Competition in Nordic Retail Banking

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Preface

At the last meeting between the Nordic competition authorities in the Faroe Islands 24-25 August, 2005, the Director-Generals decided to form a working group with the aim of compiling a report on competition in retail banking in the Nordic countries. The area is important for many reasons. No consumer can manage without access to retail banking. An efficient financial sector is a prerequisite for an efficient and globalized economy. A number of reforms are currently underway that will shape the market conditions for many years to come. In addition, competition concerns have been raised concerning the concentration in the market, the low degree of consumer mobility, and the high profitability.

A working group was set up with Sweden as chair, commissioned to analyse two specific areas of concern for competition: access to payment systems and consumer mobility in the Nordic retail banking markets.

The group met on three occasions and consisted of:

Danish Competition Authority	Carsten Smidt
	Jesper Mølbæk
Faroese Competition Authority	Heri Joensen
Finnish Competition Authority	Pirjo Aspinen
	Arttu Juuti
	Anne Rämö
Icelandic Competition Authority	Kristján Indriðason
Norwegian Competition Authority	Geir Pettersen
	Kjell-Arild Rein,
	Inger-Johanne Arildsen Rygh
	Kristján Ryste
Swedish Competition Authority	Ann-Charlotte Dorange, chair
	Karl Lundvall

This is the fifth report of its kind by the Nordic competition authorities.[1] The purpose is to stimulate debate and to contribute with a pan-Nordic perspective on how competition can be improved to the benefit of consumers.

[1] Reports from the Nordic competition authorities: Nordic Food Markets – a Taste for Competition, (2005), Telecompetition – Towards a Single Nordic Market for Telecommunication Services? (2004), A Powerful Competition Policy. Towards a More Coherent Competition Policy in the Nordic Market for Electric Power, (2003), Competitive Airlines. Towards a More Vigorous Competition Policy in Relation to the Air Travel Market, (2002).

Content

1 Introduction

Banks play a central role in the economy. Banks transfer risk, provide liquidity and facilitate transactions by linking savers and borrowers through a process of financial intermediation. The services that the banks offer also facilitate the exchange of services and goods between producers and consumers. This lowers transaction costs that individuals otherwise would face, leading to increased benefits for the society. An efficient banking industry is therefore important for the economy as a whole.

Financial services have recently become the focus of several surveys and studies both at national level and at international levels. The European Commission has undertaken sector inquiries[2] in the financial services industry and recently the European Competition Authorities (ECAs) jointly published a report about the retail banking industry in 17 countries. Many national competition authorities, NCAs, also carry out studies and reports about the financial services markets, especially focusing on payment systems and consumer mobility.

1.1 The Nordic perspective

The financial sectors of the Nordic countries have been the concern of competition authorities for years, given the importance of its role for the economies.

At the last Nordic meeting between the Nordic competition authorities in August 2005, a workshop was held concentrating on consumer mobility and entry barriers in retail banking. The purpose of the workshop was to identify possible common entry barriers in the Nordic financial markets. At the workshop it was concluded that the market structure, at least at a first glance, seems similar in that there is a high concentration in the market and few newcomers.[3] This can be an indicator of poor competition. If there is insufficient competition, this may result in substantial social losses due to high prices, a lack of innovation and inefficient capital markets.

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[2] Sector Inquiry Retail Banking, Interim Report I, Card Payments (2006), European Commission.

[3] The Norwegian retail banking market was examined in the DnB NOR merger case (2003). The Norwegian Competition Authority concluded that the relevant markets for several retail banking products, e.g. lending to SMEs and to households, are local or regional. The Norwegian Competition Authority wants to emphasize that the aggregate figures on market shares in this report does not necessarily represent any opinion on relevant market shares, as these may be defined as local or regional in specific cases.

The financial sector has certain characteristics that may indicate restrictions on competition. This increased risk relates partly to the economic characteristics of the sector, such as the generally high degree of concentration due to the existence of network effects and entry barriers. Also regulations, specifically designed for the financial sector, affect the behaviour of market players.

The Swedish Competition Authority released a report in January 2006, "Terms of Access to Payment Systems: The Different Positions of Small and Large Banks". The major concerns in the report are consumer immobility and access conditions to different payment systems. The report reveals that smaller banks have a cost disadvantage compared to their larger counterparts. However, it can not be ruled out that this cost disadvantage is reasonable, considering the economies of scale in the production and the higher volume that the larger banks contribute. Another important finding in the report is that Sweden has very few ATMs.

The customer mobility in the financial sector in the Nordic countries has been studied in "Mobiliteten i den nordiske finansielle sektor" by Nordisk Ministerråd (2005). The study shows that there is great variation in cost for the consumer as well as services provided to the consumer, both at a national level and at an international level between the Nordic countries. In addition to these differences, the financial institutions use different kinds of loyalty programs, customer packages and product packages. The interest fees also differ a great deal both nationally and among the Nordic countries. The report also shows that 4-5 percent of the customers changed bank in 2004.[4] The conclusion drawn in the report is that there is less customer mobility in the Nordic financial sector compared to other sectors.

1.2 The European perspective

It is difficult to analyse the Nordic retail banking market without taking into account the ongoing work at EU level in creating a Single Euro Payment Area (SEPA).

In the White paper of May 2002, 42 European banks and the European Credit Sector Association expressed their interest in a harmonised payment area. The European Payments Council (EPC) was formed in June 2002 with the aim to realise SEPA by 2010. The aim of SEPA is to enable payments throughout the whole euro area from one single bank account using a

[4] These figures include customers that establish a new bank relation without leaving their former bank.

single set of payment instruments. It should also do so with the same ease and security as in the national context, or at least on a par with the best performing national payment systems today. In practice this means that the different payment instruments have to become pan-European. Standardisation is another cornerstone in achieving SEPA as well as a more harmonised legal framework.[5] The European Commission has also adopted a proposal for a Directive for a New Legal Framework (NLF) for Payments in the Internal Market, COM (2005) 603.

The European Commission and the European Central Bank (ECB) regard SEPA as an integrated market for payment services which is necessary for an effective competition in order to erase distinctions between cross-border and national payments within the euro area. Both the European Commission and the ECB are co-operating in the process of encouraging the European banking industry and other relevant stakeholders to create the technical conditions that are necessary for realisation of SEPA by 2010.[6]

In the report "World Payments Report" by Cap Gemini (2005), SEPA is analysed. The report identifies several potential outcomes of SEPA. Cap Gemini predicts that the direct payments revenues of banks will decrease by 30 to 60 percent, resulting in a need by banks to lower their payments processing cost base by 50 percent or more. Banks will have to develop and encourage efficient payments behaviour by users. However, the increased competition and price transparency will benefit both businesses and consumers.

In June 2006 the ECA Financial Services Subgroup presented the report: "Competition Issues in Retail Banking and Payments Systems Markets in the EU", mainly focusing on consumer mobility, access to payment systems and SEPA. Also a section on market structures (concentration ratios, entry and exit, profit and efficiency in the market) is included. The report gives a number of recommendations on how NCAs could promote consumer mobility and access to payment systems. It also raises some recommendations on competition issues regarding SEPA, in that the NCAs need to be involved in the process.

The Irish Competition Authority published its report "Competition in the (Non-Investment) Banking Sector in Ireland" in 2005. The report focuses on personal current accounts, lending to small businesses and payment clearing systems. A finding is that banks in Ireland do not compete

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[5] Towards a Single Euro Payments Area – Third Progress report, ECB, 2004.

[6] Single Euro Payments Area: Joint Statement from the European Commission and the European Central Bank (04.05.2006).

aggressively. In order to enhance consumer mobility and competition, the authority suggests a number of actions such as making it easier for customers and small businesses to switch between banks, and an increased transparency of the payment systems.

In the "World Retail Banking Report" by Cap Gemini (2006), one conclusion is that the pricing structures in the Euro zone show signs of convergence. However, as the report points out, products and services in the retail banking market have become more diverse and complex thus making it difficult to compare alternatives. Another conclusion is that the increased focus on multi-channel distribution by Internet, phone and ATM, shifts the function of the branches.

1.3 Purpose, delimitations and outline

The overall purpose of this report is to identify common competition problems in retail banking, focusing on access to payment systems and consumer mobility.

Retail banking refers to provision of banking services to two types of customers; consumers as well as small and medium-sized enterprises (SME). These services consist of savings and lending, payment intermediation and card services.

Potential entry barriers and other restrictions on competition for financial institutions, especially related to the payment systems and/or consumer mobility are of special interest in this report. High entry barriers in an industry can reduce the number of firms competing and increase concentration. This may lead to higher prices for the consumer than if the barriers did not exist. Barriers to entry can, for instance, be governmental regulations, investment requirements, economies of scale, customer loyalties and more. Consumer mobility is of special interest if high switching costs and brand loyalty are present in the market.

The following chapter presents a picture of the market structure and concentration levels in the Nordic countries. Chapter 3 describes the different payment systems whereas payment card systems are analysed in chapter 4. Consumer mobility is explored in chapter 5. Conclusions and recommendations are outlined in chapter 6.

2 Retail banking markets

Retail banking refers to the provision of banking services to consumers as well as small and medium sized enterprises (SME). These services consist of savings and lending, payment intermediation and payment card services. All the major banks in the Nordic countries offer services which together define them as retail banks. In addition to the retail banking products, these banks also offer a broad spectrum of financial products such as fund management, insurance, international payment services and various kinds of investment advice and more. Such banks are sometimes labelled as **universal** or **full service banks.** However, this report is primarily concerned with the former category, retail banking, which is the major function that banks play for a majority of customers, including ordinary consumers and small SMEs [7].

Nordic retail banking markets have during recent years been characterised by two tendencies. One is the emergence of new small players and another is increased investments in neighbouring countries. Sometimes new banks adopt strategies of constituting a complement to the customers' regular bank, for instance by offering competitive fund management to certain customer categories. They may also offer the full range of bank services relying on the Internet as the main distribution, marketing and communication channel instead of an extensive physical branch network.[8]

Parallel to the emergence of new banks, the incumbent large banks have expanded operations in neighbouring countries. *Nordea* is one example of this, created through a series of Nordic mergers, currently active and in possession of significant market shares in all major Nordic countries except Iceland. Another example is *Danske Bank* which recently became the fifth largest player in the Swedish market. The Baltic States has seen substantial investments by Swedish banks. The banking industry in Iceland has grown

[7] SME are defined as companies with less than 250 employees except in Finland and Iceland. In Finland it is defined in 2003/361/EC (replacing the 96/280/EC: Commission Recommendation of 3 April 1996 concerning the definition of small and medium-sized enterprises). In Iceland it is defined as firms with total debt commitment under EUR 2 million. Most Faroese companies are small and the definition of SME has never been used there. The data concerning the Finnish banking markets used in this report uses "non-financial enterprises" as a proxy for SME.

[8] Inquiries made by the Norwegian Competition Authority shows that, in competition for SMEs, accessibility to the bank, local presence and a well established branch network are important features in the Norwegian retail banking market. Even though the number of branches in Norway has declined the past decade, the banks still operate with a significant number for outlets, showing the importance of a well established branch network.

rapidly and overseas operations of the three commercial banks have now almost become equal to the domestic operations.

In spite of these developments, concentration remains high in the Nordic banking markets. Also, profits appear high, even remarkably high in some instances. Given the complexity of banking products, and shortage of international comparable data, we have not been able to compare the offers available to the Nordic customer with those available in other European countries. Nevertheless, market concentration and profitability measures may tell us important facts about the status of competition in the Nordic countries. Section 2.1 contains short descriptions of the major players in the Nordic countries. Although new banks have appeared, the likelihood that these entries have made an impact on the industry sufficient to materialise in better products and lower prices for the customers is yet to be seen. New players are briefly described in section 2.2. The fact that concentration is fairly high is confirmed in section 2.3 which, together with the summary measures of profitability in section 2.4, suggest that competition should be strengthened in the Nordic retail banking markets.

2.1 Major banks in the Nordic countries

Nordic retail banks' competition strategies seem to vary somewhat across countries. Main components are service levels, product range, convenience, customer relationships, reputation, fees and interest rates. The balance between these may differ. Evidence and experience suggest that consumers consider non-price aspects, such as reputation and convenience, as important as price and fee levels. Internet banking is the most important alternative distribution channel. As Internet use in connection with the most common retail banking products has increased, the number of local branches has declined steadily in most countries. Still, branches are considered important marketing channels for many banks, especially large banks, although with redefined roles. The major banks in the Nordic countries are listed in table 2.1 below.

Table 2.1 Major retail banks in the Nordic countries 2004

Country/ Bank	Market share	Description
Denmark		
Danske Bank	54	Financial conglomerate. Is through a series of mergers an important player also in Norway and Sweden. Listed, A.P. Møller – Mærsk Group owns 20%, Realdania Fund owns 10%.
Nordea	19	Retail and corporate focus. Major player in all Nordic countries except Iceland, Faroese Islands and Greenland. Listed, Swedish Gov't (20%), Nordea-Danmark fonden (4%).
Jyske Bank	5	Extensive branch network throughout Denmark and a few international branches. International focus is rather limited. Listed, Nykredit is the largest owner (5%).
Sydbank	3	Originally based in Southern Jutland but today almost nationwide (but not outside DK). Listed, Silchester International Investors Limited and Nykredit hold > 5%.
Faroe Islands		
Føroya Banki	45	Full-service bank, publicly owned. To be privatized soon. Growing locally into other markets, e.g. the insurance market.
Føroya Sparikassi	42	Full-service bank with growing international focus. In 2004 acquired the share capital of Kaupthing Bank Danmark which became Eik Bank Danmark. Also acquired 10 % of Spron in Iceland.
Norðoya Sparikassi	10	A self-owned full service bank, originally from the northern part of the islands, recently expanded to other regions of the islands.
Suðuroyar Sparikassi	3	Privately owned full service bank, local saving bank expanding into the centre area of the islands.
Finland		
Nordea	61	See above.
OP Bank Group	21	Group of 236 independent member cooperatives, also involved in insurance. Listed.
Sampo group	11	The insurance company Sampo started banking 2001 by merging with Leonia Bank. Listed. The Finnish State owns 14%.
Savings Banks	3	Local presence, group of 40 independent local savings banks.

Table 2.1 (Continued)

Country/ Bank	Market share	Description
Iceland		
KB banki	33	Extensive branch network, retail and corporate focus. Present in ten countries, including all the Nordic countries, Switzerland, UK and US. Listed, Meiður owns 17%, Egla 10%
Landsbanki	30	Extensive branch network in Iceland and well-represented abroad. Carries a broad range of financial products and services. Listed, Samson Holding owns 45%.
Islandsbanki	27	Wide portfolio. Expansion in Nordic countries, UK and mainland Europe. Listed, Straumur Fjárfestingabanki owns 24% and Milestone 7%.
Spron	3	Savings bank with local presence.
Norway[9]		
DnB Nor	38	Local presence. Recent investments in the Nordic countries, the Baltic states, Poland and Russia. Listed. Norwegian State owns 34%, Savings Bank Foundation 11%.
Nordea	14	See above.
Sparebank 1 Alliance	13	Savings banks. 19 member banks. Strategic agreement with Föreningssparbanken.
Terra-Group	6	Local savings banks. Consists of 81 member savings banks.
Sweden		
Handelsbanken	27	Local presence, decentralised decision-making, long-term consumer relationships. Listed: Industrivärden 10%, (a holding company), Oktogonen 10%, (employee profit share system).
SEB	24	Retail and corporate focus, advice and investment banking. Expansion in the Baltic region. Ambition to gain a strong-hold in Northern Europe. Listed: Investor 20%, company mainly involved in large-scale industrial corporations Trygg-Stiftelsen, approx 10%, a pension fund.
Nordea	16	See above.
Förenings-sparbanken	15	Originates in the savings bank sphere, strong in ordinary retail services, expanding into other market segments, such as pensions. Recent investments in the Baltic states. Listed, Sparbanksstiftelsen 20%, Independent Savings Banks 8%.

Note: Market shares are expressed in percent and based on total assets in 2004 derived from annual statements for all operations within respective country. In Iceland, based on annual statements for parent companies.

The majority of retail banks in Denmark, as in other Nordic countries, are domestically owned. A few banks dominate the market. The largest is *Danske Bank* with 54 percent measured by total assets. *Danske Bank* is a

[9] The Norwegian Competition Authority found that the relevant market for most retail banking products were local or regional in the DnB NOR merger case (2003). The market shares here presented are not applicable as a general view of the competition authorities on relevant market shares.

financial conglomerate that offers all kinds of financial services as well as real estate agency and is active in Norway and Sweden. The Bank has also recently bought two banks in Ireland and Northern Ireland. *Nordea Bank* is the second largest bank in Denmark with market share of 19 percent. *Jyske Bank* is the third largest bank with a 5 percent market share. It offers full services to private and SME customers. The bank has branches in all of Denmark and a few international branches as well. *Sydbank*, with a minor (3 percent) market share, offers full range of service to private and SME customers almost nationwide.

Since *Nordea* is foreign the total share of foreign-owned capital in banks in Denmark is fairly large. Banks in Denmark operated 2,025 branches in 2004, 220 fewer than 10 years earlier. Most banks supply a wide range of services. Smaller banks may rely on larger banks for some retail products based on agreements with insurance companies and mortgages institutes, for example.

There are four banks in the Faroe Islands, all of which can be described as full-service banks. The number of banks has not changed since 1994, but the number of branches fell from 57 in 1994 to 42 in 2004.

In 2004 there were nine full service banks or banking groups in Finland and 18 niche banks. The four largest banking groups represent roughly 95 percent of total assets: *Nordea Bank Finland group* with market share of 60 percent, *OP Bank Group* with market share of 20 percent (239 member banks), *Sampo Bank* with market share of 10 percent and *Savings banks* with market share of under 5 percent (40 member banks). The number of branches has declined in the last decade. There were 1,580 branches in Finland in 2004 whereas in 1994 there had been about another 370 branches.

In Finland two of the nine full service banks/groups are at present foreign-owned. *Svenska Handelsbanken* is the only genuine foreign full service bank. *Nordea Bank* Finland has its roots in the merger of *Merita* and *Swedish Nordbanken* in 1997. *Merita* for its part was formed in 1995 in the merger of the two largest Finnish commercial banks *KOP* and *SYP*. *OP Bank group* announced in 2005 a merger with the insurance group *Pohjola*. *Sampo Bank* belongs to the *Sampo group*. *Sampo* is an insurance company which started banking business at the beginning of 2001 when it merged with *Leonia Bank* (formerly *Postipankki*). The major operators in banking markets are the same as a decade ago, even if the names and structures have changed. The importance of specialisation can be seen in the growing number of niche operators.

In Iceland, three full-service commercial banks represent 90 percent of the market. These banks are fairly similar in size regarding the domestic market, amounting to 27-33 percent each. In 2003 *Búnaðarbanki Íslands* and *Kaupþing banki* merged and became *Kaupþing-Búnaðarbanki (KB banki*) now *Kaupþing banki*. The bank offers integrated financial services to individuals, companies and institutional investors and is active in ten countries, including all the Nordic countries, UK, Switzerland and the US. *Landsbankinn* has positioned itself as a primary source of general and specialised financial services to individuals, corporates and institutions. *Íslandsbanki (*now *Glitnir)* offers a full range of services to private individuals and companies. The Bank has expanded into neighbouring markets, particularly Norway, but also other Nordic and European countries. The savings bank, *Spron,* with a market share of 3 percent, together with 24 smaller savings banks represent the rest of the market. Most of the banks in Iceland supply a similar wide range of services, local presence and retail banking products. In 1995 there were 179 branches in Iceland, one more than in 2005. All banks are domestic.

The four largest banks in Norway are *DnB NOR* with a 38 percent market share, Nordea Norge with 14 percent, *Sparebank 1 Alliance* with a 13 percent market share and *Terra-Group* with a 6 percent market share. Together they control around 71 percent of the market measured in total assets. *DnB NOR* focuses on customer relationships, based on local presence and a full range of services. Recently, the bank has established itself in other Nordic countries, the Baltics, Poland and Russia. *Nordea Bank* is focused on the Nordic countries as its home market. *Sparbank 1* has a strong regional identity. *Terra-Group* is an alliance of local savings banks. In Norway, 12 of the commercial banks are foreign-owned with about 30 percent of total assets. In 1996 there were 18 commercial banks and 133 savings banks. The number of branches in Norway declined from 1,537 in 1995 to 1,234 in 2005.

The retail banking market in Sweden is dominated by four or five large players. The four largest are *Svenska Handelsbanken* with a market share of 26 percent, *Skandinaviska Enskilda Banken* (*SEB*) with 25 percent of the market, *Nordea* with 16 percent and *FöreningsSparbanken* (*Swedbank*) with a 15 percent market share. These banks represent around 81 percent of total bank assets and are all domestic. The fifth largest bank, *Danske Bank*, is foreign and now accounts for 8 percent of the market in total assets. *Handelsbanken* has local presence and is focused on long-term consumer relationships. *SEB* is consumer- and corporate-focused offering advice and investment banking with ambitions to expand in the Baltics and to gain a stronghold in Northern Europe. *Nordea* is focused on the Nordic countries as its home market. *FöreningsSparbanken* originates in the savings bank sphere, strong in ordinary retail services and expanding into other markets segments such as pensions, with recent investments in the Baltic States. Some niche banks have emerged during the last ten years focusing on retail banking and relying predominantly on tele-banking and the Internet. In 1994 the retail banks operated 2,587 branches in Sweden, a number which had shrunk to 1,874 by 2003.

There are presently no foreign banks active in Iceland or the Faroe Islands but, in the other four Nordic countries, foreign-owned banks make up a sizeable part of the market. The market share of foreign retail banks in Denmark, including *Nordea*, is around 30 percent. Most of these banks are Scandinavian and have their headquarters in another Nordic country. There are two foreign full-service retail banks in Finland. *Nordea Bank* is the largest having its headquarters in Sweden as does the *Svenska Handelsbanken*. In addition, there are 17 foreign-owned niche banks that have branches in Finland, nine of which have headquarters in another Nordic country. In Norway, there is a total of twelve foreign-owned retail banks or branches of foreign banks. In Sweden, there are a few foreign retail banks and around 20 niche banks.

2.2 Newcomers

Increased globalisation and integration of international financial markets has spurred foreign investment in banking in the Nordic countries, except Iceland and Faroe Islands. Nevertheless, with the exception of *Nordea* and *Danske Bank*, their market shares are in most cases marginal.

Three new retail banks were established in Denmark in 1997-2005, two of which were foreign-owned. Their combined market share is marginal. Foreign banks (except *Nordea*) have been increasing their activities in Denmark and now hold a 10 percent market share.

Two new full service banks have entered the market in Finland in the last decade. *Svenska Handelsbanken* started in Finland in 1990 and *Tapiola Bank* in 2004. *Tapiola* has a long history as a Finnish insurance company and the bank is using the company’s existing branch network. Several niche banks have also been established in the past decade. Niche banks have typically specialised in one segment of products e.g. property management services and lending to enterprises. Niche banks do not necessarily have a branch network at all but may base their activity to the Internet, for example. There is also an increasing number of branches of foreign banks, most of which have roots in another Nordic country. The newcomers and the specialisation have brought to the Finnish banking market new products which benefit the customers, such as longer loan-periods or demands for a lesser degree of collaterals.

The Finnish market is open for operators other than traditional financial market operators. At the beginning of 2006, *SOK's* Supervisory Board decided to found *S-Pankki Oy* (*S-Bank Ltd*), which will conduct deposit banking operations, and in February 2006, the Financial Supervision Authority granted a credit institution licence to the operations. *S-Group's businesses* include food and groceries, specialty goods, hotels and restaurants, hardware and agriculture, automobiles and service stations.

Since 1996, 13 new banks have entered the Norwegian retail banking market. These are both foreign banks and domestic newcomers. Six of them have disappeared through mergers and acquisitions. The newcomers adopt different strategies and target different market niches. The number of niche banks – banks that specialize in one or a few products - has increased during the past decade. An example is *Skandiabanken* with the Internet as their main communication channel. Other niche banks, such as *Bankia Bank*, through *Gebyrfri.no*, and *BNbank* have used similar strategies.

During the period 1993-2006, 22 banks entered the retail banking market in Sweden, seven of which have since left the market through mergers or acquisitions. New entrants in Sweden are to a large extent owned by insurance companies, but also the dominant food retailer, *ICA*, has started in retail banking. Foreign banks have expanded and now hold a 14 percent market share in household lending and a 12 percent share in company lending. The strong development in market shares for foreign banks is mainly driven by the expansion of *Danske Bank*, now the fifth largest bank in Sweden.

Bank mergers or acquisitions have occurred in all the Nordic countries in the last decade but only one real exit from the market has occurred, the *COOP Bank* in Sweden in 2003.

2.3 Market concentration

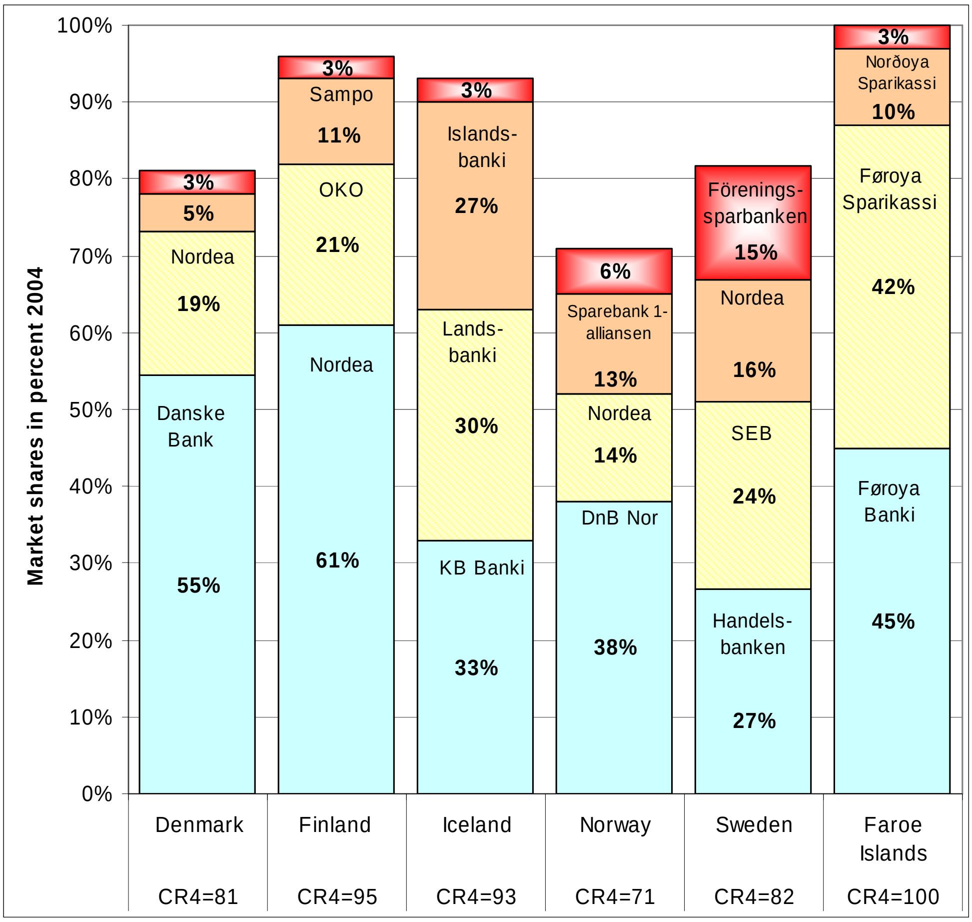
The retail banking market in the Nordic countries is often characterised as concentrated and oligopolistic. For example, Deutsche Bank Research recently remarked that "the banking systems of the Nordic countries are very highly concentrated."[10] The market shares of the four largest retail banks are displayed in Figure 2.1 below.[11] The sums of these shares, the concentration measure CR4, range between 71 and 95 percent in the Nordic countries. Judging by this specific index, Finland has the most concentrated market with a CR4 of 95 percent. The least concentrated Nordic country seems to be Norway where the four largest Norwegian banks account for 71 percent – considerably less than in Finland, but still high. Sweden and Denmark have concentration rates at 82 and 81 percent, respectively. Iceland resembles Finland with a CR4 of 93 percent. The figure also illustrates the Nordic dimension of *Nordea*, which is one of the four largest banks in all Nordic countries, except Iceland.

The development of CR4 during the last decade is presented in table 2.2. During this period, concentration has increased marginally in Denmark and considerably more in Iceland following the 2003 merger between *Búnaðarbanki Íslands* and *Kaupþing banki*. In contrast, the Norwegian CR4 index rose from 57 to 71 between 2000 and 2004 following the 2003 merger between *Den norske Bank* and *Gjensidige NOR*. In Finland, concentration appears to have fallen somewhat, but still remains high. The change is, however, small, and may be attributable to a change in statistical classifications. The development in the Swedish market shows that the four largest banks have started to lose market shares in the latter half of the period, presumably a result of the expansion of new actors and enhanced competition from fringe players.

[10] Deutsche Bank Research, EU Monitor, Financial Market Special, No. 13 2004, June 28, p. 12.

[11] In this study we have used CR4 as a primary indicator of competition. CR4 is the sum of market shares of the four largest market players.

Figure 2.1 Market shares of the largest banks 2004



Source: see table 2.1.

Table 2.2 Concentration ratios in the Nordic countries 1995-2004

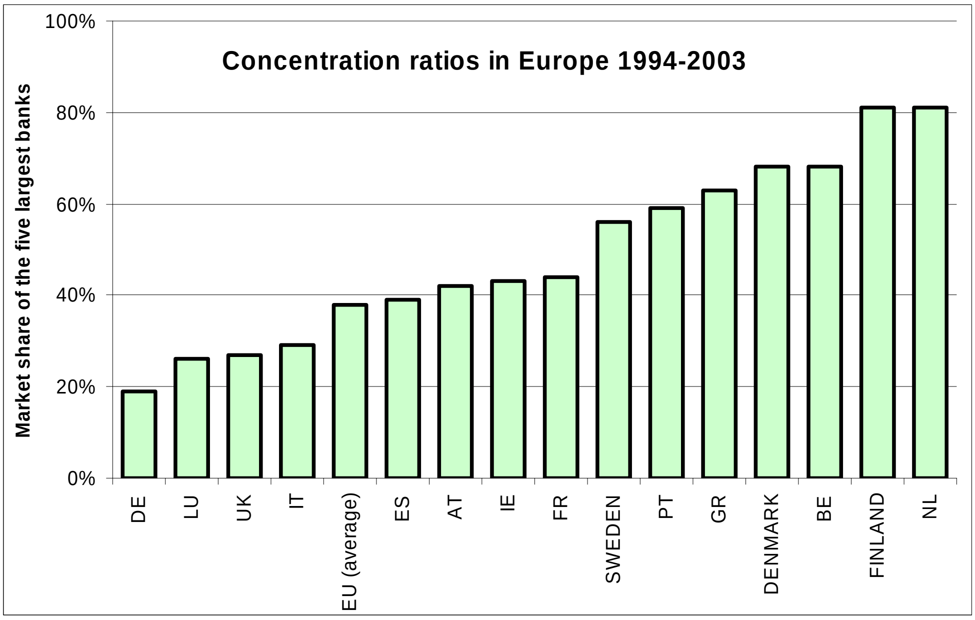
Country	CR4		
	1995	2000	2004
Denmark	79	80	81
Faroe Islands	100	100	100
Finland	98	95	95
Iceland	85	87	93
Norway	54	57	71
Sweden	84	88	82

Source: Banker's Associations, Central Banks and Financial Supervisory Authorities of the Nordic countries, various years.

When concentration is measured using alternative variables, such as deposits, lending, mortgages or number of customers, the relative positions of the banks changes somewhat. However, the above qualitative conclusions on concentration remain largely valid.

Compared with other national retail banking markets in Europe, these concentration figures appear high. In Figure 2.2 below, Bikker and Bos report the CR5 concentration rates, i.e. the sum of total assets of the five largest companies in the banking industry, for a number of countries in Europe. Since a wider definition of banks is used in that study, concentration rates are considerably lower compared to the tables and the figure above. Although Norway and Iceland are not included, the other Nordic countries exhibit fairly high concentration rates, well above the EU average. In many cases, concentration is higher in 2003 compared to the average for the period 1994-2003.

Figure 2.2 Concentration ratios of Banking Industries in various European countries 1994-2003



Source: Bikker and Bos, 2004, "Trends in Competition and Profitability in the Banking Industry: A Basic Framework", DNB Working Paper 18/2004, tables 6 and 7, pp 45.

Nevertheless, there are countries in which concentration ratios are similar to those found in the Nordic countries, including the Netherlands, Belgium, Greece and Portugal.

Overall, we may conclude that the Nordic retail banking markets are fairly concentrated in comparison with retail banking markets in other countries in Europe. The trends over time are mixed - whereas concentration rises in some countries, it falls in others. New banks, and also smaller fringe players that have been around for some time, do exert a competitive pressure on the incumbents in some countries and appear to gain market shares.

2.4 Profitability

Another indicator of competition, besides concentration, is profitability rates for the participants in the market. Usually, competition exerts a pressure on margins in an industry. Hence, profitability decreases as competition becomes stronger. In contrast, high or growing profitability may indicate poor competition in the market. Profitability measures are, however, affected by a range of factors other than competition, such as the composition of assets and liabilities, the relative size of equity capital as well as accounting rules and principles, to name but a few. Some caution when interpreting these measures is therefore warranted.

Key profitability indicators in the banking sector include the *return on equity* and *return on assets* ratios. Return on equity is the ratio of profits to equity capital and provides a useful measure of the profitability of equity investment in banking. Return on assets is defined as profits divided by total assets and is an indicator of how profitable a company is relative to its total assets. Profits are typically evaluated after tax and extraordinary items. It is also measured before tax to assess the underlying operating profitability, unaffected by national differences in taxation or one-time gains or losses. In general, we would expect better competition to reduce the return on equity and the return on total assets.

Another frequently-used measure of bank profitability is the *net interest margin*, which allows comparisons over time and across countries. This indicator is measured as the ratio of net interest income (interest income minus interest expense) to total assets.[12] Since net interest income remains an important source of income for banking institutions, a low margin may imply strong competition. The *cost-to-income ratio,* or the operating costs expressed as a percentage of operating income, is sometimes interpreted as a proxy for efficiency and competitive conditions. A high ratio is generally assumed to indicate a high degree of competition and, as a result, a low profit rate. Furthermore, *loan loss provisions,* or the ratio of credit losses to total assets typically affect banks' profitability.

These indicators are reported for 2003 in table 2.3 below. In addition to the Nordic countries, five European countries are included as a comparison. The differences between these two categories of countries are not very significant. Instead, the overlap is extensive. On average, however, there is a tendency for the Nordic bank markets to exhibit higher return on assets

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[12] Bikker and Bos, 2004, "Trends in Competition and Profitability in the Banking Industry: A Basic Framework", DNB Working Paper 18/2004, tables 6 and 7, p 45pp.

and high net interest margins compared to the reference countries. There is no similar distinguishable Nordic effect concerning return on equity and cost to income ratios. The negative rates of return observed for Germany may reflect the fact that the German banking industry remains fragmented and less consolidated than the banking sectors in other European countries.

Table 2.3 Bank profitability indicators 2003

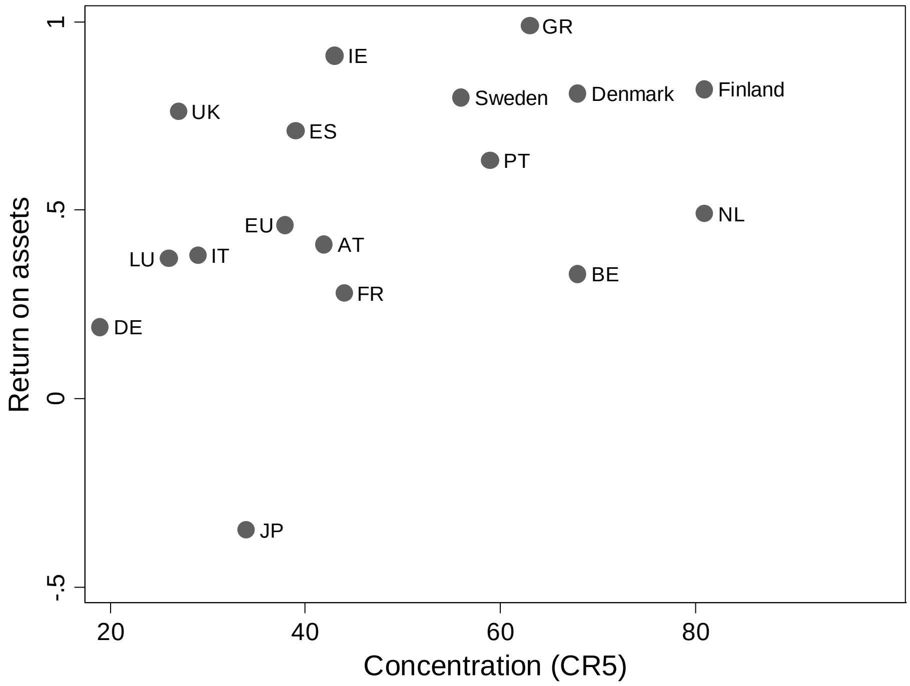
Country	Return on Equity		Return on Assets		Net Interest Margin	Cost to Income	Loan Loss Provisions to total assets
	Pre-tax	*Post-tax*	*Pre-tax*	*Post-tax*			
Denmark	17.02	11.78	1.01	0.70	1.60	51.53	0.22
Finland	14.47	15.16	1.42	1.49	1.28	50.08	0.02
Faroe Islands	-3.94	-2.80	-0.83	-0.59	4.37	56.07	2.96
Iceland	18.31	15.79	1.44	1.24	2.18	50.17	0.90
Norway	11.85	9.15	0.71	0.55	2.05	59.73	0.41
Sweden	12.80	9.33	0.72	0.53	1.34	64.73	0.08
Germany	-0.12	-2.21	-0.01	-0.10	1.36	72.56	0.39
Netherlands	15.99	11.60	0.59	0.43	1.45	67.23	0.18
UK	21.70	15.45	1.00	0.71	1.60	56.82	0.29
Ireland	15.20	12.11	0.79	0.63	1.08	50.73	0.07
Austria	8.04	6.90	0.41	0.35	1.14	68.80	0.31

Source: Calculations by the Nordic Competition Authorities based on data in Bank Profitability (2004), OECD, except for Faroe Islands, where the numbers are provided by the Faroese Competition Authority.

Using the data provided by Bikker and Bos presented earlier, we can plot return on assets and concentration in figure 2.3 for the period 1994-2003. The chart illustrates the previous findings in table 2.3 that the Nordic countries appear to be somewhat more profitable and concentrated regarding the retail banking industries. However, the pattern is ambiguous; the overlap is extensive. Moreover, the pattern for the period 1994-2003 is considerably less clear compared to the situation in 2003.

The central banks of the Nordic countries, primarily concerned with stability of the financial system, closely follow the development in the sector. The overall picture relating to the year 2004 appear to be that banks do exhibit good profitability. This may satisfy stability objectives, but not necessarily competition objectives.

Figure 2.3 Return on assets and concentration 1994-2003 for some countries



Source: See figure 2.2.

Profitability of retail banking has been increasing in Denmark since the latest banking crisis in the beginning of the 1990s. The trend is especially apparent since 1996, with profitability being close to constant. Credit losses have decreased. In addition, there has been a substantial increase in the service charge. These changes have all contributed to higher profitability for retail banking.

Bank profitability indicators for retail banks in the Faroe Islands show that the net interest margin is higher than in any other Nordic country, indicating the lack of competition among retail banks. The provisions for losses and write-offs on debtors were extraordinarily high in 2003, as a result of the situation in the sea-farming industry. In many ways this makes the profitability indicators in 2003 different from other years. The return on equity and return on assets are negative, while the cost to income is equal to the other Nordic countries, indicating that this year's low profit is not caused by competition, but provisions for losses and write-offs.

The financial results of banks and insurance companies operating in Finland have improved and their profitability has remained good. Underlying these improved results were increased net interest income and net fee income, moderate development in expenses and recoveries in respect of earlier loan losses. The cost/income and cost/asset ratios suggest that the efficiency of the banks in Finland has improved.

In Iceland, privatisation of the state banks and the resulting mergers have led to profound changes in activities and business practices. The banks have expanded, their equity has grown and profitability improved. Banks are now able to offer more favourable terms to their customers, both in traditional banking services and in the services of their partner enterprises, such as insurance companies.

In Norway, according to the Central Bank of Norway, pre-tax profits and the return on equity in the largest banks have increased during the past year. The return on equity is as high as in the large Nordic financial conglomerates. The favourable results are largely due to very low loan losses and lower operating expenses. Lower loan losses are due in part to a market reduction in the share of non-performing loans since 2003. Increased use of automated services is an important factor behind the reduction in operating expenses.

The profitability of full-service banks in Sweden (including foreign branches, excluding subsidiaries) has fluctuated during the last ten years. Studies have shown that the financial deregulation reforms of the 1980s have positively affected bank productivity growth. Recent estimates indicate that productivity in Swedish banks has increased during the last five years.

2.5 Conclusions

Nordic retail banking markets are still dominated by large domestic banks with rather large and loyal numbers of domestic clients. During recent years, however, some of these banks have expanded into neighbouring countries. For example, banking is a major export product for Iceland, as illustrated by the *Kaupthing banki* and *Glitnir* banks expanding into the Nordic countries. *Nordea*, after a series of mergers, is one of the three largest banks in Finland, Sweden, Norway and Denmark. *Danske Bank*, accounting for roughly half the market in Denmark, has emerged over the last few years as the fifth largest bank in Sweden. Swedish *SEB* and *Föreningssparbanken* account for a very large part of the market in the Baltic States. The major Finnish and Norwegian players are also looking at nearby markets. This integration process is likely to continue.

Parallel to this process, the number of new actors and fringe players appears to be growing in most markets. These banks may aim for the entire portfolio of retail bank customers, or for some product segment, such as mutual fund management. Nevertheless, their impact is yet to be seen – although competition in some countries may have increased, it would be an overstatement to say they have made an impact on the industry, as concentration remains stable at quite high levels.

The sum of the four largest banks' market shares (measured in total assets) amounts to 71-100 percent in the six examined Nordic markets. This is a high figure compared to Europe, and the development over time suggests that a significant decrease is highly unlikely.

Profitability measures, profit statements by banks and Central Bank opinions indicate that Nordic banks are profitable. From a stability perspective, this situation is satisfactory – because the risk of default of the system is low. The market is dominated by banks that are financially sound. From a competition perspective, however, the margin in the industry suggests that banks can give consumers substantially better offers and still be profitable. In other words, more competition between banks can benefit consumers in terms of better products at lower costs.

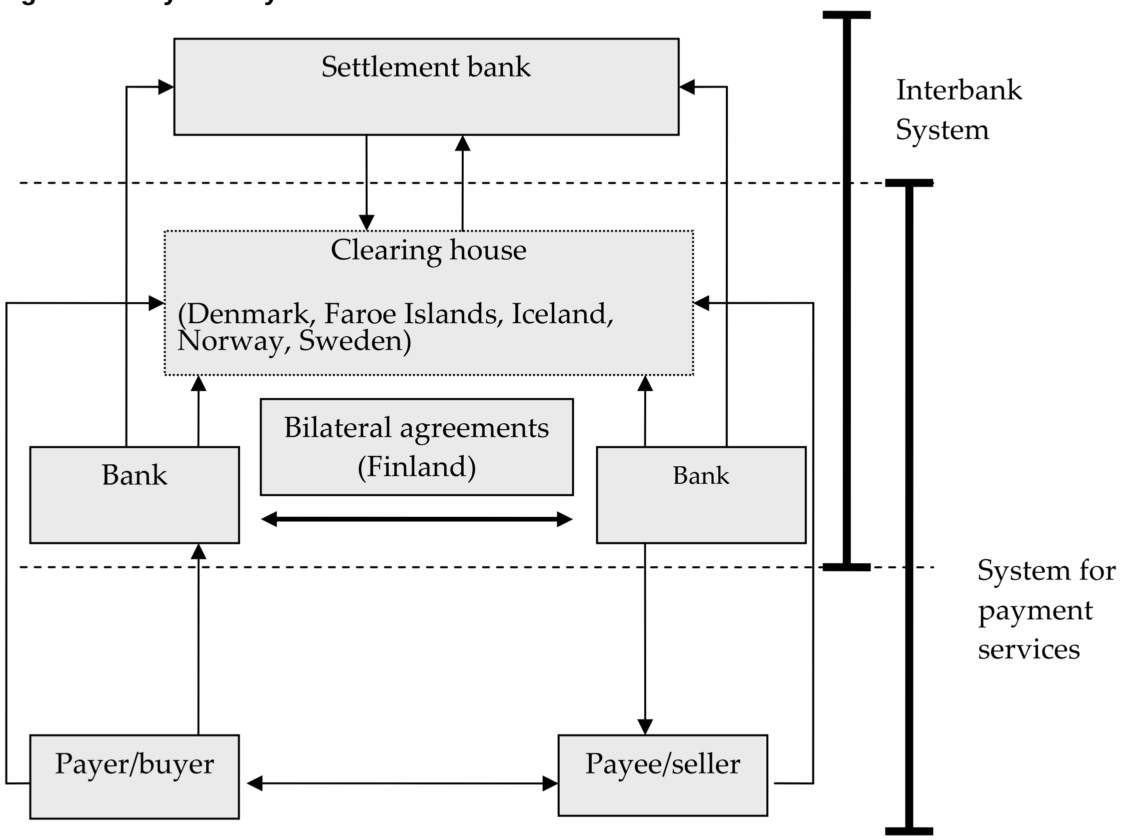
In all Nordic countries the number of local branches is falling. Tele-banking, and in particular Internet banking, is linked to this development. Some niche operators have taken advantage of the new marketing channel and concentrated their interaction with their customers to the Internet, thereby eliminating the need for a physical branch network. Although this may increase the likelihood of new entry to the Nordic banking market, other factors may restrain it. For instance, retail banking belongs to a family of services that for households represent a substantial element of trust. Thus, consumers may wish to remain with the well-known providers of retail banking services despite better (but perhaps perceived as uncertain) deals being available. Such consumer immobility may constitute a restraint to competition. Also, efficient access to the necessary service inputs such as those of the payment infrastructure is very important and may constitute an entry barrier. These two dimensions will be further explored in the following chapters.

3 Interbank payment systems

Payment systems are an integral part of the basic structure of the economy and the financial sector in particular. Payment systems play a central role in a modern economy, as most economic activity relies on them. The smooth functioning of these systems is a crucial aspect of a sound currency and is essential to the conduct of monetary policy. These systems also have a significant bearing on the functioning of financial markets, since reliable and efficient payment systems are crucial to the maintenance of banking and financial stability. There are a variety of operators in financial markets, not all of them banks.

Chapter 3 discusses interbank payment systems between banks in particular. Chapter 4 concerns payment service systems directed at end customers (cardholders and merchants). For simplicity's sake, the interbank payment systems between banks dealt with here exclude clearance and delivery systems for securities.

Figure 3.1 Payment systems in the Nordic countries



3.1 The importance of interbank payment systems

Creating an interbank network requires interbank payment systems which enable transactions between the various monetary institutions, i.e. the payer and the payee have customerships with different service providers. Interbank systems hence form a basis for the existence of systems directed at the banks' customers. The concepts 'upstream' and 'downstream' markets are used in economics. In this case, upstream markets are the interbank payment markets and downstream markets the systems for payment services (or customer services). Upstream interbank markets are based on cooperation, whereas in downstream markets the actors compete with each other.

The interbank systems are either arranged by the banks themselves or maintained by the central bank. Payment systems are, in general, classified into large-value payment systems and retail payment systems. This depends on the types of payment they transmit and settle. Interbank systems – compared with what are called customer payment systems – refer to systems designed for the banks' own mutual payments in which the banks mainly handle their own commissions.

The commonly used term, 'retail payment systems' also includes the transmission of bank card payments between banks. For more on bank card payments, see the next chapter.

Participation in an interbank payment system is a requirement for the existence and development of most customer services. The reason for this is that the interbank payment systems constitute an infrastructure which is necessary if a bank wants to offer customer services that include an element of payment transfers in the market.

To meet most consumer demand, banks must be able to link basic payment services such as cards, giro transfers and direct account transfers to the customer's transaction account. This, in turn, assumes that the bank has access to the infrastructure underlying the payment systems on non-discriminatory terms.

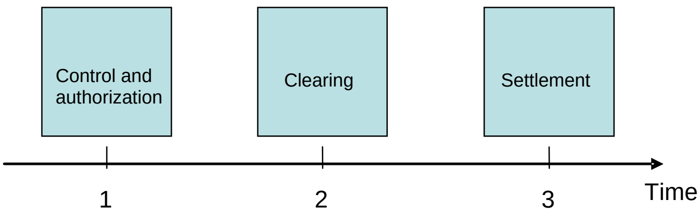
3.2 Payment process

Market transactions consist of the delivery of a product from the seller to the buyer and the payment, i.e. a cash flow, from the buyer to the seller. Each payment is basically a transfer of money between two parties. This transfer can be realized in many ways and is determined by the payment function and the payment channel. The simplest transfer is a cash payment in which the payment is finished and the claim ceases at the point of exchange of money, i.e. notes and/or coins.

Other examples of payment functions are credit transfers, card payments, direct debits, cheques and bank money-orders. In contrast to cash payments, these payments are not completed at the time of payment. Instead, it implies a transfer between two accounts at one and the same bank or possibly at two different banks. These categories of account-based payments may allow for different types of payment channels, i.e. how information about the transfer is sent. A bank card may, for example, be used for payment in a store or on the Internet. A crucial difference between cash and account-based payments is that the latter require intermediaries.

A payment transaction is usually divided into three steps: verification, clearing and settlement (see the figure below).

Figure 3.2 The generic payment process



Steps in the payment process:

1. Control and authorization: At the verification stage, banks establish the customer's identity, the validity of the payment instrument and whether the requested sum is available in the account.

2. Clearing
   During the clearing process two main functions may be performed[13]:

   a. exchange of the payment instrument or of relevant payment information between the payer's and the payee's financial institutions, and

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[13] CPSS : sep 2000/40 "Clearing and settlement arrangements for retail payments in selected countries".

b. calculation of claims for settlement. The outcome of this process is a fully processed payment transaction from payer to payee as well as a valid claim by the payee's institution on the payer's institution. In general, there are four types of arrangement for the clearing of payment instructions. The first arrangement takes place within one and the same financial institution, the other three require interbank arrangements:

   i. When the accounts to be debited and credited are held in the same financial institution - termed in-house transactions - the exchange of information and the calculation of balances that characterize the clearing process can be performed within that financial institution.

   ii. In a bilateral arrangement, the sorting and processing of payments flowing between two financial institutions are handled by the institutions themselves (Finland).

   iii. Alternatively, financial institutions may employ a common third party - a separate financial institution known as a correspondent - for clearing, with one or more institutions forwarding payment instructions to the correspondent for sorting and processing. Correspondents generally provide services for other financial institutions according to contracts that are negotiated bilaterally.

   iv. Multilateral clearing arrangements are based on a set of procedures whereby financial institutions present and exchange data and/or documents relating to funds transfers to other financial institutions under a common set of rules. One example of such an arrangement is a clearing house; this is an organization that operates central facilities and which may also act as a central counterparty in the settlement of the payment obligations under a multilateral netting arrangement. Alternatively, multilateral arrangements may be based on a clearing association that is a coordinating body organising and facilitating clearing among institutions but not operating central processing facilities or acting as a principal for settlement (Denmark, Faeroe Islands, Finland, Iceland, Norway and Sweden).

3. Settlement:
   The net sums – i.e. the sums that the banks owe one another after clearing – are regulated at the settlement stage. Settlement balances resulting from clearing arrangements may be posted to two types of settlement accounts:

   a. correspondent accounts that pairs of financial institutions hold with each other. The institution holding the settlement account as an asset refers to it as a "nostro" account, while the correspondent bank providing the settlement account as a liability refers to it as a "vostro" account. The accounts are typically used when payments due to or due from the correspondent banks are to be settled bilaterally;

   b. accounts held with a third-party financial institution acting as a settlement bank. Multilateral clearing organizations typically rely on a settlement bank where participants maintain individual accounts to which settlement obligations are posted.

In large-value systems settlement generally takes place in central bank money. In retail payment systems, however, settlement is performed by either the central bank or a private correspondent bank, which means that settlement takes place in central bank money or commercial bank money, respectively.

The access to settlement accounts at the central bank may be either open to all institutions participating directly in clearing arrangements or limited to financial institutions satisfying specific criteria (e.g. institutional type, minimum payment volumes). In the latter case, financial institutions that do not have access to a central bank account settle their payments across the books of a direct participant in settlement, which in turn settles across the books of the central bank.

Unlike the other Nordic countries, Finland does not have a separate centralized clearing house for payment transactions.

3.3 Interbank payment systems in Nordic countries

Of the Nordic countries, Norway, Iceland and the Faroe Islands are not members of the European Union. Denmark and Sweden are members of the EU but are not currently members of the single currency zone. However, Denmark is a member of exchange rate mechanism II (ERM II). This means that the Danish krone is linked to the euro. Finland is the only Nordic country in the euro zone.

3.3.1 Denmark

KRONOS is Danmarks Nationalbank's real-time gross settlement (RTGS) system and acts as the banks' home banking system, via which they can transfer amounts in krone and euro. Amounts coming from the netting system Sumclearing are also settled via KRONOS. Net amounts cannot be settled unless there are sufficient funds on the banks' accounts with Danmarks Nationalbank. Individual payments in KRONOS typically have a high value, while the number of payments is relatively modest. Domestic payments in euros are made via KRONOS. KRONOS is also the Danish part of the joint European payment system, TARGET, through which euro payments to other EU member states are made via the joint European payment system. Denmark is a member of the EU but is not currently in the single currency zone. However, Denmark is a member of exchange rate mechanism II (ERM II) and follows a fluctuation band of +/- 2.25 percent. This means that the Danish krone is linked to the euro.

The Sumclearing system is a net settlement system for handling retail transactions, typically bank transfers between customers and debit cards. The netting system is characterized by payments that are many in number, but modest in size. In netting systems, payments between banks are compiled to show how much the individual banks owe each other. A net amount is calculated for each bank, and at a fixed time the amounts are exchanged. In the netting system the net amounts are eventually transferred via Danmarks Nationalbank's real-time gross settlement system KRONOS for individual settlement. Not all the players participate directly in the Sumclearing system, and some of the smaller banks participate via a larger bank. The Sumclearing system is operated by PBS (Payment Business Services) on behalf of the system owner, the Danish Bankers' Association.

Table 3.1 The systems of Denmark

System	Operating body	Description	Types of transactions
KRONOS	Danmarks Nationalbank	central bank´s settlement system	settles interbank payments
Sumclearing	Payment Business Services (PBS)	retail payment system	debit, payment card and direct debit transactions, cheques

3.3.2 Faroe Islands

The Faroese banks are part of the Danish system. In addition, Faroese banks have their own clearing bank. The Faroese system is a real-time system, so transfers can be seen immediately at the receiving bank. Elektron is an IT company which makes IT solutions for the Faroese banks. All four retail banks and the Faroese government are the owners of Elektron.

All national transactions pass the real-time Faroese payment system, while the rest go through the Danish system.

The Faroese banks are members of the Danish Bankers Association, and thereby also owners of the Danish system.

3.3.3 Finland

BoF-RTGS is a real-time gross settlement system operated by the Bank of Finland. Account holders maintain settlement accounts at the central bank to facilitate settlement of their own and customers' payments. The banks operating in BOF-RTGS have the status of a 'clearing bank'. Finland is the only Nordic country in the euro zone. The BoF-RTGS settlement system is a real-time gross settlement system and is a part of the Euro system's TARGET system (Trans-European Automated Real-Time Gross Settlement System). [14]

The POPS system is an interbank settlement system for express transfers and cheques (including bank drafts). POPS is a real-time system operated by the participating banks on a decentralized basis. The member banks send payment instructions to each other directly. The system uses both netting and gross settlement. Payment orders are generally netted

[14] The Eurosystem is currently developing the next generation of TARGET (TARGET2).

bilaterally. Whenever a large payment exceeds the established limits, the bank has to make a corresponding transfer in BoF-RTGS. POPS was developed jointly by the member banks and the Finnish Bankers´ Association. The banks are also responsible for maintenance of the POPS system.

PMJ is an interbank payment system based on batch processing. The system is designed especially for customer mass transactions. Payment orders are transmitted bilaterally between banks and settlement, based on clearing calculations, takes place in the BoF-RTGS system twice a day. The PMJ is jointly run by the Finnish banks and the Finnish Bankers' Association. Unlike the other Nordic countries, Finland does not have a separate centralized clearing house (ACH) for payment transactions.

Table 3.2 The systems of Finland

System	Operating body	Description	Types of transactions
BoF-RTGS	Central Bank of Finland	central bank´s settlement system	settles interbank payments
POPS	members of the Finnish Banker´s Association	large-value netting system	express transfers and cheques
PMJ	members of the Finnish Banker´s Association	retail payment system	credit transfers, direct debits, debit card transactions

3.3.4 Iceland

The RTGS system is the Real-time Gross Settlement System of the Central Bank of Iceland. It covers orders to an amount of ISK 10 million or more as soon as the balance on the payer's account will permit. Thus, the RTGS system will transfer payment orders over the RTGS system limits directly to or from the business accounts of participants at the Central Bank.

The JK system is responsible for netting accrued payment orders under ISK 10 million between participants. The real-time netting positions between participants in the system can be observed, and participants can therefore monitor and control risk relating to payment transfers. Customers have immediate access to cash deposited on accounts as soon as netting has taken place. Settlements are made on participants´ RTGS accounts at the Central Bank of Iceland. The JKsystem of Fjölgreiðslumiðlun Ltd. (FGM) is jointly owned by the commercial banks, the savings banks, the Central Bank of Iceland and two payment card companies, VISA Iceland and Kreditkort.

The Icelandic Banks' Data Centre (Bank Data Centre) is responsible for the day-to-day operation of the RTGS system under an agreement with the Central Bank of Iceland and the JK system, and pursuant to an agreement with the FGM, and owns the infrastructure on which electronic payments are largely based. The Central Bank of Iceland has contributed to the development of the JK netting system.

The RÁS system is used to transmit all authorization requests and capture all electronic payment card transactions. FGM is responsible for operation of the RÁS system, which it owns. FGM is also responsible for the custody and supervision of all rules, instructions and agreements on individual means of payment developed jointly by the commercial banks and savings banks and other parties in Iceland.

Table 3.3 The systems of Iceland

System	Operating body	Description	Types of transactions
RTGS	Icelandic Banks´ Data Centre based on agreement with Central Bank of Iceland	central bank´s settlement system	settles interbank payments: payment orders in the amount of ISK 10 million
JK	Icelandic Banks´ Data Centre (IBDC) based on agreement with FGM	retail payment system	settles interbank payments: payment orders under ISK 10 million
RAS	Icelandic Banks´ Data Centre (IBDC) and VISA Iceland based on agreements with FGM	card payment system	Card transaction (auth. requests and financial transactions)

3.3.5 Norway

NBO is the Central Bank of Norway’s settlement system. Most banks in Norway have accounts at the Central Bank of Norway. The largest banks settle their claims and liabilities vis-à-vis other banks through entries in their accounts with the Central Bank. Settlement may be made for each payment transaction (gross settlement) or by netting a number of individual transactions between two or more banks (net settlement).

Different types of payments are settled in different ways. Ordinary customer payments (e.g. payment card, giro and ATM transactions) are included in a multilateral netting - NICS Retail. This multilateral netting is settled in Norges Bank twice a day. Larger transactions and interbank transactions are cleared in a separate multilateral netting (NICS SWIFT) or sent individually to settlement in NBO in real time, either through NICS RTGS or directly to the Central Bank of Norway (Norges Bank).

NICS, Norwegian Interbank Clearing System, is the banks' joint national system for clearing payment transactions. NICS is a channel for transactional and informational exchange between the banks and the Central Bank of Norway's settlement system (NBO). At the same time, it provides a collective basis for the final settlement between the banks. Settlement and clearing are done through direct participation in NICS/NBO or indirectly through a clearing bank. The NICS system is developed by Bankenes Betalingssentral AS (BBS), the Norwegian banks' payment and clearing house, in cooperation with the banks. BBS is also the operational unit under an agreement with Finansnæringens Hovedorganisasjon (the Norwegian Financial Services Association) and Sparebankforeningen (the Norwegian Savings Banks Association).

Previously, the two banks DnB and Gjensidige NOR Sparebank had authorizations from the Central Bank of Norway to act as clearing banks. The banks merged in 2003 and now operate one system, based on a single authorization.

Table 3.4 The systems of Norway

System	Operating body	Description	Types of transactions
NBO	Central Bank of Norway	central bank´s settlement system	settles interbank payments
NICS	Bankenes Betalingssentral AS (BBS)	clearing house for retail payments	giro, ATM and card payment transactions
DnB NOR clearing	DnB NOR	clearing for retail payments	giro, ATM and card payment transactions

3.3.6 Sweden

RIX is the system used by the Swedish Central Bank (Sveriges Riksbank), to settle payments between banks. Payments are settled in RIX on the principle of real-time gross settlement (RTGS). The settlements usually take place a few times per day. Banks that participate in RIX hold accounts in the Riksbank. Sweden is not a member of the euro zone and does not, therefore, participate in the single monetary policy but, along with the other non-euro EU countries, its payment system is linked to TARGET.

BGC, Bankgirocentralen AB operates a giro payment system, 'Bankgirot'. This is based on giro numbers, which are linked to bank accounts. The system provides clearing of payments using giro numbers. The payer and the payee may or may not have accounts in the same bank. After clearing, BGC prepares and compiles settlement orders which are transferred to RIX.

The Data Clearing System handles a number of credit transfers which go directly from bank accounts. The system is also used when more rapid retail payments are required. These transfers are settled in RIX. The Data Clearing System is owned by the Swedish Bankers´ Association but operated by BGC.

CEKAB is a company providing switching services for ATM and POS transactions. Other providers of these services also exist. CEKAB is owned by several major banks. When a customer uses a cash dispensing machine (ATM), the payment is checked and cleared using one of the four communication systems available before the settlement order is sent to RIX (via the Bankgirot). Card payments are mainly carried out by CEKAB or by BABS, which is a system owned by Föreningssparbanken. Clearing takes place abroad, via the Visa or Mastercard infrastructures, before the transaction is settled in Sweden. Visa card payments are settled in SEB. Because CEKAB is not only an interbank system but also a customer system, it will also be described in the next chapter.

Table 3.5 The systems of Sweden

System	Operating body	Description	Types of transactions
RIX	Central Bank of Sweden (the Riksbank)	central bank´s settlement system	settles interbank and customer payments:
- K-RIX (SEK)			transactions are in general for larger amounts
- E-RIX (Euro)			
The Bankgirot	Bankgiro-centralen AB (BGC)	retail payment system	mainly clears and settles retail payments, but also
		clearing house for retail payments	processes certain large value payments. Giro payments, bank transfers, direct debits, card payments etc.
Data Clearing System	Bankgiro-centralen AB (BGC)	retail payment system	direct transfers from bank account to bank account without use of a giro number. Also used when more rapid retail payment transfers are required.
CEKAB	CEK AB	card payment system	checking of card payments
BABS	Föreningsspar-banken	card payment system	checking of card payments

3.4 Access to the payment systems

According to the doctrines of the network economy, incumbent operators have an incentive to accept new members into a network when the added value of a new member to each network member is higher than the loss caused by the new member, e.g. as a market share loss. What is significant in the assessment of profit is the extent of new coverage that the new operator brings to the network. The coverage may be geographical branch network coverage or it may be the width of the service pallet, for example. Since retail banking is already fairly extensive in the Nordic countries, new members do not necessarily bring a high amount of added value to the network itself. New network members are likely to cause a net loss to existing members in the form of lost customerships.

Theoretically speaking, banks thus would not seem to have any incentive to invite new members to join their interbank payment systems in order to compete for customers. Rather, banks would, theoretically, seem to have incentive to hinder the entry of new members, e.g. by complicating and slowing down the joining process, by demanding large compensation for joining or by placing members who are late joiners in a weaker position than others.

3.5 Decision-making about attaching new members to the network

3.5.1 The role of the central bank

One of the most important functions of central banks is to provide a monetary asset that does not carry the risk of default (central bank money). Interbank obligations generated in interbank payment, clearing and settlement processes are often discharged by making use of such monetary assets. Furthermore, central banks generally provide accounts for financial institutions in which balances of central bank money can be held. Most central banks endeavour to maintain public confidence in retail payment systems. Some restrict their activities – besides settlement - to cooperating with private payment system providers to promote safety, efficiency and interoperability by developing common standards. The fact that central banks offer settlement services to their domestic interbank clearing systems through their accounts allows financial institutions to reduce their credit risk.

One of the primary functions of the central banks in the Nordic countries is to promote a safe and efficient payment system. The central banks' payment systems can be seen as the overall hub of the country's payment systems. The role of the central bank varies somewhat in the different Nordic countries.

3.5.2 The role of other operators

In the Nordic countries, the interbank retail payment systems are as a rule wholly operated and owned by private bodies. These private bodies comprise banks operating on the market. The exception is Iceland, where the Central Bank of Iceland is also one of the owners and developers of the retail payment system. The Norwegian state has an ownership share of 34 percent in DnB NOR, which runs the other clearing system for retail payments in Norway.

Table 3.6 The role of the operators in Nordic countries

	The retail payment system	Operating body	Owner
Denmark	Sumclearing	Payment Business Services (PBS)	The members of the Danish Bankers´ Association
Faroe Islands	The Sumclearing Faroese payment system	Payment Business services Elektron	The members of the Danish Bankers´ Association The Faroese government and all four retail banks
Finland	POPS	Members of the Finnish Bankers´ Association	Finnish Bankers´ Association/ The members of the Finnish Bankers´ Association
	PMJ	Members of the Finnish Bankers´ Association	Finnish Bankers´ Association/ The members of the Finnish Bankers´ Association
Iceland	JK	Icelandic Banks´ Data Centre	Fjölgreiðslumiðlun (FGM) FMG is jointly owned by the commercial banks, savings bank, Central Bank of Iceland, Visa Iceland and Kreditkort
	RAS	Icelandic Banks´ Data Centre	Fjölgreiðslumiðlun (FGM)
Norway	NICS	Bankenes Betalingssentral AS (BBS)	BBS has an agreement with the Norwegian Financial Services Association and the Norwegian Savings Banks
	DnB NOR clearing	DnB NOR	DnB NOR is a public limited company. The Norwegian state owns 34% of the shares
Sweden	The Bankgirot	Bankgirocentralen, BGC	BGC Holding AB owned by SEB 33%, Föreningsbanken 29%, Svenska Handelsbanken 25%, Nordea 10% with the remaining 2% owned by Kaupthing Bank Sverige LänsförsäkringarBank, Danske Bank and Skandiabanken
	Data Clearing System	Bankgirocentralen, BGC	Swedish Bankers´ Association
	CEKAB	Centralen för elektroniska kortbetalningar (CEKAB)	Owned by Nordea 39%, Svenska Handelsbanken 37%, Föreningsbanken 21%, Danske Bank 3%
	BABS	Föreningssparbanken	Föreningssparbanken

In Sweden and Norway the operator of the clearing house (BGC, BBS) is owned directly by the banks. The three largest banks operating in Sweden are also the major owners of the most important card payment systems (CEKAB and BABS).

The indirect ownership and influence of the banks are channelled through the bankers´ associations. In Denmark, the members of the bankers´ association are the owners of the operator of the centralized clearing house (PBS) and in Finland the members of the Bankers´ Association are the direct owners of the major retail payment systems (POPS, PMJ).

Bankers´ associations usually operate as trade associations and are responsible for watching over the interests of their member banks. The need for a network necessarily means that a degree of cooperation between the members is unavoidable. At the very least, a network's members must agree on the methods and standards for exchanging information, how to cover network costs, and the conditions of admission to the network.

Although there are country-specific differences in the operation of bankers´ associations, these seem to play a central role in the financial sector in the Nordic countries. The associations at least make recommendations about the overall rules and conditions for access to payment systems. Because of the absence of a centralized clearing house, in Finland the bankers´ association or its committees make decisions on matters such as joining fees, the timetable for joining, etc. In addition, membership of the bankers´ association is a prerequisite when a new bank enters the interbank payment systems. In Norway, membership is not a prerequisite, but the only bank participating without membership is Swedbank (Föreningssparbanken). In Iceland and Denmark membership is not needed. In Sweden membership is not formally a requirement, but in practice all full service banks operating in Sweden are members of the bankers´ association. No information concerning the Danish association was available for this report.

It should be noted that banks entering the market usually have the option of joining the interbank payment system indirectly, as a client of a bank already in the system.

The operators of the payment systems or the bankers´ associations represented by the banks are also involved in developing payment systems for the Nordic countries. Network effects mean that the competitive pressure that existing payment systems face from alternative systems or the threat of new networks forming is limited. Once a network is established, it is extremely difficult for a new competing network to gain the critical mass needed to function effectively on a standalone basis, even if the level of investment needed is not viewed as prohibitive. A key factor in the intensity of retail competition is the ability of institutions with new offerings to enter the market by accessing the payment system easily and fairly. Retail competition is, therefore, dependent on the payment system and its ability to deliver efficient and transparent charges for access and use, with innovation and cost reductions. Ultimately, any inefficiencies in the payment systems are likely to affect final customers in the form of higher prices and less innovative products and services at the retail level.[15]

There are historical reasons for the present structure of interbank payment systems, and the incumbents have developed the systems for decades. A general feature of Nordic systems is that access is normally awarded by banks already in the system. The incumbent banks consequently have some decision-making power within interbank payment systems. However, in some systems, the banks are left with little room for discretion as they must comply with fixed rules of access, such as the rule that any bank holding a licence is allowed access to the system.

3.6 Cooperation and competition

When the efficiency of the payment systems is assessed, it should be noted that even if competition between operators creates efficiency, competitors also have to cooperate to bring about a network. Cooperation is one characteristic of a network economy.

From the point of view of competition, cooperation between companies is problematic when it includes communicating on practices which may directly or indirectly affect the competitive conduct of a company. Since payment systems depend on cooperation, they may raise particular competition concerns.

The partly contradictory aims (competition vs. cooperation) pose a challenge not just to the undertakings involved, but also to the supervision authorities. The central banks and the financial supervision authorities must jointly determine the threshold that allows an optimum balancing of competition and cooperation.

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[15] UK payment systems, OFT 2003.

3.7 Joining costs

The method of pricing payment systems varies a great deal in the Nordic countries. Some countries may use a joining fee paid as a lump sum, an annual or monthly membership fee, a fee based on the volume of events, or a combination thereof.

The joining fees of the Nordic payment systems vary from zero to EUR 1.2 million. Finland has the highest system-based joining fee (the EUR 1.2 million joining fee includes POPS and PMJ), which is the same for all who join. According to the Finnish Bankers' Association, the other commonly collected fees are correspondingly lower or are not collected at all. In Iceland there is no joining fee or annual fee, and the system is based entirely on transaction fees. In Sweden the joining fee varies from zero to around EUR 100,000 (the joining fees for Bankgirot, Data Clearing System and CEKAB cost no more than EUR 180,000 in total). In Norway the fee for joining NICS varies, depending on the bank's capital liability. Access fees vary from approximately EUR 44,000 to EUR 625,000. The joining fee for DnB NOR is agreed bilaterally. In Norway, interbank fees vary from EUR 0.05 to 2.25.[16]. In Denmark the fee for joining Sumclearing is about EUR 420,000.

Making a comparison of interbank fees and their levels is not simple. Pricing differs from one country to another. The average total costs for the first year after joining are the closest estimates available for comparing fees. Payments systems in the Nordic countries vary considerably and comparisons tend to be misleading. For instance, services vary and they are differently priced. Likewise, cost structures differ. As an example, bank revenue from a float is illegal in Norway, whereas it is not in many other countries. A more detailed approach to these issues follows below.

The fees are paid to the system administrator, who decides on use of funds for the system or its maintenance or, depending on the organization form, re-allocates it as compensation to its owners or members. Benefit from the fees hence accrues to the system members but the allocation may vary.

According to a general competition law principle, even high access costs may be warranted if they are based on actual costs. The European Commission has stated that the costs of specific services provided should

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[16] See Publication no. 6: Collection of contracts and rules for domestic payment transfers, Finansnæringens Servicekontor og Sparebankforeningens Servicekontor, September 2003.

be based on objective criteria and that the fee for each service should not exceed the costs on which its calculations are based.

3.8 Allocation of fees

There are dissimilarities in the discount system as well, insofar as the discounting principles used are roughly opposite in Norway and Sweden. In Norway, the joining fee depends on the funds commanded by the joining party: the actor who commands more funds has a higher joining fee. Sweden has a volume-based discount system which favours large actors.

In Sweden, the Swedish Competition Authority has noticed that small actors may have problems with the way terms of access to the general payment systems in the banking market are designed. These concern both pricing and other requirements, particularly those of a technical nature, which are said to favour large operators.

Some of the systems – Bankgirot, CEKAB, Dataclearing – apply roughly the same principles when setting fees, irrespective of the customer’s identity. They offer volume discounts on total invoice amounts, which means that small actors are given discounts of below 5 percent while the large banks enjoy discounts that are often in the region of 10-30 percent.

This represents a cost disadvantage to small actors, but the explanation offered by the system’s advocates is that there are significant economies of scale in production. Also, the participation of the market’s large actors, with their substantial transaction volumes, is essential to cost efficiency in the system; without them, smaller actors would probably have to operate on much less favourable terms. In certain cases, these volume discounts have been examined by both the Swedish Competition Authority and the Market Court, and found to be compatible with the competition rules. The smaller actors that the Competition Authority contacted were not altogether against the idea of discounts but questioned whether they were entirely cost-motivated.

3.8.1 Joining time

In the Nordic countries, joining a system is preceded by a period when the joining party adapts its system to the payment system, and the banks already in the system adapt to the new system. In practice, this means the technical testing and revision of the systems.

A tight schedule has been drawn up in Denmark for conducting all the tests. In the other Nordic countries, no specific time or joining process has been defined. This is justified by the impossibility of predicting the joining process and the heavy dependence on the characteristics of the joining party. In Finland, for example, the Finnish Bankers' Association recommends that a new party should reserve up to 9 - 12 months for system testing.

From the competition perspective, it would clearly be a good thing if the joining process was transparent: the party joining would have a clear picture in advance about the length of the joining process and the related costs. Joining also includes the activities of third parties, which may not be foreseeable.

3.8.2 Other challenges related to joining

The joining process may include linguistic challenges. In Finland and Denmark, for example, the system requires a command of the national language.

In most Nordic countries, the interbank payment systems may be joined directly or indirectly via another member. The fees paid by 'indirect members' to the service provider bank ('clearing bank') are agreed on mutually. The content of the service may vary. Indirect membership may be an inexpensive way to join the system, particularly for small entrants.

A tutor bank system has been developed to make joining the interbank system in Finland easier. The joining bank pays compensation to a bank already in the system for technical support in the joining process. A tutor bank is chosen primarily on a voluntary basis. Correspondingly, a pair-testing bank is chosen for pioneer tests with the joining bank prior to full system testing. The tutor bank system is a fairly new phenomenon. It may simplify and clarify the joining process, but if it does not function properly, such a practice may also be an impediment to joining.

3.9 Case law

In 2003[17] the Norwegian Competition Authority (Konkurransetilsynet) banned an exclusive agreement between the Norwegian banking associations (Finansnæringens Hovedorganisasjon (FNH) and Sparebankforeningen) and Bankenes Betalingssentral (BBS)[18] concerning the processing of EFTPOS transactions. The agreement required the participating banks to use BBS as the collector of this data. In May 2002 POS System AS complained to Konkurransetilsynet, claiming that BBS was abusing its dominant position and that the agreement restricted competition on the market for processing EFTPOS transaction data. According to POS System, one of the most important implications of the agreement was that it prevented banks from using POS System and its collaborating partners to process EFTPOS transaction data. The agreement implied that POS System had to deliver the processing data generated in its system to BBS, and could not function in direct connection with the banks. Furthermore, POS System claimed that the agreement restricted competition in the sense that BBS, in its pricing for merchants, could interlock a monopolistic service (transactions) and a service exposed to competition (terminals).

Under the agreement between the banking associations and BBS concerning the processing of EFTPOS transactions, BBS had a monopoly on this service. BBS is owned by all the Norwegian banks, which might have an interest in setting monopoly prices for BBS, as they could both pass on the higher costs to card users and at the same time receive a dividend from BBS.

The Norwegian Competition Authority concluded that the exclusive agreement between the banking associations and BBS restricted competition in the market for the collection of EFTPOS transaction data and banned clauses related to this issue.

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[17] March 28th 2003.

[18] The Norwegian banks' payment and clearing house, owned by Norwegian banks.

3.10 Conclusions

The Nordic countries hold different positions when it comes to EU membership and the common currency. Furthermore, the organization of their payment systems clearly differs.

In the Nordic countries, interbank payment systems and their arrangements are national, even though the banks have increasingly expanded their operations to more than one Nordic country. In all the Nordic countries the interbank payment systems can be regarded as giro-based (as opposed to cheque-based).

Conditions of access to the systems vary slightly as to the degree of discretion enjoyed by incumbent banks in deciding on the entry of new members to the system. A general feature, however, is that access is awarded by banks already in the systems, and that these banks have decision-making power over fees.

Although there are differences in the payment systems in the Nordic countries, making it difficult to compare the joining costs, it can be concluded that the fees and access conditions may include elements that could form a barrier to entry to the payment systems and banking markets.

4 Access to payment card systems

Retail banks provide several payment instruments to provide for payment transfers, including cash, cheques, credit transfer systems and payment cards. These payment instruments make the means of settlement available between two or more parties, and may to a certain extent be substituted one for the other. Price, availability, efficiency and security determine which instrument is used in the various transactions.

The experience of the competition authorities in the Nordic countries, as the impression seems to be elsewhere, is that competition problems concerning payment transfer services are primarily connected to access to infrastructure in cash withdrawal card systems and payment card systems. Whereas chapter 3 focused on the interbank system as a whole, the following section concerns conditions of access to infrastructure in cash withdrawal card systems and payment card systems.

Chapter 4 is divided into two parts. In part one, 4.1 to 4.3 describe the different payment card systems in the Nordic countries; in 4.1 we describe the ATM system, in 4.2 we describe the international payment card system, and in 4.3 we describe the national payment card system. In part two, 4.4, we discuss possible competition problems connected to these systems.

4.1 Cash withdrawal card systems

The basic function of an ATM system is to provide the customer with cash without having to enter a bank branch. ATM systems can be organised in different ways. The basic system is where the banks own and run their own system. In this system the customer will only be able to use the ATMs of its own bank. Most of the banks in the Nordic countries have come to the conclusion that their customers will benefit greatly from access to a wider range of ATMs. They have therefore entered different forms of co-operation so that their customers can use a wider rage of ATMs. In Finland the banks have gone one step further and established a joint venture company to handle all ATMs.

Figure 4.1 ATM – General

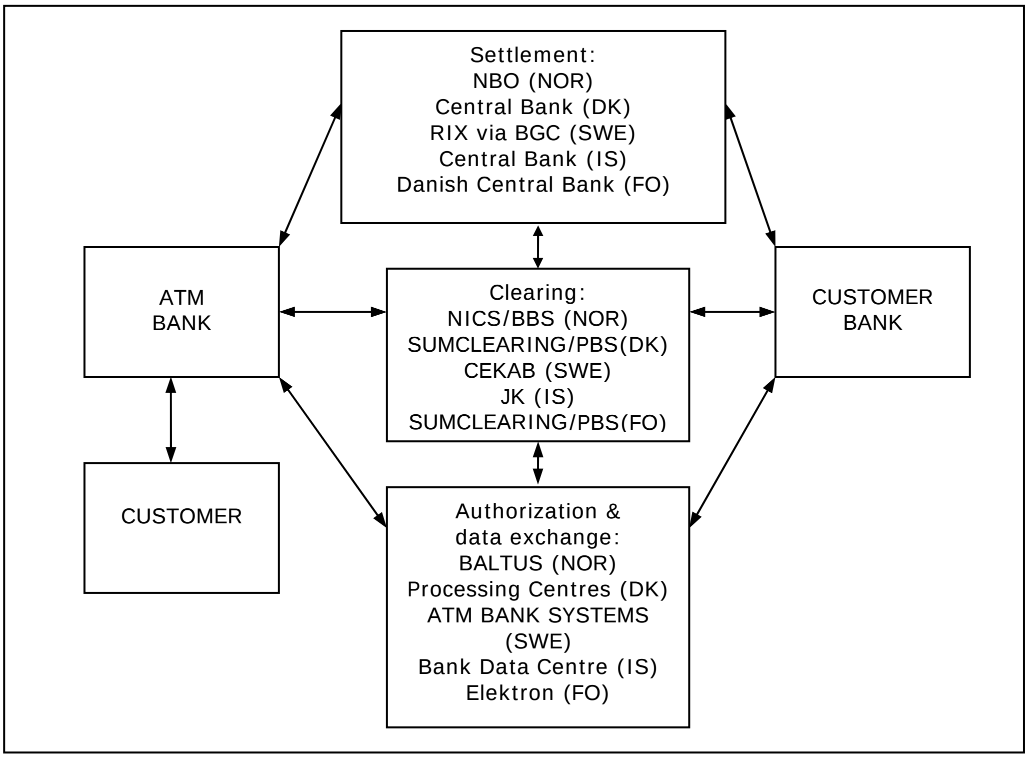


Figure 4.1 shows the basic building blocks of an ATM system for debit cards. The basic transaction between a bank and its customer is shown to the left (ATM bank and Customer bank are the same).

Banks may themselves run their ATM system or outsource the operation (or part of) to subcontractors. There are a number of suppliers offering ATM operation services to banks. These services include:

- installation of ATMs
- processing services for ATMs
- maintenance of ATMs
- filling of cash.

On the operational side, banks have the possibility of outsourcing their entire ATM operations. However, a bank can never outsource its obligations and responsibilities in relation to other banks.

In order for a customer to use the ATMs of other banks than the card issuing bank, two conditions must be met:

1. A legal agreement between the card issuing bank and the ATM bank giving access to the ATM network of the ATM bank. This can be done bilaterally between the individual banks (e.g. Sweden) or multilaterally by all the banks in the respective country (e.g. Norway, Denmark and Iceland).

2. An arrangement for technical communication for information transfer (authorisation, clearing and settlement). See chapter 3.

An alternative to 1) and 2) is to join an international payment card scheme, which is generally accepted in all ATMs.

In Norway, banks usually own their own ATMs. To ensure access for all banks to all ATMs a multilateral agreement has been put in place. Holding a banking licence (Norwegian or foreign) and paying the joining fee are the only criteria for participating in the BankAxept scheme. All members of BankAxept have immediate access to all ATMs. In addition, there is a multilateral agreement on the interbank fee connected to ATM transactions. Authorisation is done through BALTUS, which is a software program by which all ATMs can communicate. Clearing and settlement are done through NICS (BBS) and NBO (Norges Bank).

In Sweden, most banks own their own ATM network, and agree bilaterally on fees for accessing each others ATM network. Today, one and the same card is sufficient for accessing all ATMs within the country. Authorisation and clearing is done though CEKAB, a separate clearing company, or through the banks own system. CEKAB is a central element in ATM clearing operations. All transactions may either be handled through this separate company or by the banks themselves. If a bank does not own any ATMs or does not itself operate a system, information is sent to CEKAB, which authorizes and clears operations for cash withdrawals. See chapter 3 for more information on CEKAB.

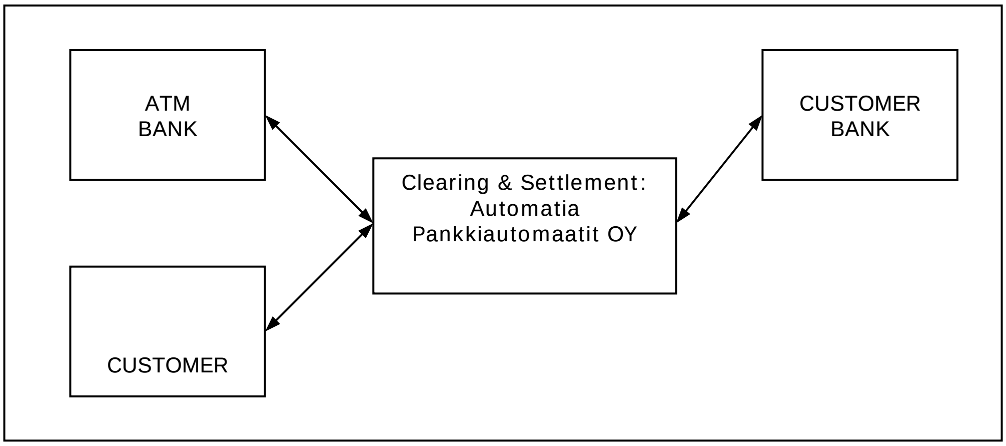
Similar to Norway and Sweden, Danish banks normally own their own ATMs. To ensure that the card holder can use ATMs in a wider system than that of their own bank, Danish banks have multilateral agreements among themselves. Authorisation, clearing and settlement is done bilaterally between the banks and through Sumclearing.

In the Faroese islands, the banks have their own withdrawal cards, and transactions between Faroese ATMs and Faroese accounts are cleared in Elektron. The cash withdrawal system has been bought from the Danish PBS.

In Iceland, each bank has its own ATMs, and banks have entered into an agreement whereby customers are able to use any domestic ATM. The banks have also signed an agreement to service each others customers and to pay for servicing each others customers. The ATMs are connected with the Icelandic Banks' Data Centre. Using this joint system, business transactions are routed to the customer's bank, and the banks then settle the transactions in the joint settlement system.

In Finland, ATMs are operated by *Automatia Pankkiautomaatit Oy* (hereafter referred to as Automatia), which is a company jointly owned by the three largest Finnish banks (Nordea Bank Finland, OP Bank Group, Sampo Bank). The other full service retail banks (savings banks, Aktia Savings Bank, local co-operative banks, Bank of Åland, Svenska Handelsbanken and Tapiola Bank) are customers of Automatia. Automatia has priced its services to the owners and customers based on the ATM network density and transaction volume. The traditional card for ATMs has been Pankkikortti or an ATM card. Banks may charge customers for transactions but in practice this has been uncommon. The international cards Visa, MasterCard, American Express and Diners Club are interoperable with all ATM's in Finland. Banks and credit card companies charge on transactions according to their individual pricing.

Figure 4.2 – ATM – Finland

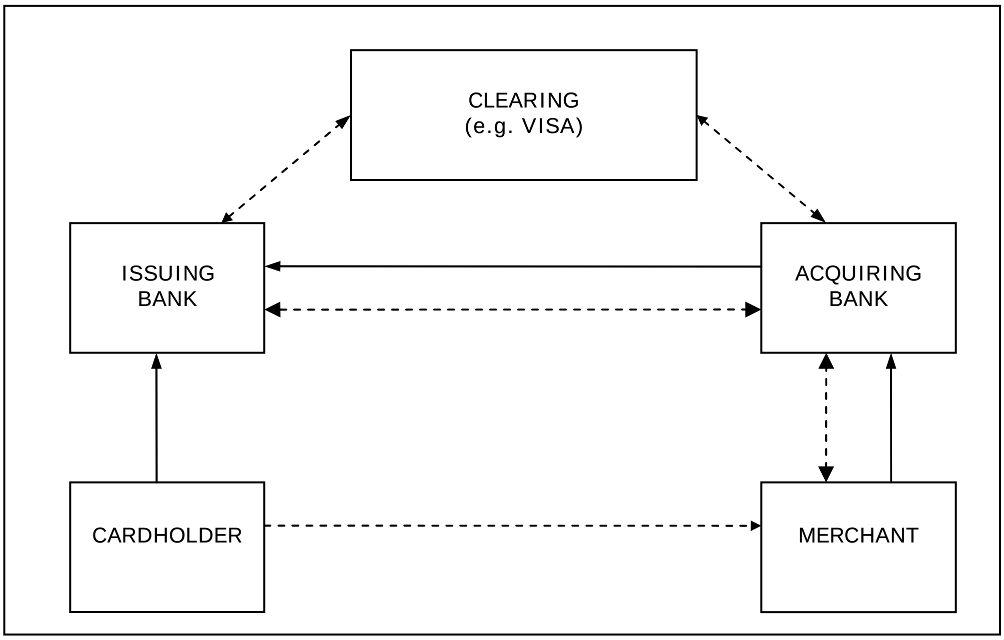


4.2 International payment cards

A wide range of payment cards are offered in the Nordic countries. Payment cards can be broadly divided into debit cards, charge cards and credit cards. Debit cards are directly linked to the cardholder's bank account, which is charged immediately. Charge cards are not linked to a bank account. The cardholder receives a batch invoice from the card issuer (for example once a month). The cardholder is offered a certain amount of credit through deferment of payment. The credit is free as long as the invoiced amount is paid by the deadline. Credit cards are payment cards that grant the user a certain amount of credit which is repaid in instalments according to a repayment plan.

International payment cards like Visa, MasterCard/Eurocard, American Express and Diners Club Card are present in all the Nordic countries, but they play a different role in the different countries. In Sweden and Iceland they have a predominant role, and are the basis of the national payment card market, while in Finland, Norway and Denmark they play a supplementary role to the national joint venture payment card system. We will come back to the national joint venture payment card system later in this chapter.

Figure 4.3 International payment card systems



As figure 4.3 shows, a card system is based on a combination of four different roles, namely cardholder, card issuer, merchant and acquirer. In addition, the figure shows the fee structure (whole arrows) and the flow of information (stippled arrows) between the four parties. The parties are explained in the following:

- Cardholder: Private person or enterprise who disposes of and is legally responsible for the use of a payment card with debt, charge or credit facility.

- Card issuer: The activity/undertaking issuing the card to the cardholder. This may be a bank or a finance/card company.

- Acquirer of transactions: The activity/undertaking that delivers services to the merchant, including settlement for payment transactions carried out using a card. The undertaking may be a bank or a finance/card company or a subsidiary of a bank. The collection of transactions is normally carried out by an acquirer, but in some cases external transaction collectors may perform this task for the acquirer.

- Merchant: A shop, restaurant or the like where cards may be used. Merchants may have a registration facility both on the physical premises and for remote trading via the Internet.

The customer pays an annual fee, transaction fees, a statement fee, exchange fees and interest rate to the card issuer. The merchant pays connection and transactions fees (Merchant Service Charge, MSC) to the acquirer. The acquirer pays interchange fees to the issuer (MIF).[19]

The card systems are organised in two ways, either as three-party systems or four-party systems. In a four-party system, four different participants fill these roles. In three-party systems, one participant fills the roles of both acquirer and issuer.

In Sweden, the payment card market is to a large extent based on international payment cards, and the banks run their own payment card system. The interbank fees are set up by bilateral agreements or via multilateral agreements where the fees are fixed at the level that applies for cross-border payments in the EU.

Visa Sweden is the local representative of Visa International in Sweden. To become a member of Visa Sweden you have to meet the demands formulation by Visa International. Visa Sweden also decides the interchange fee in Sweden, but it is possible for the banks to bilaterally agree lower interchange fees.

In Iceland, the payment card market is based on international payment cards and rules, but the banks have outsourced operations to two independent payment card companies, Kreditkort Ltd. and VISA Iceland Ltd. They are both owned by Icelandic commercial banks and savings banks. The role of these companies is, on the one hand, services and support to commercial banks and savings banks in the issue of payment cards and, on the other hand, acquirer under contract with merchants. Kreditkort also issues its own credit cards in Iceland.

In Iceland there is a single EFTPOS (Electronic Funds Transfer from Point of Sale) system, named the RÁS system, for both credit cards and debit cards. The RÁS system is owned by an independent company, FGM, which in turn is wholly owned by the Icelandic commercial banks, savings banks, Kreditkort, VISA Iceland and the Central Bank of Iceland. FGM was established in 2000 following a decision by the Icelandic Competition Authority that new participants should be granted access to the RÁS system.

[19] The acquirer pays a bilateral interchange fee (BIF) to the issuer if they have a bilateral agreement.

Kreditkort holds a Principal Member MasterCard licence in Iceland and issues its own credit cards. Commercial banks and savings banks who also issue MasterCard/Maestro in Iceland, do this based on an Affiliate Member licence with MasterCard International. Kreditkort is an agent and local acquirer for Diners Club, American Express and JCB in Iceland.

VISA Iceland is a group member of VISA EU and holds the licence to issue and acquire VISA payment cards in Iceland, both debit cards and credit cards. VISA Iceland does not issue its own credit cards but processes the issuing of VISA cards in Iceland on behalf of Icelandic banks and savings banks.

Both card companies, Kreditkort and VISA Iceland, are acquirers in Iceland. In the acquiring market the companies operate as independent parties and upon request service all merchant agents which accept their cards for payment.

Visa Bank Group Norway is a membership organisation for Norwegian banks and other financial institutions, which offers membership in Visa Europe on behalf of Norwegian issuers and acquirers. Visa Bank Group Norway manages the Visa brand and international rules in Norway, and has the responsibility for collecting and settlement of interchange fees in Norway. Visa Bank Group Norway has 153 members.

Norwegian issuers and acquirers of MasterCard meet in the Norwegian MasterCard Membership Forum. However, the MasterCard guidelines determine that if one actor has a dominant position in a market (controls more that 75 percent of the MasterCard business in a country) this actor shall decide the interchange fee. SEB Card AB, Oslo branch, has long held such a position in the Norwegian market. In addition, Teller AS has become a Principal Member of MasterCard, and offers affiliate licenses.

DnB NOR ASA holds an exclusive license on acquiring American Express in Norway, and is at present also the only issuer of American Express in Norway. The SEB Card AB, Norwegian Branch, issue and acquire Diners Club in Norway. These are closed three party systems, of which other banks can not become a member.

In Finland the national debit card Pankkikortti still holds a large market share, even though the product will be phased out by 2008, as is explained later in chapter 4.3.2. Issuing international payment cards in Finland uses a three party system, as the main product Visa is issued and acquired by Luottokunta. Luottokunta is a card service cooperative which is jointly owned by banks (53 %) and merchants (43 %). Unlike other three party systems, Luottokunta is open to new members.

In Finland, Luottokunta is the sole acquirer of Visa and Eurocard/MasterCard cards. Luottokunta purchased the MasterCard Acquiring Service business from Eurocard Oy in early 2004.

Luottokunta is the sole issuer of Visa. Banks operate as Luottokunta's distributors in Visa cards. The exception is Visa Electron which is issued by banks. Master Cards are issued by banks as they have their own issuing licences.

Diners Club operates in Finland in cooperation with SEB Card.[20] Diners Club offers its products directly to consumers, but operates mainly in the business card segment.

In Finland, American Express offers Green Card, Gold Card and Platinum Card to private customers and American Express Corporate Card to corporate customers. American Express enters direct agreements with card-holders and retailers, i.e. it controls both the issuing and acquiring functions.

Danish banks issue MasterCard, Maestro, Visa Electron, Eurocard, Amex and Diners, with PBS International as the largest acquirer. Visa is co-branded with Dankort. Within Denmark only the Dankort element of the card can be used while the Visa element can be used abroad.

In addition to being the main acquirer, PBS owns the Danish payment card infrastructure and offers processing etc. to card companies. Diners and Amex do their own acquiring, using PBS as service provider. It is necessary for issuers, acquirers and merchants and others who want to use payment cards to have access to PBS. The prices PBS offers for access to the infrastructure are currently being investigated by the Danish Competition Authority

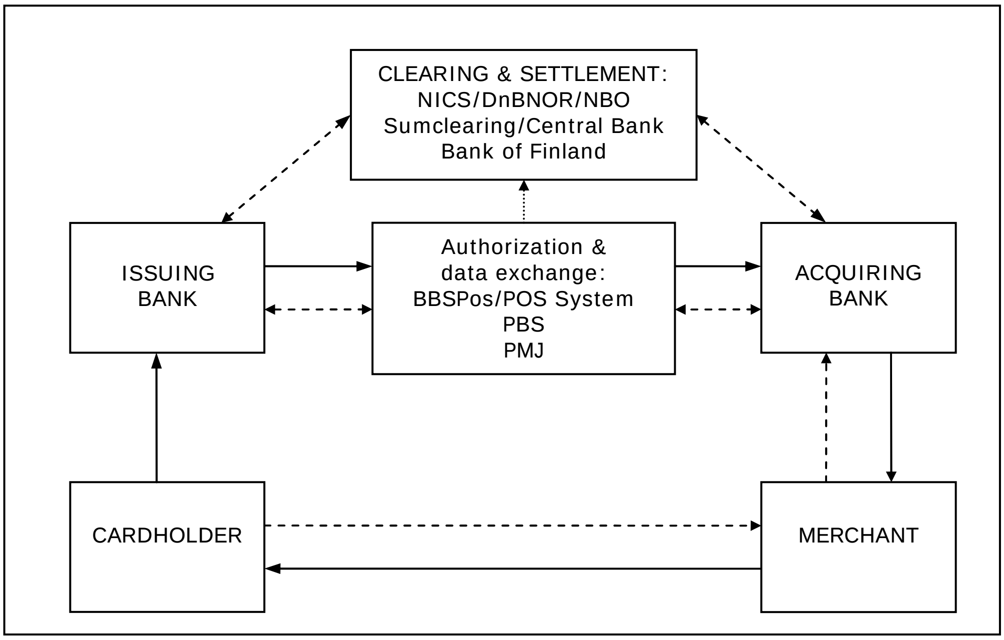
4.3 National payment card systems

In Norway, Finland and Denmark the payment card markets are dominated by national payment card systems (direct debit cards). BankAxept (Norway), Pankkikortti (Finland) and Dankort (Denmark)

[20] The diners Club brand is owned by Citibank.

handle 87, 67 and 90 percent, respectively, of all payment card transactions. The national payment cards in Norway and Finland are often co-branded with an international payment card like Visa or MasterCard. Common for these payment card systems are that they are jointly owned by all major banks in the country.

Figure 4.4 National Payment Card Systems: BankAxept, Dankort and Pankkikortti



4.3.1 BankAxept (Norway)

BankAxept is run by BBS which is the Norwegian banks' payment and clearing house, and is a joint venture between Norwegian banks. Banks in the BankAxept scheme must comply with the scheme's general rules, but operate independently of each other, both issuing and/or acquiring banks in the market. Each individual bank sets their own prices and service levels towards their own customers in competition with the other banks in the scheme.

All banks with operations in Norway can participate in the BankAxept scheme, whether they are Norwegian banks, branches of foreign banks or banks that conduct business in Norway on a cross border basis. Holding a banking licence (Norwegian or foreign) is the only criterion for participating in the BankAxept scheme.

The individual acquiring bank settles payments that the bank has acquired by crediting the retailers' bank accounts. The issuing bank settles its cardholders' payments through debiting the account of the cardholder. Settlements between banks are described in chapter 3.

4.3.2 Pankkikortti (Finland)

In Finland, the most important and most commonly used payment card system is the national Pankkikortti system (Bank Card). It is used exclusively for domestic debit. In the Bank Card system, the banks operate as issuers and distributors of the cards and are also responsible for acquiring services. All the acquirers are also issuers in the bank card payment system (except Tapiola Bank).

The standard way to join the Finnish payment systems as a clearing bank is to join the PMJ and the POPS interbank payment systems. Finland has no centralised clearing house. All banks transmit bank card transactions to one another via the interbank PMJ network, and settlement is carried out at the Bank of Finland. Each bank charges its own customers' Bank Card transactions from the cardholders' accounts. The PMJ transmission of Bank Card transactions has operated on the principle of reciprocity and banks do not charge each other fees for transmission.

A merchant agrees with its own bank on the reception of Bank Card transactions and sends all payment terminal transactions to its own bank, which transmits the transactions made with other banks' bank cards to the issuer through PMJ. Each bank collects transaction fees for Bank Card payments received from their customers (merchants), and these are not agreed upon jointly. In practice, the fee has been very small compared to other card programs.

According to the Finnish Bankers´ Association, the bank card system is open to all banks that operate in Finland. Banks within the Finnish Bankers' Association have jointly defined the bank card system's functionality and the related guarantee terms. Every bank that joins the bank card system has to pay a joining fee of 700,000 euros. Investments made and the changes required by those joining are used as criteria. The banks do not pay any annual fees, fees per card issued/other volume membership fees or other fees for the system. The bank must have a valid payment transaction agreement and it must sign the bank card cooperation agreement.

A likely outcome of implementing SEPA in Finland is that the national bank card system will cease to exist. According to the Finnish Bankers' Association, national bank card schemes will not be developed to deliver cards for Europe-wide use. Banks operating in Finland will offer their customers card products corresponding to bank cards in line with the SEPA-framework[21]. Domestic bank card schemes will be abandoned on a bank-by-bank basis according to a transition schedule. Issuance of national bank cards will cease according to the transition schedule, and no later than at the end of 2007, with national bank cards ceasing to be legal tender no later than at the end of 2010.[22] According to the Finnish Bankers' Association, banks will launch new card products to replace the Bank Card.

4.3.3 Dankort (Denmark)

In Denmark, Dankort, which is run by Payment Business Services A/S (PBS) is the dominant payment card (debit card). PBS is owned by more than 130 Danish banks and the National Central Bank. The access conditions to PBS payment system are set by PBS itself. PBS also owns the payment card infrastructure in Denmark, which is used by all the banks and several other issuers and acquirers of payment instruments in Denmark.

PBS operates the technical infrastructure of the payment system, offers processing of payment transactions, clearing and settlement and is the service provider of business support services to banks, card acquirers and card issuers. PBS is the acquirer of the national debit card Dankort, and PBS International is the largest acquirer of debit and credit cards issued by Danish banks such as MasterCard, Maestro, Eurocard Visa Electron and JCB. Danske Bank is acquirer of Amex, and Diners is acquirer of Diners Card.

Dankort and PBS were separated in 2001. As of 1 July 2006, PBS has re-taken control of the activities of Dankort. Nearly all banks have licence to issue Dankort. Despite the fact that PBS A/S runs Dankort, a bank with a Dankort licence is not obliged to acquire its Dankort transactions at PBS A/S.

All banks with a license to issue Dankort have to pay a common yearly subscription fee for participation in the infrastructure. This fee is allocated among the banks using a partition key. A bank's subscription fee is calculated on the basis of the bank's adjusted working capital.

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[21] European banks, the European Central Bank and the European Commission aim at creating an integrated payments area, known as the Single European Payments Area (SEPA).The objective is to develop payment services that will be on a par with national payment services for the SEPA as a whole.

[22] http://www.pankkiyhdistys.fi/sisalto_eng/upload/pdf/SEPAimplementation2006.pdf

Finally, it should be mentioned that both PBS and Dankort notify their terms and conditions to the Danish Competition Authority.

In the Faroese islands, the payment card system is equal to that of Denmark and the common payment card is Dankort.

4.4 Competition issues

With the increased number of card users and card transactions, supply of payment services has grown larger and more complex. Providing card payment services has become an important service in terms of turnover and consumer impact. Accordingly, the number of incumbent undertakings and the price level, etc. has increasingly become a competition concern.

As previously seen, the infrastructure necessary to provide card payment services, both cash withdrawal and payment card transactions, is a restricted good. Access to ATMs and POS[23] systems is vital in order to operate in the banking or credit card business. Infrastructure for cash withdrawal card systems and payment cards systems can be based on the infrastructure of a single dominant participant or on bilateral or multilateral agreements. In both instances, participation in payment systems is dependent upon access to a system in which other banks also participate. It is impossible, or at the least very expensive, to create a separate infrastructure independently of other market participants. As the main rule, undertakings rely on joining an existing infrastructure in order to provide payment services by card.

In markets with these characteristics, competition concerns may easily arise. The following chapter provides an overview of different competition issues related to cash withdrawal card systems and payment card systems experienced by the Nordic countries. This means that not all possible types of competition concerns are addressed. For instance, due to their complex and sensitive nature, questions related to horizontal cooperation are omitted. In the following, the Nordic experiences are summed up in a few key points describing some shared competition concerns in these countries.

In the following, subsections 4.4.1 to 4.4.4 look at conditions for entry, subsections 4.4.5 to 4.4.7 look at problems connected to dominance and finally, subsections 4.4.8 to 4.4.9 look at cross-border activities and regulation of payment systems in the Nordic countries.

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[23] POS = Point of Sale.

4.4.1 Entry

Potential entry into a market is a crucial factor in determining the competitive pressure on a market, or whether or not an incumbent business is a monopolist or has significant market power. Potential entry by a new firm will depend on the level of barriers to entry. A series of factors may constitute barriers to entry such as sunk costs connected to joining the market, legal provisions or technology. Barriers to entry thus tell us something about the likelihood that new firms will enter a market (potential competition). If potential competition is high, it is assumed to have a disciplining effect on the companies already in the market.

In card based payment systems, whether they are based on bi- or multilateral agreements or on joint ventures, access to infrastructure is vital to ensure competition. In the experience of the Nordic competition authorities, fee structure may constitute one of the most important barriers to entry into markets for card payment systems. The entry barriers met by potential competitors may, according to the Nordic experience, vary according to the characteristics of the institution which is applicant to the system. For instance, different joining conditions may apply to domestic banks, foreign banks and non-banks.

4.4.2 Entry for banks – access fees

Cash card withdrawal systems are outlined in section 4.1 above. Table 4.1 below describes which of the Nordic countries have a system for ATMs based on bilateral agreements between banks, and which have one dominating operator. The figure also describes in which of the Nordic countries the payment of an access fee is a precondition for entry to cash withdrawal card systems:

Table 4.1 ATM arrangements in the Nordic countries

Country	One dominant supplier or operation by each bank based on agreements.	Access Fee
Finland	The system is run by Automatia through the Otto platform. - Automatia is owned by the three largest banks in Finland. - 8 Finnish banks and Luottokunta (card payment acquiring organisation) are presently customers. - According to Automatia it is open to new customers. - Has agreements with international card companies.[24]	Entry fee. The size of the fee is confidential according to Automatia. No interchange fees in the ATM network.
Denmark	Sumclearing/PBS	The size of the fee is confidential.
Sweden	There is a multilateral agreement through the banks' association.	
	ATMs in Sweden are generally installed and owned by the banks.	The fixed cost for installing an ATM is about 500,000 - 1,000,000 SEK
	There are bilateral agreements between banks for use of each others ATMs. A bank whose ATM is used for cash withdrawals charges a fee for this service.	The size of the fee is set on a bilateral basis between banks. The fee is either paid directly by the cardholder or by the cardholder's bank. In Sweden the norm is that the cardholder's bank pays an interchange fee to the bank that owns the ATM.
Norway	Multilateral system ATMs in Norway are generally installed and owned by the banks.	The admittance fee for joining the BankAxept scheme is outlined in the agreement on calculation of fees for access to the banks common payment transaction system[25].
Iceland	Multilateral system ATMs in Iceland are installed and owned by the banks.	The norm is that the cardholder's bank pays an interchange fee to the bank that owns the ATM.
Faroe Islands	Sumclearing/PBS There is a multilateral agreement through the banks' association.	The size of the fee is confidential.

[24] The following international card companies have agreements with Automatia: Visa, Visa Electron, Plus, MasterCard, Maestro, Cirrus, Diners Club, American Express, all the Finnish domestic debit 'bank cards' as well as all ATM-use-only cards issued by banks operating in Finland. According to Automatia, all applications from international card companies have been granted.

[25] See Publication no. 6: Collection of Contracts and Rules for Domestic Payment Transfers, Finansnæringens Servicekontor og Sparebankforeningens Servicekontor, September 2003.

Payment card systems are outlined under section 4.2 above. In the competitive analysis, a distinction has to be made between the system predominant on the national market; systems based on international card systems or systems based on a national card system. Table 4.2 below describes which systems prevails in the various Nordic countries and whether the payment of an access fee is a precondition for entry to payment card systems:

Table 4.2 Infrastructure for payment card systems

Country	Common infrastructure or system predominantly based on agreements.	Access Fee
Faroe Islands	One predominant infrastructure.	The size of the fee is confidential.
Finland	No common infrastructure.	Individually set. The merchant fees of Luottokunta vary from 0.3% to 1.35%.
Denmark	One predominant infrastructure.	The size of the fee is confidential.
Sweden	No common infrastructure.	Individually set.
Norway	One predominant infrastructure for national debit cards. Holding a banking licence (Norwegian or foreign) is the only criteria for participating in the BankAxept scheme. Holding a banking licence is the only criteria for participating in Visa Bank Group Norway, and application automatically grants membership. All banks and financial institutions can apply for licence to issue various MasterCard products.	The admittance fee for joining the BankAxept scheme is outlined in agreement on calculation of fees for access to the banks common payment transaction system[26].

[26] Publication no. 6: Collection of Contracts and Rules for Domestic Payment Transfers, Finansnæringens Servicekontor og Sparebankforeningens Servicekontor, September 2003.

Table 4.2 (Continued)

Country	Common infrastructure or system predominantly based on agreements.	Access Fee
Iceland	No common infrastructure for credit cards but one system for processing debit cards.	
	Each of the card companies operate their own system and are responsible for authorisation, registration, financial transactions and other processes necessary for issuing and usage of cards.	
	Holding a banking licence and an agreement with VISA Iceland is the only criteria for issuing VISA payment cards.	No access fee is paid to VISA Iceland. There is an interchange fee between VISA Iceland and issuers (banks).
	Banks and financial institutions can apply for licence to issue MasterCard payment cards in Iceland. All banks and savings banks hold Affiliate Member licence in the MasterCard system.	Access fee is paid to MasterCard Europe. Multilateral interchange fee between Kreditkort and issuers (banks) and a bilateral system is in preparation.

Several of the Nordic countries have experienced that fees may constitute barriers to entry.

Finnish competition authorities have dealt with entry fees in relation to cash withdrawal card systems. Although Automatia, the co-operative of the three largest banks in the market, claims that the system is open to new customers, the Samlink-banks[27] had problems with joining the network as acquirers. The FCA did not reach a conclusion in this case as Automatia and Samlink reached an agreement on the conditions of Samlink's entry to the system in July 2004.

A few years ago some of the new niche banks complained to the Swedish Competition Authority that they were asked to pay unreasonable fees to the larger banks in order to access their ATMs. The Swedish competition authority is concerned that the fixed cost for installing an ATM, currently

[27] Samlink Ltd is an IT company owned by the Savings Banks. It produces IT and support services required in banking. All the Savings Banks are shareholders in this company. The term Samlink-banks refer to the company's main customers: Savings Banks, Aktia Savings Bank and Local Co-operative Banks.

amounting to 500,000 - 1,000,000 SEK, is a sufficiently substantial amount that it causes problems for small newcomers to the market, considering that investments must be made for an entire network of ATMs. Smaller banks may be forced to rely on agreements with larger banks with a developed infrastructure of ATMs. In the view of the Swedish Competition Authority there are two alternatives for a bank seeking to ensure access to ATMs owned by other banks. One option is to enter into bilateral agreements with owners of existing ATMs in order to achieve access to their ATM network. Complete cover of all ATMs in the market requires bilateral agreements with virtually all the banks that own ATMs. The second possibility to ensure a bank access to all the available ATMs for its customers, is through connection with international card co-operations, such as Visa and MasterCard.

The Swedish Competition Authority has recently published a report on the conditions for access to the general payment infrastructure. These conditions were analysed for both large and small banks. The authority acknowledged the fact that small banks usually pay more for access to the ATMs owned by the larger banks than the larger banks pay to each other for the same service. Clearly the larger banks have invested in the existing ATM network and have certain costs that are related to the running and functioning of the network. It is nevertheless evident that the smaller banks face a cost disadvantage in this respect relative to larger banks. Furthermore, the authority pointed out the relatively small number of ATMs in Sweden. A comparison with 13 countries in the EU showed that Sweden has the lowest number of ATMs per capita and the highest number of cash withdrawal transactions per ATM. Part of the explanation for this might be the fact that banks rather than the cardholders carry the costs for this service. Nevertheless, given the cost and fee structure for the ATMs, it should still be profitable for larger banks to install more ATMs. It should also be lucrative for other actors, who only intend to provide ATM terminals, to enter the market. A prerequisite for this, however, is that the larger banks pay such an actor a fee that is very similar to what the smaller banks pay for access to the larger banks’ network of ATMs. It appears though that the larger banks are unwilling to do this, which in turn makes entry in this market difficult and contributes to the relatively low number of ATMs in Sweden.

In Iceland, ownership of all payment card activities are closely intertwined relating both to the issue of cards, acquiring and the payment systems. Commercial banks and savings banks are jointly involved in all these aspects. It is the view of the Icelandic competition authority that this ownership structure is likely to cause problems for access by new participants.

Kreditkort has provided one competitor in acquiring, access to the debit card system in the RÁS system by entering a so-called processing contract. This involves Kortathjónustan Ltd., which provides processing services to the Danish acquirer PBS International. The background of this arrangement is that PBS is competing in the Icelandic market in payment card acquiring. Kortathjónustan Ltd., which provides service on behalf of PBS to merchants doing business with PBS, requested the access in order to be able to provide both debit card and credit card services to merchants. Since MasterCard and Maestro are separate brands and subject to different rules set by MasterCard International, it was regarded as reasonable to accede to this request.

VISA Iceland has rejected a similar agreement with Kortathjónustan Ltd. concerning access to the RÁS system relating to Electron debit cards. VISA Iceland has on the other hand established several special national rules providing various conditions for cross-border acquiring for VISA payment cards in Iceland. These rules mainly involve special arrangements in Iceland consisting of facilitated payments, in full or instalment, on debt from credit card transactions. They include extensions on card holders' debts, with or without interest. Kreditkort has in a similar manner established certain national rules for the issue and acquiring of MasterCard payment cards in Iceland, but the conditions are not as stringent as those of VISA Iceland. Both companies employ stricter risk control if PBS undertakes the acquiring, than when they undertake the acquiring themselves. The Icelandic Competition Authority is currently investigating these arrangements for the payment card market in Iceland. The system adopted by VISA Iceland may, even though not necessarily unlawfully, constitute discrimination in the market acquiring market.

Norwegian and Danish competition authorities do not yet have any decisional practice on whether the access cost constitutes a barrier to entry, though both authorities have received signals or complaints from some market participants that find the level of cost problematic. In a report on financial markets from 2003, the Norwegian Competition Authority found that access fees to some degree constitute an entry barrier.[28]

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[28] Publication by the Norwegian Competition Authority, no. 1/2003, "Competition in Financial Markets". (Published in Norwegian only).

4.4.3 Entry for foreign banks

The question has been raised whether entry is more difficult for foreign than national banks. With increased harmonisation of financial regulation throughout Europe, this problem seems to be decreasing.

In Norway, there is in principle no difference between national and foreign banks when entering BankAxept, but the admittance fees are calculated differently. The Norwegian Competition Authority has not evaluated to what degree the cost of joining might constitute a barrier to entry, but has made a note of the fact that foreign banks seem to be charged the maximum fee automatically.

In Denmark, some of the foreign banks have referred to a "club" mentality in the Danish bank sector, and were given the impression that they were not welcome as owners of the infrastructure.

In Iceland, foreign banks must have a banking licence in their home country and confirmation of the licence must be received from the competent authorities by the Icelandic Financial Supervisory Authority in order to issue payment cards. To engage in acquiring, it is enough to be a subsidiary of a bank(s) as is the case with PBS A/S in Denmark which competes in the Icelandic market.

4.4.4 Entry for non-banks

The question of entry for non-banks is mainly relevant in Norway, Finland and Denmark, where the payment card system is predominantly run by banks. In Sweden and Iceland, where the payment card system is based on various payment card companies, this question is less relevant.

Access to payment systems for non-banks may be an important means to increase potential competition.

In Iceland both VISA Iceland and Kreditkort have been granted access to the system, with the exception of debit cards where a precondition for issuing is holding a banking licence.

In Norway, Denmark and Finland, a precondition for entry to the national debit card system is holding a banking licence. This means that access for non-bank payments card suppliers is somewhat problematic.

In Finland, there are also some well developed retailer card programs that operate outside the interbank payment systems. Some retailer card programs are well developed. For example S-Kortti is issued by the S-Group retailer chain and has most of the features of traditional payment cards. S-group has agreements for co-operation with for example petrol station chains. Some petrol station chains have their own payment cards issued primarily for corporate customers.

4.4.5 Dominance

In a competition analysis, dominance is relevant in several aspects. Dominance may constitute an entry barrier in itself. Dominance may also be analysed in relation to abusive behaviour, as a precondition for applying competition law.

The definition of dominance, and whether the term market power is used instead, may vary between national competition regimes. Most European countries have national competition regimes which to some extent reflect EC competition law. For this reason, in the following, dominance is understood as the ability of an undertaking on a market to behave to an appreciable extent independently of its competitors, customers and ultimately its consumer.[29]

The assessment of dominance/ market power is made on the basis of market shares and an analysis of the level of barriers to entry. Dominance can hence only exist in relation to a market. Consequently, competition authorities define a relevant market. For the purpose of this analysis it is not necessary to define the relevant market in detail. Dominance is consequently considered in relation to cash withdrawal card systems and payment card systems, even though there might exist more narrow markets.

4.4.6 Dominance in the cash withdrawal card systems

In Finland, Automatia dominates the ATM network. Through Automatia the three largest banks have a stronghold on ATMs. The FCA is closely monitoring Automatia because of its gatekeeper status in the cash withdrawal network. A new competing network would not be economically viable.

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[29] Case 27/76 United Brands v Commission.

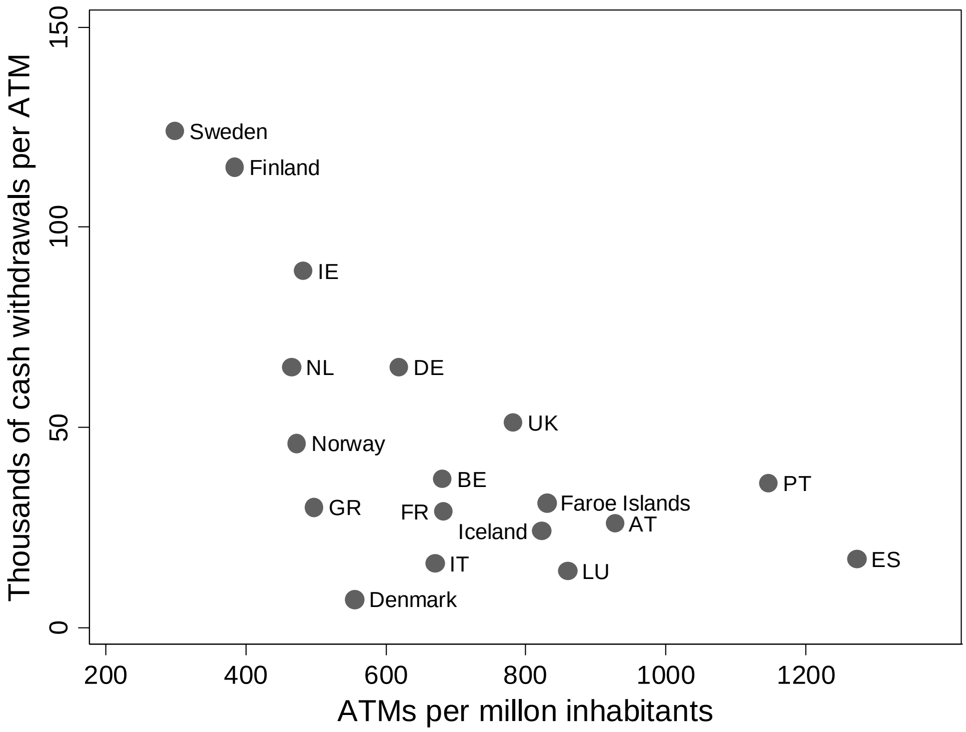
In Norway, Denmark, Faroe Islands and Sweden, ATMs are owned by the large banks individually. This means that dominance by a single undertaking is unlikely to occur. On the other hand, competition concerns may arise due to collective dominance or due to horizontal cooperation between the banks.

The Icelandic Competition Authority is not aware of any problems relating to the operation of ATMs in Iceland. However, the Icelandic Authority is concerned by the extensive and intertwined ties in the ownership by commercial banks and savings banks of the netting and payment system in Iceland, to which a new participant would certainly require access. The ownership ties and the business activities of FGM could indicate a barrier to entry for a new participant into this market, but no conclusion has been drawn on this.

For the sake of comparison, a figure has been included below, which seeks to demonstrate whether different European countries are provided with a sufficient number of ATMs, measured by the number of withdrawals per ATM.

As follows from the table, there are relatively large Nordic variations in the number of ATMs. The figure seems to indicate that Sweden and Finland are undersupplied with ATMs, compared to other European countries. It might be that large banks owning ATMs have an incentive to keep the number of ATMs down. To some extent, however, a low number of ATMs may reflect that cash-back is an option when using payment cards, as an alternative to using ATMs. It should be noted that not all ATMs in each European country can be jointly used by all banks' customers. This means that the total number of ATMs may not show how many ATMs the customers can actually use.

Figure 4.5 ATM-density in relation to total number of transactions



Source: European Central Bank, 2005, Blue Book 2005, Payment and Securities Settlement systems in the European Union and the national competition authorities of Denmark, Norway and the Faroe Islands.

4.4.7 Dominance in the payment card systems

In Norway, banks have to a large extent outsourced transaction processing to BBS. BBS is a dominant actor in the Norwegian payment card market. As described in the following, the Norwegian Competition Authority has on two occasions found behaviour by BBS contrary to competition law.

Firstly in 2001, the Norwegian Competition Authority banned an exclusive agreement between BBS, the dominating clearing and settlement house, and the banks connected to electronic invoicing.

Secondly in 2003, the Norwegian Competition Authority banned an agreement between BBS and the banks connected to processing EFTPOS-transactions. Previous to 2003, collection of transaction data from banks in Norway was monopolised due to an exclusivity clause in the agreement between the banks and BBS. The POS System entered the market after the exclusivity agreement had been banned by the Norwegian authority.

In Sweden, payment systems are connected to the different banks which provide interbank access through bilateral and multilateral agreements. The large banks are most important in this system. The terms of the agreements may differ between large and small banks, but in the view of the Swedish Competition Authority, not to such an extent that they place smaller banks at a disadvantage as regards card issuing.

In Finland, though there are some concerns about dominance, the FCA has not received any complaints about the abuse of dominant position in the payment card markets. Luottokunta has a strong position in the international payment card markets in Finland. The banks could, at least theoretically, supply acquiring services also on their own, but in practice Luottokunta dominates both the Visa and MasterCard acquiring markets. The FCA is closely monitoring the level of cooperation in Luottokunta.

In Denmark, PBS is a dominant player. Access to PBS is a necessity for issuers, acquirers and merchants and other who wants to use payment card. PBS's offered prices for access to the infrastructure are currently being investigated by the Danish Competition Authority. Institutions must furthermore accept two sector agreements, one concerning "clearing without documents" and one agreement concerning "accounts with checks and/or Dankort". No conclusion has been made as to whether these conditions may lead to foreclosing effects on the market.

In Iceland, Kreditkort and VISA Iceland engage in acquiring only where their own cards (brands) are used in business transactions. Competition is more evident in the issue of cards (brands) where the competition mostly involves different structures of service and offers in co-operation with various partners.

4.4.8 Cross-border activity

The following section deals with the current level of cross border activity in payment systems.

Cross-border activity is an important means of enhancing competition as it may increase the number of firms active on a market. Cross-border activity can take place both on the supply and demand side of financial markets.

On the supply side, foreign financial institutions may through EU/EEA regulations open branches in states other than the state where the parent company is located. EU/EEA regulations thus promote increased cross-border movement on the supply side. This may lead to increased potential competition in each national market, and thereby enhance competition.

On the demand side, however, there is little movement on a cross-border basis. Although no specific figures are available, the impression from the Nordic markets is that consumers seem little inclined to demand financial services outside their national boundaries on more than an insignificant level.

ATMs are widespread in the Nordic countries, and normally accept international payment cards like VISA and MasterCard. Consequently, withdrawal of local currency by foreign credit cards should be relatively easy.

The competition authorities in all of the Nordic have reported that there is little or no cross-border activity in connection with the payment systems.

In Norway, the Norwegian Competition Authority asked a selection of banks which operate in several Nordic countries, how well the payment card system infrastructure is adapted to accommodate cross-border payment transactions. The response was that the infrastructure is built to accommodate the national payment system and is not well adapted to cross border payment transactions at all.

In Iceland, there are three enterprises operating in the acquiring market. VISA Iceland acquires only transactions relating to VISA payment cards. Kreditkort acquires transactions relating to MasterCard/Maestro cards, as well as several other types of cards which are not issued by Icelandic financial undertakings, while the Danish enterprise PBS is a cross-border acquirer both for VISA and MasterCard payment cards. This means that VISA Iceland and Kreditkort are not in competition with one another in this market, but both are engaged in competition with PBS.

4.4.9 Regulation

Most of the Nordic countries have a mixture of regulation by law and self-regulation, with primary emphasis on self-regulation. The Nordic countries seem to be well regulated as regards licensing requirements and other requirements aimed at ensuring financial stability. Beyond this, self-regulation seems to be the norm for the running and operations of payment systems. For instance, the level of entry barriers seems to depend upon self-regulation. This makes control with self-regulators an important issue.

In Denmark, the mutual agreements on ATMs are agreed on in the bank organisation "Finansrådet" and approved by the Danish Competition Authority. The payment card system is regulated in the "Betalingsmiddellov" (Act on Certain Payment Instruments, consolidated act no. 1501, 20 December 2004, amended by act no. 603, 24. June 2005). Section 14 of the Act implies that banks can charge a subscription fee from the retailers when consumers use payment cards with a chip in a shop (contrary to Internet purchases). The retailers may not charge a fee from the customers. However, if the customers use an international card issued in another country, retailers may charge customers a fee. Retailers may not charge a higher fee than they are charged by the banks. Access conditions to the PBS payment system are set by PBS itself, and PBS is obliged to notify its conditions to the Danish Competition Authority on a regular basis.

The banking industry in Sweden is to a high degree self-regulated. The cash withdrawal card system is not regulated formally. Nevertheless, banks that own parts of the ATM infrastructure/network are expected to provide access to their ATMs based on conditions that are not discriminatory to foreign banks or to new and/or smaller banks.

In Finland, the cash withdrawal card systems are not directly regulated. There is no framework legislation covering Finnish payment systems as a whole. Regulation and supervision of payment systems is decentralised to several authorities. A specific piece of legislation governs means of payment, even though the legal regulations pertaining to payment systems are still primarily based on contracts between private parties. The major contracting parties are the banks engaging in professional payment transfer and the central bank. As Finland does not have a separate ACH, the Finnish Bankers´ Association is involved in the administration of the contracts concerning the systems.

In Iceland, the ATMs in the country are all operated by commercial banks and savings banks. For all card transactions, both ATM and POS, market participants are required to have an operating licence pursuant to Act No. 161/2002 on financial undertakings, and are subject to regulation by the Financial Supervisory Authority. No special rules apply to the activities of ATMs. Supervision of the payment/netting system and POS system is entrusted to the Central Bank, which is one of the owners of FGM.

In Norway, the systems for payment services are regulated by Chapter 3 in the Payment Systems Act, and the rules are enforced by The Norwegian Financial Supervisory Authority (Kredittilsynet) and the Bank of Norway

(Norges Bank). The purpose of the provisions is to ensure that systems for payment services are organised and operated so as to promote secure and efficient payments, and effective and co-ordinated execution of payment services. The Norwegian Financial Supervisory Authority shall be notified of the establishment and operation of systems for payment services, including the establishment and operation of a cash withdrawal card system. The aim of these rules being financial stability, matters important in a competition perspective, such as access requirements, are left to self-regulation.

With regards to fees, the Norwegian Competition Authority has granted an individual exemption, pursuant to the Competition Act of 1993, on the agreements regulating access fees to BankAxept. This exemption is valid until 2011. With regards to the dominant position of BBS, which is self-regulated by the banks, the Norwegian Competition Authority is closely monitoring the market and has banned anti-competitive agreements, see above.

With regards to competition between international payments schemes in Norway, a joint research project between the Norwegian Competition Authority, the Financial Supervision Authority and Bank of Norway led to a report to the Norwegian Ministry of Finance in October 2004. The project group concluded that competition between international card companies should be monitored and regulatory measures initiated if competition does not improve.

The information provided by each national authority seems to indicate that financial markets in the Nordic countries are well-regulated as regards rules to ensure financial stability. Financial stability is important in order to avoid consumer harm. Possible competition concerns seem to be addressed by the self-regulators on request from national competition authorities, and it seems that self-regulators in general need to be more concerned with constructing rules on access to payments systems which ensure access for foreign banks, and non-bank institutions.

4.5 Conclusion

There are two predominant systems in the Nordic countries. In Sweden and Iceland the payment system is based on international payment card systems, while in Denmark, Faroe Islands, Norway and Finland the payment card system is to a large extent based on national joint venture payment card systems.

The advantage of a system based on joint ventures is an improved likelihood of cost efficiencies, in particularly in countries with scattered populations. This might improve consumer access to payment systems. On the other hand, the systems may have a downside in terms of access conditions, which might deter potential competition.

The advantage of a system based on international payment cards, is the likelihood that entry barriers are lower than in joint venture systems. On the other hand, international payment card systems are likely to incur higher infrastructural costs and a more complex network of agreements. This might reduce consumer access to payment systems.

Whether analysing ATM or POS systems, the common denominator in a competition analysis is the importance of infrastructure. Infrastructure is a restricted good, and consequently access is an important competition concern. The disciplining effect of potential competition on undertakings already on the market is an important concern to competition authorities. Fee structures conditioning access is in the experience of the Nordic competition authorities one of the most important barriers to entry. Furthermore, extensive self-regulation on top of rules to ensure financial stability means that it is important to ensure that competition concerns are addressed and adequately dealt with. In particular, access for foreign and non-bank institutions seems to be an important means to increase the competitive pressure in payment card systems.

5 Customer mobility

It is widely accepted that increased competition results in a market outcome with low prices and maximum welfare benefit for society. The main reasoning for this relates to the fact that under fierce competition no suppliers are able to exert market power and influence the market price.

A way to obtain improved competition is to ensure the existence of customer mobility – i.e., customers should have the option to freely choose their supplier at all times. This mobility poses an important threat against the supplier and thereby minimizes market power.

The threat arises since any rational customer will choose the cheapest good if two suppliers offer the same good at different prices – at least if the customer does not have other preferences.

Because of this rationality, a low price supplier will win market shares at the expense of an expensive supplier. To avoid the negative effect, the expensive supplier will find it profitable to lower his price, hereby starting a price mechanism, with the result that the suppliers offer the same (market) price.

Accordingly, with optimal customer mobility, each supplier will meet an infinitely elastic demand. An infinitely elastic demand implies that if the supplier raises the price above the market price, the demand for his products will be zero. This constitutes a credible threat disciplining the supplier to take the market price as given.

However, if customers for some reason have poor opportunities or poor incentives to switch to another supplier, the supplier will meet a demand with some degree of inelasticity. Thus it will, to some extent, be possible for a supplier to raise his price above the market price without losing market shares.

In conclusion, the degree of customer mobility in a market is likely to reflect the level of competition on that market. A lack of customer mobility can, in other words, have a direct, negative impact on the competition level. However, it must be said that low customer mobility also occurs in markets with fierce competition.

5.1 Barriers to customer mobility

Customer mobility may be less than perfect for a number of reasons, and listed below are five selected barriers to customer mobility on bank services. Some of the barriers are closely linked to each other.

First, the existence of *switching costs* makes customers immobile. In many countries a customer must pay a fee in order to discontinue his relationship with the bank. Such fees have a very direct impact on a customer's decision to leave their bank, and if the fees are high they have a 'lock in' effect on customers.

Second, the existence of *searching costs* also makes customers immobile. These costs reflect the difficulties and inconveniences that customers may face when changing bank. For instance, customers spend time searching for a new bank and arrange meetings with different bank consultants.

In addition, a change of bank may be troublesome for customers because it means changing account number, including informing all relevant parties (employers, customers etc.) of the new account number. If care is not taken to inform all relevant parties, the customer may not receive his/her future payment/salary transferred by these parties. Getting a new account number is inconvenient for both household consumers and SMEs. However, the problem seems to be more significant for the SMEs, since they have a wide range of business relationships and would need to change the templates for letters and invoices, for example.

Third, customer mobility will slow down if customers have *difficulties comparing* the services and prices offered by the banks. These difficulties arise in situations where:

- The banks offer very different services (heterogeneous services) making it difficult for customers to compare these services.

- The banks have a complex price structure making it difficult for the customers to comprehend the 'real' price.

In both situations it is difficult for customers to understand the terms of the products and to make meaningful comparisons between the products. Lack of transparency may in other words result in sub-optimal decision-making by the customers.

The best way to avoid this inefficiency is to make the market more transparent. Transparency is, for instance, achieved by banks reporting their services and prices to a neutral, public website. On such websites, the customer can compare the prices (interests and fees) from different banks getting an indication of which banks – if any – are cheaper than the current bank. A drawback to comparison websites is that the customers can only get an indication of prices. Many customers will still be able to negotiate better prices than the official prices listed on the website.

Fourth, *bundling* of products can have the same 'lock-in' effect on customers as switching costs. Today, banks have turned into financial supermarkets where customers are offered bank products, mortgage loans, insurance products and securities trading under the same roof. As a consequence, most banks make use of some kind of loyalty program, advantage program, product package or customer package.

A common feature of these programs and packages is that the customer gets some sort of discount if he/she acquires all products within the same financial group. Loyalty programs can also include discounts to non-financial services (restaurants, travelling, etc.).

Bundling, being a result of loyalty programs and product packages, represents a problem to customer mobility:

- Customers are reluctant to switch banks because it often implies a switch of the whole range of products. The inconvenience of switching will be considered too high, thus reducing the customer's choice.

The price of each individual product is less transparent to the customer. Thus, it is difficult to compare for example the price of car insurance with other alternatives. There is a risk that niche banks with fewer products will have a harder time selling their products. When non-financial services are linked together with loyalty programs, the price of the entire banking relationship becomes non-transparent to the customer.

Fifth, *extensive transportation costs* divide a market into smaller geographical markets, where customers are only mobile within their local area. This may result in imperfect competition between local markets.

However, if all banks have branches in the local markets, competition will exist within each local market.

Furthermore, today, banks enable their customers to use the Internet for many day-to-day services and some customers need no advice from the banking advisor. This partly excludes the transportation issue. But as customers prefer to have face-to-face meetings with their banking consultant, the physical location of the bank is still crucial to some customers.

The next section deals with important factors when choosing a bank. Section 5.3 deals with actual barriers to switching bank, and in section 5.4 we highlight changes in switching behaviour and actual measures to improve switching behaviour. In section 5.5 we conclude on the customer mobility analysis.

5.2 Important factors when choosing a bank

Different aspects of customer demands affect the importance of competitive parameters in a sector. If customers value location of a bank – location becomes a competitive parameter.

In a market with lack of competition, the product characteristics that customers value most may not correspond to the competitive parameters in the sector. The reason for this may be that there is a common understanding among the suppliers not to compete on specific parameters. Another reason may be that there is poor transparency in the market, which implies that customers find it too expensive or troublesome to search for a better supplier.

To ensure the best possible competition among retail banks, knowledge of the sectors' competitive parameters, and especially factors that actually stimulate customers to switch bank, is crucial.

When retail customers choose a bank, quality, service factors or product features are important. Prices, trust, range of products and location of branches also matter when customers choose a bank.

Customers are different and hence each customer will have his/her own preferences for choosing a bank. However, various surveys have revealed that some specific preferences are more common than others. The most important preferences will be explained below.

Most people are provided with a bank account at such an early time in their life that the choice of a bank is a result of their parents' habits and tradition.

This means that there is no choice involved for the bank customer's first bank. Some customers will stay with their first bank for the rest of their lives.

When people get old enough to appreciate the different aspects of a bank relationship, they either choose to stay with their current bank relationship or to switch bank. Since a bank relationship is ongoing, each customer does this assessment more or less continuously.

If the customer at a given point of time chooses to switch bank, the mobility can be driven either by positive (pull) factors or by negative (push) factors. A pull situation can be explained as a situation where the customer is satisfied with his current bank but simply gets a better offer from another bank or finds the conditions of another bank so attractive that he is willing to switch. On the contrary, a push situation can be described as a situation where the customer is 'pushed away' from his current bank, i.e., experiencing the situation so dissatisfying that he has no other option than to switch to another bank.

For customer mobility, pull and push situations have the same result, but from a competitive point of view it is relevant to say that pull factors are the most favourable. If customer mobility is driven mostly by pull factors, it can be a sign of efficient competition with companies trying to outbid each other in order to attract new clients. In practice, however, customer mobility in the banking sector is driven by both pull and push factors.

Questionnaires from some Nordic Competition Authorities have shown that major pull factors among the customers are better prices and better services in other banks. In this connection 'services' can be understood as a series of different aspects – for instance the number of branches. In Norway, evidence has shown that mortgage loans to SMEs are an important issue. It seems that it is more or less unprofitable for distant banks to evaluate mortgage values and credit risks of SMEs. As a consequence, local presence and a well established network of branches are important factors. This probably applies in other Nordic countries, too. But branches are important not only to SMEs. Household customers, as well, value the presence of branches.

As for prices (interests and fees), surveys have shown that both household customers and SMEs see prices as one of the three most crucial factors when choosing a bank. This indicates that transparency of prices is equally important when it comes to customer mobility.

Not only will lower interests and fees be interesting to new customers but likewise the absence of fees. With a declining level of interest rates within the last several years, it has been harder for the banks to make profits through net interest margins. Thus, there has been a movement towards a dual price structure where increased income is built on fees on individual services and actions. The number of fees has risen dramatically and this topic has also been a main issue in the media. Therefore, a few banks have started to advertise with 'no fees'. This will of course attract some customers.

The most obvious push factor is perhaps the situation where the customer becomes dissatisfied with the banking consultant or feels that he/she has been treated badly by the bank.

Another important factor relates to a change in life situation (marriage, move, new job, getting children etc.). If you get married you may want to switch to your husband's/wife's bank. In the case of moving, your current bank is perhaps not present in the new area. Many customers may only reconsider their banking relationship when a change in life situation occurs.

From a competition point of view, mortgage loans comprise a central product in the personal retail banking market. A mortgage loan is a financial service of substantial size to the customer compared to other banking services. This implies that bank customers demanding mortgage loans may be willing to switch bank/mortgage bank if they can find a better offer. For example in the Norwegian market, banks are well aware of this and are consequently highly involved in the real estate business.

The importance of housing mortgage also creates a need for professional advice, making a personal and long term banking relationship more preferable. This makes a distribution network of branches still more important.

If bank customers only consider switching bank when raising a mortgage loan, it will have a limiting effect on competition. However, it must be said that customers obtain new mortgage loans more often than buying new houses.

If the different pull or push factors do not have sufficient impact on the customer he/she will of course be reluctant to switch bank. Again there seems to be different reasons why customers prefer to stay with their current bank.

In general, Nordic customers seem to be content with their banking relationship. In Denmark a survey showed that 70 percent of the customers would not consider switching banks even if it could be done without costs. Similar satisfaction can be observed in the other Nordic countries.

One of the crucial factors in this connection seems to be the level of trust. Consequently, a common explanation as to why a customer has chosen to be a customer in a certain bank is old habit or tradition (‘always been the family bank’).

Willingness to switch is also highly affected by a good relationship with a personal banking advisor in the local branch. A Danish survey has shown that consumers value a personal banking advisor at as much as 10-15,000 DKK a year. This comes perhaps as a bit of a surprise since most customers mainly use the Internet for their daily bank transactions, but an obvious reason may be that a personal banking advisor is important when serious issues arise.

Furthermore, some customers are more loyal to their bank because they believe that it will be easier to obtain a loan if suddenly in need. It will normally take some time to build a new relationship with the new bank. During this period of time, in may be harder for the bank to assess the customers’ creditworthiness or credit rating. This may deter customers from switching.

Convenience is also a parameter. Although loyalty programs and bundling may be a problem for transparency, it is more convenient for customers to buy all financial products in one bank,- even though it might be more expensive than shopping around.

Finally, lack of interest seems to be a common feature among bank customers. A survey performed by Berg and Borgeraas[30] among retail banking customers concluded that two of the reasons for low customer mobility relate to the facts that customers have an unconsidered relationship with the banking market, and that bank affairs are low interest areas. It seems that many customers do not compare prices and services and have a lack of interest and commitment when it comes to financial services.

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[30] Berg and Borgeraas: ’Hindringer for mobilitet i bank-markedet’, SIFO, Fagrapport nr. 21 – 2004.

5.3 Empirical data on customer mobility

In general, direct costs are low when Nordic bank customers want to switch from one bank to another. However, this does not imply that customers often switch to a new bank. The switching rate is quite low. In general, empirical switching rates show that around 5 percent of the customers switch each year. It is worth mentioning that there are only limited empirical data available on customer mobility. In Finland, Iceland and Sweden no studies have been made that look directly at this issue.

As mentioned earlier, a Danish survey showed that 70 percent of the customers would not consider switching banks even if it could be done without costs – this is of course closely linked with the high degree of satisfaction among bank customers. However, if the customer was able to save between 10,000 and 15,000 DKK, he/she would switch to another bank.

Each year the Danish Competition Authority calculates a mobility index showing the change in market shares from the previous year. The index ranges from 0 to 100. Since 2000, the mobility index for the banking sector has been between 1.5 and 3 which is substantially below the average for the services sector as a whole.

The Norwegian Competition Authority has calculated the same mobility index for lending to SMEs. This showed an index between 1 and 2.6 in the years 2000-2002, highly consistent with the Danish results.

A survey by Juul[31] has examined the mobility of household customers in the Nordic countries. The five largest banks in each country were asked about the number of private household customers as of 31 December 2004. Then, they were asked how many household customers became new customers in 2004 and how many left. For each country the gross mobility for the five largest banks – explained as customer gain and loss – is shown in table 5.1.

Table 5.1: Customer mobility for private customers in the Nordic countries

	Denmark	Finland	Iceland	Norway	Sweden
Gain	+ 5.3 %	+ 5.1 %	+ 4.0 %	+ 5.4 %	+ 4.4 %
Loss	- 5.4 %	- 2.1 %	- 1.7 %	-2.8 %	-4.2 %

[31] Juul: 'Mobiliteten I den nordiske finansielle sektor', TemaNord 2006:507.

The results in table 5.1 are biased since 35 percent of the banks were unable or did not want to deliver the figures needed. With this reservation, it seems that 4-5 percent of the customers have switched bank in 2004. In four countries the gain of customers is higher than the loss. The interpretation of this feature could be that the five largest banks in each country have 'stolen' customers from the rest of the banks. Only in Denmark is the loss higher than the gain.

It should be mentioned that the Juul survey does not show whether the household consumers left their previous bank completely or just started a partial relationship with another bank. Several of the Nordic competition authorities have the impression that it has become more and more common for customer to have several parallel bank relationships. In addition, table 5.1 could simply show that the market is growing. According to the Finnish Bankers' Association, roughly 4 percent of Finnish household customers switch banks each year. The Finnish Bankers' Association has reported that every fourth customer has an account in more than one bank.

The results above are complemented by other surveys regarding the length of banking relationship. In Norway there is evidence that 85 percent of SMEs have had the same principal bank for three years or more. Two thirds of the SMEs have had the same principal bank for six years or more. The Danish Ministry of Economic and Business Affairs carried out a customer mobility survey in 2004. This showed that 82 percent of the respondents have not switched bank within the last 3 years. The survey by Juul concludes that 63 percent of the consumers have been loyal to their bank for more than 10 years. Only 5 percent have switched bank during the last year.

Responses from other European Competition Authorities show that mobility in the retail banking sector is quite low. In Hungary only 16 percent of the customers have ever switched banks. In UK the estimated annual switching rate is 4-6 percent, and in France it is roughly 5 percent per annum.

In 2003, the Norwegian Competition Authority compiled a report on the banking sector. Of the 27 banks participating in the study, 14 banks answered the questions about customer mobility for the period 1999 to 2001. This showed that the number of new customers constituted 7 to 8 percent of the total number of customer relations. In 2000 and 2001, a number of niche banks such as Skandiabanken were established. If this is added to the above numbers, the mobility in 2002 was above 8 percent. In the same Norwegian study, additional figures from 2001 showed that the ratio between the numbers of new customers over total customers ran to 11.5 percent.

Compared to other countries a mobility ratio of 11.5 percent seems high, and it could be concluded that the increase in the number of niche banks in Norway has increased the mobility among bank customers. However, the increase in new customer relations does not necessarily mean that more customers have terminated earlier bank relationships. The Norwegian trend is that the customers tend to shop around more than before, establishing several parallel customer relationships.

From a competition policy point of view this is a positive trend. Customers switching their banking relationship entirely is not the only desirable goal. Multiple banking relationships can also be a sign of efficient competition in a market, where both full-service and niche banks compete on individual products.

However, the overall picture indicates that the mobility in the banking sector is still quite low. The Danish Competition Authority has calculated that the net percentage of customers switching supplier in other service sectors is around 15 percent a year. Evidence shows that customer mobility in the banking sector in the Nordic countries, in general, is somewhat below this figure. Compared with other European countries the banking sector mobility in the Nordic countries appears to be average.

5.4 Barriers to switch bank

When it comes to *switching costs,* banks operate only to a very limited degree with fees connected to opening and termination of a customer relationship, at least with regard to the most common products such as house loans, car loans and other ordinary loans, overdraft facilities, deposits etc. However, a fee may be connected to movement of capital pensions and securities deposits.

In Iceland the Competition Authority has identified early payment fees[32] as a barrier for switching. In Finland the early payment fees are regulated by consumer protection regulation.

According to the Finnish Consumer Protection Act a bank must not charge a consumer for premature payment of a house loan. This rule has

[32] Early payment fee is defined as the possible fee a borrower must pay in connection with premature payment of a loan.

exemptions: 1) the amount of the credit is over 17,000 EUR; 2) the interest rate is fixed for at least three years; and 3) at the moment of prepayment the same bank would give the same loan at a lower interest rate. The amount of the charge is limited: the maximum compensation that may be collected may be the difference between the interest agreed upon and the corresponding credit with fixed interest for the remaining credit period or the period of the determination of the reference interest rate.[33]

In the rest of the Nordic countries, it is the general opinion that switching costs have no significant impact on the customer's willingness to switch banks.

One problematic switching cost, however, is the notary public fee concerning mortgage loans. This is particularly the case in Norway. When customers want to transfer the mortgage to another lender, they have to pay a notary public fee in order to have the mortgage paper notarised. The problem is also relevant in Iceland and Denmark.

At 1 July 2004, the notary public fee in Norway was 2,112 NOK, after several years of increases. The fee constituted a substantial switching cost for the borrowers. On several occasions, the Norwegian Competition Authority has pointed out that this switching cost harmed competition in the house mortgage market. Since house mortgages are the central banking product in the personal retail banking market, the impact is wider than just the isolated market for house loans.

The authority calculated the switching cost effect of the notary public fee, shown in table 2.3. Because of the notary public fee, the interest rate differential has to be at least 0.21 percentage points for rational customers to consider changing bank. For a customer who initially had a mortgage loan of 1,000,000 NOK with an interest rate of 3.35 percent, this means that he would only consider switching bank if the new bank could offer an interest rate of 3.14 percent or better at that time, thus the 78 banks offering an interest rate between 3.14 and 3.35 percent would be excluded. The customer would also have other costs connected to changing banks. For customers with smaller mortgages, the switching cost effect would be even

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[33] This is regulated in the Consumer Protection Act 38/1978, chapter 7, section 12 'The creditor may charge a compensation for premature payment of the credit if the amount of the credit granted exceeds FIM 100,000 and if the interest rate on the credit is fixed or if the period for the determination of the reference interest rate is at least three years and if the interest rate of a corresponding new credit offered by the same creditor at the time of repayment is lower than the interest rate agreed upon. The maximum compensation that may be collected shall be the difference between the interest agreed upon and the corresponding credit with fixed interest for the remaining credit period or the period for the determination of the reference interest rate'. (85/1993).

greater: the number of banks offering an interest rate between 3.08 and 3.50 percent for a 500,000 NOK mortgage loan would be 108.

Three different mortgage sizes ranging from 500,000 NOK to 2,000,000 NOK, with an effective interest rate at 3.35 to 3.50 percent are compared. To emphasise the switching cost effect, a relatively expensive bank is used as comparison. The time horizon is one year.

Table 5.2: Notary public fees in Norway

Mortgage in NOK	Notary public fee as a percentage of the mortgage	Number of banks not profitable to switch to[1]
2,000,000	0.1055	30
1,000,000	0.2110	78
500,000	0.4220	108

Note 1: The number is calculated based on a comparison of interest rate terms in 126 Norwegian banks on 21 July 2004.

Source: The Norwegian Competition Authority.

The Norwegian fee was reduced with effect from 1 January 2006. But, if the customer wants to change the amount of the house mortgage at the same time as they change bank, they will still have to pay the old fee. Therefore, the problem is still relevant.

In Finland the notary public fee has been revoked. In 1996, the Finnish Competition Authority (FCA) initiated moves to the Ministry of Finance to abolish the notary public fee (1.6 percent) on house loans. The FCA's initiative contributed to the final elimination of the fee in 1998. The fee was found to be a factor impeding customer mobility. After this amendment, customers have been found to be more willing to switch their customer agreements. The removal of the notary public fee is alleged to have affected the demand on credit products. It is assumed to have increased the demand on consumption credit because, as for small loans, the fee affected the effective annual rate. It has also been claimed that the removal of the Finnish notary public fee has affected the competitiveness of the SME sector compared to the other Euro countries that have reduced their financing costs. The date on which the notary public fee was removed was influenced by the implementation of the third stage of the EMU at the beginning of 1999, when the fee would presumably have weakened the Finnish banks' competitiveness in relation to other banks in the Euro region.

Searching costs are high in the banking sector compared with other sectors. Financial matters are difficult and time-consuming for many people who do not want to spend too much time trying to find another bank. Searching costs are also closely linked with the bundling issue. If customers via bundling are forced to switch all financial products at the same time, searching costs will be higher.

Swedish studies have shown that consumers believe that the conditions do not differ between banks and therefore it is not worthwhile comparing services between banks. If this is the common belief, even small switching and searching costs will appear as barriers to customer mobility. The job will thus be to provide customers with true information such that it is worthwhile to search the banking market for products with lower prices. Improved transparency is crucial in this connection.

The survey by Juul shows that half the customers try to negotiate interest rates and fees with the bank. The survey also shows that more than 80 percent of the customers who negotiated with the bank achieved a satisfactory result.

The inconvenience associated with acquiring new account numbers and movement of deposits and loans may be an important factor for some customers. The banks within all Nordic countries have agreements on a procedure for customer switching, which should make a switch fairly easy.

Customers switching bank need not contact the ‘old’ bank. This contact is done by the new bank which also takes care of transferring the deposits to the new accounts, as is the case in Finland, where the client gives authorization to the new bank. Some banks even inform relevant parties such as employers and tax authorities. In addition, the new bank often pays the costs connected with transferral. But, even though it is relatively easy to switch bank, many customers still find the inconvenience too high.

Some have mentioned account number portability as a means to reduce inconvenience. The idea is that the banking customer can simply bring along his old account numbers to the new bank. For private customers, number portability will reduce many associated indirect switching costs such as informing others of the new account number. For SMEs, number portability will reduce associated indirect switching costs such as changing account numbers in their invoicing systems and informing business connections. The banking sector, though, has stated that number portability in practice will be expensive to implement. If this is so, such costs should be weighed against the benefits for the costumers.

The Nordic competition authorities believe that this proposition could be investigated further.

Complexity, too, seems to be an important issue for not switching bank. A necessary condition for switching behaviour based on positive factors is the customer access to information on prices and products in other banks. Therefore, information is closely linked to the switching issue.

Inconvenience, as mentioned earlier, is a factor that may deter customers from switching banks. The inconvenience caused by switching can be seen as a searching cost and is closely linked to the complexity of banking services. This complexity may result in banking customers spending much time trying to collect information on terms, fees and interests. The faster and easier this can be done, the less the inconvenience may feel.

This complex picture was also found in the survey conducted by the Danish Ministry of Economic and Business Affairs in 2004. In the survey, 71 percent of the respondents stated that prices – interests and fees – were not transparent at the time. In Sweden it is also a common belief that customers do not have the necessary information to compare services from different banks.

It appears that improved transparency is important if customer mobility is to be increased. One of the main reasons for customers not switching banks is the complexity and lack of transparency. The reason why consumers value a personal banking advisor so highly could be that they simply do not understand the different products and therefore must rely on their advisor.

The survey made by Berg and Borgeraas[34] shows that customers in the low price banks make their choice based on economical reasons. In other banks the choice of the customers to use the bank is more random. This also confirms the importance of transparency.

As mentioned in the beginning of this chapter, the banks have turned into financial supermarkets. This means that *bundling* of products is widespread. In the Juul report a survey has shown that 79 percent of the respondent banks use some sort of loyalty program or customer package.

The problem with bundling is that the customer receives more discounts the more products he/she bundles. The customer, however, often does not

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[34] Berg and Borgeraas: 'Hindringer for mobilitet i bank-markedet', SIFO, Fagrapport nr. 21 – 2004.

select what products to include, only the level of involvement. Thus, the customer often buys more products than needed.

The banks in all Nordic countries have loyalty programs. One example is the Nordea program shown in box 5.1.

Box 5.1: Nordea's loyalty program

Nordea introduced their loyalty program in 2001. The program has 3 levels (Basis, Fordel, Fordel+). The more products the customer buys in the Nordea group, the higher the level he/she will be placed on. The highest level has the highest discounts. If the customer is to move from Basis to Fordel, he must have an active wage account, engagements for more than 50,000 DKK and buy at least 3 products. A Fordel+ customer must also have an active wage account, but he must in addition have engagements for more than 250,000 DKK and buy at least 5 products.

The problem with bundling and loyalty programs is that these also enhance complexity, making it even more difficult for customers to compare products, prices and services. This is another reason to enhance transparency.

According to the Finnish Consumer Agency, loyalty discounts have peaked in Finland. However, bundling still seems to be a problem for competition. In Sweden the banks appear to have reduced the level of bundling. From a competition point of view this is positive.

As mentioned earlier, to some customers the existence of a local branch is crucial. This would imply that *transportation costs* are a significant factor.

However, in most areas more than one bank is represented with branches. Furthermore, banks today enable their customers to use the Internet for much of the day-to-day services and some customers do not need the services of the banking advisor. To some extent, this has decreased the importance of transportation costs.

5.5 Switching behaviour – how to boost it

The banking sector in each of the Nordic countries has many similarities: There is lack of competition cf. chapter 1. This lack of competition is due to the dominance of a few, large banks and the presence of entry barriers mainly as customer inertia.

The many similarities of the sector in each of the Nordic countries give reason to believe that there is also a similar pattern of customer mobility and this problem should be addressed by similar means.

Several initiatives have already been taken in the various countries in order to enhance customer mobility and competition. The importance of transparency is mentioned several times, and it is not surprising that some of the main initiatives have been implemented in that area.

In Sweden, a public website provided by the Swedish Consumers' Banking and Finance Bureau has made it possible for customers to compare prices on banking services more easily.

In Denmark, a similar facility has been provided since 1 January 2006 in a cooperation between the Danish Bankers Association and the Danish Consumer Association. The private business Mybanker has provided a web-based facility for Danish customers for several years.

In Norway, the Norwegian Consumer Council and the Financial Supervisory Authority of Norway have taken steps to organize an information website for customers to compare different banking products. However, this work is not yet completed.

Even though switching bank in the Nordic countries seems to be quite easy, other countries have progressed further. Both Ireland and the Netherlands have introduced Switching Codes which simplify the switching procedure for customers. The two different codes are explained in box 5.2..[35]

[35] The description is taken from a report on 'Competition Issues in Retail Banking and Payment Systems Markets in the EU' made by ECA.

Box 5.2: Switching Codes in Ireland and the Netherlands

The Irish Bankers' Federation (IBF) launched a Switching Code in January 2005, and a version of the Code has now been adopted by all of the major retail banks, and has generally been successful in promoting switching. Permanent TSB, the retail banking division of Irish Life & Permanent plc., launched a fee-free banking campaign almost immediately with a stated aim of attracting 60,000 new customers to increase its market share beyond 12 percent. The IBF informed that 10,000 customers had used the Switching Code between February and end August 2005. This approximates to a switching rate of around 0.5 percent. As a continuation of this success, a Business Current Account Switching Code will be launched in June 2006. The benefit of the Switching Code lies not just in the numbers of customers switching, but also in the way it has changed banks' behaviour by forcing them to react to increased customer mobility. Since the Code's introduction, all the main retail banks have introduced some sort of fee-free personal current account product.

In January 2004, banks in the Netherlands started to offer switching services (Bank-Switch Support Service) to customers. Under this system, the former bank ensures that all income, such as salary and benefits, are automatically credited to the new account for 13 months. The customer must take the initiative to inform his employer or the organisation(s) from which he/she receives a benefit, of the changes. With regard to debits, the bank informs companies which submit instructions for automatic debt collection of the change of the account number. The Dutch Banking Association states in its Annual Yearbook of 2004 that some 45,000, chiefly private customers, took advantage of this service in 2004 (some 0.6 percent of the total number of households in the Netherlands). On 1 October 2004, a special application form was made available for the commercial market. The service will be evaluated by the Ministry of Finance that will pass it on to the House of Representatives. At that time, it will be determined if the switching service forms a good alternative for number portability.

As mentioned in the box above, the experience in Ireland and the Netherlands has been good so far. The reasons for implementing the Switching Code in Ireland were concerns among consumers that important payments such as wages, bills or loan repayments would not be completed during the switching process. Also, consumers considered the switching to be a slow and troublesome process. Same concerns also seem to be common among Nordic banking customers.

A third finding is the benefit of niche banks in the market. As mentioned in section 5.3 there seems to be a trend in some countries towards customers holding parallel banking accounts. This will open up the market for niche banks (with a principal focus on only one or a few products) and 'mavericks' which will shake up parts of the market with discounts or lower prices on single products.

In Norway, there is evidence of somewhat improved customer mobility over the past years. It is the opinion of the Norwegian Competition Authority, that the introduction of several niche banks, like Skandiabanken (Internet bank) and Bankia Bank (payment cards), has improved the customers' awareness of the benefits of shopping for banking services.

In Denmark there was a drop in securities trading fees at the beginning of 2006. This was initiated by a few web-based brokers, but it was not long before the broker divisions of the big banks had to follow. The price war has reduced the trading fees of the big banks by 40 percent.

5.6 Conclusion

Evidence shows that transparency is an important issue in the retail banking market. The presence of informed retail banking customers is closely linked to the question whether customers have access to useful information about the market. Useful information is true and easily accessible information on interest rates, fees and terms for each relevant product.

For most customers, easily accessible and adequate information can be provided through public websites. This has already been implemented in Sweden and Denmark and is underway in Norway, too.

On such websites, the customer can compare the prices of different banks and get an indication of which banks – if any – are cheaper than their current bank. Because a lot of customers will be able to negotiate better prices and conditions than the banks' official prices, comparison websites normally only provide an indication of prices. But using this, the customer has a basis for negotiating with his/her current bank or a new bank.

The survey by Juul showed that half of the customers try to negotiate with the bank and that more than 80 percent of the customers negotiating with the bank had reported a satisfactory result. Comparison websites can be a valuable tool in this connection.

Websites and thereby improved transparency are crucial factors if searching costs and the level of complexity are to be lowered. There is evidence, though, that a significant share of banking customers find switching too burdensome and too complex.

Another means of helping customers is to make the actual switch as smooth as possible. The Nordic banks have already taken some steps to ease the burden but, as is evident, the banking sectors in Ireland and the Netherlands have gone even further. In these two countries Switching Codes have been implemented, and so far successfully.

In addition, the Nordic competition authorities recommend further investigation into a possible implementation of number portability.

6 Conclusions and recommendations

6.1 Conclusions

Nordic retail banking markets are still dominated by large domestic banks with rather loyal domestic clients. During recent years, however, some of these banks have expanded in neighbouring countries. For example, banking is a major export product for Iceland, including the expansive *Kaupthing* and *Glitnir* banks. *Nordea* is, after a series of mergers, among the three largest banks in Finland, Sweden, Norway and Denmark. *Danske Bank*, accounting for roughly half the market in Denmark, has recently become the fifth largest bank in Sweden. Swedish *SEB* and *Föreningssparbanken* account for a very large part of the market in the Baltic States. The major Finnish and Norwegian players are also looking at nearby markets. This integration process is likely to continue.

Parallel to this process, a number of new actors and fringe players appear to be growing in most markets. These banks may aim for the entire portfolio of retail bank customers, or for some product segment, such as mutual fund management. Nevertheless, although competition in some countries may have increased, the impact on the industry is yet to be seen, since concentration remains stable at quite high levels.

The sum of the four largest banks' market shares (measured in total assets) amounts to 71-100 percent in the six examined Nordic markets. This is a relatively high figure compared to other European countries, and the development suggests that any significant decrease is highly unlikely.

Profitability measures, profit statements by banks and Central Bank judgements indicate that Nordic banks are profitable. From a stability perspective, this situation is satisfactory - the risk of default of the system is marginal. The market is dominated by banks that are financially sound. From a competition perspective, however, the margins in the industry suggest that banks can give consumers substantially better offers and still be profitable. In other words, more competition between banks can benefit consumers in terms of better products at lower costs.

In all Nordic countries, the number of branches is falling. Tele-banking, and in particular Internet banking, are associated with this development. Some niche operators have taken advantage of the new marketing channel and concentrated their interaction with their customers to the Internet, thereby eliminating the need for a physical branch network. Although this may increase the likelihood of new entry to the Nordic banking market, other factors may restrain it. For instance, retail banking belongs to a family of services that for households represent a substantial element of trust. Thus, consumers may wish to remain with the well-known providers of retail banking services despite better (but perhaps perceived as uncertain) deals being available. Such consumer immobility may constitute a restraint to competition. In addition, banks often offer consumers various forms of discount packages, frequently bundling different products together at favourable prices, thus providing strong incentives for loyalty to a single bank.

A low frequency among consumers to switch banks can be harmful for competition. Potential entrants to the market would acknowledge that gaining large groups of customers rapidly, a prerequisite to achieve a viable scale of operations, is a challenging, time-consuming and highly risky affair. Hence, potential new players in the market may abstain from entering, easing the competitive pressure on the incumbent banks and resulting in higher-than-necessary costs for customers.

Sound competition therefore necessitates a certain degree of consumer mobility. Also warranted is more cross border activities. Although large Nordic banks are investing in the neighbouring markets, there exist several obstacles to better connect national markets together. Such obstacles may arise because of regulatory differences between countries, such as the rules for VAT and deposit guarantee schemes. Other obstacles to integration include the very national structures of payment systems – partly a natural consequence of the use of different currencies in the Nordic countries. Efficient access to these payment infrastructures is a prerequisite to enable a bank to compete efficiently in the market.

In the near future, the payment systems in the Nordic countries need to be better integrated to enable inexpensive and rapid cross-border money transfers. In the euro area, the creation of the Single Euro Payment Area, the SEPA, and the adoption of a New Legal Framework, the NLF, has the potential to push development in the euro area in this direction. The reforms will have consequences not only on the euro area but also on the Nordic market. It is desirable that the regulatory environments in the Nordic countries do not impose restrictions on the further development of efficient payment products between the non-euro Nordic countries and the euro area. The national competition authorities in the Nordic countries have an important role to play in participating in these processes, to ensure that the new structures are pro-competitive.

A policy for better competition in Nordic retail banking markets with the aim to build an integrated market for consumers, must consider all these areas carefully. In this report, payment systems and consumer mobility has been scrutinised. In the view of the Nordic Competition Authorities, these two areas merit high priority on the agenda of Nordic Governments in order to facilitate a development towards more competition to the benefit of consumers.

6.1.1 Payment systems

Although there are differences in the payment systems in the Nordic countries, making the joining costs difficult to compare, it can be concluded that the fees and access conditions may include elements that could form a barrier to entry to the payment systems and banking markets.

In the Nordic countries, interbank payment systems and the arrangements for them are national, even though the banks have increasingly expanded their operations to more than one Nordic country. In all the Nordic countries, the interbank payment systems can be regarded as giro-based (as opposed to cheque-based).Processing generally involves one institution acting as a clearing house, where net positions between banks are derived which later are settled, usually between accounts in the Central Banks. This set-up is similar for all Nordic countries except Finland, where clearing is decentralised between the banks themselves.

Conditions of access to the systems vary slightly as to the degree of discretion enjoyed by incumbent banks in deciding on the entry of new members to the system. A general feature, however, is that access is awarded by banks already in the systems, and that these banks have decision-making power over fees. Such effects on competition which arise as a result of access rules may harm consumers in terms of less choice and quality as well as higher fees for retail banking products.

Regarding payment cards, there are two predominant systems in the Nordic countries. In Sweden and Iceland the payment system is based on international payment card systems, whereas in Denmark, Faroe Islands, Norway and Finland payment card systems are to a large extent national joint venture enterprises.

The advantage of a system based on joint ventures is an improved likelihood of cost efficiencies, in particularly in countries with scattered populations. This might improve consumer access to payment systems. On the other hand, the systems may have a downside in terms of access conditions, which might deter potential competition.

The advantage of a system based on international payment cards, is the likelihood that entry barriers are lower than in joint venture systems. On the other hand, international payment card systems are likely to incur higher infrastructural costs and a more complex network of agreements.

There is still an area of discretion between banks to negotiate bilateral agreements that may make entry harder for certain segments in the market. Sweden is notorious for a complex web of bilateral agreements for interchange fees which may constitute an entry barrier for some smaller players for some kinds of products.

Access conditions for large and small banks to connect to essential payment infrastructures, in the experience of the Nordic competition authorities, often discriminate small banks versus large banks. Such discrimination is one of the most important barriers to entry in retail banking markets, and therefore, potentially, a serious competition problem. Furthermore, extensive self-regulation on top of rules to ensure financial stability means that it is important to ensure that competition concerns are addressed and adequately dealt with. In particular, access for foreign and non-bank institutions seems to be an important means to increase the competitive pressure in payment card systems.

6.1.2 Consumers

The willingness and preparedness of a consumer to buy retail bank products from an "unknown" bank is closely linked to how easy it is to compare the details, quality and prices provided by different banks. Evidence suggests that financial products are perceived as very complex and hard to compare by a majority of consumers, which explains why customer relationships go on for many years. Consumer mobility is considerably lower in retail banking compared to other industries.

For most consumers, easily accessible and adequate information can be provided through public websites. Such initiatives have been taken in Sweden and Denmark and are also underway in Norway. On these websites, the consumer can compare prices and offers from different banks. Studies suggest that negotiating with the bank is common and that a majority achieved a satisfactory result. Comparison websites can be a valuable tool in this respect.

Another way of helping consumers is to make the actual switch as smooth as possible. Banks in the Nordic countries have already taken some steps to ease this burden for consumers. The examples of Ireland and the Netherlands show, however, that more can be achieved. In these two countries, *Switching Codes* have been implemented in order to facilitate consumer mobility. So far, these codes have spurred higher mobility. Another issue in this respect is *account number portability*, i.e. the right to keep bank account numbers when changing bank – an idea inspired by the introduction of number portability in telecommunications markets. Since some of the burden of switching lies in informing payers about changes of account numbers, such portability would probably make it easier for consumers to switch bank.

6.2 Recommendations

These recommendations are developed to enhance competition in retail banking markets in the Nordic countries for the benefit of consumers in terms of better products and lower costs. Implementation of these recommendations would constitute a step forward in the integration to a more genuine Nordic and European market for retail banking. As the regulatory environment differs among countries, the proposals are formulated on a general level – further adaptations are necessary to implement them in the various markets. They are aimed at governments, regulators and banks.

6.2.1 Banks' access to payment systems

– *Transparent and non-discriminatory rules of access to payment systems.* Payment systems are an integral part of the economy and the financial sector in particular. Both interbank payment systems and payment cards systems are vital elements of infrastructure for entrants wanting access into the markets for retail banking. Banks must therefore obtain efficient and comparable access terms for the provision of payment system services from infrastructure holders. Although large-scale operations may motivate marginally better pricing terms, the differences must not limit the smaller banks' ability to successfully compete with the incumbent large banks. Discriminatory rules may restrict entry for institutions such as non-banks, smaller banks and foreign banks into the market. The regulatory environment must therefore be designed so as to safe-guard transparent, non-discriminatory, objective and proportionate terms of access to payment systems. Regulatory reform may therefore be necessary in order to achieve these objectives. Competition authorities and sector regulators, mandated with a sharp legal mandate, need to prioritise this specific area with the aim to impose deterring sanctions where anticompetitive access conditions to essential payment infrastructures are identified.

– *Unbundling of management-owner and client roles of payment systems:* The largest customers of the services of payment infrastructures are often also owners. The conditions on which small and new banks are given access to payment services are therefore partly influenced by their competitors in the market. Therefore, for large banks as co-owners of payment infrastructures, conflicts of interest may arise between the two roles of being a customer and an owner *at the same time*. To eliminate the risk of discrimination, it may be necessary to unbundle these roles and create a clearer division of the respective responsibilities. The management of the production of essential inputs for banks to offer payment services to customers must be run with the benefit of all users in mind, not just the largest. To achieve these objectives, reforming the rules for governance may be necessary. Such regulatory reform needs to be specific on the requirements on separation of the management-owner and client roles

6.2.2 Consumer choice

– *It should be easy for consumers to compare alternatives*
  There is a need for better *transparency*. Websites where consumers can get accessible and clear information have proved useful for this purpose and can be developed further. Governmental agencies and independent consumer organisations have an important role in facilitating the accessibility of information for the consumer using different means. The information must be designed with the aim to enable the consumer to make informed and rational choices.

– *It should be easy to make the switch in practice*,
  i.e. there should be some kind *of switching facility* to reduce the cost of implementing the practical work associated with migrating the portfolio of financial services to the new bank. The involved banks have an important role in making the shift as simple as possible, although they may have opposing incentives. Clear rules on the responsibility of banks may be formulated in a Switching Code.

Financial Supervisory Authorities may also have a role in creating a smooth and secure switching process. The Nordic competition authorities recommend that this matter is further investigated. Both for private customers and SMEs this could reduce switching costs.

– *A Nordic market for Nordic consumers.*
  The Nordic governments should open up to harmonisation of the relevant regulatory environment for retail banking, aiming at increasing competition by enhancing geographical integration of markets. The purpose should be to create a Nordic market, or even a European market, for consumers.