

As Nets was now in early 2014 being restructured by their new owners Bain Capital and Advent, there was a market window with an opportunity to gain market share before Nets could focus on such issues. Additionally, the interchange cap had not yet been implemented, and it was smart to act now to take advantage of that. A short term hit on EBITDA by investing heavily to gain market share fast would be a smart move and be favorable in the long run.

In late-spring 2014, SEB started a formal process in which NC had positioned themselves well. NC had not only followed the market and made due diligences for one year, SEB seemed to like the story and appreciate that NC was an experienced payments investor, had spent a lot of time in preparing and presenting their case before anyone else became part of the process. Moreover, NC was an important partner to SEB in other regards.

NC and Johan Tjärnberg continued to work on the investment plan – SuperPay. With Euroline as the platform investment, it had to be a bit different than with Nets and the e-commerce and global aspects of Euroline made new opportunities potential. The SuperPay plan and original business plan for Nets' merchant phasing businesses was revised to SuperPay 2.0.

The SuperPay 2.0 entailed an offering covering all payment needs with solutions for cards, invoices and online and offline payment, since they had understood that merchants were asking for broader "plug 'n' play" solutions than what existed on the market. Euroline would be the growth platform from which they would expand geographically as well as product wise and expand and innovate the payment solutions offering. This would be a buy and build investment and they had done research on potential add-ons and reached out to several of them of which many looking optimistic. KPIs were identified and thoroughly planned for already in the SuperPay 2.0 plan.

This SuperPay 2.0 plan was something very different from other investments NC had done. It was practically a startup plan, creating something new from scratch. Yes, they would buy different firms to get the puzzle pieces together faster, but they would not have many pieces of the puzzle just by buying Euroline. Substantial operational investments had to be made in order to realize their business idea. It was definitely not a traditional buy and hold case, but very much a case where operational investments would be the real key to success. To create a completely new kind of business, it would be necessary to do many things at the same time. Since it was such a different way of working, the deal team for the investment had to convince the other ones at NC that this new way of investing would work. Fredrik Näslund says:

*"It was a bit tricky. We split the calculations in order to track new additional cost / growth investments and we invented a term we called designated cost. Me and Rickard*[23] *received some complaints about it... They were like 'really, are we going to count designated costs now'. And well that's exactly what we did. We put aside some 50 million euro (...) that could be used during a couple of years and this*

[23] See Exhibit 12 for a biography.

*money were looked upon as expansion money over P&L investing in new operating costs beyond the underlying businesses' costs bases... We had a clear view of unit economics, such as customer acquisition cost, how long will payback time be, what is the EBITDA margin etc. Then we could see that the more money we put into this, the more we will earn in the long run." Fredrik Näslund, 2019-03-29*

Their idea behind using "designated cost" was to split up the reporting to distinguish between expansion costs and core business costs. Over EUR 50 million were invested during a couple of years to open up new offices/markets, new technology development, building the Bambora team, etc. and were treated as costs in addition to the core business P&L. This allowed for the investors and financiers to track the development of the underlying business(es) as well as the development/payback of the "designated cost" investments.

Fredrik Näslund and team had to convince the investment committee to go through with the deal. The good track record of Johan Tjärnberg, track record of the team with the Point success (being NC's best investment ever), as well as the vast amount of knowledge they now had about the payment sector gave the necessary trust internally to move forward with such an unusual investment.

*"I remember when we had our investment committee meetings. Johan had such a good track record with us and we [the deal team] had done so well in the past in payments, I mean Point was Nordics best investment ever, so internally they trusted us."(...) "I remember some being very suspicious to this designated cost concept, but in the end we could explain the units economics well and promised to track it in detail, so NC went through with it." Fredrik Näslund, 2019-03-29*

## 5.4 Execution: The Bambora Story

In the following section the course of events from mid-2014 to mid-2017 is explained. The subsections describe different themes: the M&A plan, culture building, and KPIs and operational improvements. Each subsection is described in its chronological order.

### 5.4.1 M&A: buying Euroline and performing 12 additional acquisitions[24]

It turned out that SEB accepted NC's offer of EUR 2.2 billion and signed in Q2 2014. Since NC had to put Mastercard licenses in place, the deal closed in early-December 2014. The Operations team within NC contributed with a lot in this acquisiton across several areas and in particular in leading the complex IT carve-out with in-house IT expertise.

SEB entrusted Nordic Capital with taking over some of its key customer relationships. SEB acted as a referral partner and sales channel to Bambora and was offered to re-invest 25% into Bambora to provide comfort on how Bambora would serve SEB's customers. In the end, that was not seen as necessary by the bank. Furthermore, SEB was part of the Board of directors of what would become Bambora. The carve-out from SEB was complex, both because of the nature of carving out an organization and customer portfolio but in particular from an IT/platform carve-out point of view.

Euroline was the card acquiring base which could handle physical and online card acquiring as well as international acquiring. Through inhouse innovation and an M&A agenda Bambora would build mass-

[24] See Exhibit 14 for an overview of Bambora's investments.

market add on services (such as services related to loyalty, analytics and cash flow), an instore and online bundled end-to-end acceptance offering, a partnership referral model with SEB (referrals and cash management), PSP and ePSP services and launch alternative payment instruments (invoicing) to the merchants. Together, this would be a one-stop shop for merchants with business online and offline.

Hence, the NC team and the consultants looked for other, complementary companies simultaneously. There were only two independent payment terminals and software vendors in the Nordic market that offered the right PSP services for the SuperPay plan - Payzone and Samport. NC made due diligence on both companies and ended up buying the Stockholm-based card terminal providing company Samport. This key add-on was almost secured during negotiations with SEB. Payzone was later acquired by Nets. Daniel Berglund reflects:

*"...when we bought Euroline for several billions, we only had two shots [Payzone or Samport] to get this together. Otherwise, we would have had to build this ourselves, which would have taken around two, three years." Daniel Berglund, 2019-03-29*

Early on, the team also analyzed and acquired the Australian payment terminal company KeyCorp. They believed and hoped that the Australian payment market would in the short-time future become deregulated and that the banks would sell their card acquiring platforms, just as in the Nordics. With 50% of Australia's terminal fleet and over 371,000 terminals, KeyCorp was the clear market leader like Point, the company had its own remote software through which it monitored the terminals, and sometimes loaded terminal software upgrades, of 756,000 instances for 301,000 merchants. NC got comfort in KeyCorp from seeing lots of similarities between the Nordic payments market and the Australian and between Point and KeyCorp. In addition, KeyCorp was truly a high quality and stable business.

KeyCorp's business model was indirectly linked to SMB merchants and the company lacked the direct link that was essential in the SuperPay 2.0 business case at the time of the acquisition. The fund did not allow core acquisitions outside Europe, only add-on acquisitions, and KeyCorp happened to be the first acquisition on paper (closing before the closing of Euroline). Daniel Berglund reflects:

*"It could have been seen as a bet [when we bought KeyCorp before Euroline]. Otherwise we would have been stuck with a service business in Australia! Not really, the reason why we dared to make such an investment (...) [is because] it was extremely similar to Point's service business and we had high comfort on Euroline. We knew how to better operate it. (...) We knew how to run it. We knew how to double the value on its own. Even if that was not the strategy, it would not have been a disaster." Daniel Berglund, 2019-03-29*

With Euroline and Samport, the team had secured the parts for an offline offering except for a go to market delivery organization, which was a strong area in the former Point team. Moreover, to forward integrate into the mobile and online segment, the team bought the Swedish mobile application company MPS in 2014 to complete the mobile solution. Later in early 2015, the Danish company ePay was acquired to complete the online offering with an ePSP. Daniel Berglund explains:

*"...what we had with us from Point, where we bought service businesses - i.e. delivery businesses really - in seven of the eight different countries [that we invested in] was that we knew quite well what kind of business we needed to have and buy in order to create distribution" Daniel Berglund, 2019-03-29*

The team also acquired the Danish service / delivery business DK Online in 2015, becoming the first active outbound sales channel for what was still known as SuperPay. Since 2014, DK Online had a partnership with Samport, acquiring payment terminals from Samport. However, NC did not find any similar and suitable businesses in Norway and Finland, why they had a green field strategy there and they hired experienced payments people to quickly build local go-to-market teams in those geographical areas.

In 2015, the team also acquired another Australian company, IP Payments to expand that part of the business online. The SuperPay 2.0 team expanded to Canada in late-summer 2015 by acquiring and carving out Beanstream, which had a business comparable to ePay's business in Denmark. Most of the acquisitions done by SuperPay/Bambora were of partners of Euroline that were already integrated in their platform and used to sell their offering. This strategy avoided the typical cumbersome platform migration challenges. Beanstream was such a case and thus already integrated into the Euroline platform. Later in 2015, the team also bought the big data and merchant analytics company dSafe in Norway. Bank & Butik in Sweden offered a strong distribution channel in Sweden, digital sales and growth systems. The Finnish company Maksukaista/Paybyway was acquired to add the required e-commerce technologies for the Finish market.

In early 2017, the team acquired the Zurich-based company Innocard, offering acquiring, distribution and online services in the Swiss market. This was their first expansion into the DACH[25] area and was to prove SuperPay 2.0's in-store business model. At the same time, Bambora also acquired DevCode, which was a Stockholm-based online enterprise payments business, offering flexible payment platform solutions for multinational companies.

One add-on was sold back to its previous owner when NC realized it did not fit in with the rest of Bambora.

### 5.4.2 Culture and branding

In 2014, Johan Tjärnberg recruited Antonia Brandberg Björk[26] to be responsible for human resources at the company that was about to be created. She had a background within HR from various industries, including private equity and financial institutions, and Johan had heard good things about her.

*"I remember going to the countryside and I sat on the plane thinking that he [Johan Tjärnberg] is probably worth going there to meet. And then we had lunch and he told me about what plans he had, about the concept of creating a one-stop shop, that no one does it (...) [in] this industry that I did not know at all, and very much that 'we should do something brand new on the market' - be disruptors - and we have backing from Nordic." Antonia Brandberg Björk, 2019-02-19*

Johan Tjärnberg gave Antonia Brandberg Björk a lot of freedom to form the human resource agenda for SuperPay 2.0. She bought HR-systems, planned and built processes for the fully developed company they knew they would grow into. This meant a big upfront effort and financial investment in the HR / P&P area to build for the future. They all knew they had to plan for a steep curve, but it all went faster than they thought from the beginning.

[25] Germany (D), Austria (A), and Switzerland (CH)
[26] See Exhibit 12 for a biography.

In spring 2014, they were only 6-8 people on this project and started with recruiting good people they knew. At the same time, Antonia Brandberg Björk and Johan Tjärnberg created what they called People & Performance (P&P). Both of them knew that they wanted to build a modern and dynamic working place, which needed resources beyond the traditional HR. Antonia Brandberg Björk explains:

*"There's a lot of organizations where HR is still about cuddling and crying when you've had a hard time, and then you get your salary, but not [about] so much more. And they [the HR functions] are often disconnected from the business and results. (...) That is why we wanted to move away from HR and work with the expression people and performance instead." Antonia Brandberg Björk, 2019-02-19*

The logic behind people and performance was that employees, including the management team, were evaluated equally weighted based on performance and values.

However, recruitment was difficult at first. In order to create a dynamic and high-performing company, Antonia put the bar very high for recruitment since day one and only aimed for the best talents. The problem was that they did not have much more than an idea in place. Antonia Brandberg Björk continues:

*"We had SuperPay in the beginning, we didn't even have a brand, so the first year we were called Cidron[27] SuperPay. And we were sitting on this (...) pet shop at Söder and just 'No, but we are super up and coming!' The fact that we had Nordic Capital as financiers was almost the only card we had. People were like 'Really?' I remember when we tried to recruit a Head of Accounting, the first position basically, in September 2014. [It was a] completely risk averse type of person [who wondered] kind of company this was. [I thought that] if I can have the interviews at Nordic Capital, then it would be a bit easier to attract candidates. But it was so tough." Antonia Brandberg Björk, 2019-02-19*

When Euroline was acquired, the team wanted to be close to Euroline and managed to find a temporary office at a former pet shop where they spent the second half of 2014. She explains:

*"Although we had NC funding in the back, it was really a startup. When we moved [to the temporary office], we were carrying boxes ourselves. We went to IKEA and bought mugs and to ICA to buy milk. (...) And we went to Office Depot down in the subway exit and bought some file folders." Antonia Brandberg Björk, 2019-02-19*

She continues:

*"Then, just a year later, you notice that 'God, there are spontaneous applications to us from super talents.' We were like 'Okay, the days are passed when we needed to stand there and dance and show off Nordic, (...) [now] we got a strong employer brand' without really investing in employer branding, but by creating a strong culture, a strong way of working." Antonia Brandberg Björk, 2019-02-19*

In January 2015, Patrik Göthlin[28] was recruited as COO, after recommendations from Daniel Berglund, they had previously worked together at Bain & Company. Patrik Göthlin elaborates on recruiting and market attention:

[27] Cidron is the palindrome of Nordic.
[28] See Exhibit 12 for a biography.

*"[We were] around at a time when payments were attracting a lot of attention, interest and money (...) and when several other [companies] had built marketing around payments and claimed that payments are important. (...) It helped us a lot because suddenly, people cared about payments." Patrik Göthlin, 2019-02-20*

The team was good at letting low performers or the ones that did not fit with the culture go. Not only was it important to perform well, it was also very important to fit with the culture, at all levels. They thought it was essential to take out negative energy and promote performance and good behavior as well as provide ample room to grow for young high potential talents. Since people were evaluated based on not only performance but values as well, there were people that had to leave because of poor cultural values. Antonia Brandberg Björk explains:

*"We talked a lot about that we don't want high-performing assholes. We really acted according to that. Johan [Tjärnberg] were standing there saying 'WE DON'T WANT HIGH-PERFORMING ASSHOLES' and everyone just 'Yeah okay!'. It was so incredibly important to us. It is not just what you do, (...) but actually being a pleasant person and treating people with respect." Antonia Brandberg Björk, 2019-02-19*

Moreover, there were very few people who voluntarily left. Johan Tjärnberg explains:

*"Even those who, if one would be completely honest, had to leave, [in cases where] we took an active decision that 'you do not fit in here' for various reasons, I believe that we have also managed to maintain a relationship with them, and these people speak well about [the company]. It's pretty cool." Johan Tjärnberg, 2019-03-11*

Of the 13 acquisitions that were made, 11 were completed within 10 months. This, as well as a large amount of people employed from the outside resulted in a large bulk of employees being added very early on. In total, they grew from zero to over 500 employees during the first year. As the SuperPay 2.0 plan had no brand, product and revenue during the first year, Antonia Brandberg Björk, Patrik Göthlin and Johan Tjärnberg were very careful that the companies they acquired were part of the creation of a new company rather than integrated with an existing company. Johan Tjärnberg elaborates on this point:

*"The whole story was based on the fact that these companies that we acquired - we were very clear in the acquisition process - that this was not about us acquiring a company that we would integrate in a traditional way, but this was more about that 'we should change the world and we think you have something that fits in with this. Together we will build the puzzle and we will launch a new company'. I think the whole story was quite attractive to many. So, it was more of a competition about who could re-brand first, you know." Johan Tjärnberg, 2019-03-11*

The employee philosophy very much involved empowerment and "rather over-promote young people" (Johan Tjärnberg, 2019-03-11) and give them responsibility and support, than be old-fashioned and miss out on good people. In the beginning the heavy focus on empowerment resulted in irregularity and that everyone went in different directions. Consequently, the Bambora management team started to work with the second level management, forming high consistency around the business goals. As a way to overcome this, Johan Tjärnberg created what he refers to as *the Playbook*, which included a set of business priorities, strategic approaches and principles, as an outer framework to the large employee empowerment. The Playbook also involved *the Leadership Rulebook*, which embraced the anything-is-possible attitude and raising-the-bar-for-what-good-looks-like attitude in order to make the leaders continuously think bigger. The Leadership Rulebook also included the performance-management model which required all managers to be data driven in their performance model.

In January 2015, Johan Tjärnberg and rest of the team talked with the Board of Directors about entering four new markets *and* launching the brand *and* the first product in May 2015. Few believed in this time plan. However, Johan Tjärnberg was right, the plan proved to be right time after time. Johan Tjärnberg refers to himself as a "big believer" and puts a lot of effort in his leadership style. Antonia Brandberg Björk reflects:

*"Johan is very good at inspiring. He's an incredibly good leader. He's good at inspiring and illustrating the future. He's also good in the way that as soon as you feel you are approaching some type of goal, he puts another one a little further away." Antonia Brandberg Björk, 2019-02-19*

During spring 2015, besides working on acquisitions, the team heavily worked on creating their brand and forming their first product. The difficulty was to create a global brand that fulfilled all necessary legal requirements, everything from website, to brand and logo/mascot. After reviewing several hundreds of brand names and after three brands had failed on different legal restrictions, the team was considering the Australian surfing term *bombora*[29], inspired by the acquisition of KeyCorp. However, they did not want to have the word "bomb" in their brand name, why they finally decided to go with *Bambora*. They had decided on having a clean brand name, without anything that involved "pay", and they thought that Bambora was playful and very much *them*. In order to make the brand slightly alive, they wanted Bambora to be accompanied with an animal. In order for this to be different and represent *their* animal, and to symbolize their cross-breeding view on payment, the team decided on going with a mixture of a zebra and a giraffe: the *zebraffe*.

At the same time, Bambora worked at its first product package, Bambora One. This product package offered a full-service solution for offline (in-store) payments, including a payment terminal and card acquiring.

Another strength of Bambora was that they were very good at celebrating things. As there was a data and performance driven culture, there were screens everywhere showing the KPIs of the week. As soon as a target was reached or a new acquisition was made, the Bambora people was not late in celebrating and painting new offices purple. These actions built and strengthened the feeling of a Bambora family and success. This also led to that not only the management team, but everyone, was motivated and inspired to work hard and do their best all the time.

The management team of Bambora had continuous, regular and frequent contact with the NC team. The Bambora team wanted NC, to be involved and be there at Bambora as much as possible. Johan Tjärnberg had contact with the NC team almost every day, at least every second day. Especially Fredrik Näslund and Johan Tjärnberg possibly often discussed things in more informal settings as well since they lived close.

[29] Bombora means "a wave which forms over a submerged offshore reef or rock, sometimes breaking heavily and producing a dangerous stretch of broken water".

## 5.4.3 Operational development and improvements

### 5.4.3.1 Keeping track

In order to fairly track and evaluate the performance of the business idea that became the global company Bambora, the Bambora and Nordic Capital team build really strong KPI focused reporting and kept track of the development of the "designated cost". The team was able to track the core business well, see where the growth came from, understanding the unit economics for the various products that would deliver strong future profits and review the payback and potential in the designated cost investments. Bambora's KPI focused reporting also informed the business decisions in a powerful way and enabled a performance focused and driven organization.

A team at NC, separate from the deal team, continuously values the investments in each fund over the investment period. So as well with Bambora. Fredrik Näslund reflects:

*"I think our team that valued Bambora had a very conservative approach. We had hundreds of discussions with them since we wanted them to ignore the designated costs. (...) It was a bit tough and we got criticism for wanting to exclude the designated costs [to show the underlying profitability]. It's difficult to explain to people internally, (...) even more difficult for NC's investors to follow." Fredrik Näslund, 2019-03-29*

He continues:

*"But by having the designated costs separate from the rest of the costs we were able to track the investments and say 'Look actually the core business is going very well, the growth comes from the core business.'" Fredrik Näslund, 2019-03-29*

To upfront commit to invest such a large amount of money to build out something new, report them separately, and not have a clear path to pay-back or positive cash flow in all instances is not common in a private equity setting and was new to NC. But it was necessary in order to build Bambora. Johan Tjärnberg shares his view:

*"I think that it has been more comfortable for the deal team that worked with Bambora and a little more uncomfortable for the rest of the Nordic organization, to each month see that we put in money in something that we do not really see what we get [back from]. (...) Throughout our first 24 months, we did not make any money. Of course, if you have invested that large amount of money, there were expectations, even though everyone believed in the concept and the idea. It is an extreme pressure in such a situation. (...). There have been many sleepless nights." Johan Tjärnberg, 2019-03-11*

Furthermore, there were a lot of things happening simultaneously and fast during the first years: 13 acquisitions including two carve-outs, growing from zero to more than 500 employees, creation of a new, global brand, and an unusual way of upfront investing. Fredrik Näslund compares it with other NC investments and reflects on the speed of everything:

*"[Bambora] was a bit extreme in the sense that many things happened at the same time. It was (...) a bit like a startup. (...) [The speed] was really crazy actually. Not what one would do according to the textbook. We had ten new people in the management who just took a fantastic responsibility and did almost everything right. [They were] ambitious, followed up on people, followed up on financials,*

*followed up on sales you know. (...) It is what we should do as a private equity firm. We have to [in order to] make the companies grow in a competitive market, (...) do many things at the same time." Fredrik Näslund, 2019-03-29*

Another way Bambora kept track on its business was through a detailed KPI plan. They had a growth analytics team that reviewed and tracked growth KPIs. Other KPIs regarded customers and geographic market information. Bambora also worked with employee KPIs (connected to People and Performance), which was new to NC. In total, Bambora measured KPIs related to all their strategic guidelines.

#### 5.4.3.2 Bambora in 2017

After less than three years, Bambora grew into an industry innovator and a digital leader in the global payments industry. The main operational accomplishments were sales growth, margin expansion and strategic repositioning. The company's revenue in 2016 amounted to over EUR 2.3 billion. When Euroline was acquired in 2014, it had almost 200 new customers every month. During the first six months of 2017, Bambora gained 15,000 new customers, corresponding to around 2,500 per month and by mid-2017 that figure reached ~3,000. Finally, at the end of the investment period, the company had more than 110,000 customers in 70 different markets and 300 commercial partners. The yearly transaction value amounted to more than EUR 55 billion, of which 70% was online and mobile. Also, by recruiting around 400 new people in two and a half years, Bambora employed over 700 people in mid-2017. To make operational improvements, NC committed EUR 52 million in extraordinary OPEX and CAPEX. All-in-all, the efforts and investments resulted in a stable organic growth of around 30%, much higher than the underlying markets. This was possible thanks to launches of new transformational products and large investments in R&D, going from 4 to 170 developers.

In 2017, the Australian payments market was still not deregulated and Bambora's Australian business (KeyCorp and IP Payments) did still not offer card acquiring services. But these businesses were still delivering well in their core offerings.

Daniel Berglund reflects about the overall improvements of Bambora:

*"Johan Tjärnberg and I met over a beer last summer at my summer house and (...) we said that maybe we failed 30% of the things: 30% of the acquisitions, 30% of the efforts. But 70% of it actually turned out pretty well, and that was good enough for us to be able to fly.“ Daniel Berglund, 2019-03-29*

## 5.5 Exit opportunity in 2017

### 5.5.1 Background

At first, the comments from market players were about how crazy the whole Bambora investment was, but soon, in 2016, many market players came with other much more positive comments and were suddenly very interested in working with Bambora in one way or another. Apparently, Bambora had started to appear very interesting to market players. Bambora's high-technological, flexible and international platform had until then been a well-kept secret, and the many acquisitions that lead to the creation of a new, innovative company that was highly impressive. Now the players that Bambora approached for partnership agreements were much easier to convince. One such potential partner that Bambora approached in 2016 was Ingenico Group, one of the global leaders in seamless payments, Ingenico Group (Ingenico).

The operational partnership with Ingenico was intensified into a strategic alliance during autumn 2016. Since Ingenico had been a bidder in the Point deal back in 2011, NC had an idea of Ingenico's strategy and needs.

### 5.5.2 Discussions with Ingenico

In February 2017, the CEO of Ingenico, Philippe Lazare, called Fredrik Näslund from Paris and said that he wanted to come to Stockholm to meet with him since he wanted to buy Bambora. Fredrik Näslund pointed out that Bambora was not for sale yet, they had value creation plans for at least two more years. However, Philippe Lazare insisted on having a meeting when he would come to Stockholm in a couple of weeks. They put forward an offer which was not high enough for NC.

Rickard Torell explains:

*"It wasn't really great for us to sell Bambora at that time when it really, in 2016 or early 2017, just started to feel really good, we started to have momentum and things had [just]come into place*[30]*. We were still buying things: DevCode and Innocard in early-2017 (...) and although most of the strategy was in place from the beginning, some things changed all the time and what was top priority still varied. (...) From NC side, we now all saw the strong value creation and growth in Bambora that had been difficult to crystallize in the beginning." Rickard Torell, 2019-03-29*

After a few weeks, based on their initial due diligence, Ingenico gave a new offer, which was rejected by NC once again. However, NC allowed Ingenico to perform a due diligence of Bambora for a couple of weeks in order to really understand the business and for them to find conviction to pay a good price for Bambora. NC required that Ingenico fully valued Bambora's strategic plan until end of 2018, not the current state of the company. This meant that they had to get comfort with the projections of sales processes, financials, commercial and technical road maps.

As Bambora had a clear plan for the next two years and were confident in that as long as they continued with their ongoing work they would succeed with their plan, NC felt comfortable the firm would be worth more in the future. They were on the right track already and had proven to outperform their plan so far.

After Ingenico's due diligence and having access to parts of Bambora for a few weeks, Ingenico and NC decided to meet once again. At that meeting, Ingenico came with an offer which NC thought was worth considering. In order to keep the discussions silent and to save time, NC choose not to involve any investment banks. Instead, since end of March 2017 / beginning of April 2017, the NC team and the CFO of Bambora, Ulric Delamare, worked day and night to prepare the financials of Bambora. A massive effort from the management team of Bambora and NC was undertaken to prepare the company for exit discussions and presenting the company and strategy in a suitable way. Extraordinary focus was put on the People & Performance side of Bambora for the Ingenico team.

[30] See Exhibit 15 for Bambora's development plans until 2019.

### 5.5.3 Ingenico

Ingenico, founded in 1980 and based in France, was a world leading payment company, specialized in seamless payments with smart, secure and trusted solutions online, offline and mobile (Carlander 2017). Its customer base consisted of retailers and financial institutions, from small merchants to some of the major global brands. In 2017, Ingenico had the largest payment acceptance network in the world, offering local, national and international payment solutions (Ljung, 2017).

Since 1985, Ingenico had been listed on the Paris stock exchange (since 2000 known as Euronext Paris), and its stock price amounted to around EUR 10 per share in late-1999. At the dot com bubble, the share price peaked to over EUR 80 per share (February 2000), and decreased to around EUR 10 per share in late-2002. From then on, Ingenico experienced a steady growth in share price (except during 2008-2010). In early-2013, its stock price was around EUR 45 per share, and steadily increased during the years and peaked in mid-August 2015 around EUR 125-130 per share. By end of 2016, its stock price was EUR 76 per share, and just above EUR 80 per share in June 2017.

The culture was different from a usual culture in a Nordic country. It was more similar to a bureaucratic, traditional French culture originally.

An acquisition of Bambora would make Ingenico compete with its customers, which would lead to a strategy relocation of Ingenico. Ingenico was since 1987 present in Australia and by 2017 it owned many of its Australian competitors. Ingenico was an acquisitive company; it had made acquisitions in the UK, Germany, the US, Turkey, China, Russia, Indonesia, and companies with global reach (Ingenico 2019). In 2012, Ingenico started a partnership with Paypal.

### 5.5.4 Decision making

In spring 2017, market rumors were indicating that actors such as Nets and Paypal had put some pressure in the what was a secret off-market deal. Bambora received interest and inquiries from other actors as well, however, they did not entertain such dialogs.

NC faced a crucial decision. By not using an investment bank, NC lost a bit of the normal approach of inviting several actors to a formal auction, which possibly could push up the price. For instance, there were other large international strategic buyers such as Nets, Paypal, Worldpay or Wirecard, that they could approach.

The dialog between NC/Bambora and Ingenico came up unsolicited and originated from the good operational partnership between the two companies. That reduced the need for an investment bank to be involved on the sellers' side. Leakage risk was also a high priority area for NC in the process and they wanted to keep the number of advisors to a minimum. It was rather early in NC's investment horizon and NC had a detailed plan for the next two years that had not yet been executed. That is difficult to value since it is somewhat unproven and the upside need to be weighed against e.g. market/sector valuations going down in the future. The risk that Ingenico would retreat or not deliver as expected in the sales process could potentially hurt NC and Bambora in terms of strategic information leakage and unnecessary time spent.

Initially, the French corporate culture was expected to be very different from the culture build in the Swedish Bambora, possibly making the integration of the two firms difficult. However, the culture at

Bambora and the strong People & Performance focus and processes was one of the key reasons for Ingenico strong interest in acquiring Bambora. They wanted to be influenced by the culture in Bambora, roll these values and processes out in their own organization. They seemed to have a plan for how to integrate the firms. Through their partnership with Bambora and their intensive due diligence period, Ingenico seemed to understand the nature of Bambora, and they had been easy to work with. Also, Ingenico and Bambora were a good match in terms of geography, strategy, operations and size.

The NC team now wondered if mid-2017 was a good time to exit Bambora or if they should wait another three years? Was it right not using an investment bank? Was EUR 1.5 billion a good price?

## 5.6 Epilogue

In this section we describe what happened in NC after the exit of Bambora. We also shortly describe the dynamics in the payments industry at this time.

### 5.6.1 Bambora after 2017

NC and the advisory deal team were satisfied with and accepted Ingenico's offer of EUR 1.5 billion. The acquisition was published in July 20, 2017. This was followed by a very positive market response, visible in the share price uplift on the day in Ingenico.

One and a half year later, Bambora has delivered on all promised parts according to Johan Tjärnberg who is still working at Bambora. He has in fact gone from being the CEO of Bambora, to be the leader of the SMB segment at Ingenico, to being the leader of one of the two business segments at Ingenico namely the large and strategically important Retail business. Apparently, it is almost as a reverse acquisition, since a large part of Ingenico is supposed to be integrated into the culture and the DNA of Bambora. Johan Tjärnberg comments on how special this is:

*"One can think that, as Ingenico is a French company with the ambition to integrate themselves into a Swedish firms' culture, the situation is very unique. It is special as there are not that many French firms that has done this. And if you think of the French bureaucracy, you do as you always have done." Johan Tjärnberg, 2019-04-08*

Today in 2019, over 125,000 merchants in 65 different countries use Bambora as their payment solution. The yearly transaction value that Bambora manages is EUR 55 billion and the number of new customers per month is 3,000. Bambora is still a game changer within the payment industry, and seeks to continue to grow (Bambora, 2019).

### 5.6.3 Using knowledge acquired from the Bambora investment: NC technology and payments investments after exit

NC's investments in the Technology and Payment sector have been influenced by learnings from the Bambora investment. For example, NC added P&P to its Playbook where NC follows up on employee KPIs and the subject is now formally part of the board agenda. P&P focuses on performance management driving a performance culture, engagement and driving culture through top-management engagement. This best-practice model has later been implemented in other NC investments in Technology & Payments companies. It has become part of the standard procedure and learnings and network in the area is to a large extent based on what was learnt in Bambora, but is improved and built out with experiences in other portfolio companies. In March 2015, NC acquired Vizrt which offers real time digital solutions, analysis and automatization tools for media and entertainment industry. The responsible advisor is Fredrik Näslund, who also, together with Rickard Torell, is a member of the board (Nordic Capital, 2019h). Cint was acquired in February 2016 and is world leader in the insights data collection technology market. Daniel Berglund is the responsible advisor and a board member and Rickard Torell is also a board member (Nordic Capital, 2019a). Also, Antonia Brandberg Björk is a member of the board of Cint, contributing with P&P questions. Rickard Torell explains:

*"In many of the companies we work with or evaluate to invest in, at least the ones I'm involved in such as Cint and Vizrt, there was not even a proper HR function when NC bought them. Vizrt had over 500 employees but still only an administrative function for employment contracts. That is typical and really strange since companies like this key asset is the competence of their employees. Employees that are often highly educated, expensive and sought after. Now both Cint and Vizrt stepped up significantly in the P&P / HR areas and invested a lot in both resources and processes. Much more focus on this topic across NC's investments today as we have realized it's worth so much and critical to enable rapid expansion. The HR processes are more concrete [now]." Rickard Torell, 2019-03-29*

Another example of learnings from Bambora into NC and further into other portfolio companies is product management. This is one of the other key areas of NC Technology & Payments Playbook. They learnt a lot in Bambora in the area, e.g. digitalization, new product development, roadmaps, how to best structure and organize product management vs. the R&D and commercial side of the organization, etc. This enable Nordic Capital not only to re-use these learnings and network/advisors in other portfolio companies. But also in evaluating new investment opportunities: they are more equipped when knowing what good looks like to identify improvement areas and have comfort in how much better they can make a company. Rickard Torell continues:

*"Our network has become richer, but also on the consulting side. We get to know the great consultants on an individual basis rather than just relying on the large brand name consultancies. We tend to work with them over and over again. (...) It also comes from the fact that we since three years ago work more vertically, meaning that the same people work with roughly the same industry and segment. This means that we can create and preserve a lot more knowledge, not only in the subsegments but also in networks. One is only working with software and payments instead of doing healthcare sometimes and consumer investments sometimes." Rickard Torell, 2019-03-29*

Only a few months after exiting Bambora, NC started a DD process to acquire Trustly from Bridgepoint, and after high competition closed the deal in 2018. Trustly is a leading provider of direct online bank payments within and across most of the European countries, which NC had been following for three to four years. Trustly and Bambora were partners: Bambora helped Trustly's customers with card transactions, and Trustly provided Bambora's customers with direct bank payments. Furthermore, Magnus Gottås, who was responsible for Trustly during Bridgepoint's ownership, had been working in the Point team under Fredrik Näslund. Also, NC, especially Daniel Berglund, had got to know the CEO of Trustly, Oscar Berglund, during informal events.

## 5.7 Payments after 2017 and looking forward

Within the payments industry we will experience dramatically different growth levels across mature and emerging markets going forward. As international trade increases, cross-border payment flows will increase (BCG, 2019).

Payments is still one of the most important areas within the fintech world. Technological advancements and new online and non-cash solutions make it reasonable to assume that the revenue stream will increase by another USD 1 trillion through 2027 (BCG, 2018). Retail and wholesale payment institutions seem to have a bright future, as long as they adapt to and meet customer expectations (BCG, 2018).

The payment firms are in a good position to capture important data and build loyalty since the most frequent type of customer engagement is payments interactions. They can impact the shopping experience since by gathering information from customer interactions, customer understanding, customer trust, cross-selling and service can be improved. Furthermore, the traditional role of payment companies is changing significantly. They now have a more active role all through the shopping experience, by for example increased access to credit and creation of omnichannel experiences (BCG 2018).

The competition is likely to increase in the field, and disruptions are likely to continue to happen. New digital solutions will arise at the same time as card payments, although threatened, will continue to grow. RDEs will contribute with the most disruptive ideas. Consolidation within the payment industry will continue to intensify. Going forward, one needs to improve customer experience, embrace an innovative mindset and change the operational setup if needed, rethink the wholesale business model, and make sure products and services are developed as omni-channel and integrated ones (BCG, 2018).

Another possible disruptive arrival in the payments market is blockchain technology. In fields such as trade finance and cross-border transactions for private consumers, commercial customers and banks, blockchain technology seems to be promising. Therefore, is it crucial that banks and other payment players evaluate the potentials of blockchain and their ability to offer cross-border services. Moreover, blockchain technology may solve interoperability challenges associated with m-wallets. For instance, Stellar's blockchain platform is implemented in Nigeria with the aim of enabling the interoperability there (IBM). Banks need to offer a regulated and controlled ecosystem and tested cases for blockchain to gain attractiveness. Multinational corporations should highly demand this technology, given that many of them mostly have intracompany and cross-border transactions.

# 6 Analysis

An analysis of the Bambora case from a perspective of the previously mentioned literature is provided in this section.

## 6.1 Analysis from a private equity perspective

### 6.1.1 Value creation theories

NC created value in Bambora in various ways and went beyond its comfort zone and typical investment strategy by creating a company from scratch, a startup basically.

Following the work of Kaplan and Strömberg (2009), the financial engineering that NC realized besides high leverage was an implementation of a management incentive plan, where almost 10% of Bambora was owned by the management. Regarding governance engineering, NC's control of Bambora through the board was structured, both formal and informal. There were frequently held meetings and close work between NC and Bambora.

It seemed that NC's choice of CEO, Johan Tjärnberg, was a safe bet because NC had witnessed his great work in Point. Moreover, NC gave the management team of Bambora freedom, providing incentive for the management team to work hard and take responsibility. However, NC continuously followed unit economics and KPIs, within which the freedom was constrained. These KPIs, set already from the beginning when making the plan, was perhaps also essential to get a feeling of "security" to dare to invest.

However, operational improvements accounted for the largest value creation. Perhaps the most important part of the operational value creation done was the actual creation of the SuperPay and later SuperPay 2.0 plan, formed by Johan Tjärnberg and NC. To realize the existence of a market opportunity and create a completely new merchant payments solution, a one-stop shop where the merchants' needs were in focus, was a large part of the operational contribution. In fact, by simplifying the value chain dramatically, basically controlling the whole value chain from the card payment in a physical store or online, to the merchant receiving the money in its bank account, NC, through Bambora, practically changed the payments industry.

Looking from another angle of operational improvements, NC performed a massive M&A agenda with 13 acquisitions in less than three years, most of them done in only one year. There were many things happening at the same time and NC together with the Bambora team managed to not only integrate all companies (except for perhaps KeyCorp which was run separately) but at the same time build the Bambora brand: in a way creating the brand and the new firm together instead of integrating the firms in an already established brand. It was advantageous for NC to build a completely new company in the sense that there was no heritage for the add-on acquisitions to comply with. Additionally, the fact that none of the firms had an existing HR department may have made it easier to integrate the firms and build the culture and Bambora together. This, together with a strong performance culture and a concrete business plan (visible through the SuperPay 2.0 plan with the Hexagons, and the later created Playbook, as well as the P&P agenda etc.), motivated the add-on companies to build a new, modern brand together with the management team and the platform company Euroline, acting as one with the other add-ons.

Also connected to the culture, NC provided Bambora with a sense of security, and a base to build trust. NC provided status by providing space, facilities and contacts. The fact that NC was backing the investment made it easier to recruit people. The management and other employees felt as if it was somehow safe to engage in a seemingly crazy journey thanks to being backed by NC, as NC had succeeded before and had a reputation of doing reasonable and well-thought through investments. Bambora basically borrowed the reputation the brand of NC entailed, before there was a Bambora brand. The borrowing of the NC brand's reputation was visible in several ways, as an example, NC provided meeting rooms for interviews at a time when what would be Bambora did not have their own proper office. This improved the impression and the professional outlook of Bambora. Additionally, to have NC as an investor meant an advantage when negotiating prices, e.g. NC could negotiate for several companies at once. Moreover, NC's trust building contribution enabled the SEB carve out and the sale to Ingenico, as earlier discussed, which we view as a way of ensuring stakeholders the quality of Bambora.

NC succeeded to not only financially incentivize the management team, but made Bambora a self-fulfilling and fun working place for the management team by promoting being brave and bold. We believe that this approach allowed the existence of the startup feeling within Bambora, reaching all employees of the organization. By recruiting Johan Tjärnberg, who recruited good people such as Patrik Göthlin and Antonia Brandberg Björk, the company could facilitate a culture where only people who fit their values stayed and "high performing assholes" got to leave. Having bridge millennials in the leading team, who understood the need of the new/future customer (young leaders are essential to understand how to develop products after bridge millennials and millennials needs), NC was smart to trust young leaders. Even though NC did not execute the actual SuperPay 2.0 plan themselves, and did not invent the P&P plan themselves, their way of working with the management team of Bambora facilitated the Bambora culture that was created.

The growth focus was clear from start. Already when NC set up the team to create the company from scratch, practically investing in a startup, they naturally had a clear growth focus. Then, by growing both organically and through M&A, they climbed from zero to over 700 employees, reached over 70 markets, and went from 200 new customers per month to over 2,500. This (natural) growth focus confirms the findings of Gompers et al. (2016) and Døskeland and Strömberg (2018). Also, in line with Døskeland and Strömberg (2018), NC ensured a professional management team of Bambora right from the start of the growth journey, since they had a growth focus and were planning for a much larger company from the start.

For some of the Bambora employees, and even NC employees, it might have seemed that NC heavily overinvested in some acquisitions and the idea of designated costs (EUR 50 million) put aside for organic growth investments was hard to understand. However, we would not view it as overinvestments since their hypothesis turned out to be right and the use of designated costs seemed to be well reasoned. We also deem it crucial to point out that it seems that NC was good at prioritizing, e.g. selling back a poor performing company that they had acquired, given the speed and dynamic environment. Hence, they did invest heavily, and upfront, but they did so thoughtfully and also reacted fast if things did not turn out as planned, to be compared to findings by (Axelson et al. 2009)

Even though Bambora's profits on paper decreased during the first 24 months, they continued to acquire complementary companies and grow their international presence. This was necessary to build the company fast enough and to time the investments right. They knew there was a market window which would not be open forever. Clearly, such a strategy would not have been possible in a non-private equity backed company, especially not a public company, where a firm has to give quarterly reports and convince a large number of investors that their strategy is right. In such a setting the firm would probably have become financially distressed and even gone bankrupt very fast.

### 6.1.2 Generalist versus sector specialist

Literature suggests that private equity is an industry where soft knowledge is needed. Furthermore, soft knowledge is transferred easier when a small group of people is working tightly together. It is clear that soft knowledge has played a big role in the Bambora case, and through the Bambora investment, NC extended its experience and knowledge within tech and payments, as well as strengthened its confidence within the field. To even be able to invest and create Bambora, experience and knowledge within the payments sector was highly essential.

That NC acquired knowledge and strengthened their confidence through their previous payments investments, was essential to build the foundation for the Bambora investment. Knowledge and understanding of the industry to develop the business plan, to execute a rapid M&A agenda, to enable an exit to a strategic buyer, to have contacts with industry people to build the Bambora team, to have confidence to dare to execute the bold business plan, to have good reputation within the field of payments to enable partnerships and to have trust from the rest of NC to get permission to invest, were all necessary puzzle pieces to be able to create Bambora.

It seems as if NC had never done the Point investment, the Bambora idea and opportunity had never been created. The previously developed plan was a disruptive business plan where a change of the product, the business model, the distribution setup and a creation of a sense of a cool company were all ingredients. This plan could first of all never have been invented without previous experience within the field, and secondly, it was too bold a plan to be done by someone without great self-confidence.

Proactive deal sourcing was another key success factor and was possible through a thorough understanding of the payments industry. NC had discussions with SEB regarding their payment activities already in 2005 and 2009. Discussions intensified in 2013 concluding in 2014 with Fund VIII's acquisition of Euroline. By mapping the payments market, NC and Bambora could identify possible add-on acquisitions which would form the building blocks of Bambora. The rapid M&A story had to happened in order to build the company within a certain window, within a certain time frame. It was important that NC and Bambora could find the add-ons fast as the M&A progress also was essential in order to build a common culture together with all the initially different firms, and avoid the normal "integration" of add-ons. A knowledge within the field was essential to find good add-ons fast enough.

Gompers et al. (2009) suggests that specialist firms are better finding good exit opportunities. The exit of Bambora was a very successful one, and this was partly possible because of previously acquired knowledge and experience within the payments sector. First of all, NC was able to map strategic buyers from an early stage because of their deep knowledge within the field. This, and the ability to create a company that would be interesting to strategic buyers, led to an early exit process initiated in the first half of 2017. In addition to this, the deep internal knowledge of the strategic landscape and the payments industry that NC possessed made it possible not to use any investment bank in the exit process.

Previous investment within payments also provided with management team members, many of them came from the NC network originating mainly from Point (Fund V). However, also cross-sectional networks were used, some of the management team members came from the NC network originating from the Healthcare investment Unilabs (Fund VI). This suggests that diversification and the possibility to draw from different networks can be good for private equity investments.

Since Bambora was a pioneer in the industry, as well as the fact that the deal in term of returns were very successful, NC strengthened their reputation and acknowledgement within tech and payments both in terms of innovativeness but also in terms of deal execution. An improvement of their reputation of being innovative goes also hand in hand with an improvement of their reputation as an actor within society as a value creating entity. And an improvement of all these aspects of their reputation is not to be underestimated. It will make it easier for NC to acquire funds, to attract entrepreneurs who would like to work with them, to find partners in different setups, and to be interesting for potential employees as entrepreneurship is something that many young and newly educated people find highly interesting and cool.

Trust is an essential aspect in private equity deals, and it stems from good reputation. Private equity firms benefit from establishing relationships with stakeholders, e.g. banks (SEB), suppliers / partners (Ingenico and SEB). NC's long and good relationship with SEB enabled the carve out of Euroline from the rest of SEB. Trusting and having confidence in that NC and Bambora's management team would take care of Euroline's customers, mainly consisting of SEB's large and small corporate customers, including Spotify and H&M, SEB was positive to the carve-out. It was of high importance for SEB that the customers ended up in good hands, and NC could be trusted with this. Thus, it is important to create knowledge and operational / sector track record within private equity. Establishing relationships and gaining trust within a certain sector seem to be very important for private equity deals.

It is also worth mentioning that when looking at a competitive advantage perspective it is clear that NC, through its deep knowledge within the payment sector, had a significant advantage compared to most other private equity firms. Among other benefits, NC could act as a mentor and a sounding board to the Bambora team since they knew a lot and had an understanding of the payment industry, and another private equity firm without a comparable payments investment history[31] might not have been able to do so.

The Bambora team had never been able to make this trip with another private equity firm. A combination of past outcomes and relationship buildings enabled a high level of trust, confidence and sector knowledge as well as a large and high-quality network, all essential to build Bambora.

### 6.1.3 Buyout versus venture capital

Perhaps the Bambora investment was similar to a venture capital investment in the sense that NC invested in an idea, which they partly had proven before via Point. However, a traditional venture capital works very differently in terms of number of investments, they invest in many different startups with the hope that a few of them become stars. A traditional venture capitalist would probably not have trusted the startup team as NC did and the traditional stage financing of venture capital firms would probably not have enabled the massive M&A plan and recruitment.

[31] To our knowledge, only Bain Capital and Advent can be said to have had a similar payments history as NC.

## 6.2 Analysis from an organizational learning and capabilities perspective

### 6.2.1 Capabilities: competitive advantage as competences and dynamic capability

Looking from the perspective of Teece et al. (1997), the *organizational processes* of NC can be divided into categories of the investment objects' geographical areas and sectors. The case we have studied has been within the Tech and Payments sector and consequently it has demonstrated the organizational processes within this sector in particular, although the overall processes of the whole organization of NC has been studied from a high level as well.

In general, considering the typical overall *coordination and integration* among the different parts of the organization, NC has a proactive investment sourcing approach and the sector teams work systematically to find good investments. Each investment has a responsible advisor, who is supported by investment professionals, and also usually someone from their in-house operational professionals team and their group of industrial advisors.

*Dynamic capabilities* occur in NC through learning from past investments, learning from the employees of the portfolio companies, by acquiring knowledge from the consultants network they work with, and through following industries over an extended period of time. What has been shown in this case study with the sequential investments in Point, Bambora, and later investments such as Trustly, Vizrt and Cint is that NC in detail has been following the development and dynamics of the payment industry and the different parts of the payment value chain over an extended period of time. This has been crucial especially in consolidating and transformative markets such as the payments industry, where timing and being the first can be the key to success, perhaps even the determinant of success or failure. To increase the probability of success one has to know the market thoroughly to be able to time investments right.

Additionally, NC seems to have a *transformational reconfiguration style* that in our view is cautious but still to some degree transformational, up to date, and progressive. An example of this is NC's shift from a generalist approach to a sector specific investment approach in 2015, in order to be able to store knowledge in people, teams and processes (best practice models being an example of the latter). This shift can also be interpreted as a new organizational activity pattern, or a new organizational logic, which stores newly made knowledge. For a private equity firm, it is easier to create, retain and transfer knowledge with a sector focus, and it seems that NC recognized the need to reconfigure its organizational process. This, the capability to change, is valuable in private equity, assuming that private equity, especially within technology and payments, is a fast-changing environment.

In terms of *positions*, NC possesses a range of different assets. Its technological assets can be defined as intellectual technological resources stored in NC's advisory teams covering various sectors, an inhouse operational experts team working both with specific sector focus and across sectors, the NC Tech & Payments Playbook, for instance. Moreover, NC has strong reputational assets in terms of good track record, high competence among NC employees, successful partnerships, price rewards, etc. One of NC's limited partners explained that they highly value strong track record within specific sectors, teams that have proven themselves, strong investment strategy and position, among other things when choosing fund allocations. Thus, because of strong reputational assets, we find NC's financial assets to be strong, both in terms of fundraising capabilities (we see that in increasing fund sizes and recurring limited partners) and bank financing capabilities.

NC's current and future *paths* determining where NC can go within the technology and payments sector, have undeniably been affected by NC's prior investment in Point, and the network and track record they built up during that time, Johan Tjärnberg being an example of an important network connection. Teece et al. (1997) mean that future actions are constrained by history, but one could argue that the future actions of NC also have been formed, influenced and made possible by past investments such as Point. That is, NC would probably never have invested in Trustly directly after its exit of Point, without having invested in Bambora in-between. This since NC continuously built upon the knowledge it gained, and since the investment in Trustly most likely required more confidence within payments investments and deep knowledge about the industry and in particular PSD2.

The one company that was sold back to the former owner in the Bambora case is an example of testing, receiving feedback and evaluation of efforts. Even though NC and Bambora did several things at the same time and not sequentially, which is very unusual for a private equity investment that is usually more sequential and stable, they seem to have prioritized good projects during the Bambora journey in a large enough scale. Perhaps a trial and error method had to be followed in order to be innovative in a successful way.

Since NC possessed the necessary technological, financial and reputational assets, NC was able to have a buy and build strategy and make 13 acquisitions in less than 3 years, instead of building a company from scratch which probably would have taken at least the double amount of time. By being one of the first in the industry to offer a full service, one-stop shop solution with efficient global go to market models, NC could profit from and taking large market shares and building an increasingly strategically and technically sought-after company. What seems to have influenced both NC's success in Point and in Bambora is the aspect of timing. Knowledge about the industry, the right contacts and the right financial assets were all needed to be able to invest at the right moment. NC clearly invested in Bambora and payments at the right time, when the tech hub in Stockholm was growing and they could ride on other companies' successful marketing effort of making payments hip and cool (e.g. Klarna, Spotify, iZettle and Stripe), and could do so thanks to its position of its assets. Also, as timing was important, and being fast and first, NC had a competitive advantage in finding the acquisitions since some of them were similar to NC's past investment (e.g. KeyCorp had similarities to Point), making NC's due diligence and acquisition processes faster.

The technological opportunities that Bambora and NC possessed were essential. For instance, NC had a head start in the acquisitions of KeyCorp and Samport, since they had similarities to Point. Thus, NC could be faster in its due diligences, investment decisions and strategy implementations relative to other private equity actors with less payment experience.

### 6.2.2 Learning: organizational learning and knowledge management framework

Using the concept of Argote et al. (2003), it can be understood that the units create knowledge when they generate new knowledge. The general partner NC, its portfolio companies and limited partners are examples of different *units* in this case. In the case of Bambora the knowledge of the importance of human capital, employee KPIs, and new ways of hiring were all generated through the Bambora investment. The units retain knowledge within the technology and payment sectors in the Playbook (e.g. NC added P&P to its Playbook), industrial networks, and within the investment advisory teams.

The *properties of the relationship* between NC and Bambora seems to have been intense and close, especially in the beginning, which can be understood as natural taking into account the nature of the investment: by acquiring 13 companies, NC and the Bambora team created a new company. Yet, since mid-2016, when Bambora became self-driven, the relationship between NC and Bambora became more traditional. The two units are different in the sense that Bambora is the operational engine and NC is the owning body that provides financial, operational and governance capabilities. Overall, the communication between these two units was quite frequent and the connection quite intense. This facilitated knowledge transfer.

The *properties of knowledge* between NC and Bambora were tacit and thus hard to transfer, like Nonaka (1991) and Szulanski (1996) write. Between the limited partners and the general partner NC, the NC advisory teams and the general partner NC (investment professionals to the general partner board), and even within the NC advisory teams (one sector to another), it was sometimes difficult to transfer knowledge. For instance, the NC investment advisory teams typically are close to the companies and acting as sector experts, and in the case of Bambora there are clear examples of when this sector expertise was hard to transfer. One of these examples were the difficulty to explain and give full comfort regarding the designated cost concept in Bambora to others who were a step further away from the investment, such as other NC investment advisory teams or the GP board. Another example was the logic of the KeyCorp acquisition to be communicated to the broader Bambora team. It diverged from the core of the SuperPay 2.0 plan and rested on other investment attractions. These difficulties of knowledge transferring may, according to Nonaka (1991) and Szulanski (1996), be explained by that the knowledge was tacit and ambiguous. However, we notice that the logic of both the designated cost concept and the acquisition of KeyCorp became clear to the parties over time.

Furthermore, NC employees were highly motivated, had the ability and the opportunity to create, retain and transfer knowledge which Argote et al. (2003) argue is essential for successful knowledge management. The environment at NC Technology & Payments team allowed the investment professionals to feel trusted and backed by the rest of NC, even though they had to convince them at times. This dynamic was a result of that Fredrik Näslund and Daniel Berglund had been working with Point which turned out to be NC's best investment, but also the friendship, work relationship, and good track record Johan Tjärnberg had with them. Working together with Johan Tjärnberg on his bold idea of disrupting the payments industry together with the history of the successful investment in Point made the NC investment professionals motivated to create and execute the SuperPay 2.0 plan and invest in the creation of Bambora. The Technology & Payments team members at NC trusted their ability to develop and go further than what they managed to do in Point. Finally, the same pattern was visible again a few years later when the same NC advisory team worked on the investment in Trustly.

NC's past experience with Point and the network and confidence within payments that was built during that time, made them able to successfully realize the SuperPay 2.0 plan. The network and relationships had a role in many of the happenings before, during and after the Bambora investment. The acquisition opportunities were created and shaped by NC's past and current network and NC's relationships with stakeholders. As an example, the SEB carve out would probably not have been possible without the past relationship of NC and SEB. The trust building was very important, since SEB would let over some of its most important clients to the buyer of Euroline. Furthermore, by tracking the payment industry and its players, and having divested Point where Ingenico was a bidder, NC was able to partly create an exit opportunity and the partnership with Ingenico enabled mutual trust which simplified the exit process.

NC's acquisition opportunities were rather limited since the SuperPay 2.0 plan specifically required certain technology, product and market characteristics in the acquisitions to be done. For instance, there were only Samport and Payzone on the offline PSP market that NC could acquire at the time, and they had to set up a greenfield in Norway and Finland to build distribution.

From the perspective of Bambora, the cultural power and sense of common knowledge in that unit encouraged the Bambora employees to participate in the knowledge creation process in terms of working long days and being creative, even though not all had the financial incentives to do so. Hence, we believe that culture is a strong and important factor of transforming personal knowledge into common knowledge. We also believe that the performance culture at Bambora and the fact that everyone was individually incentivized to create and use internal knowledge through best practice models, KPIs, etc., helped to transfer the internal knowledge between units (e.g. Bambora to NC), which is in line with Menon and Pfeffer (2003).

In the context of Bambora, there are several factors positively influencing the knowledge creation and transfer. Different boundaries can be said to have been drawn at different places at the same time. First of all, everyone at NC and Bambora were in the same team in terms of creating and supporting the vision of Bambora, which made it easier for knowledge to transfer and improve both organizations. According to Darr et al. (1995) and Kane et al. (2002) units of the same organization is more likely to transfer and improve performance of the organization than knowledge coming from external units. Secondly, at the same time there was a boundary drawn between the project team at NC and the management team of Bambora, which made it easier to listen to and value knowledge coming from the other side. At least if Menon and Pfeffer (2003) are to be trusted, who state that organizational members are likely to value knowledge from external sources more than knowledge from internal sources. This meant that in essence they were valuing internal knowledge more, when looking at NC and the Bambora management as one team, which helped them to not miss out on organizational improvement opportunities.

A transactive memory system, a consensus of who knows what, seems to enable knowledge retention and transfer. The management team of Bambora could talk to NC about their challenges, and NC would know who to talk to as they knew who knew what within their network and within NC.

Tacit knowledge, such as knowledge about how to negotiate and deal tactics which are difficult to articulate, are hard to transfer (Nonaka, 1991). The best way to transfer such knowledge is through observation. The NC team is experienced in how to negotiate company valuations and what tactics to use in different deal situations. Within the NC team, this knowledge and experience is transferred as the team members work with each other and actively experience multiple deal processes over time.

It has been shown that organizations sharing a common owner are more likely to transfer knowledge between each other (Darr et al., 1995; Bauman and Ingram, 1992) and a very clear example of such a knowledge transfer that is very unlikely to have happened without NC is the transfer of the P&P work tools from Bambora to other NC investments.

People & Performance was developed by Antonia Brandberg Björk, very much because of a close collaboration with Johan Tjärnberg. Because of their frequent, intense and open contact they could realize that the traditional HR term and its way of working would not fit the organization they wanted to create. In order to succeed and realize their vision, they needed to create a new way of working with HR related questions. The result was the creation of new knowledge about how one can work with People and Performance and how a systematic approach to align employees with performance can benefit the organization in a much more profound way than many thought before.

The knowledge about this way of working with employees was retained in the Payments Playbook at NC and is increasingly shared with other sector teams at NC via e.g. the inhouse Operations team. Antonia Brandberg Björk created large parts of what today has been developed into the People & Performance part of the Playbook on the NC side. Clearly this area became much more of interest for Fredrik Näslund and the NC team during the Bambora investment and Fredrik started to focus more on these questions in other situations. The relationship between Fredrik and Antonia was regular, frequent and direct, and they met to talk about P&P on several occasions. This enabled the knowledge retention through the addition of P&P to the playbook, but also a knowledge transfer from the management team of Bambora, Antonia in particular, to NC and Fredrik Näslund in particular. This has also facilitated the knowledge transfer to other portfolio companies of NC, both the current and future ones.

The main units involved in the knowledge creation, retention and transfer of P&P were the individuals Antonia Brandberg Björk, Johan Tjärnberg and Fredrik Näslund, the organization of Bambora or more specifically mainly the management team of Bambora, as well as the organization of NC and in particular the payments team at NC. The properties of these units and the relationships between the units that were crucial in these processes were the close, open and intense relationship of Johan, Antonia and Fredrik, as well as the curious mindset of Fredrik, wanting to know more about P&P, and also the dynamics within the management team where everyone pushed each other and supported each other to perform at their best.

Johan Tjärnberg facilitated knowledge learning by inviting NC to work close with them, he wanted them to be as much as possible at their side. This was very important, as it led to frequent contacts, and what seems to be an openness to learn from each other. Knowledge retention and knowledge transfer could be made thanks to this environment. The relationship between the management team and the NC team was also very intense, they all felt that a lot was at stake and all of them wanted to succeed. This intensity further eased the knowledge transfer and retention.

Furthermore, Johan Tjärnberg and Fredrik Näslund lived close to each other, and could easily have frequent and informal contact, both during Point, after Point and during the Bambora journey. Thanks to this relationship, to the sharing of knowledge between Johan Tjärnberg and Fredrik Näslund, the idea of SuperPay that eventually became Bambora could be created. Perhaps the social similarity between Johan and Fredrik was fairly large partly since Fredrik Näslund had been working operationally before, further easing the creation and retention of knowledge.

Because of NC's insight in different organizations, knowledge about P&P could be transferred from one organization to another. And this way of transferring knowledge is not something that only NC has the possibility to do, other private equity firms are in theory equipped with the same basic assets. Private equity firms should take advantage of this opportunity as much as they can. They are in a unique position to facilitate knowledge transfer between the firms they own. They should become experts in retaining knowledge and transferring knowledge between their companies, so they can take advantage of the fact that they get to see deep into a vast range of companies both at the same time and in a short period of time, as well as over time in different industries. They might for instance have seen how other firms in the same industry tackled a similar problem earlier and can help another portfolio company to overcome the obstacle.

This situation is rare and rather specific to the private equity market. Firms usually do not let anyone from the outside in, it is in the nature of the competitive landscape to keep all your secrets to yourself. But through the ownership of a private equity firm, a company can get valuable information about how other firms solve their problems and overcome challenges, while they at the same time open up their knowledge bank to the private owner who can then further transfer the knowledge to their portfolio companies. This is conditional on that the knowledge about knowledge creation, retention and transfer is great enough. If private equity firms can really turn into experts of organizational learning and retain and transfer knowledge between their portfolio companies, they are in a position to create a lot of value, potentially adding to the societal welfare. This might also be the only way to continue to produce high returns for their LPs as intensity in the competition among private equity firms increase.

Finally, building upon the acknowledged value creation theories of financial, governance and operational engineering (e.g. Kaplan and Strömberg, 2009), we would like to extend the model by viewing private equity firms' organizational learning and capabilities as a dynamic value creation component. One could see it as a way of operational knowledge maintenance, or even as an extension within the operational engineering in terms of new industry specific knowledge and network accessibility. Hence, how a private equity firm learns is essential, and just as they seek to be experts in financial, governance and operational engineering, private equity firms should become experts in (organizational) learning in order to develop their and their portfolio companies' capabilities.

# 7 Concluding Remarks

The case of Bambora is a case about a private equity firm not acting according to the textbook. Instead of sourcing to find a stable company, then developing an investment case for the potential investment, and then buy it and improve it, the deal team in the Bambora case first looked at a market and came up with an idea of a new disruptive kind of firm, developed an entrepreneurial investment plan including creation of a new kind of firm, found a management team to run the potential firm and then found firms to buy in order to realize the idea. Everything is done in a completely different order and way than usual. Will this way of working with private equity be more common in the future?

We find particular examples of when organizational knowledge and capabilities are the foundation for operational value creation. We conclude that one should view private equity firms' organizational learning and capabilities as a dynamic value creation component. One could see it as a way of operational knowledge maintenance, or even as an extension within the operational engineering in terms of new industry specific knowledge and network accessibility. Hence, *how* a private equity firm learns is essential, and just as they seek to be experts in financial, governance and operational engineering, private equity firms should become experts in (organizational) learning in order to develop their capabilities. This might be the only way to continue to produce high returns for their limited partners as intensity in the competition among private equity firms increase.

Our thesis may suggest future research to investigate whether our findings are also applicable to situations where the investment has not been successful, and how it differs from firm to firm and across different sectors, in order to shed further light on how private equity firms learn and transfer knowledge. How common it is to invest in such an entrepreneurial way, and the trend going forward, is another field to study.

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# Exhibits

**Exhibit 1.** Payment-specific abbreviations

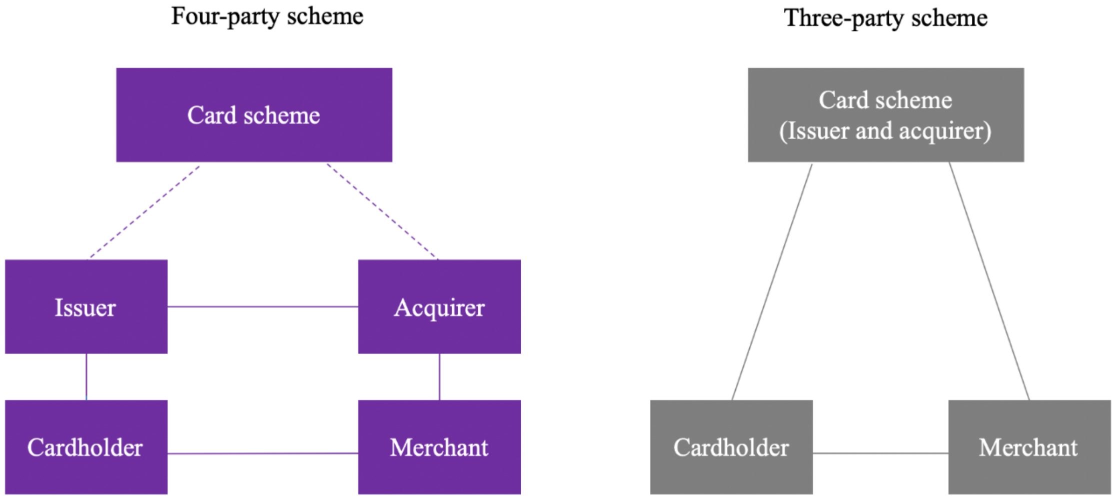
| Abbreviations | |
|---|---|
| EBA | European Banking Authority |
| ECB | European Central Bank |
| EPOS | Electronic point of sales system |
| ISV | Integrated software vendor |
| MIFs | Monetary Financial Institutions - Central banks as defined by ECB |
| PaaS | Payments as a service |
| POP | Point of purchase |
| POS | Point of sale - the time and place where a transaction is completed |
| PSP | Payment Service Provider |
| SaaS | Software as a service |
| SEPA | Single Euro Payments Area |
| SMB or SME | Small and medium sized businesses / enterprises |

**Exhibit 2.** Overview of major payments players and other large players

| Payment players | | | | | | | |
|---|---|---|---|---|---|---|---|
| E-commerce, three-party system for payments | Overlay services. Payment is drawn directly from bank account, customer must click icon at payment and state account number etc. | Invoicing services, e-commerce payment solutions | Wallet solutions. One creates an account where card information is stored, and can be used on e-commerce website | Combined e-commerce, m-wallet, physical | Lightweight mPOS terminals linked to mobile devices | Cross-border credit transfers, resembles ordinary bank transfer | Virtual currencies, offer conversion from virtual currencies such as bitcoin to national currency |
| **Paypal** | **Sofort**<br>**Trustly** | **Klarna** | **Amazon Payments** | **Adyen**<br>**Ingenico**<br>**Lyra Network** | **iZettle**<br>**Payleven**<br>**Sumup** | **Transferwise**<br>**WorldRemit**<br>**TransferGo** | **Coinify**<br>**BitPay**<br>**CoinSimple** |

| Other large players | | |
|---|---|---|
| Own payment solution | Online platform with own payment solution | Large, global technology firms, where you can linksa payment card to mobile wallet |
| **Starbucks** | **'acebook Payment In**<br>**Alipay**<br>**Uber**<br>**AirBnB** | **Apple**<br>**Google**<br>**Samsung** |

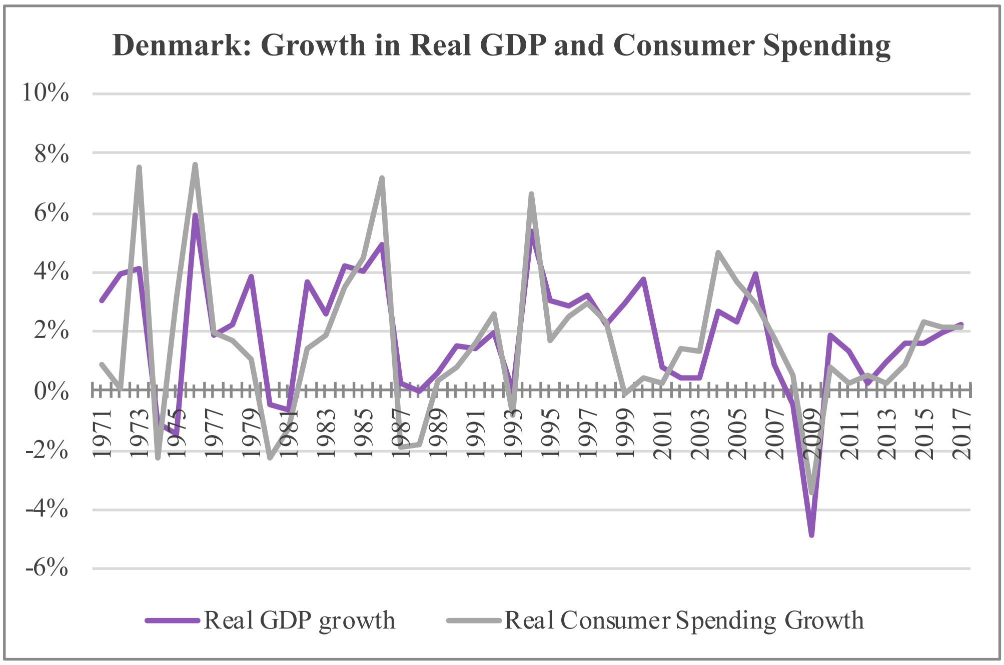
**Exhibit 3.** Examples of payments business models

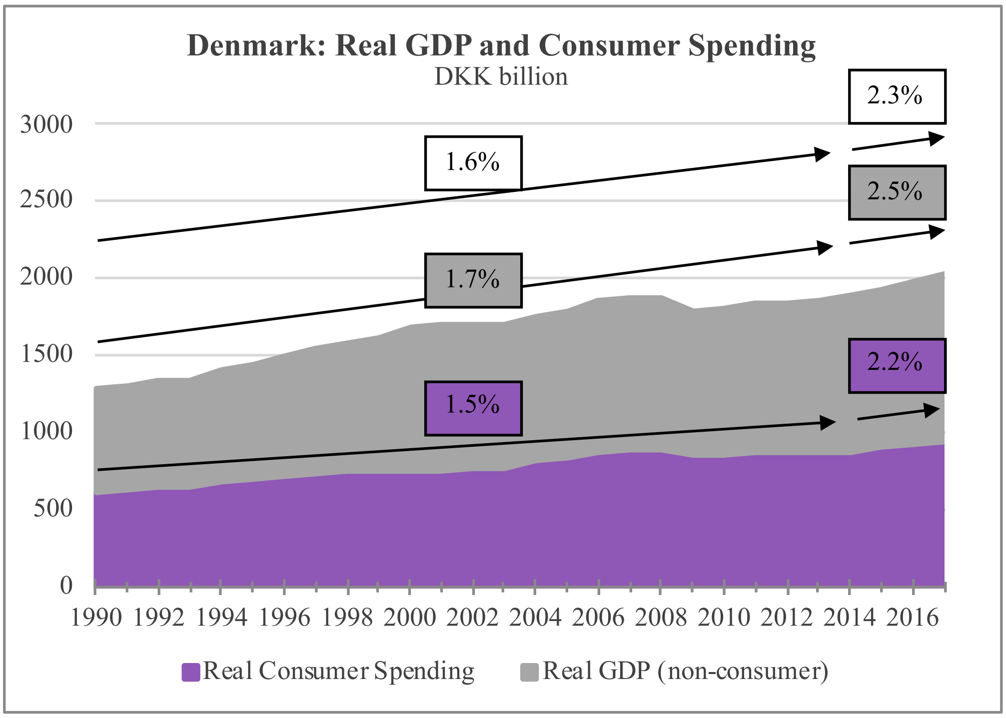



Source: ECB

**Exhibit 4.** Real GDP and Consumer spending in the Nordics

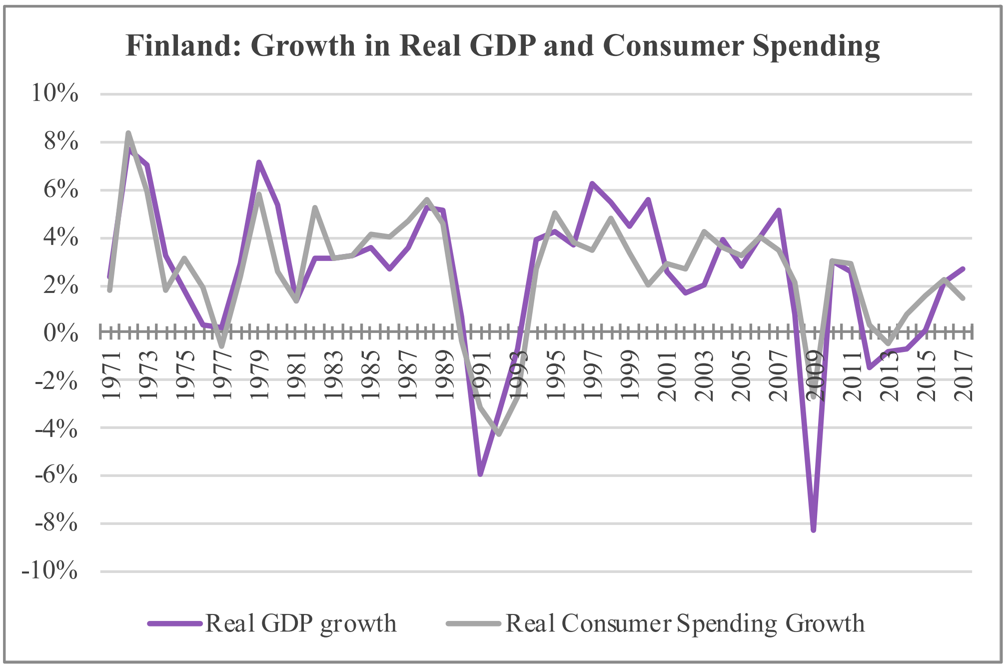
**Exhibit 4a.** Denmark

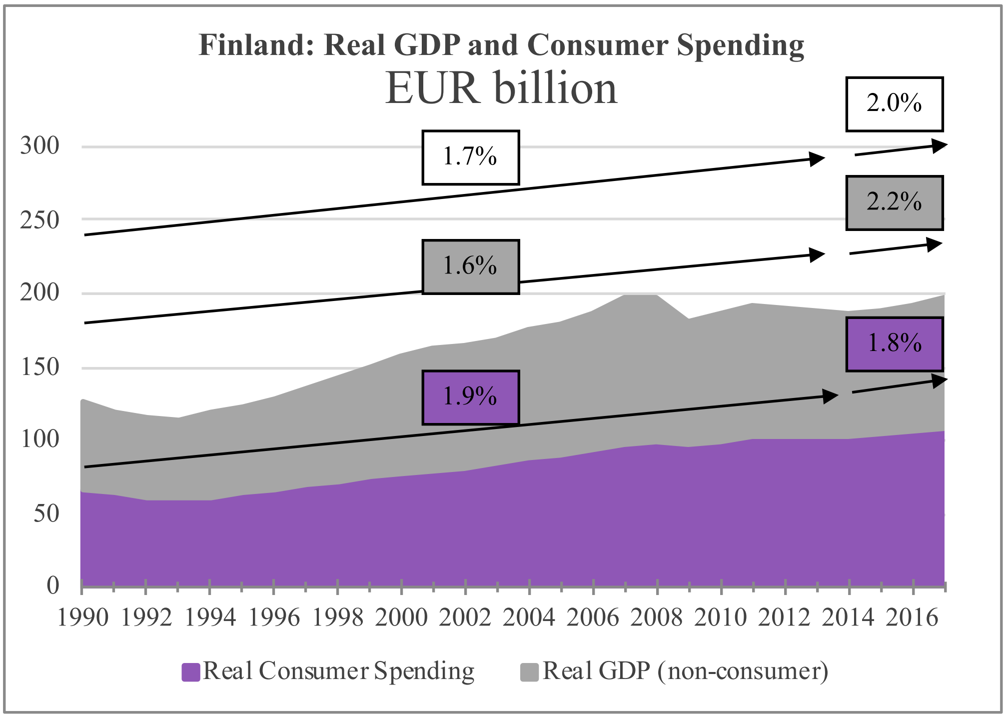



*Source: OECD*

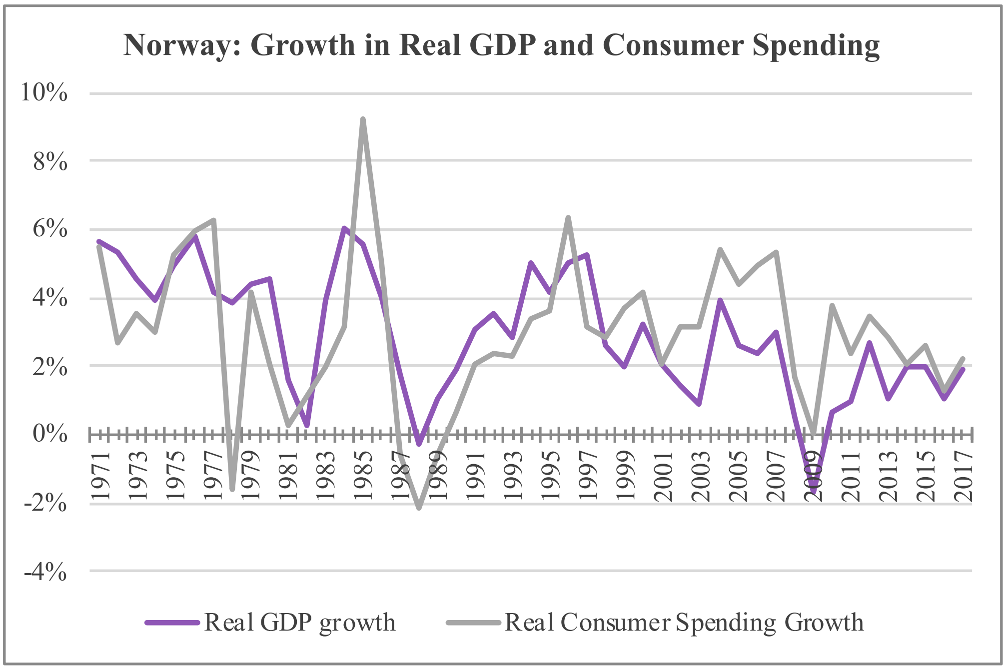
**Exhibit 4b.** Finland

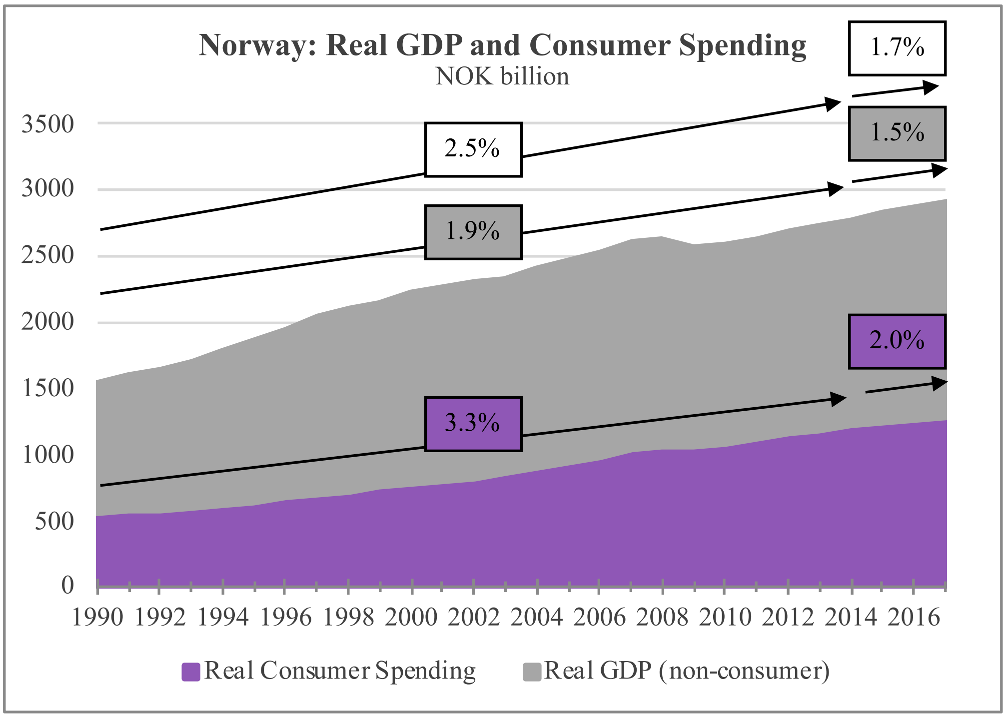



*Source: OECD*

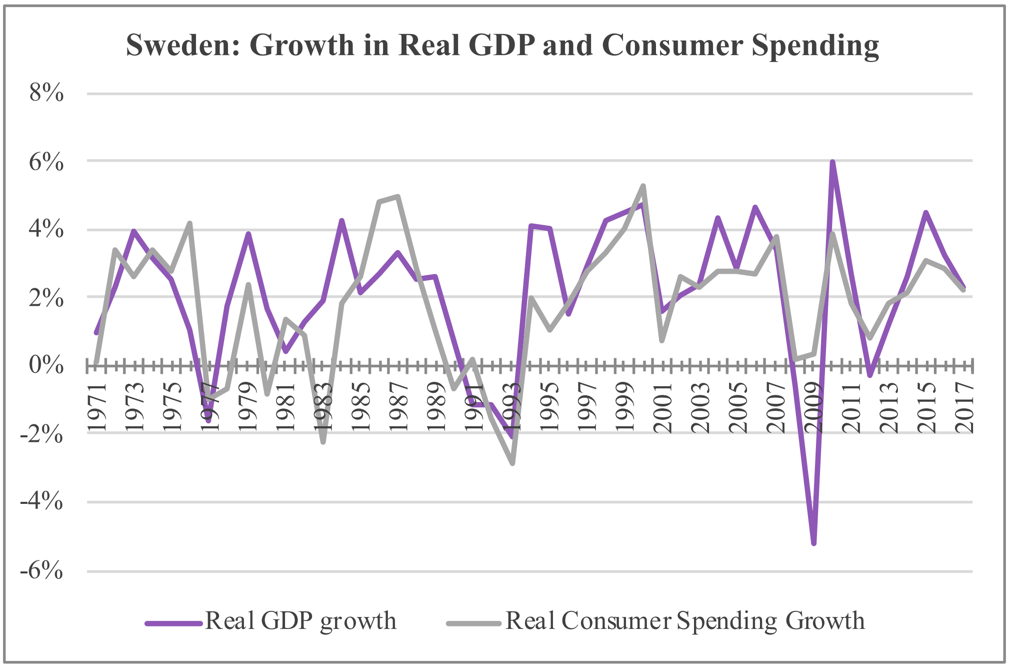
**Exhibit 4c.** Norway

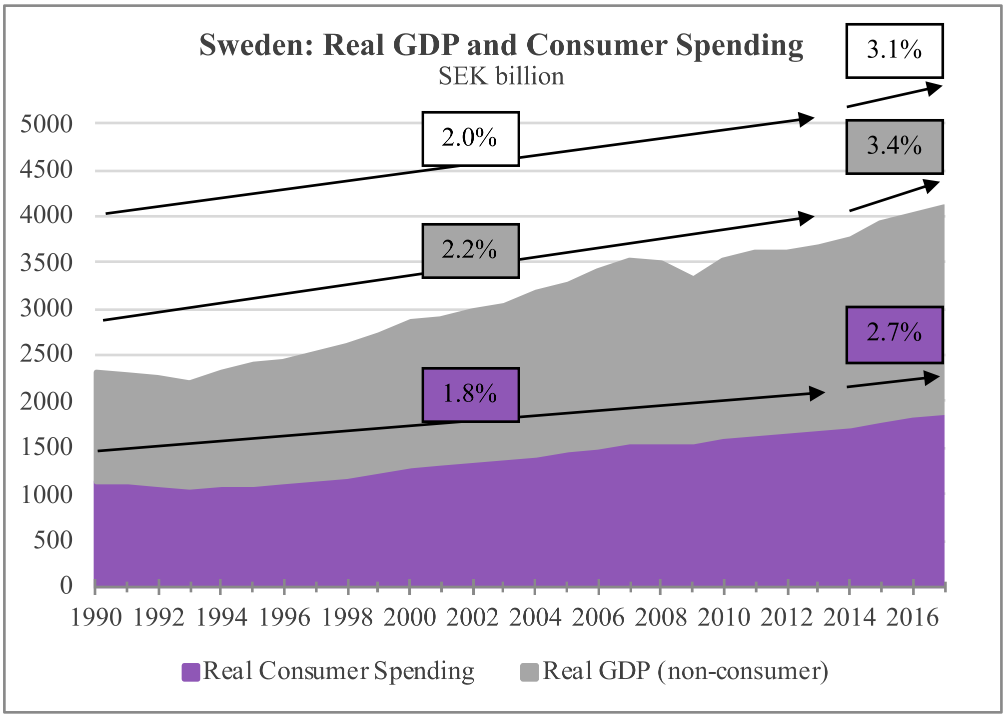



*Source: OECD*

**Exhibit 4d.** Sweden




*Source: OECD*

**Exhibit 5.** Use of internet

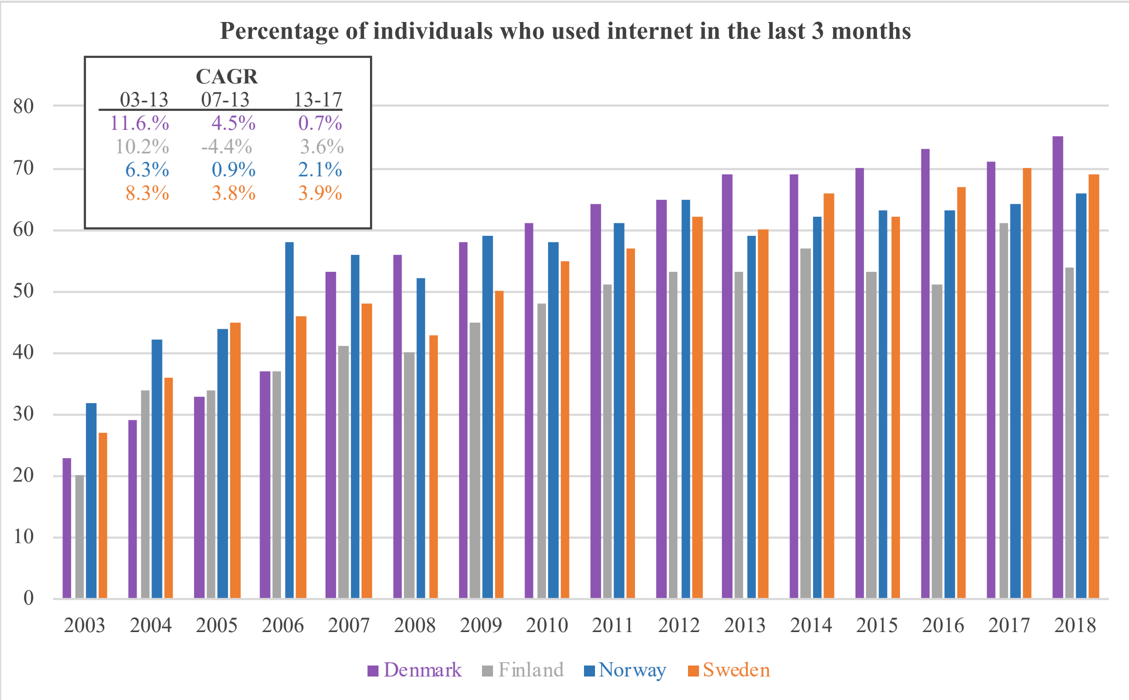



**Exhibit 6.** Number of cards per capita per Nordic country and EU

**Nr of cards per capita**

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | CAGR 08-13 | CAGR 13-17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Denmark** | 1,0 | 1,1 | 1,3 | 1,4 | 1,5 | 1,5 | 1,5 | 1,6 | 1,7 | 1,5 | 1,6 | 6,0% | 0,9% |
| *Growth* | | *13%* | *20%* | *7%* | *1%* | *2%* | *2%* | *5%* | *9%* | *-11%* | *1%* | | |
| **Finland** | | 1,3 | 1,4 | 1,4 | 1,5 | 1,5 | 1,4 | 1,6 | 1,7 | 1,8 | 1,8 | 1,3% | 5,8% |
| *Growth* | | | *1%* | *3%* | *5%* | *0%* | *-1%* | *14%* | *6%* | *2%* | *1%* | | |
| **Norway** | 2,1 | 2,2 | 2,4 | 2,5 | 2,5 | 2,5 | 2,5 | 2,6 | 2,8 | 2,9 | 3,0 | 2,3% | 5,4% |
| *Growth* | | *6%* | *8%* | *4%* | *0%* | *1%* | *-1%* | *7%* | *7%* | *2%* | *6%* | | |
| **Sweden** | | 2,3 | 2,3 | 2,3 | 2,3 | 2,3 | 2,3 | 2,3 | 2,5 | 2,1 | 2,1 | 0,3% | -2,4% |
| *Growth* | | | *3%* | *-2%* | *2%* | *1%* | *-1%* | *0%* | *12%* | *-16%* | *-3%* | | |
| **EU** | 1,5 | 1,6 | 1,6 | 1,6 | 1,6 | 1,6 | 1,6 | 1,7 | 1,7 | 1,7 | 1,7 | 0,7% | 1,5% |
| *Growth* | | *3%* | *0%* | *0%* | *0%* | *1%* | *3%* | *3%* | *1%* | *1%* | *2%* | | |

*Source: ECB*

## **Exhibit 7.** Number and value of transactions per Nordic country and EU

### **Exhibit 7a**. Denmark

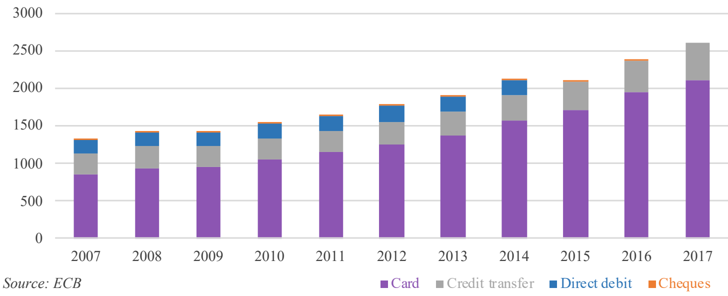
**Denmark**

Value and nr of transactions

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Card | | | | | | | | | | | |
| *% of total transaction value* | *20,2%* | *21,5%* | *21,4%* | *22,9%* | *23,7%* | *25,1%* | *25,6%* | *25,6%* | *43,6%* | *47,9%* | *49,3%* |
| *% of total nr of transactions* | *64,0%* | *65,4%* | *62,5%* | *64,2%* | *65,6%* | *70,8%* | *71,8%* | *73,8%* | *81,4%* | *81,7%* | *81,1%* |
| Credit transfer | | | | | | | | | | | |
| *% of total transaction value* | *27,6%* | *28,7%* | *28,4%* | *28,7%* | *29,4%* | *26,3%* | *30,3%* | *33,4%* | *55,2%* | *51,4%* | *50,7%* |
| *% of total nr of transactions* | *20,8%* | *20,1%* | *18,9%* | *17,8%* | *16,9%* | *17,0%* | *16,7%* | *16,3%* | *18,6%* | *18,3%* | *18,9%* |
| Direct debit | | | | | | | | | | | |
| *% of total transaction value* | *34,2%* | *36,8%* | *39,0%* | *38,5%* | *39,6%* | *40,6%* | *41,8%* | *39,6%* | | | |
| *% of total nr of transactions* | *13,9%* | *13,5%* | *11,7%* | *11,5%* | *11,1%* | *12,0%* | *11,4%* | *9,8%* | | | |
| Cheques | | | | | | | | | | | |
| *% of total transaction value* | *18,0%* | *13,0%* | *11,2%* | *10,0%* | *7,3%* | *8,0%* | *2,3%* | *1,4%* | *1,2%* | *0,7%* | *0,0%* |
| *% of total nr of transactions* | *1,2%* | *1,0%* | *0,6%* | *0,4%* | *0,3%* | *0,2%* | *0,2%* | *0,1%* | *0,1%* | *0,0%* | *0,0%* |
| **Total transaction value (billion DKK)** | **1,659** | **1,645** | **1,515** | **1,537** | **1,561** | **1,567** | **1,606** | **1,711** | **1,108** | **1,252** | **1,340** |
| **Total nr of transactions (million)** | **1,332** | **1,431** | **1,524** | **1,631** | **1,746** | **1,767** | **1,900** | **2,116** | **2,097** | **2,374** | **2,603** |

*Source: ECB*

**Denmark: Nr of transactions in millions, Use of different payment instruments**



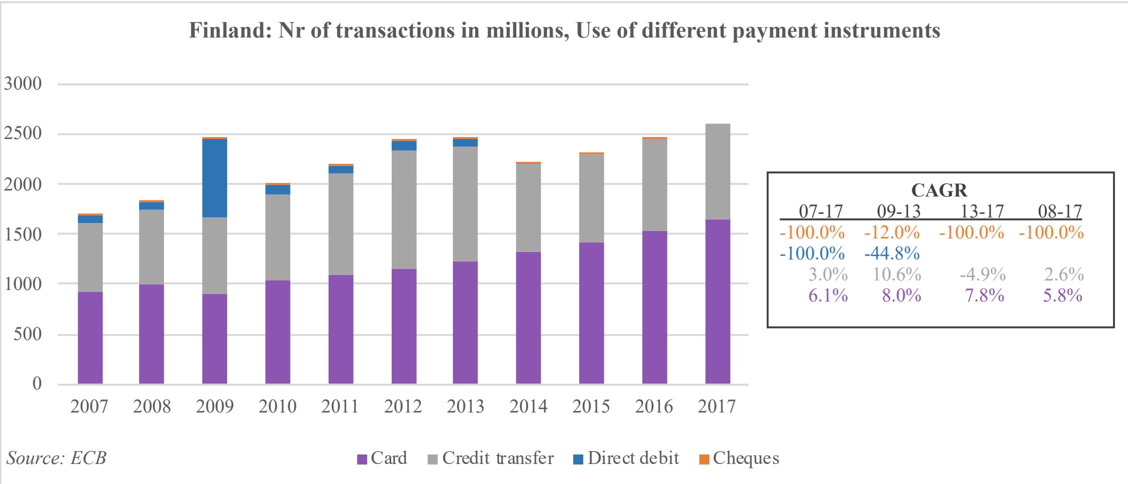

*Source: ECB*

| CAGR | | | |
|---|---|---|---|
| 07-17 | 09-13 | 13-17 | 08-17 |
| -100.0% | -25.9% | -100.0% | -100.0% |
| | 4.9% | | |
| 5.9% | 2.4% | 11.6% | 6.1% |
| 9.5% | 6.8% | 11.5% | 9.5% |

## **Exhibit 7b**. Finland

| Finland<br>Value and nr of transactions | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Card | | | | | | | | | | | |
| *% of total transaction value* | *0,8%* | *0,7%* | *0,7%* | *0,9%* | *0,8%* | *0,8%* | *1,0%* | *1,6%* | *1,6%* | *1,6%* | *1,7%* |
| *% of total nr of transactions* | *54,1%* | *54,4%* | *36,8%* | *52,4%* | *50,0%* | *47,6%* | *49,9%* | *60,5%* | *61,8%* | *62,8%* | *63,6%* |
| Credit transfer | | | | | | | | | | | |
| *% of total transaction value* | *97,4%* | *97,8%* | *97,8%* | *97,4%* | *97,8%* | *98,0%* | *97,7%* | *98,1%* | *98,4%* | *98,3%* | *98,3%* |
| *% of total nr of transactions* | *41,3%* | *41,1%* | *31,6%* | *43,4%* | *46,2%* | *49,1%* | *47,2%* | *39,4%* | *38,2%* | *37,2%* | *36,4%* |
| Direct debit | | | | | | | | | | | |
| *% of total transaction value* | *1,1%* | *1,0%* | *1,0%* | *1,2%* | *1,1%* | *1,0%* | *1,1%* | *0,1%* | *0,0%* | *0,0%* | *0,0%* |
| *% of total nr of transactions* | *4%* | *4%* | *32%* | *4%* | *4%* | *3%* | *3%* | *0%* | *0%* | *0%* | *0%* |
| Cheques | | | | | | | | | | | |
| *% of total transaction value* | *0,7%* | *0,5%* | *0,5%* | *0,4%* | *0,3%* | *0,2%* | *0,2%* | *0,2%* | *0,1%* | *0,1%* | *0,0%* |
| *% of total nr of transactions* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* |
| **Total transaction value (billion EUR)** | **4,088** | **4,688** | **4,239** | **3,736** | **4,465** | **4,589** | **4,025** | **2,652** | **2,782** | **2,780** | **2,835** |
| **Total nr of transactions (million)** | **1,696** | **1,824** | **2,446** | **1,986** | **2,183** | **2,428** | **2,452** | **2,200** | **2,298** | **2,445** | **2,597** |

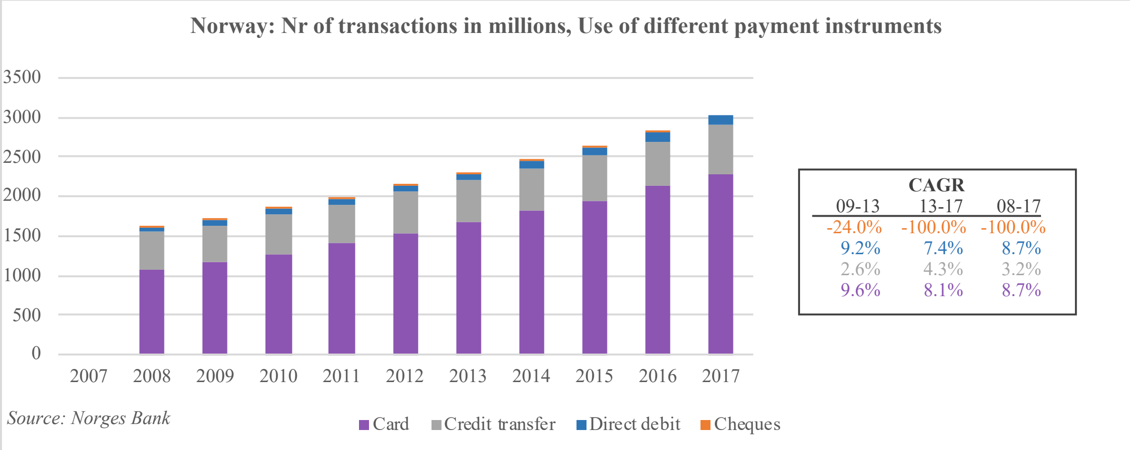
*Source: ECB*



## **Exhibit 7c**. Norway

| Norway<br>Value and nr of transactions | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Card | | | | | | | | | | | |
| *% of total transaction value* | | *3,8%* | *4,0%* | *4,0%* | *4,1%* | *4,3%* | *4,3%* | *4,3%* | *4,3%* | *4,6%* | *4,5%* |
| *% of total nr of transactions* | | *67,3%* | *68,4%* | *69,5%* | *71,0%* | *72,2%* | *73,1%* | *74,2%* | *74,8%* | *75,8%* | *75,6%* |
| Credit transfer | | | | | | | | | | | |
| *% of total transaction value* | | *94,5%* | *94,2%* | *94,2%* | *94,1%* | *93,9%* | *94,0%* | *94,1%* | *94,0%* | *93,7%* | *94,1%* |
| *% of total nr of transactions* | | *29,3%* | *28,1%* | *26,9%* | *25,3%* | *24,1%* | *23,1%* | *22,0%* | *21,3%* | *20,4%* | *20,6%* |
| Direct debit | | | | | | | | | | | |
| *% of total transaction value* | | *1,6%* | *1,6%* | *1,7%* | *1,7%* | *1,7%* | *1,7%* | *1,6%* | *1,6%* | *1,6%* | *1,4%* |
| *% of total nr of transactions* | | *3,3%* | *3,5%* | *3,6%* | *3,7%* | *3,7%* | *3,7%* | *3,8%* | *3,8%* | *3,8%* | *3,7%* |
| Cheques | | | | | | | | | | | |
| *% of total transaction value* | | *0,1%* | *0,1%* | *0,1%* | *0,1%* | *0,1%* | *0,1%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* |
| *% of total nr of transactions* | | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* |
| **Total transaction value (billion NOK)** | | **11,675** | **11,505** | **12,514** | **13,319** | **13,783** | **14,733** | **15,875** | **16,672** | **16,699** | **18,373** |
| **Total nr of transactions (million)** | | **1,598** | **1,696** | **1,833** | **1,973** | **2,135** | **2,284** | **2,449** | **2,608** | **2,800** | **3,021** |

*Source: Norges Bank*




## **Exhibit 7d**. Sweden

| Sweden<br>Value and nr of transactions | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Card | | | | | | | | | | | |
| *% of total transaction value* | *5,8%* | *6,0%* | *6,3%* | *6,1%* | *5,8%* | *5,6%* | *5,8%* | *6,0%* | *6,3%* | *6,2%* | *5,4%* |
| *% of total nr of transactions* | *62,0%* | *64,0%* | *64,7%* | *65,1%* | *63,9%* | *65,4%* | *66,5%* | *67,2%* | *67,8%* | *66,4%* | *67,0%* |
| Credit transfer | | | | | | | | | | | |
| *% of total transaction value* | *89,8%* | *89,7%* | *89,4%* | *89,8%* | *90,1%* | *90,5%* | *90,6%* | *90,5%* | *90,3%* | *90,6%* | *91,7%* |
| *% of total nr of transactions* | *28,7%* | *27,1%* | *26,5%* | *25,8%* | *26,8%* | *25,7%* | *24,8%* | *24,5%* | *25,6%* | *27,3%* | *26,3%* |
| Direct debit | | | | | | | | | | | |
| *% of total transaction value* | *3,8%* | *3,8%* | *4,0%* | *3,9%* | *3,9%* | *3,6%* | *3,5%* | *3,4%* | *3,3%* | *3,2%* | *2,9%* |
| *% of total nr of transactions* | *9,2%* | *8,9%* | *8,8%* | *9,1%* | *9,3%* | *8,9%* | *8,7%* | *8,3%* | *6,7%* | *6,3%* | *6,7%* |
| Cheques | | | | | | | | | | | |
| *% of total transaction value* | *0,5%* | *0,6%* | *0,4%* | *0,2%* | *0,2%* | *0,3%* | *0,1%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* |
| *% of total nr of transactions* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* | *0,0%* |
| **Total transaction value (billion SEK)** | **11,155** | **12,045** | **11,871** | **12,840** | **13,991** | **15,067** | **15,641** | **16,315** | **14,441** | **16,076** | **19,033** |
| **Total nr of transactions (million)** | **2,265** | **2,579** | **2,741** | **2,981** | **3,103** | **3,346** | **3,604** | **3,900** | **4,199** | **4,770** | **5,003** |

*Source: Riksbanken*

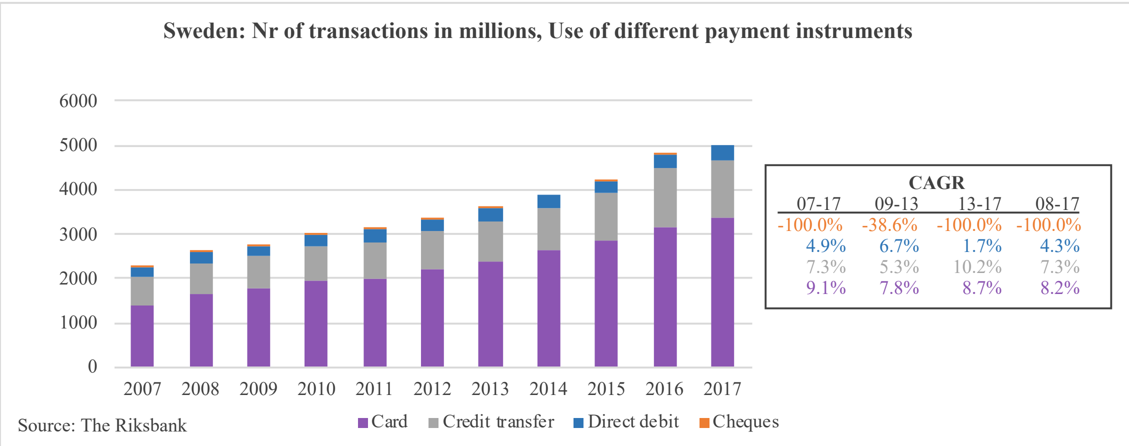


**Exhibit 7e**. EU

**EU**

Value and nr of transactions

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Card | | | | | | | | | | | |
| *% of total transaction value* | *0.5%* | *0.6%* | *0.7%* | *0.8%* | *0.8%* | *0.8%* | *0.9%* | *1.0%* | *1.1%* | *1.1%* | *1.1%* |
| *% of total nr of transactions* | *36.9%* | *38.3%* | *39.1%* | *40.1%* | *41.7%* | *43.0%* | *46.1%* | *49.4%* | *50.0%* | *51.9%* | *53.6%* |
| Credit transfer | | | | | | | | | | | |
| *% of total transaction value* | *91.7%* | *90.5%* | *89.7%* | *89.4%* | *89.3%* | *90.1%* | *90.4%* | *94.4%* | *95.6%* | *95.8%* | *95.8%* |
| *% of total nr of transactions* | *28.4%* | *28.0%* | *27.9%* | *28.1%* | *28.0%* | *27.7%* | *26.9%* | *25.9%* | *25.9%* | *25.4%* | *24.9%* |
| Direct debit | | | | | | | | | | | |
| *% of total transaction value* | *4.8%* | *5.8%* | *6.6%* | *7.1%* | *7.6%* | *7.2%* | *7.1%* | *3.2%* | *3.3%* | *3.1%* | *3.1%* |
| *% of total nr of transactions* | *26.2%* | *26.2%* | *26.2%* | *25.9%* | *25.0%* | *24.6%* | *23.2%* | *21.2%* | *21.1%* | *20.2%* | *19.5%* |
| Cheques | | | | | | | | | | | |
| *% of total transaction value* | *3.0%* | *3.1%* | *2.9%* | *2.7%* | *2.3%* | *1.9%* | *1.6%* | *1.4%* | *0.0%* | *0.0%* | *0.0%* |
| *% of total nr of transactions* | *8.5%* | *7.6%* | *6.7%* | *5.9%* | *5.2%* | *4.6%* | *3.9%* | *3.5%* | *3.0%* | *2.5%* | *2.1%* |
| **Total transaction value (billion EUR)** | **307,753** | **260,715** | **219,910** | **226,548** | **241,376** | **256,933** | **259,843** | **251,094** | **269,230** | **274,080** | **283,828** |
| **Total nr of transactions (million)** | **74,493** | **77,480** | **80,591** | **85,132** | **88,887** | **92,421** | **100,423** | **102,914** | **111,621** | **119,893** | **129,113** |

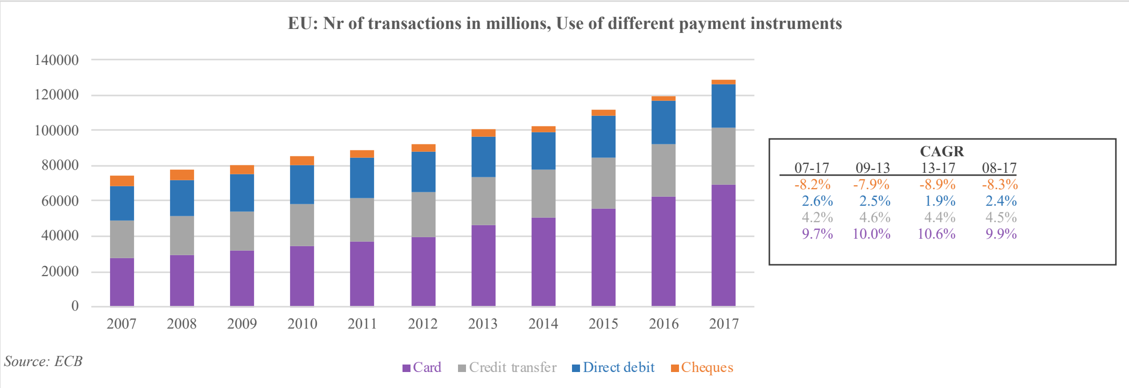
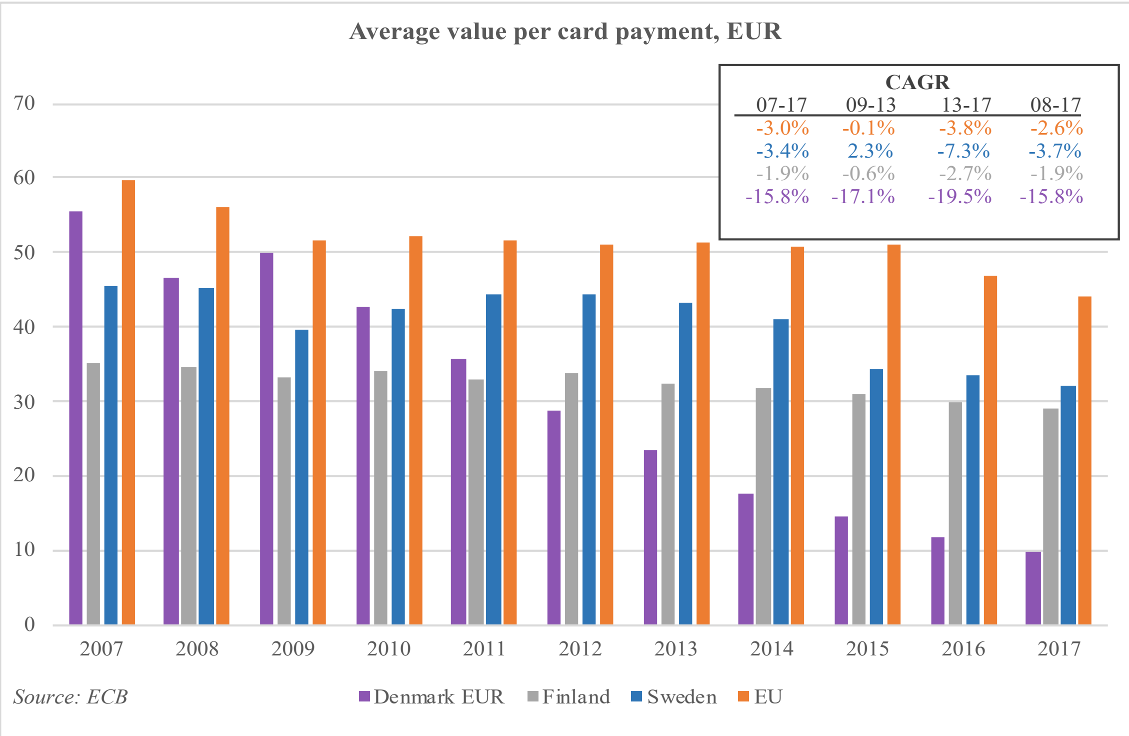



**Exhibit 8.** Average value per card payment




Growth rate is mostly negative, the average value per card payment is declining.

**Exhibit 9.** EU electronic payment instruments

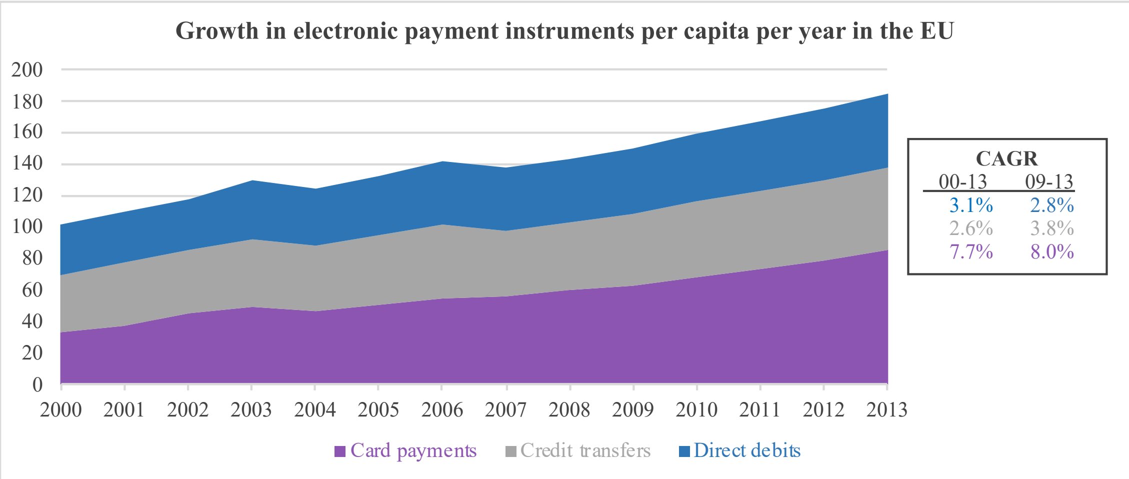



**Exhibit 10.** Overview of Nordic buyout investors

| Nordic Buyout investors | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 Q1-Q3 | Total |
|---|---|---|---|---|---|---|---|
| EQT | 4 | 6 | 6 | 5 | 2 | 4 | 27 |
| Accent Equity Partners | 4 | 4 | 4 | 4 | 4 | 1 | 21 |
| Nordic capital | 2 | 6 | 2 | 1 | 4 | 1 | 17 |
| Altor Equity Partners | 3 | 2 | 1 | 2 | 5 | 4 | 17 |
| Norvestor Equity | 1 | 3 | 4 | 5 | 2 | 2 | 17 |
| FSN Capital | 2 | 2 | 5 | 1 | 3 | 3 | 16 |
| Adelis Equity Partners | 1 | 3 | 2 | 3 | 4 | 3 | 16 |
| Axcel | 4 | | 1 | 3 | 2 | 4 | 14 |
| IK Investment Partners | 1 | 4 | 1 | 5 | | 3 | 14 |
| Erhvervsinvest Management | | 2 | 4 | 3 | 3 | 2 | 14 |
| Triton Partners | 3 | 2 | 1 | 1 | 3 | 2 | 12 |
| Segulah Advisor | 2 | 3 | 2 | 3 | | 2 | 12 |
| Maj Invest Equity | 1 | 2 | 2 | 1 | 5 | | 11 |
| Sponsor Capital | 2 | 1 | 4 | | 2 | 2 | 11 |
| Procuritas | | 2 | 1 | 2 | 2 | 4 | 11 |
| Sentica Partners | | 3 | 1 | 3 | 2 | 2 | 11 |
| Vaaka Partners | 1 | 2 | 3 | 3 | 1 | 1 | 11 |
| Polaris | 1 | 2 | 2 | 2 | | 3 | 10 |
| CapMan Group | | 7 | | 2 | 1 | | 10 |
| Intera Equity Partners | | 4 | 1 | 3 | | 2 | 10 |

*Source: Unquote*

**Exhibit 11.** Detailed overview of Nordic Capital investments

**Nordic Capital investments**

| | Fund I | Fund II | Fund III | Fund IV | Fund V | Fund VI | Fund VII | Fund VIII | Fund IX | CVI |
|---|---|---|---|---|---|---|---|---|---|---|
| **Healthcare** | >> **Meda** (Pharmaceuticals Marketer) 1991-1995 Sweden | | >> **Nycomed Pharma** (Pharmaceuticals Producer) 1999-2002 Denmark | >> **Unomedical** (Single use medical devices) 2003-2008 Denmark<br>>> **Nycomed Pharma** (Pharmaceuticals Producer) 1999-2002 Denmark<br>>> **Dynal Biotech** (Pharmaceuticals Diagnostics producer) 2001-2005 Norway<br>>> **Biovitrum** (Biotechnology Researcher) 2001-2006 Sweden | >> **Permobil** (Powered Wheelchair Manufacturer) 2006-2013 Sweden<br>>> **Nycomed** (Pharmaceuticals Producer) 2005-2011 Switzerland<br>>> **Fougera Pharmaceuticals Inc.** (Formerly Nycomed US Inc.) (Specialty Pharmaceuticals) 2006-2012 US<br>>> **Falck** (Emergency and Assistance Services) 2004-2011 Denmark<br>>> **Atos Medical** (Medical Devices) 2005-2011 Sweden | >> **Unilabs** (Laboratory and Radiology Services) 2007-2016 Switzerland<br>>> **ConvaTec** (Ostomy, Wound Care and Hospital Products) 2008 - 2018 UK<br>>> **Fougera Pharmaceuticals Inc.** (Formerly Nycomed US Inc.) (Specialty Pharmaceuticals) 2006-2012 US<br>>> **Capio** (Healthcare Services) 2006-2017 Sweden | >> **Sunrise Medical** (Complex Rehab Mobility Solutions for Disabled) 2015 & 2018 - current Germany<br>>> **ConvaTec** (Ostomy, Wound Care and Hospital Products) 2008 - 2018 UK<br>>> **Handicare** (Mobility Solutions for Disabled and Elderly) 2010- current Sweden<br>>> **Binding site** (Clinical Laboratory Diagnostics) 2011 & 2018 - current<br>>> **Acino** (Branded Generic Pharmaceuticals) 2013 & 2018 - current Switzerland | >> **Anicura** (Companion Animal Hospitals and Veterinary Clinics) 2014 - 2018 Sweden<br>>> **GHD** (Medical Homecare Products and Services) 2014 - current Germany<br>>> **Alloheim** (Care Services Provider) 2018 - current Germany | >> **Prospitalia** (Healthcare-spend Management and Clinical Solutions) 2018 - Current Germany<br>>> **OSG Ober Scharrer Gruppe** (Outpatient Ophthalmologic Treatments) 2018 - current Germany<br>>> **European Dental Group** (Dental services) 2018 - current Netherlands | >> **Sunrise Medical** (Complex Rehab Mobility Solutions for Disabled) 2015 & 2018 - current Germany<br>>> **Binding site** (Clinical Laboratory Diagnostics) 2011 & 2018 - current UK<br>>> **Acino** (Branded Generic Pharmaceuticals) 2013 & 2018 - current Switzerland |
| **Technology & Payments** | >> **Intentia** (Computer Software Manufacturer) 1990-1996 Sweden | | | >> **Guide Konsult** (IT Consulting Services) 2001-2006 Sweden | >> **Aditro** (Business Process and Software Services) 2004-2013 Sweden<br>>> **Point International** (Electronic Payment Solutions Provider) 2004-2011 Sweden | | >> **EG A/S** (IT Solutions and Consultancy Services) 2008-2013 Denmark<br>>> **Itiviti** (Financial Technology and Services) 2012 & 2018 - current Sweden | >> **Bambora** (Payment Solution and Services) 2014 - 2017 Sweden<br>>> **Vizrt** (Professional Software for Real-Time Media) 2015 - current Norway<br>>> **ERT** (eClinical Solutions for the Pharmaceutical Industry) 2016 - current US<br>>> **Cint** (Market Research Technology) 2016 - Current Sweden | >> **Trustly** (Direct bank payments) 2018 - current Sweden<br>>> **Macrobond** (Financial software) 2018 - current Sweden<br>>> **Signicat** (electronic id) 2019 - current Norway<br>>> **BOARD International** (Cloud-based support software) 2019 - current | >> **Itiviti** (Financial Technology and Services) 2012 & 2018 - current Sweden |
| **Financial services** | | | | | | | >> **Resurs Holding** (Consumer Financing) 2012 - current Sweden | >> **Nordnet** (Pan-Nordic Digital Savings Platform) 2017 - current Sweden<br>>> **Nordax** (Consumer Loans and Deposits) 2017 - current Sweden<br>>> **MFEX** (Independent Fund Distributor) 2018 - current Sweden<br>>> **Intrum** (Credit Management Service Provider) 2014 - current | | |
| **Industrial Goods & services** | | >> **BT Industries** (Forklift Truck Manufacturer) 1994-1995 Sweden<br>>> **Elmo Leather** (Leather Tanner) 1994-2004 Sweden<br>>> **Gislaved Folie** (Plastics Foils Producer) 1994-2003 Sweden<br>>> **Karlshamns** (Vegetable Oil Producer) 1994-1997 Sweden<br>>> **Optimera** (Building Materials Retailer) 1996-1998 Sweden<br>>> **Skrivab** (Office Supplies Distributor) 1993-1996 Sweden | >> **Ahlsell** ( Building Products Wholesaler) 1999-2006 Sweden<br>>> **Essex** (Electronics Manufacturer) 1998-2000 Sweden<br>>> **BE Group** (Steel Fabricator and Distributor) 1999-2006 Sweden<br>>> **Nopco Paper Technology** (Paper Chemicals Producer) 1999-2007 Norway<br>>> **Nybron Flooring** (Wooden Flooring Manufacturer) 2000-2006 Switzerland<br>>> **Reynolds** (Non-Ferrous Metals Distributor) 1999-2005 France<br>>> **Sonion** (Microphone Manufacturer) 2000-2008 Denmark<br>>> **Starkki** (Building Materials Wholesaler) 1999-2000 Sweden<br>>> **Wilson Logistics Group** (Air and Sea Freight Forwarder) 1999-2004 Sweden | >> **Ahlsell** ( Building Products Wholesaler) 1999-2006 Sweden<br>>> **BE Group** (Steel Fabricator and Distributor) 1999-2006 Sweden<br>>> **Marioff** (Fire Extinguishing System Manufacturer) 2001-2007 Finland<br>>> **Nybron Flooring** (Wooden Flooring Manufacturer) 2000-2006 Switzerland<br>>> **Reynolds** (Non-Ferrous Metals Distributor) 1999-2005 France<br>>> **Starkki** (Building Materials Wholesaler) 1999-2000 Sweden | >> **Ahlsell** (Building Products Wholesaler) 1999-2006 Sweden<br>>> **Bufab** (Fasteners and Small Parts for the General Industry) 2004- 2014 Sweden<br>>> **BE Group** (Steel Fabricator and Distributor) 1999-2006 Sweden<br>>> **Luvata** (Metal Solutions Manufacturer) 2005-2017 Finland<br>>> **Reynolds** (Non-Ferrous Metals Distributor) 1999-2005 France<br>>> **FinnvedenBulten** (Automotive Metallic Components, Systems and Solutions) 2004-2014 Sweden<br>>> **Starkki** (Building Materials Wholesaler) 1999-2000 Sweden<br>>> **Kompan** (Playground Equipment Manufacturer) 2005-2014 Denmark<br>>> **Plastal** (Automotive Plastic Components Supplier) 2005-2009 Sweden | >> **Brightpoint** (Mobile Phone Distributor) 2006-2007 Denmark<br>>> **Chromaflo Technologies** (Color Tinting Solutions) 2008-2016 Finland<br>>> **Corob** (Color Tinting Solutions) 2008-2016 Finland<br>>> **Nefab** (Packaging Solutions Provider) 2007-2014 Sweden<br>>> **Luvata** (Metal Solutions Manufacturer) 2005-2017 Finland | >> **SafeRoad** (Traffic Products & Services) 2008-2018 Norway<br>>> **Bladt** (Manufacturer of Complex Off-Shore Steel Structures) 2012 & 2018 - current Denmark<br>>> **Munters** (Air Treatment) 2010 - current Sweden | >> **Ryds bilglas** (Vehicle Glass Repair and Replacement) 2018 - current Sweden<br>>> **Unifeeder** (Commercial Feeder Services) 2013 - 2018 Denmark<br>>> **Quant** (Industrial Maintenance Services) 2014 - Current Sweden | | >> **Bladt** (Manufacturer of Complex Off-Shore Steel Structures) 2012 &2018 - current Denmark |
| **Consumer & Retail** | >> **Liber** (Book Publisher) 1990-1993 Sweden<br>>> **Anticimex** (Pest Control Services) 1992-1995 Sweden<br>>> **Candelia** (Confectionery Producer) 1993-1994 Sweden | >> **Hilding Anders** (Bedding Manufacturer) 1997-2003 Sweden<br>>> **Fritidsresor** (Tour Operator) 1995-1998 Sweden | | >> **S.A.T.S** (Fitness Chain) (2002-2006) Sweden<br>>> **Anticimex** (Pest Control Services) 2001-2006 Sweden<br>>> **C More Group** (Pay TV Provider) 2003 -2005 Sweden | >> **Cloetta** (merger with Leaf) (Confectionary Producer) 2005-2013 Sweden<br>>> **KappAhl** (Fashion Retail Chain) 2004-2006 Sweden | >> **Menigo** (Food Service Distributor) 2006-2016 Sweden<br>>> **Brink Group** (Towing Systems) 2007-2015 Netherlands<br>>> **Thule** (Leisure outdoor Industry) 2007-2016 Sweden | >> **Europris** (Mixed Discount Retail) 2012 - 2017 Norway<br>>> **Brink Group** (Towing Systems) 2007 - 2015 Netherlands<br>>> **Thule** (Leisure outdoor Industry) 2007 - 2016) Sweden<br>>> **Tokmanni** (Mixed Discount Retail) 2012 - 2017 Finland<br>>> **Sportnordic** (Sporting Goods Retail) 2012 & 2018 - current Denmark<br>>> **Ellos Group** (Online Fashion and Home retailer) 2013 & 2018 - current Sweden<br>>> **Britax** (Branded Child Safety Products Manufacturer) 2011 & 2018 - current | >> **Ole & Steen** (Premium Bakery-Led Food-Service Chain) 2017 - current Denmark<br>>> **Greenfood** (Healthy Food Supplier) 2016 - current Sweden<br>>> **Ginatricot** (Female Fashion Retailer) 2014 - current Sweden | | >> **Sportnordic** (Sporting Goods Retail) 2012 & 2018 - current Denmark<br>>> **Ellos Group** (Online Fashion and Home retailer) 2013 & 2018 - current Sweden<br>>> **Britax** (Branded Child Safety Products Manufacturer) 2011 & 2018 - current |
| **Other** | | | | | | | >> **SiC Processing** (Wafer Slurry Recycling Services) 2010-2013 Germany<br>>> **Master Marine** (Offshore Accomodation Services) 2009 & 2018 - current Norway | >> **Resman** (Well Service and Technology) 2015 - current Norway | | >> **Master Marine** (Offshore Accomodation Services) 2009 & 2018 - current Norway |

**Exhibit 12.** Biography of the main people in the case

Fredrik Näslund has been at NC since March 2001 and is also Head of Denmark and Norway. Through involvement in 16 Healthcare and Technology & Payments platform investments, he has gained knowledge from and strengthened NC's position within those sectors, especially in the Payments sector. He worked on the first NC payment sector investment, Point International (Point) (2004 - 2011). In 2013/2014, he was the driver behind and the responsible advisor of NC's investment in what was to become Bambora (2014 - 2017). Fredrik Näslund was also the responsible advisor for NC's investments into e.g. Itiviti (2012, 2018 - current), CINT (2016 - current), Trustly (2018 - current) and Signicat (2019 - current). Before working at NC, Fredrik Näslund was part of the management team at Capio.

Daniel Berglund joined NC in January 2010. He is mainly involved in investments within Technology & Payments and Healthcare IT and has been a member of the board in nine portfolio companies, Bambora being one of them. Prior to working at NC, Daniel Berglund was at Bain & CO.

Rickard Torell joined NC in June 2012. In the last five years, he has been mainly involved in the Technology & Payment sector team. He served as board member of Bambora and currently works with and is a bord member of the NC's investments Cint and Vizrt. Prior to joining NC, Rickard Torell worked at the Investment Banking Division at Morgan Stanley in London.

Johan Tjärnberg is since May 2015 the CEO of Bambora. He, together with NC, created what came to be Bambora. This opportunity partly/mainly came from his track record with NC: he had been the CEO of Point and had worked with NC during almost seven years before Bambora. Prior to working at Point, Johan Tjärnberg worked at PwC.

Antonia Brandberg Björk was one of the initiators and head of Bambora's HR and human capital team, *People and Performance*. Prior to working at Bambora, she was HR Manager at the private equity firm EQT Partners, and before that, she was HR manager at SEB, Inditex, Air France KLM and Ericsson.

Patrik Göthlin joined Bambora in January 2015 as COO and Head of Customer Experience, and in September 2017 he became Head of Global Online. He previously worked at Bain & CO, where he got to know Daniel Berglund, and before that, he was an associate at Advokatfirman Vinge.

**Exhibit 13.** Bambora case time line

**Bambora Case time line**

| | | 2011 | … | 2014 | 2015 | 2016 | 2017 | 2018 | | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| Idea, Sourcing | | Point exit | | Nets SuperPay; Euroline SuperPay 2.0 | | | | | | |
| The Bambora Story, Execution | M&A | | | Acquisition of KeyCorp, Samport and MPS | Acquisition of Epay, DK Online, IP Payments, Beanstream, Dsafe, Bank & Butik, Maksukaista/Paybyway | | Acquisition of Innocard and Devcode | | | |
| | Operational | | | KPI set; No profit | Patrik Göthlin joins; Bambora One; No profit | | >110,000 customers in 70 different markets and 300 commercial partners. Bambora yearly transaction value: EUR 55 bn. 2,500 new customers per month | | | >125,000 merchants in 65 different countries use Bambora. Bambora yearly transaction value: EUR 55 billion. 3,000 new customers per month |
| | Culture and Branding | | | Antonia Brandberg Björk joins; P&P | Introducing the brand Bambora; Over 500 employees | | | | | |
| Exit | | | | | | Ingenico as partner; Stategic allians with Ingenico | First meeting with Ingenico about potential acquisition; Signing July 2017 | | | |
| GP processes and learning | | Payment industry knowledge | | | | | P&P in Playbook; Implementing learnings from P&P in Vizrt and Cint | Acquisition of Trustly | | |

**Exhibit 14.** Overview of Bambora's investments

**Bambora Investments**

| Investment nr | Company name | Based in country | Based in city | Founded in | Acquired in |
|---|---|---|---|---|---|
| 1 | Euroline | Sweden | Stockholm | 1993 | 2014 |
| 2 | Keycorp | Australia | | 1983 | 2014 |
| 3 | Samport | Sweden | Stockholm | 2003 | 2014 |
| 4 | MPS | Sweden | Stockholm | 2003 | 2014 |
| 5 | ePay | Denmark | Aalborg | 2001 | 2015 |
| 6 | DK Online | Denmark | Odense | | 2015 |
| 7 | IP Payments | Australia | Sydney | 2004 | 2015 |
| 8 | Beanstream | Canada | Victoria | 2000 | 2015 |
| 9 | dSafe | Norway | Oslo | | 2015 |
| 10 | Bank&Butik | Sweden | Mölndal | | 2015 |
| 11 | Maksukaista | Finland | | 2013 | 2015 |
| 12 | Innocard | Switzerland | Zurich | 2008 | 2017 |
| 13 | Devcode | Sweden | Stockholm | 2014 | 2017 |

**Exhibit 15.** Bambora's development plans

**Development plan 2017-2019**

| | | | | |
|---|---|---|---|---|
| Strategic initiatives: | 1. Corporate accounts development Nordics | 2. Bambora One accelerated penetration | 3. Bring the repeatable model to maturity in SMB Nordics | 4. Expand repeatable model outside Nordics (DACH) |