



A Vision for Competition

Competition Policy towards 2020



A Vision for Competition

– Competition Policy towards 2020

Table of Contents

Preface	5
Executive Summary.....	7
1 Background and structure of the report	18
2 Competition policy – A tool to stimulate sustained economic growth.....	20
2.1 Future challenges to the Nordic economies.....	20
2.2 Competition and economic growth	24
2.3 Removal of structural barriers to competition spurs economic growth	27
2.4 Concluding remarks.....	30
3 Competition policy in the Nordic Countries: Legal and Institutional Frameworks.....	31
3.1 The General Tasks of the Nordic Competition Authorities.....	31
3.2 Similarities in the Nordic countries’ competition acts	44
3.3 Differences in legal powers between the Nordic Competition Authorities.....	45
Appendix 1 - Competition Law Enforcement: Institutional frameworks.....	60
4 Implementing and evaluating Competition Policy – Learning from experience	66
4.1 Identifying competition problems – Tools and methods used	66
4.2 Effective project delivery	73
4.3 Prioritisation - making the most of available resources	74
4.4 Evaluating the Effects of Competition Policy	76
4.5 Concluding remarks.....	84

5	Competition policy – A tool to stimulate innovation	86
5.1	What are innovations?	86
5.2	Why do we need innovations?	87
5.3	How can competition and competition policy favour innovations?	87
5.4	Balancing static vs. dynamic effects within competition law enforcement	92
5.5	The complementary relationship between innovation policy and competition policy	96
5.6	Concluding remarks.....	99
	Appendix 1 - Empirical studies that support the positive competition-innovation relationship	101
	Appendix 2 – The Nordic Competition Acts and how they treat innovations	103
6	Competition policy – A tool to promote efficiency in the public sector	106
6.1	Public procurement	106
6.2	The public procurement process	107
6.3	Competition and public procurement in the Nordic healthcare sector	112
6.4	Systems of Choice in the Public Sector	119
6.5	Increased interaction and competition between private and public undertakings may enhance competition concerns	123
6.6	Applying competition law to the healthcare sector.....	126
6.7	Concluding remarks.....	127
	List of references.....	129

Preface

Competition policy plays a central role to stimulate economic growth through the positive relationship between competition and increased productivity in the economy. Competition policy therefore forms part of a broader policy response to the challenges that globalisation, demographic changes and declining productivity growth rates pose to sustainable economic growth of the Nordic economies.

The Nordic Competition Authorities (NCAs) have a long history of cross-border collaborations. Collaborating and learning from each other's experiences are vital to prepare and equip the NCAs with the right policy tools and powers to be as effective as can be. This is of particular importance in a long-term perspective where an ever-changing world poses constant challenges to competition policy. In August 2011, at a meeting between the NCAs in Helsinki, Finland, the Director-Generals decided to form a working group with the aim to publish a report on how effective competition policy and effective competition authorities can contribute to address future challenges to economic growth and welfare in the Nordic countries.

The report has identified a number of key areas which are central in this context. First, effective competition policy requires strong and active competition authorities that are equipped with the right tools and legal powers. By contrasting the NCAs' legal powers across the Nordic countries and against the European Commission (EC), this report has identified both a need and a scope for strengthening the legal instruments to make competition policy more effective in the future. A second aspect of being an effective competition authority is the ability to evaluate the authority's work in order to promote continuous improvement and accountability. Even though the effects of competition policy may not be easily measured in terms of an aggregate economic value, this report shows that the NCAs' work generate positive welfare effects. Third, a crucial area identified is how effective competition policy can contribute to maintain and improve the Nordic countries' innovation climate and capability. Here, the NCAs have a potentially important role to play in favouring innovation through the promotion of regulatory reforms that facilitate market entry and enhance competition.

Finally, the report highlights the role that competition, competition policy and the NCAs can play to increase efficiency, improve quality and availability in the public sector across the Nordic countries. Specific emphasis is put on the healthcare sector because of its significant part of public expenditure.

The report has identified three important areas where competition policy and the NCAs play, and will continue to play, an important role in the future: public procurement, including innovation procurement; the development and implementation of systems of choice in the public sector; and to ensure that public and private businesses compete on equal terms.

This report is the tenth of its kind and a result of collaborative efforts of staff members from all the NCAs. 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.

The members of the working group have been:

- Danish Competition and Consumer Authority: Lars Martin Jensen, Kathrine Thrane Bløcher and Christina Hoffgaard
- Faroese Competition Authority: Sigurd Rasmussen
- Finnish Competition Authority: Martti Virtanen and Tom Björkroth
- Greenland Competition Authority: Nicolai Odgaard Jensen
- Icelandic Competition Authority: Guðmundur Sigurðsson and Þorbergur Þórsson
- Norwegian Competition Authority: Kjell J. Sunnevåg
- Swedish Competition Authority (Coordination and Project Management): John Söderström (Project Manager), Lena Fredriksson (Deputy Project Manager) and Erik Hegelund

The working group has also received valuable assistance from colleagues across the NCAs.

Executive Summary

Stable and sustainable economic growth is a shared goal of all Nordic economies. However, there are some challenges to this goal that are fairly similar across the Nordic countries. This report aims to discuss the role that competition, competition policy and the Nordic Competition Authorities (NCAs) - through the promotion and safeguarding of competition - can play in order to achieve the goal of sustained economic growth in a future perspective stretching towards 2020 and beyond.

The challenges to sustained economic growth highlighted in this report include, first, like for most OECD countries, a slowdown in productivity growth rates over the last decades. Second, global competition from fast-growing economies in Asia, Africa and Latin America constitute a challenge to the competitiveness of the Nordic business sector, not only with regard to prices but also in terms of quality and knowledge content. Third, the combination of an ageing population and a shrinking share of the population of working age also challenge the goal of stable and sustained economic growth. Admittedly, these challenges call for action on a broad front and require that various policies and instruments must be put into play. As this report aims to show, competition and competition policy form part of a broader solution to these challenges.

Competition policy – A tool to stimulate sustained economic growth

In an increasingly globalised world, for the Nordic industries to remain competitive also in the international marketplace, it is crucial that they increase their productivity and develop high value products and services. Innovation, which is the main topic of Chapter 5, is key in this regard. Another challenge common to the Nordic countries is the ever-increasing share of elderly people in the population. This demographic development, where fewer people of working age will have to provide for the increasing demands of welfare service provision of an ageing population, may put new pressure on public expenditures. This adds to the general need to increase efficiency and productivity growth in the public sector. However, productivity growth rates have been declining quite substantially since the 1960s, especially in so-called 'domestic' industries; sectors which are generally not exposed to competitive pressure from foreign firms, like for example construction, transportation, communication, and a number of financial, professional and service industries. Due to their large size measured as share of total employment, low productivity growth in the domestic industries implies low productivity growth for the economies as a whole. This makes it all the more important to discuss potential impediments for efficient competition in these markets, relating to domestic characteristics. Here, competition policy has an important role to play in order to promote domestic competition and spur economic growth.

Competition policy affects economic growth

Competition acts as a driver for economic growth through different channels, making competition policy an important policy tool for the Nordic countries to put into play in order to achieve their desired long-term growth objectives. In essence, there are four main channels through which competition, and competition policy, may stimulate economic growth: enforcement of the competition legislative framework to identify and correct breaches of competition law; competition advocacy work aimed at the removal of regulatory frameworks with distortive effects on competition; strengthening of the competition culture; and the promotion of effective competition in the public domain, notably through favouring effective public procurement procedures.

With regard to the channels through which competition affects productivity growth, putting pressure on firms to control costs and use their resources efficiently is one important factor. The ease of market entry and exit is a second factor that conditions the competitive pressure in a market, whereby the entry and exit of firms will reallocate resources from less to more efficient firms in the long run. Market entry and exit may however be affected by entry/exit barriers. Where barriers to entry are low, entry – and the threat of entry – incentivises firms to continuously improve in order not to be forced out of the market by new entrants. A third channel is through the pressure to innovate that competition exercises over firms. Since the incentives to innovate depend highly upon the market structure and conduct of firms, competition policy occupies an important role in stimulating firms' incentives to innovate through its potential to affect market structures.

Regulatory reforms may spur competition and growth

Effective competition in the market relies on firms to actively seek and exploit new market opportunities. In some industries and markets, however, rules and regulations may have adverse effects on competition. In the case where regulations have such adverse effects, regulatory reforms have great potential to enhance competition. Over the years, the NCAs have identified a number of regulations that limit competition, cause consumer harm, and limit the potential for economic growth. Practically all of the identified regulations target 'domestic' industries. This implies that there is great scope for productivity gains and increased economic growth through regulatory reforms of domestic policies. Advocacy work aimed at competition-enhancing regulatory reforms is therefore an important part of the NCAs' activities.

Legal and institutional frameworks of Nordic competition policy

The general objective of competition policy is to safeguard competition in the market and to protect the interests of consumers. While this is the common denominator for all NCAs, their responsibilities as well as the legal and institutional frameworks that govern competition law enforcement vary to some extent across the Nordic jurisdictions. Departing from this fact, Chapter 3 contrasts the NCAs' legal powers with regard to antitrust, merger control and

sector inquiries both across the Nordic countries and against the European Commission (EC), and identifies the areas where there is scope for strengthening the legal competition law frameworks to make competition policy more effective in the future.

General tasks of the Nordic Competition Authorities

All NCAs are responsible for safeguarding and promoting competition in their respective countries through the enforcement of competition law and competition advocacy activities. On top of these two major tasks, which are rather similar across the Nordic countries, the NCAs have additional responsibilities in the areas of public procurement, sector supervision and consumer policy. However, the roles and assignments with regard to these three tasks differ, in some cases rather substantially, between the NCAs. An overview of key similarities and differences between the tasks of the NCAs regarding, in turn, law enforcement, competition advocacy, public procurement, sector supervision and consumer policy is given in Chapter 3.

Economic concepts and theory tend to play a greater role in competition law enforcement

In both antitrust and merger control cases there are two dominant approaches to competition law enforcement: the 'form-based' and the 'effects-based' approach, which may sometimes lead to different outcomes. In response to the development of the more economic approach and to avoid 'over-enforcement' (Type I error), such as forbidding a 'good' merger which would increase efficiency in the market and have positive effects for consumer welfare, and 'under-enforcement' (Type II error), such as allowing a merger which can then exercise market power and exploit consumers, all NCAs have made efforts to boost their competence in industrial economics and related fields.

Similarities in the Nordic countries competition acts – Antitrust and merger control

All the Nordic competition acts are harmonised with EU competition law and contain rules regarding antitrust, merger control and sector inquiries. The main EU competition rules, which are applicable in cases where trade between member states may be affected, are found in Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU). In addition, there are EU rules on merger control as well as legislation in the form of implementing regulations and block exemptions. The national competition rules contain prohibitions identical to those found in the TFEU and apply where the conduct in question has a national effect. Nordic countries which are not EU-members, except for the Faroe Islands, apply articles 53 and 54 of the EEA Agreement instead of the said EU rules.

Potential for improved and/or additional enforcement powers of the Nordic countries' competition regulations

Effective competition policy requires adequate legal powers. While there are substantive similarities in the Nordic competition acts, in all essential harmonised with EC competition law, the legal powers of the respective NCAs to investigate, sanction, or otherwise intervene against competition problems, tend to differ. Importantly, in a general comparison with the EC, the NCAs do not have as extensive legal powers regarding antitrust, merger control and sector inquiries.

- *Antitrust*

For the purpose of the report the main working tools of the NCAs with regard to antitrust are accounted for in Chapter 3 of this report. These include prohibition decisions, imposing of fines, commitments decisions and settlement procedures. The comparative analysis of the main working tools of the NCAs demonstrates that basic elements of decision-making powers and procedures are generally present in all jurisdictions with a few exemptions, but that the NCAs, in general, do not have as extensive decision-making powers as the EC.

With respect to investigative powers, which refer to the different enforcement systems and procedures for antitrust investigations as well as sanctions for non-compliance, all the NCAs have the power to conduct inspections in business premises, request information and conduct interviews. The main difference between the NCAs is that not all the NCAs can conduct inspections of non-business premises, and that not all the NCAs can conduct compulsory interviews. Further, the NCAs' powers to sanction for non-compliance or for providing false or misleading information are not as extensive as the EC's.

Notwithstanding the many similarities in the enforcement of antitrust rules in the Nordic countries, there are still additional steps to be taken in order to improve the enforcement of the antitrust rules in line with the, in many aspects, more extensive powers of the EC. Further to this, having similar enforcement tools and powers to enforce competition law is essential for facilitating future cooperation among the Nordic countries.

- *Merger control*

Merger assessments often involve rather complex legal and economic considerations, together with the handling and analysis of large sets of quantitative and qualitative data that have to be made within rather short time frames which are regulated by competition law. Effective merger control hence depends highly upon the powers and tools available to the NCAs.

The comparative overview of merger control in Chapter 3 indicates that most NCAs lack some of the decision-making powers and investigative tools which would have the potential to increase the effectiveness of merger control in their respective countries. In brief, all NCAs except Finland and Sweden have the power to prohibit a merger. Further, the EC as well as the competition authorities of the Faroe Islands, Iceland, and Norway, have the ability to impose sanctions against 'gun jumping', that is, where the parties have implemented a concentration before notifying the authority, or during the authority's investigation. In

Iceland, Norway and Sweden, the competition authorities may, under certain circumstances, issue an injunction to the merging parties to notify a transaction that does not fulfil the turnover thresholds for mandatory notification.

Concerning merger notifications to the NCAs, all the NCAs have the power to decide which information should be provided in order to start the legal time limits. However, in mergers which give rise to concerns regarding anti-competitive effects, this 'basic' set of information is often not enough to make an informed assessment. In practice, the NCAs will need considerably more information, documents and data from the parties, and sometimes also from third parties. Due to the time limits, the NCAs must be able to promptly receive and analyse the information requested. Tools ensuring the effective collection of information are therefore crucial to the investigation. Here, should the requested information not be submitted in time, the EC and the competition authorities of Finland and Norway have the power to 'stop the clock', meaning that the legal time period is stopped from the day of the deadline for submitting the information until the day the requested information is submitted.

All the NCAs may request information under penalty of fines. The competition authorities of Finland, Iceland, Norway and Sweden may also request people, who are likely to possess relevant information, to a hearing at the authority, if necessary under penalty of fines. Only the EC and the competition authorities of Iceland and Norway have the power to also impose fines in case an injunction is not followed, if the parties indulge in gun-jumping, or if there is a breach against a condition that was part of a clearance decision.

A clearance decision that turns out to be based on misleading or incorrect information from the parties may be revoked by the EC and the competition authorities of Denmark, the Faroe Islands and Iceland. The same applies if the parties commit a breach of a condition or an obligation that was attached to the decision. In Finland, the competition authority has to file an application for annulment to court, while the possibilities to rectify these situations seem limited in Norway and Sweden. In contrast to the Icelandic and the Norwegian authorities, the Swedish, Finnish and Danish competition authorities may not impose fines, and the Swedish and Finnish competition authorities may not block mergers.

- Sector inquiries and market studies

A sector inquiry or market study often forms part of the competition authorities' task to promote competition in a certain sector or market. The aim of a sector inquiry is often to assess competition in a particular market and recommend pro-competitive measures in order to increase consumer welfare in the relevant areas. In addition, a sector inquiry may also unearth evidence of competition law infringements that call for regular enforcement actions in the relevant industry or sector. Thus, sector inquiries form part of an effective competition policy. Yet, sector inquiries are resource intensive, and also require access to relevant market data which companies are often reluctant to disclose, like for example company data on market shares, strategies, prices, margins and costs. Consequently, in order to perform effective sector inquiries, the NCAs need legal investigative powers to get access to the relevant market data.

A comparison between the NCAs and the EC in this respect shows that the most striking differences are the powers to carry out inspections on-site and to impose fines in situations where the information that is supplied to the NCA is either incorrect or misleading, which not all NCAs possess at present.

- Effective competition policy requires adequate legal powers

To sum up the findings from the comparative overviews in Chapter 3, the overall conclusion is that the NCAs tend to have less effective legal powers than the EC regarding antitrust, merger control and sector inquiries. It may therefore be suggested that there is both need and scope for strengthening of the Nordic countries' legal competition frameworks and thereby increase the effectiveness of competition law enforcement in the future. It is however beyond the scope of this joint report to propose any amendments to the existing competition law frameworks of the respective jurisdictions. Instead, the purpose has been to highlight potential improvements based on a comparative analysis, and eventually each NCA must decide on the need for making such recommendations to policy makers and legislators.

Effective competition policy implementation towards 2020 - Learning from experience

Agency effectiveness in focus

Like all governmental institutions funded by public resources, the NCAs must assure that they are effective in their policy implementation and that they provide value for tax payers' money. Moreover, to remain effective as institutions in an ever-changing world also in a longer-term perspective, it is crucial that the NCAs are apt to adjust to, and accommodate, the changes that the future may hold. This means that the NCAs must develop competition policies, strategies and work processes that are in line with the challenges that lie ahead, and that are adapted and integrated with other types of future business development policies, such as innovation and research policy. Against this background, to increase their effectiveness, the NCAs focus on developing and improving effective and efficient work practices and tools and also learn from each other's experiences by sharing information and knowledge through a well-established cooperation.

Working proactively has gained importance

Proactivity has become increasingly important in competition policy and the NCAs have taken, and continue to take, important steps in developing and adopting new tools and methods to identify competition problems; increasing awareness of competition rules; prioritising between different cases and activities; effective project delivery; and evaluation and communication with stakeholders. The current trend indicates that it will become increasingly important for the NCAs to prioritise and focus on the issues and activities that can provide the best results for consumers and society. Furthermore, the demand for

evaluation of the effects of competition policy is likely to continue to increase in the future, why the NCAs must possess the ability to evaluate their work and also to communicate the value that the NCAs create for consumers and society. Here, it is important that both competition authorities and stakeholders have a good understanding of evaluation methods and their strengths, weaknesses and limitations, and that the evaluation methods used are tailored towards the needs and requirements of competition authorities and their principals alike.

Effective competition policy has positive welfare effects

With regard to the evaluation of competition policy effects, Chapter 4 gives a brief introduction to some general quantitative as well as qualitative evaluation methods, together with some examples of evaluations carried out by the NCAs. An important insight from this overview, is that while a quantification of the effects of competition policy may be tempting from the perspective of policy makers, there are limitations to the methodological and practical possibilities of quantifying the effects of competition policy. Notably, such quantifications tend to be resource intensive; make large demands on data that may not always be accessible; and the methods developed to date also rely heavily on assumptions, which risks to compromise the accuracy of the obtained results.

Nevertheless, even though the effects of competition policy may not be easily measured in terms of an aggregate economic value, more qualitative evaluations of competition policy can be used successfully to identify and assess competition policy effects. Examples from the Nordic countries show that competition policy has led to visible results in terms of lower prices, increased availability and quality. Competition policy may hence be considered as a 'cheap' policy tool: irrespective of whether the welfare gains to society from competition policy enforcement are quantifiable or not, effective competition authorities generate welfare effects in excess of their budgetary costs.

Competition policy – A tool to stimulate innovation

Innovation as a driver for economic growth

All Nordic countries have put innovation policy on their agendas in order to promote the prosperity of the Nordic economies towards year 2020 and beyond. Modern growth theory emphasises strong linkages between investments in knowledge in the form of education, research and development (R&D), and economic growth. Although estimates differ, there is strong empirical evidence of a high correlation between R&D expenditures and productivity growth. Private returns to R&D activity may be substantial, but the academic literature shows that the social return to investment in R&D is even higher. Consequently, policies which support and foster innovation can pay large dividends for society. One way to achieve these benefits is to promote those industry structures and policies that offer greater

incentives for innovation. Competition, and competition policy, constitutes one channel through which innovations can be stimulated.

Competition and innovation – a realm of complex interactions

As highlighted in Chapter 5 of this report, the relationship between competition and innovation is characterised by a realm of complex interactions. To briefly sum up the theoretical discussion, it is fair to say that an increase in the number of firms seems to reduce R&D effort of firms, whereas increases in the degree of product substitutability increases R&D effort under the assumption that the total market for varieties does not shrink. A growing market size is hence thought to increase R&D efforts, but has ambiguous effects on the number of product varieties on offer. The ease of market entry is another factor that has been found to impact on innovation through increased competitive pressure.

Moreover, the surveyed body of empirical work exploring the relationship between competition and innovation tends to stress the importance of industry level knowledge. Academic research provides compelling evidence on the so-called inverted U-relationship between competition and innovation, which indicates that more neck-and-neck competition industries show a higher level of innovation activity for any level of product market competition and the inverted-U curve has been found to be steeper for industries characterised by more neck-and-neck competition. Consequently, the intuition is that restrictions of competition are detrimental to innovation. Cartels and exclusionary abuse of dominance that radically reduce competition in the market are particularly harmful due to the magnitude of their anticompetitive effects.

In a more general perspective relating to the NCAs' policy priorities and the focus on industries and sectors that show sign of ineffective competition, these are likely to be found in a context characterised by high market concentration and high barriers to entry. An effective competition policy focusing on such industries has the potential to foster innovation and thereby generate benefits to society. This holds for industries with neck-and-neck competition as well as for other industries.

Competition policy may reinforce innovation policy

A first general conclusion to be drawn from Chapter 5 is that both economic theory and the reviewed government policies identify innovation and competition as important drivers of continued economic development and for safeguarding the competitiveness of domestic industries in a global economy. In this regard, innovation and competition policies complement each other. Second, to date, innovation concerns have played a limited role in the NCAs work but are expected to play an increasingly important role in the future. Third, it is the NCAs' shared view that the current legal framework in place offers sufficient leeway to adequately weigh-in both long and short term effects on a case by case basis. This should assure that competition policy concerns do not enter into conflict with innovation policy objectives. Finally, within the field of competition advocacy, the NCAs have a potentially

important role to play in favouring innovation through the promotion of regulatory reforms that facilitate market entry and enhance competition

Competition policy – A tool to promote efficiency in the public sector

Driven by a need to reduce costs, increase efficiency, improve quality and availability, the public sector in the Nordic countries has undergone systemic reforms over the last two decades. These reforms have gradually introduced market mechanisms and opened up for private service provision of welfare services. These developments have raised the role of competition and competition policy also in the public domain.

Against this background, Chapter 6 describes and discusses the role that competition, competition policy and the NCAs can play to increase efficiency and effectiveness in the public sector across the Nordic countries. The role of competition with regard to public services focuses on three important domains: public procurement, the development and implementation of systems of choice, and the importance to ensure that private and public entities compete on equal terms.

Throughout the chapter, specific emphasis is put on the healthcare sector. The main reason for this choice is that the sector constitutes a significant part of public spending, and also faces constant calls to reduce costs, increase efficiency and improve quality and availability.

Safeguarding competition in public procurement

Effective and efficient public procurement is of strategic importance to economic growth and welfare in the Nordic countries. The value of public procurement amounts to 15-20% of GDP in the Nordic countries and hence constitutes a considerable share of public expenditure. For economic reasons it is therefore vital that the public procurement system exploits the opportunities of competition. Public procurement that is characterised by healthy competition reduces the contracting public entities' costs, enhances the quality of goods and services procured and makes it easier for suppliers to sell their products. Moreover, carefully implemented, public procurement can boost market entry and expansion among small and medium-sized companies.

Fighting collusion in public tenders is a crucial task to ensure competitive public procurement processes, not the least as bid-rigging is difficult to detect. Effective law enforcement is of course crucial to deter bid-rigging, but advocacy activities aimed at promoting both effectiveness and efficiency of public procurement, as well as promoting cartel awareness, are equally important. The latter includes proactive activities like informing public procurement officials and potential bidding firms about the competition law framework and the benefits of competition.

To date, public procurement is chiefly applied to the procurement of standard products and solutions. However, the sustainability of the Nordic countries' public healthcare systems will depend, in large part, on innovations that can enhance the efficiency, safety, quality, and productivity of health care services. Because of their considerable purchasing power, public entities are often considered to have the power not only to promote the provision of cost-efficient goods and services, but also to promote the development of sustainable technologies as well as process and product innovation both in the public and private sector. In this regard, innovation procurement, that is public procurement as a means to stimulate continuous innovation and increased productivity in both the public and the private sector, has been emphasised increasingly throughout the last decade. However, there are indications that procuring entities consider innovation procurement to be much more complicated than traditional procurement processes. A potential role for the NCAs in this regard, depending on the scope of their individual task considering public procurement of course, is to promote the understanding of how innovation procurement processes can be designed and accommodated within the existing legal frameworks, alongside the general task of safeguarding competition.

Systems of choice to promote quality, accessibility and efficiency

As part of public sector reforms, all Nordic countries have implemented different models of system of choice. Systems of choice equip public institutions with a tool that they can use in situations where they wish to expose in-house provided services to competition and to transfer the choice of provider to the user. This opportunity for individuals to exercise choice also make publicly funded services more responsive to the needs and demands of the individual user, which can lead to better opportunities for private companies and NGOs to operate and develop by being able to compete in a simpler way with public welfare providers' in-house services. Furthermore, systems of choice are considered to favour diversity and provide greater opportunities for small businesses, value-based activities and cooperatives of various kinds to enter the market. In the healthcare sector, the main purpose of introducing a system of patient choice is to increase freedom of choice for users, promote quality, accessibility and efficiency by encouraging competition and diversity among social care and health care providers.

Against the background of increased introduction of systems of choice for a wider spectrum of welfare services, it is reasonable to assume that an ever increasing part of public sector services will be opened for competition in the future and that the contribution by private players will increase. The safeguarding of competition neutrality - public and private undertakings competing on a level playing field - will be paramount to avoid distortions to competition. One of the main challenges is to design compensation systems which do not distort competition between public and private undertakings and secure that the provision of services is based on the correct cost basis.

Increased interaction and competition between private and public undertakings may enhance competition concerns

The market-based reforms implemented in the Nordic countries have changed not only the way how public services are developed and provided but have also created new markets in which private undertakings and public entities both interact and compete. While these reforms are expected to lead to increased cost-effectiveness, one has to be aware that competition concerns may arise since public activities and intervention in markets also inhibits a risk to distort competition. Possible sources of competition distortions from public sector activities can be:

- Market failures that arise from governance and regulatory arrangements, including for example regulations, taxation, subsidies, cross-subsidies, and cost of capital requirements
- Legal or practical exemptions from competition law
- Subsidies from government to fund public service obligations, if used to cross-subsidise commercial activities
- Market distortions caused by lax public procurement rules where public sector providers are allowed to set prices below full cost

In such situations, the solution is either to prohibit a public entity from offering products in competition with private enterprises, introduce some accounting-type measures to ensure that there is no cross-subsidisation, and/or to organisationally break the link between the two entities. Opening the balance sheet for publicly-owned entities can affect their basic cost structure and flow through to the prices they can charge. If assets are undervalued, and if debt and equity positions do not conform to private sector norms, the publicly-owned entity has an advantage over private sector rivals.

1 Background and structure of the report

The Nordic countries share several common features. They are all small open economies and characterized by a set of common core values, notably regarding the social model - often referred to as 'the Nordic model' - which includes ambitious welfare systems and comprehensive public sectors financed by high taxes. In this context, stable and sustainable economic growth is a shared goal of all Nordic economies. However, there are some challenges to this goal that are fairly similar across the Nordic countries and which must be addressed in order to achieve sustained economic growth in a future perspective stretching towards 2020 and beyond. These challenges include, first, like for most OECD countries, a slowdown in productivity growth rates over the last decades. Second, global competition from fast-growing economies in Asia, Africa and Latin America constitute a challenge to the competitiveness of the Nordic business sector, not only with regard to prices but also in terms of quality and knowledge content. Third, the combination of an ageing population and a shrinking share of the population of working age also challenge the goal of stable and sustained economic growth. Admittedly, these challenges call for action on a broad front, and require various policies and instruments to be put into play. Although competition and competition policy do not constitute a solution on their own, effective competition policy implementation can contribute towards this end, as this report aims to show.

Effective competition drives prices down, improves quality and expands the range and variety of goods and services on offer. Competition also stimulates more efficient use of resources, allows new firms to enter the market and may serve as a driver for innovations, thereby strengthening firms' abilities to compete both in domestic industries and in the global marketplace. Furthermore, competition mechanisms may increase efficiency and contribute towards getting the most value for money also in the public sector. Well-functioning markets hence benefit consumers through lower prices and higher quality goods and services, but also society as a whole through the welfare-enhancing effects of competition on the aggregate economy. However, effective competition is no law of nature in the marketplace. On the contrary, firms seeking to maximize profits always strive to achieve a position of market power. Effective competition hence requires effective competition policy to deal with anti-competitive behaviour of firms which cause consumer harm, but also the removal of structural barriers to effective competition in the marketplace.

The general aim of competition policy can be said to promote competition by making markets work better and contribute towards increased efficiency and competitiveness. In essence, competition policy comprises of two main activities: enforcement of competition law and competition advocacy. The former refers to the identification and prosecution of those in breach of competition law, while the latter is concerned with the promotion of a competitive environment for economic activities by other means than law enforcement, notably through its relationships with other governmental entities. This includes, for example, targeting potentially anticompetitive governmental regulations and raise public awareness of competition law and the benefits of competition. Through their promotion of competition, competition authorities are therefore important institutions for promoting overall economic

growth. Yet, for competition to function well in the market place, competition policy must be able to adapt to the developments and challenges brought about by an ever-changing world. Changes to competition policy as we know it today are therefore to be expected in a more or less distant future.

Against the background outlined above, this report focuses on five broad areas of specific relevance to competition and the development of competition policy in a future-oriented context. First, Chapter 2 discusses the impact of competition and competition policy on the prospects for sustained economic growth in relation to the challenges previously mentioned. Second, effective competition policy implementation requires an adequate legal and institutional framework that assigns the competition authorities with the right powers and tools in order for them to be as effective as possible in performing their assigned tasks. The legal frameworks of the Nordic countries with regard to competition policy are therefore described and discussed in Chapter 3. Third, competition authority effectiveness is also paramount to effective competition policy implementation. This topic is elaborated in Chapter 4, together with a discussion relating to the increasing demand on accountability of competition authorities worldwide to use tax payers' money efficiently and to evaluate the effects of their activities. Fourth, innovation is widely recognised as favouring competitiveness and economic growth. Through the potential of competition to spur innovation, competition policy is one important tool to favour innovative activity and thereby contribute towards the goal of sustainable economic growth. Competition policy as a tool to stimulate innovation is the focus of Chapter 5. Finally, the Nordic countries are characterised by large public sectors and most welfare services are publicly provided. However, systemic reforms over the past two decades have gradually introduced some market mechanisms into the public sphere, which has actualised the role of competition and competition policy also in this domain. With particular emphasis on the healthcare sector, the aim of Chapter 6 is to discuss how effective competition can increase the efficiency of the public sector and thereby safeguard the efficient provision of high quality welfare services in the Nordic countries in the longer term, which is highly important considering the challenges that the Nordic countries are facing.

2 Competition policy – A tool to stimulate sustained economic growth

Sustained economic growth is a shared goal of all Nordic economies. However, in the years ahead, economic growth in the Nordic countries will be challenged on different levels. Globalisation, an ageing population and declining productivity growth rates are all challenges that need to be addressed on a broad front. As this chapter will show, competition policy plays a central role to stimulate economic growth through the positive relationship between competition and productivity in the economy.

First, an overview is presented of the three identified challenges to economic growth in the Nordic countries in relation to which competition policy can form part of a broader solution. Second, the linkages between competition and economic growth will be briefly discussed, followed by a discussion of the growth potential of regulatory reforms to remove structural barriers to competition.

2.1 Future challenges to the Nordic economies

Economic growth is a prerequisite for sustainable welfare societies. Generally defined as an increase in the level of goods and services produced within a country over a certain time period, economic growth is generally measured as changes in GDP/capita. Much simplified, economic growth is generated by an increase of production factors, or by using production factors more efficiently. In the long run, technological developments and increased productivity are the main drivers of economic growth.

As will be seen below, demographic developments in the Nordic countries – where an ageing population tends to increase the dependency burden on the declining share of people of working age – increases the reliance on increased productivity to achieve sustained economic growth under these new circumstances. However, productivity growth rates have been declining over time. Boosting productivity is hence a challenge that the Nordic countries must address, and where competition policy has a prominent role to play. Brief descriptions of each of these three challenges, and how they relate to competition and competition policy, follow next.

2.1.1 Globalisation

Globalisation is an on-going process which has affected, is affecting, and will continue to affect the Nordic countries and their economies in various ways. For regular service and product markets, globalisation and removal of entry barriers result in increased competition from abroad. In the long run this benefits both consumers and the domestic economy. It spurs efficient companies to grow and less efficient ones to exit, incentivises innovations and results in lower prices, higher quality products and a wider selection of goods for consumers.

For Nordic industries, competition from low-cost economies and the development of Information and Communication Technology (ICT) has enabled new sources and forms of competition and opened up new markets and opportunities for the creation and delivery of goods and services. To be competitive in this global context, the Nordic industries must increase their productivity and innovate, develop high value products and services and move up the value chain, and design global industrial networks which form the basis for competitive advantage.

From a business policy perspective, national competition policy has an important part to play for the creation and persistence of competitive advantage of Nordic companies in the international marketplace.¹ This is important not the least in emerging industries where well-functioning domestic competition or 'domestic rivalry' may contribute significantly to the upgrading of factors of production, product features and quality.

2.1.2 Demographic changes

Another challenge common to the Nordic countries is that the share of elderly people in the population will increase substantially in the future. To illustrate the projected development, Figure 2.1 below shows how the age-dependency ratio is projected to increase in all Nordic countries in future decades. The age-dependency ratio is a commonly used indicator of demographic change and is defined as the ratio between the (projected) total number of elderly persons (aged 65 and over) and the (projected) number of persons of working age (from 15 to 64).²

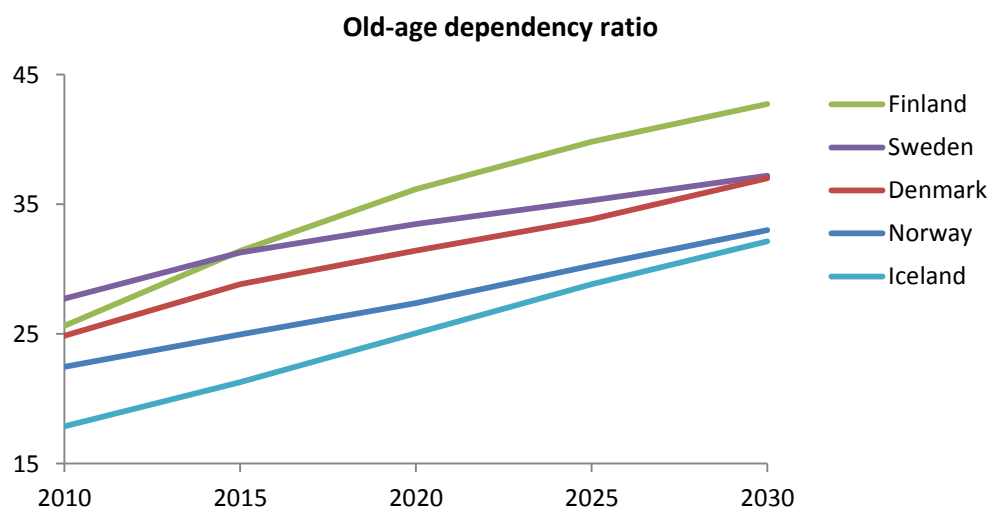


Figure 2.1 The share of elderly people will increase in the future

Source: Eurostat Population Database (2012)

¹ See for example Porter, M. (1990) and Sölvell, Ö. *et al.* (1991), (referred to in EU Commission decision No COMP/M.1672 blocking the proposed take-over between truck manufacturers Volvo and Scania).

² http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/files/quality_profiles/OLD-AGE%20DEPENDENCY%20RATIO.PDF

This demographic development, where fewer people of working age will have to provide for the increasing demands on welfare service provision of an ageing population, may put new pressure on public expenditures. Thus, the Nordic countries must address the challenges posed by the predicted structural demographic change.³ Increasing productivity growth in the public sector is paramount in this context.

Notably, there is scope for productivity gains in the public sector through organisational and technological advances. There are also some areas in the public sector domain where certain competition mechanisms may be introduced. With reference to the healthcare sector which is the focus of Chapter 6 in this report, experience has shown that substantial gains can be won through the implementation of provider payment mechanisms, and through efficient competition in the public procurement of inputs to the provision of public services. The latter is probably the area where competition policy is most relevant and has the largest scope to spur productivity increases also in the public sector.

2.1.3 Declining productivity growth

Declining productivity growth is the third challenge common to the Nordic countries which is highlighted in this report. First, it must be made clear that the Nordic countries have experienced significant economic growth since the 1960s. This is illustrated by Figure 2.2 below which plots the weighted averages for total GDP, GDP per capita, GDP per hour worked, and total hours worked for five Nordic countries for the last 50 years. As can be seen from the figure, total hours worked have remained fairly constant throughout the period while the GDP measures have increased plenty fold, which indicates significant increased productivity.

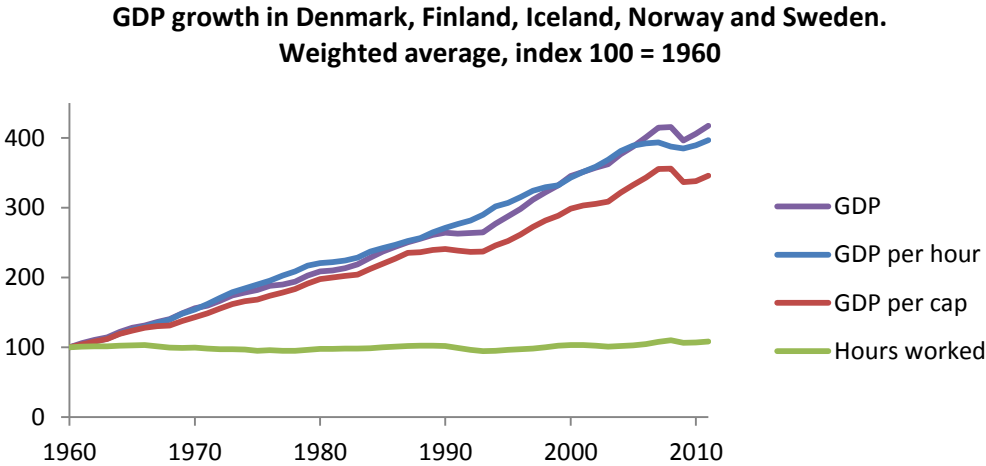


Figure 2.2 Increased growth in the Nordic countries since 1960

Source: The Conference Board (2011)

³ See for example Nordregio (2008), Nordic Councils of Ministers (2011) or European Commission (2012)

However, what cannot be seen from the above Figure 2.2 is that, similar to most OECD-countries, the five Nordic countries in the figure have experienced a slowdown in productivity growth over the last decades. A common indicator of productivity, the growth rates of GDP per hour worked for the five Nordic countries are shown in Figure 2.3 below. Even though there is individual variation in growth rates between countries and over time, the overall trend that clearly emerges from the figure is that productivity growth has declined significantly since the 1960s.

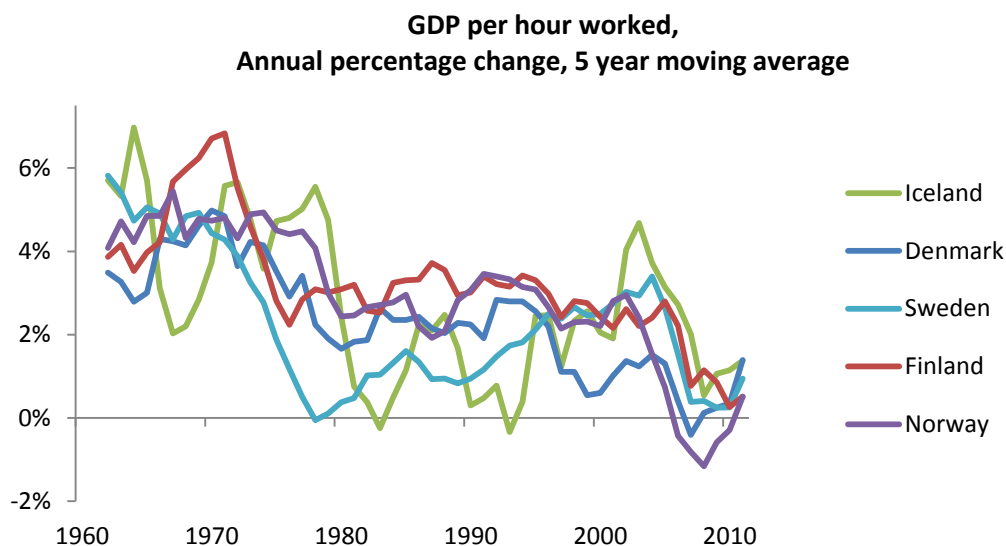


Figure 2.3 Decreasing labour productivity growth since 1960

Source: The Conference Board (2011)

Although illustrative, total GDP per hour worked does not provide any information about the underlying causes of the declining labour productivity. For a better understanding of the development of productivity it is hence necessary to compare different industries. As small open economies in an increasingly globalised world, competition from foreign firms affects firms operating on internationally integrated markets. Exporting firms, principally active in the primary and manufacturing sectors of the economy, are particularly exposed to this competitive pressure. Industries and sectors which, in general, are not exposed to competition from foreign firms are generally thought to be less affected. These so-called 'domestic' industries include for example construction, transportation, communication, and a number of financial, professional and service industries. In the context of domestic industries, competition policy plays an important role in promoting and preserving competition and thereby stimulating growth and innovation.

Table 2.1 lists productivity growth and employment rates in the different sectors of four Nordic countries alongside the EU-15 average for the 10-year period 2000-2010. This table shows that the productivity growth rates in the manufacturing industries exceed, by far, those in the domestic industries. Due to their large size, measured as share of total employment, low productivity growth in the domestic industries implies low productivity

growth for the economies as a whole. This makes it all the more important to discuss potential impediments for efficient competition in these markets, relating to domestic characteristics.

Table 2.1 Productivity and employment in manufacturing and domestic industries

	Denmark	Sweden	Norway	Finland	EU-15
Compound annual productivity growth rates, 2000-2010					
- Manufacturing industries	2.4	4.5	2.5	4.0	2.3
- Domestic industries ¹	0.8	1.3	1.6	1.0	1.0
<i>Total economy</i>	<i>0.4</i>	<i>1.6</i>	<i>0.4</i>	<i>1.4</i>	<i>1.0</i>
Employment, share of total (%)					
- Manufacturing	11.4	14.4	10.5	14.2	13.7
- Domestic industries ¹	48.7	45.7	47.9	47.3	52.7
- Other industries ²	39.9	39.8	41.6	38.5	33.5
<i>Total economy</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

¹⁾ Construction, Wholesale and Retail trade, Transport, Information and Communication, Financial services, Real estate activities and Professional scientific and technical activities.

²⁾ Agriculture, forestry and fishing, Mining and quarrying and public administration, defence, education, human health and social work activities.

Other industries are dominated by the public sector, for which productivity growth cannot be easily calculated since they cannot easily be valued in market prices. Productivity for 'other industries' are therefore not presented in the table.

Source: Own calculations based on Eurostat (2012). Statistics for Iceland, the Faroe Islands and Greenland not available.

2.2 Competition and economic growth

Economic growth depends on several factors in the economy, and different theories of growth tend to emphasise different determinants. With regard to competition as one of these determinants, several studies point to competition as a key driver of increased productivity.⁴ The main channels through which competition, and competition policy, may stimulate economic growth are depicted in Figure 2.4 below.

At the top of Figure 2.4 are the four channels through which competition and other policies may affect competition: enforcement of the competition legislative framework to identify and correct breaches of competition law, competition advocacy work, strengthening of the competition culture, and the promotion of effective competition in the public sector. The bottom half of Figure 2.4 depicts the linkages between competition and productivity through promoting within-firm efficiencies, removal of barriers to market entry and exit where inefficient firms are driven out of the market, and through incentivising firms to innovate.

⁴ For a schematic overview of a selection of empirical studies of competition and growth, see Danish Competition Authority (2009), Table 1 p.10.

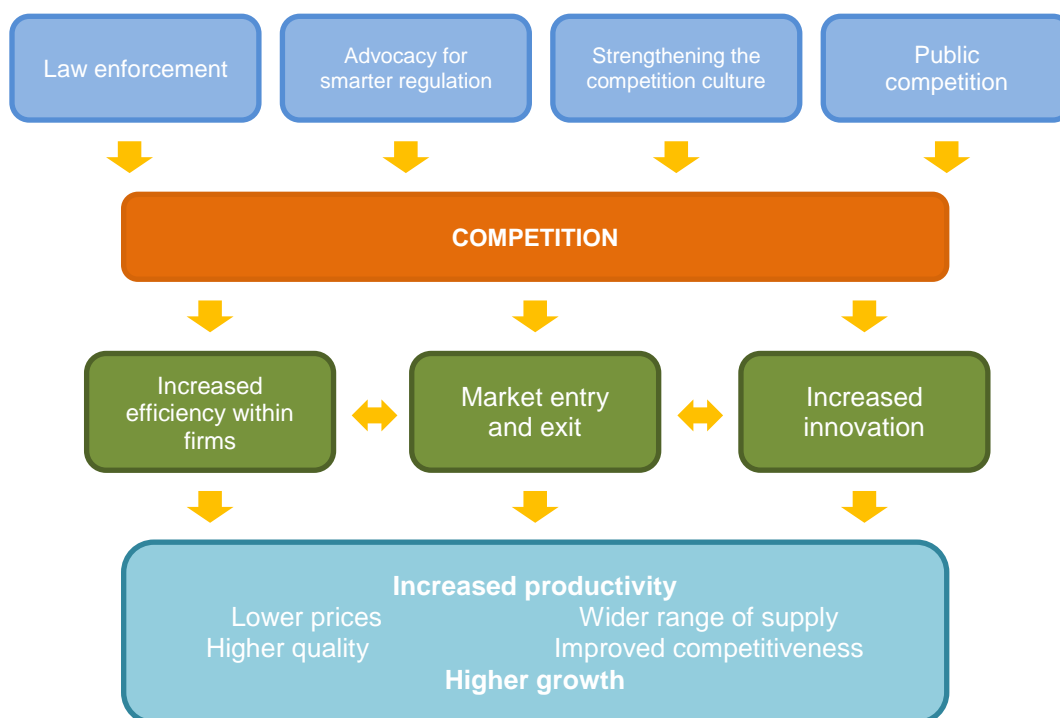


Figure 2.4 Competition as a driver for economic growth

Source: Adapted from Danish Competition Authority (2009)

2.2.1 Competition increases efficiency within firms

An important way in which competition contributes to increased productivity is through putting pressure on firms to control costs and use their resources efficiently. In a competitive environment, firms must constantly strive to lower their production costs so that they can charge competitive prices, and they must also improve their goods and services so that they correspond to consumer demands. In practice, competition affects management quality which, in turn, impacts on productivity levels, as described in Box 2.1 below.

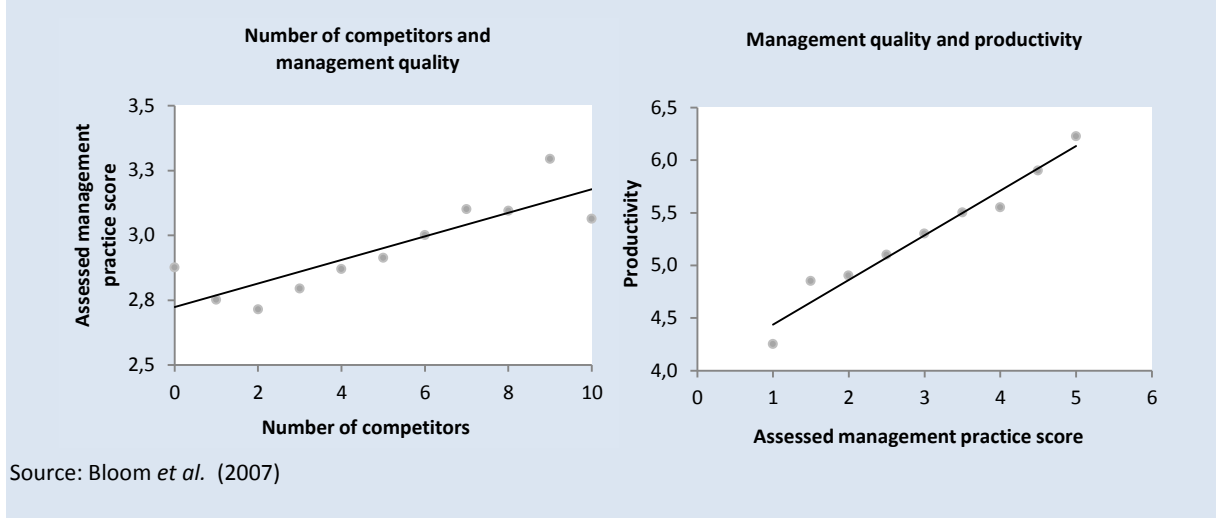
Box 2.1 Competition, management, and productivity

Competition contributes to better managed firms. This is the conclusion from a study of approximately 4000 mid-sized enterprises in the US, Europe, and Asia.⁵ The study was undertaken as a survey to plant managers. Management was assessed according to three main parameters: operations management, performance management, and people management. As can be seen from the left figure below, there is a positive relationship between competition and management quality which suggests that competition improves management. The study also indicates that the higher the assessed management practice score, the higher the productivity of the firm, as the right figure below shows.

The study provides two explanations for this finding. First, the incentives of firms to focus on good leadership are strengthened as the pressure from competitors requires firms to perform better in order to compete efficiently. Second, firms with weak management are pushed out of the market which enables

⁵ Bloom, N. *et al.* (2007)

better managed firms to grow. This finding supports a link between competition and productivity via good management practices.



2.2.2 Competition promotes productivity through the entry and exit of firms

Easy market entry and exit is one factor that favours the competitive pressure in a market. In the long run, the entry and exit of firms will reallocate resources from less to more efficient firms. Put simply, entry increases overall productivity when the entrants are more efficient than the average incumbent, and exit will raise productivity when the exiting firm is less efficient than the average incumbent.⁶ Market entry and exit may however be affected by entry/exit barriers such as start-up costs that may or may not be recoverable in the case of exit, patents, economies of scale, and government regulations. Where barriers to entry are low, new firms can easily enter the market and compete for market shares. Entry – and the threat of entry – thereby incentivises firms to continuously improve in order not to be forced out of the market by new entrants.

Several studies estimate that entry and exit of firms account for 10 – 40% of total productivity growth, naturally with some variation between countries and industries in the different studies. Also, the productivity effect of entry and exit can sometimes be greater in early stages of the product life-cycle. In industries where markets and products tend to be more mature, entry and exit have a less significant effect on productivity.⁷ A study from OECD estimates that new firms account for approximately 10% of all firms in a number of OECD countries, and that a similar share of firms exit every year.⁸ From a competition point of view, it can be argued that entry of existing firms into new markets where they were not previously operating, or exits from only some markets, may have the same effect as entry of new firms and the ceasing of operations of existing firms.

⁶ Entrants may initially, however, contribute negatively to average productivity to the extent that a certain time period is required in order to achieve the full productive potential, i.e. achieve effects of scale or simply through 'learning'.

⁷ Scarpette, S. *et al.* (2002)

⁸ OECD (2004)

2.2.3 Competition acts as a driver for innovations

It is widely accepted that innovation acts as a strong driver of economic growth. Product innovation refers to the development and market introduction of a new, redesigned or substantially improved product or service. Process innovation refers to the development of new and improved processes that lower the cost and efficiency of production. Process innovations free-up resources – capital and/or labour – which can then be used for other productive purposes. This contributes to economic growth. In a competitive environment, a firm that starts out as a market leader but fails to defend this position will gradually be pushed out of the market as more innovative competitors take over. At the same time, innovation is sometimes a costly and lengthy process and to invest in innovations, firms must expect to recoup their investment at a later stage. Instant copying of a new product or process by a competitor can be a hindrance for this and in some industries such concerns justify patent protection that gives the inventing firm a monopoly position in the market for a fixed period of time.

Since the incentives to innovate depend highly upon the market structure and conduct of firms, the degree and type of competition in a market is likely to affect innovation. Competition and competition policy's potential to spur innovation is the focus of Chapter 5 of this report, where the topic of competition and innovation is developed more in depth.

2.3 Removal of structural barriers to competition spurs economic growth

Effective competition in the marketplace relies on firms to actively seek and exploit new market opportunities. In some industries and markets, however, rules and regulations may have adverse effects on competition. Generally, regulations affect competition negatively if they limit the number or range of suppliers, limit the ability of suppliers to compete, reduce the incentives of suppliers to compete, or limit the choices and information available to customers.⁹ For example, a limit to opening hours can restrict the type of business concepts that firms can offer, and planning laws may shield existing firms in some retail markets from the competitive pressure from new entrants. In the case where regulations have such adverse effects, regulatory reforms have great potential to enhance competition.

Starting in the early 1990s, a large wave of liberalisation swept over Europe, including the Nordic countries. Notably, the markets for electricity, postal services, telecommunications and domestic air traffic were opened up for competition. Sweden also liberalised the markets for rail and taxi services. Strong evidence of privately owned firms being more efficient and profitable than state-owned firms is emerging from the vast empirical research that has been carried out on the topic of efficiency gains from privatisation.¹⁰ Two main channels through which product market policies affect productivity performance have been identified in the literature. First, lower barriers to entry and lower state control speed up the process of adopting new process technology and best-practice work methods and techniques in

⁹ OECD (2011)

¹⁰ Megginson, W.L. and Netter, J.M: (2001)

manufacturing sectors, and second, the changes in ownership increase the competitive pressure and entrepreneurial incentives of firms.¹¹

Depending on characteristics such as the size of the public enterprise sector and the technology gap to best-practice in manufacturing industries, the potential gains from regulatory reforms vary between countries. Yet, simulations of a privatisation trajectory towards OECD averages indicate productivity gains of a magnitude of up to 0.7% percentage points annually for countries with large shares of publicly owned enterprises. Moreover, an OECD case study argues that in the case of Sweden, which is one of the most liberalised countries within the OECD, regulatory reforms appear to have paid productivity dividends of as much as 0.4 percentage points in annual productivity growth during the years 1994-2003.¹²

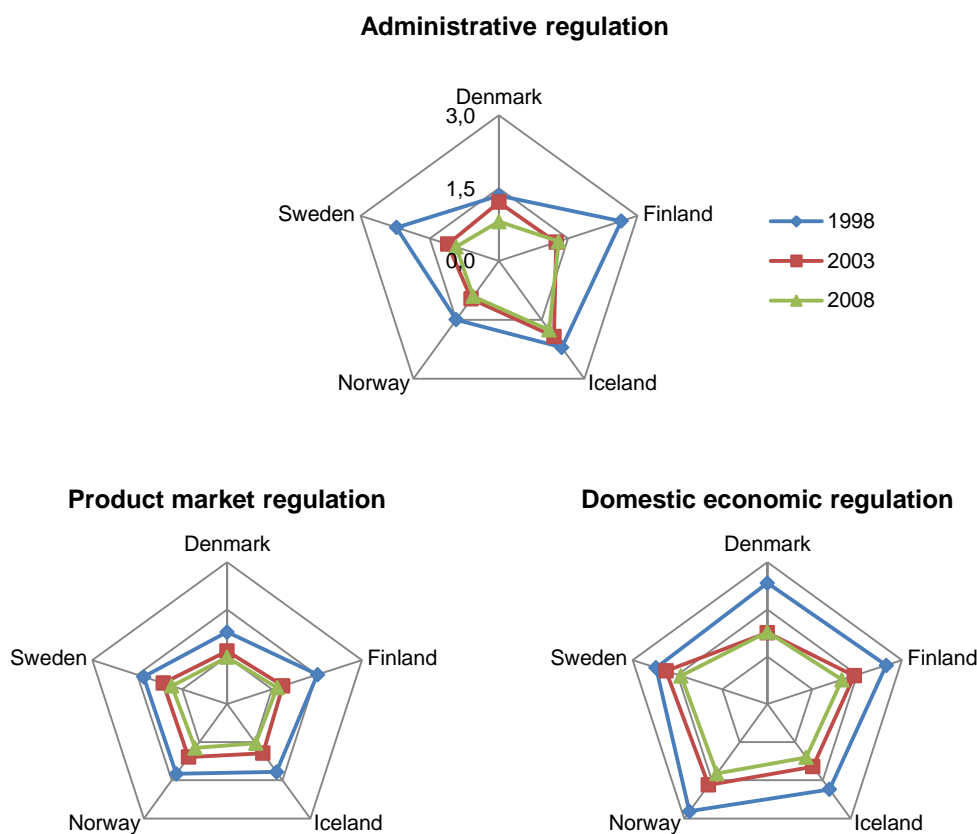


Figure 2.5 Regulatory reform indices 1998, 2003 and 2008

The diagrams range from 0 - no regulations (node) to 3 (border). The maximum value on the OECD scale is 6. Source: OECD (2012), Product Market Regulation Database.

¹¹ Nicoletti, G. and Scarpetta, S. (2003)

¹² Erlandsen, E. and Lundsgaard L. (2007)

Figure 2.5 above illustrates OECD market regulation indices for the five largest Nordic countries covering the years 1998, 2003 and 2008. These indices cover formal regulations regarding state control of business enterprises; legal and administrative barriers to entrepreneurship; and barriers to international trade and investment.¹³ The OECD market regulation index ranges from 0 (none) to 6, where the higher the index the higher the regulatory barriers.

Over the years, the Nordic competition authorities (NCAs) have identified a number of regulations that limit competition, cause consumer harm, and limit the potential for economic growth. Table 2.2 provides a non-exhaustive list of such industries where the NCAs have recommended either a revision or a complete removal of regulations with anti-competitive effects. It is worth noting that practically all of the identified regulations target 'domestic' industries. This implies a great scope for productivity gains and increased economic growth through regulatory reforms of domestic policies. Advocacy work aimed at competition-enhancing regulatory reforms is therefore an important part of the NCAs' activities. However, the overall impact of such reforms will, inevitably, depend upon the overall importance of the sector within the aggregate economy, and the initial competition characteristics of the market in question.

Table 2.2 Examples of advocacy for smarter regulation in the Nordic countries

	Denmark	Sweden	Norway	Finland	Iceland
• Pharmacies	x	x	x	x	x
• Taxis	x	x	x	x	x
• Construction (planning law, technical standards)	x	x		x	
• Retail sector (planning law)	x	x	x	x	x
• Retail market for electricity	x	x			
• Professional services (e.g. lawyers, dentists, general practitioners, real estate agents)	x	x			x
• Postal services	x	x		x	
• Rail		x			
• Gaming		x			
• Broadband				x	
• Vehicle inspection		x		x	
• Agriculture and dairies					x

Source: Own survey of the Nordic Competition Authorities' advocacy activities

¹³ For an overview of productivity and long term growth and indicators of product market regulation refer to, for example, www.oecd.org/eco/pmr. (Accessed 20-11-2012).

Worth mentioning in this context is that some regulations with anti-competitive effects are the result of societal values and considerations, relating to for instance environmental, health or safety priorities. Yet, by regulating 'smarter' it may, at least in some cases, be possible to achieve the desired policy objectives but with less distortive effects on competition. For example, the sales of pharmaceuticals by retailers have historically been highly regulated in all the Nordic countries. The objective for regulating has been the safe distribution of pharmaceuticals, accessible to all citizens in a cost-efficient manner. Norway, Iceland, and Sweden have reformed their pharmacy markets by abolishing the former state monopolies and removing many of the previous restrictions on entry and ownership. To safeguard the safe distribution of pharmaceuticals, the presence of a qualified pharmacist at each pharmacy remains compulsory. Contrary to pre-reform concerns, the number of pharmacies has risen substantially post-reform.

To mention another example, access to buildings and building sites is essential for new entrants to the retail market. The adverse effect of restrictive planning laws is hence that existing retailers are shielded from the competitive pressure from new or potential entrants. Restrictions on locations and number of building lots also put a cap on the speed at which new retail chains can expand in the retail market. This obstructs new business ideas to develop and lowers the attractiveness for best-practice international retail concepts to enter the market, e.g. in the discount or the hypermarkets segment. With specific reference to hypermarkets and the Danish retail market, the consulting firm McKinsey & Co has claimed that hypermarkets have the potential to significantly increase productivity in the sector but that the current planning law includes a size restriction that prohibits buildings of such a format.¹⁴ The Finnish, Norwegian, and Icelandic competition authorities have pointed to similar issues in their national markets. In Sweden however, the establishment of, and competition among, such large-scale formats are allowed since a reform of the zoning law in 1992.

2.4 Concluding remarks

Sustained economic growth is a shared goal of all the Nordic governments. Projected demographic developments together with a trend of declining productivity growth, however, constitute a challenge to the desired growth objectives which needs to be addressed on a broad front.

Competition policy is an important policy tool for the Nordic governments to put into play in order to achieve the desired long-term growth objectives. As this chapter has shown, competition has the potential to spur economic growth through channels such as increasing efficiency of resource use, entry of new competitors in the market place and market exit of inefficient firms, and stimulating innovation. Equally important, however, is that the competition policy provides a framework for advocacy for smarter regulations, aimed at removing or limiting any distortions to effective competition in regulated markets, and to strengthening the society's competition culture.

¹⁴ McKinsey & Co (2010)

3 Competition policy in the Nordic Countries: Legal and Institutional Frameworks

As previously shown in Chapter 2, effective competition policy can influence several factors central to sustained economic growth. Yet, the effectiveness of competition policy, and thus the potential of competition to boost productivity and growth, depends to a great extent on the national legal and institutional frameworks that govern competition policy implementation, and the tools available to the NCAs to carry out their duties. Furthermore, the different tasks and responsibilities assigned to the competition authority also matter in this regard.

Against this background, the purpose of this chapter is to provide, first, an overview of the general tasks and responsibilities of the NCAs and how these differ between the Nordic countries. The main objective of this chapter, however, is to identify areas where there is scope for strengthening the legal powers of the NCAs to make competition policy more effective. This is done by contrasting the legal powers of the Nordic countries with regard to antitrust cases, merger control and sector inquiries both across the countries and against the European Commission (EC). The overall conclusion to be made from this analysis is that there is room for improvement of the NCAs' legal powers and hence scope to increase the effectiveness of competition policy in the Nordic countries in a future perspective.

3.1 The General Tasks of the Nordic Competition Authorities

The combined general objective and common denominator of all NCAs is the safeguarding of competition in the marketplace and the protection of consumer interest through enforcement of competition law and competition advocacy activities. In addition to this, the NCAs may also have other tasks and responsibilities in the areas of public procurement, sector supervision and consumer policy. However, the roles and assignments with regard to these three tasks tend to differ between the NCAs.

An overview of key similarities and differences between the tasks of the NCAs regarding, in turn, law enforcement, competition advocacy, public procurement, sector supervision and consumer policy is given below and illustrated with some examples from the Nordic countries. The different national institutional frameworks are described separately, country by country, in Appendix 1 to this chapter.

3.1.1 Competition law enforcement

Competition law enforcement is core activity of competition policy, serving a two-fold objective. First, as a corrective measure to stop and sanction breaches of competition law, and second, as a means to deter firms from breaching competition law through raising awareness of competition law and the competition authorities' tasks and powers.

The legal framework of Nordic competition legislations is elaborated further in Section 3.3. Yet, it is worth mentioning in this overview of competition authority activity that there are different categories of competition law enforcement of which merger control and antitrust are two central components.

First, effective merger control is an important component of a competition regime, as it prevents consumer harm caused by transactions which could reduce competition among rival firms or foreclose competitors. Second, antitrust policy deals with two categories of prohibitions: prohibitions that prevent concerted practices and agreements that, by object or effect, aim to distort competition; and the abuse of market power. Cartels or agreements to fix prices or share markets are examples of the first category of prohibitions. The second category, abuse of market power, usually involves refusal to supply an essential input, blocking access to an essential facility, pricing below cost or charging customers unfairly excessive prices are examples of the second category of prohibitions.

Competition law enforcement in the Nordic countries – an overview

In order to provide an overview of the NCAs law enforcement activities and ultimately, their positive impact on consumer welfare, a schematic overview of some common indicators of competition law enforcement activity covering the 5-year period between 2007 and 2012 is presented in Table 3.1 below. It should be stressed, however, that there are no benchmark figures for the types of law enforcement activities reported. Inter-annual variations are a natural consequence of year-to-year differences in the influx and settlement of cases, differences in size and scope of the individual cases behind the reported figures, and of certain differences to the NCAs competition law frameworks.

Table 3.1 Overview of mergers, merger interventions, cases and fines imposed for all NCAs

		2007	2008	2009	2010	2011
<i>Mergers</i>	Number of decisions on merger cases, ¹ of which:	231	235	111	133	168
	- Total number of interventions in mergers	6	16	12	14	23
	- Number of annulments of mergers	3	2	5	0	5
<i>Cases in Court</i>	Total number of cases processed	16	20	27	23	16
	- Cases won	15	15	26	18	11
<i>Antitrust</i>	Number of undertakings sentenced to fines, of which:	33	33	34	22	17
	- Cases regarding collusion	26	19	19	16	10
	- Cases regarding abuse of dominance	3	2	2	5	2
	- Decisions involving voluntary commitments	10	12	13	18	15
	- Other cases ²	4	11	13	1	5

		2007	2008	2009	2010	2011
<i>Fine levels</i>	Corporate fines, total sum of fines in million Euro, ³ of which:	35.1	10.1	168.3	6.8	7.0
	- Fines: collusion cases (total, in EUR)	28.9	8.1	166.7	5.8	1.5
	- Fines: abuse of dominance cases (total in EUR)	6.1	2.0	1.3	0.97	2
	- Fines: other cases (total, in EUR)	0.107	0.01	0.21	0.08	3.5
	Weighted average of fines as share (%) of the total annual turnover of the undertakings ⁴	0.2-0.5	0.28-1.0	0.25-1.0	0.25-1.0	0.25-1.0

¹ For Norway, only second phase merger decisions included due to low turnover threshold for notification (between 300-500 notifications/year, 10-20 merger decisions in second phase/year)

² Other cases include for example failure to notify a merger to the competition authority

³ Average exchange rate Euro to Nordic currencies 2011-2012

⁴ Figures not available for all countries

Source: The Nordic Competition Authorities

To comment on the above Table 3.1, first, merger control is an important part of the NCAs' work. This involves an ex ante assessment of whether or not a merger is expected to give rise to anti-competitive effects that cause consumer harm. The first thing to be noted from Table 3.1 above is that most mergers, judging by the NCAs informed assessments, do not raise competition concerns. Nonetheless, the NCAs have found reason to intervene against a total of 77 mergers within the last five years, and also to annul 15 in jurisdictions where this possibility exists. Through these interventions against potentially harmful mergers, the NCAs have contributed to safeguard a competitive market environment to the ultimate benefit of consumers.

Second, the NCAs have a high success rate in court and win most cases put to trial. Transparency of competition authority activity in terms of publishing decisions imposing sanctions, guidelines and judgements, and also explaining the reasoning underlying a decision, is recognised as one deterrence factor of utmost importance to the effectiveness of competition enforcement.¹⁵ A high success rate in court is likely to contribute to this end.¹⁶

Third, and very important for the deterrence properties of competition law enforcement, is the sanction policy in place. Fines are key elements in this regard since they have a clear and direct impact on the magnitude of financial loss an undertaking (or an individual, in some jurisdictions) is expected to suffer if convicted for breaching competition law. In brief, the deterrent effect of the level of fines depends on two elements: how the law, literally, is designed; and how the law is enforced in practice.¹⁷ The legal frameworks of the Nordic

¹⁵ See for example Calviño, N. (2006)

¹⁶ It is worth mentioning that the notion that a case won in court would mean that the competition authority's assessment in the particular case is 'correct', and hence 'incorrect' if lost, is not entirely accurate. Different courts and agencies may, on the same evidence, disagree about the assessment of a case, why any labelling in terms of 'correct' and 'incorrect' is debatable. See for example OFT (2007) "The deterrent effect of competition enforcement by the OFT", Discussion document. OFT 963.

¹⁷ Buccirosi P. *et al.* (2009)

countries' with reference to antitrust and fines are elaborated in Section 3.3., while the remainder of this section focuses on a brief discussion of the deterrent effect of the level of fines imposed.

As can be seen from Table 3.1, the weighted average of fine levels for the Nordic jurisdictions amount to only a fraction of total turnover of firms, 0.2-1.0%. These are arguably very low numbers. The literature on the deterrent effects of competition law provides some food for thought as to whether the deterrent effect of antitrust sanctions in the Nordic countries could be improved by increasing the level of fines effectively imposed for breaches of competition law.¹⁸

In an international comparison of the effectiveness of antitrust sanctions,¹⁹ a few key points deserve particular mention. First, the fine levels effectively imposed on cartels in the EU during the time period under study, 1993-2000, average between 2 and 6% of affected sales, even though the guidelines for most jurisdictions in the EU, including the Nordic countries, stipulate a maximum fine of 10% of sales in the relevant market. This should be compared to the US and Canada, where the median of comparable fines equalled 11.1% and 16.9%, respectively. Second, in relation to this, the evidence suggest that the reputedly tough anti-cartel enforcement of the US deter global cartels from meeting physically within their jurisdiction, and instead opt for other locations that are considered less risky, like EU territory. Finally, the fact that cartels continue to be discovered is taken as an indication of under-deterrence of antitrust sanctions, including in the 'tougher' jurisdictions US and Canada.

Taken together, these findings suggest that there is scope for increasing deterrence through imposing fines which are at the upper-end of the scale of what the legal frameworks in the Nordic countries stipulate. It is worth pointing out here, that even if the maximum fine of 10% of affected sales would be applied more frequently, depending on the total turnover of the undertaking(s) involved, the deterrent effect of that level of fine could still be sub-optimal. In line with this reasoning, the UK Office of Fair Trading (OFT) has revised their guidelines for antitrust fines in 2012, raising the maximum level of fines from 10% to 30%. The intention is that this raise will be big enough to deter anti-competitive behaviour in markets which account for only a small share of total turnover.²⁰

Some examples of competition law enforcement in the Nordic countries

Moving beyond the figures reported in the previous section, selected examples of the NCAs law enforcement activities are presented below for illustration purposes. First, the cost to society of anti-competitive behaviour of firms can be considerable. Cartels may be particularly harmful, not only to rival firms but ultimately to end customers and taxpayers.

¹⁸ A review of the extensive body of literature on deterrence in competition law lies beyond the scope of this report. Refer to for example the works by Connor (2006), Calviño N. (2006) or Buccirosi P. *et al.* (2009) as introductions to further readings.

¹⁹ Connor J. (2006)

²⁰ OFT (2012)

Uncovering and convicting firms involved in such practices is therefore a prioritised activity. One example of a high-profile cartel case is the detection and conviction of an asphalt cartel in Finland, described in Box 3.1 below. The fines imposed on the parties involved, €82.55, stand in relation to the seriousness of the competition problem and highlights well how financially harmful a cartel can be in terms of welfare losses to society. Around the same time, an asphalt cartel was also detected and fined in Sweden where it remains the largest (detected) cartel to date.²¹ Following the detection of these cartels, prices have fallen in the industry. Moreover, high-profile cases like these help to raise the awareness of competition law and the powers of the competition authorities and, importantly, contribute to deter many companies, also in unrelated industries, from engaging in cartel activity.²²

Box 3.1 A multimillion euro asphalt cartel in Finland

The detection and conviction of a cartel in the Finnish asphalt industry is one noteworthy example of competition law enforcement. The nationwide cartel was active, at least, from 1994 to 2002 and involved eight firms.

In 2004 the Finnish Competition Authority proposed fines, amounting to roughly €97 million, to eight firms for breaching of the Competition Act by:¹

- Limiting the output of cartel members by imposing an annual tonnage for their asphalt production
- Applying an arrangement whereby in tendering some companies had to waive making a tender, others had to submit a higher or lower bid than others or the price was otherwise based on co-operation between the bidders
- Creating a system for monitoring the agreed market allocation shares
- Organising a cartel on the managerial level of asphalt operations
- Complicating the operations of non-cartel members and the entry of new companies into the market and
- Exchanging information classified as business secrets.

In 2007, the Market Court partly upheld the Competition Authority's proposal and imposed fines of just €19.4 million on the parties. The Finnish Competition Authority and six of the asphalt companies appealed the Market Court's decision.²

In 2009, the Supreme Administrative Court concluded that the asphalt cartel had lasted between 1994 and 2002, and that it had been composed by all the main national actors in the industry, possessing a combined market share of roughly 70% of the relevant market. The case concluded by the Supreme

²¹ Refer to <http://www.kkv.se/t/Page.aspx?id=465> for information about the Swedish asphalt cartel.

²² Several studies have attempted to measure deterrence effects of competition law enforcement. The overall conclusion seems to be that deterrence effects vary depending on e.g. business size, sector and type of anti-competitive conduct (mergers, abuse of dominance, cartels and other anti-competitive agreements) and that the ratio of deterrence well exceeds the 1:1 ratio. Although the outcome of any survey is sensitive to the context and methodology employed, just to mention a recent example, a report published by the UK Office of Fair Trading (OFT) estimated deterrence ratios of 1:12 for abuse of dominance, 1:28 for cartels and 1:40 for other anti-competitive agreements.

Administrative Court ordering the companies to pay penalties of a total of €82.55 million, which was about the maximum sum with regard to turnover of the firms permitted by law in Finland.³

¹ Finnish Competition Authority (2004). FCA proposes heavy fines for members of asphalt cartel. Published online 31 March 2004. Available at <http://www.kilpailuvirasto.fi/cgi-bin/english.cgi?luku=news-archive&sivu=news/n-2004-03-31>

² Decision by the Market Court of 9 December 2007 MAO:441/07.

³ Decision by the Supreme Administrative Court of 29 September 2009, KHO:2009:83.

Another example of competition law enforcement regarding collusive behaviour is presented in Box 3.2, describing the proceedings of the Icelandic Competition Authority which detected collusion in the Icelandic market for payment card acquiring services. This case also illustrates that law enforcement does not always have to involve court proceedings, and that certain cases can be handled more efficiently through settlement procedures which make lesser demands on competition authorities' resources.

Box 3.2 Collusion in the Icelandic market for payment card acquiring services²³

A new competitor tries to enter the market

In 2002 a new company, PBS/Kortþjónustan (PBS), attempted to enter the market for payment card acquiring services in Iceland. At that time only two firms: Greiðslumiðlun (VISA Iceland) and Kreditkort (MasterCard Iceland) were operating in the market and there were various signs that indicated that these two firms were trying to prevent PBS from gaining a foothold on the market.

A dawn raid brings results

In 2006, the Icelandic Competition Authority (ICA) carried out dawn-raids on the premises of both Greiðslumiðlun and Kreditkort. The evidence uncovered led to a dawn-raid of a third firm in late 2007, Fjölgreiðslumiðlun, which operated the electronic payment systems for authorisation, collection of entries and clearance of payments relating to transactions involving payment cards.

Evidence of exclusionary behaviour and collusion is revealed

The ICA's investigation of the case revealed that Greiðslumiðlun was intentionally trying to drive PBS out of the market for two reasons: to secure the company's own profits and to scare-off potential competitors from trying to enter the market. In their attempts to keep PBS out of the market, Greiðslumiðlun approached PBS customers and offered them unlawful exclusive price cuts and more frequent payments than what was generally available to Greiðslumiðlun existing customers and also breached the competition rules by offering free or reduced rent for point-of-sales terminals. In addition they used different technical barriers to complicate credit card transactions for merchants using PBS's acquiring services.

What more is, the ICAs investigation revealed extensive collusion between Greiðslumiðlun and Kreditkort in which also Fjölgreiðslumiðlun participated to some extent, notably by providing information on the new competitor. In essence, the collusion consisted of market sharing between the two firms to rule out competition between themselves, and also in colluding on various joint actions with the objective to

²³ Acquiring in this context involves services to vendors (e.g. retail shops) whereby they are authorised to accept payments by means of payment cards, collecting their data and disbursing the proceeds when card holders have paid their bills.

obstruct PBS from becoming established in the market, for example regarding promotions and terms of services.

Settlement

In this case, the evidence of the involved firms having breached the competition rules was crystal clear, and it was indisputable that they would have been convicted in Court had the case been brought to trial. To avoid the long and costly process involved in a Court case, Greiðslumiðlun, Kreditkort and Fjölgreiðslumiðlun separately approached the ICA and requested that their cases should be settled directly with the ICA. The settlements were finalised in the beginning of 2008 and the settlement fines amounted to a total of ISK 735 million (approx. EUR 7, 5 – 8 millions).

Aftermath

Since the settlements between the undertakings and the ICA took effect, Fjölgreiðslumiðlun has discontinued operations and The Central Bank of Iceland has now taken over their operations in an independent entity. The ownership of the two incumbent firms has changed. A single bank is now a majority owner of each of the undertakings. Both Valitor (formerly Greiðslumiðlun) and Borgun (formerly Kreditkort) operate a so called dual acquiring system, which has increased competition in the market. All in all, the financial market seems to have been positively affected by these actions.

Due to the shadowy nature of cartels, the most effective way for a competition authority to detect this kind of competition infringement is through inside information from an undertaking directly involved in the illegal conduct. Leniency schemes, that is, granting reductions in penalties to firms (or individuals) involved in cartels in exchange for discontinuing participation into the practice and for providing an active cooperation in the investigation of the enforcement authorities, hence constitute a valuable tool in the fight against cartels. All NCAs have leniency schemes in place where the first undertaking to step forward and notify the authority of the existence of a cartel may escape fines - if collaborating with the authority throughout the investigation. It is common practice to reward the first whistle-blower with larger leniency than any that may follow.

Box 3.3 presents an illustrative case of how focused actions against cartels in combination with an established leniency scheme can encourage whistle-blowing and the detection of cartels. In the Norwegian case referred to, the increase in leniency applications following the authority's commitment to combat cartels indicates that their efforts are paying off.

Box 3.3 Norway – Cartel commitment brings results

The Norwegian Competition Authority has worked systematically over several years to strengthen its capability for investigative work and to put the fight against competition crime on the agenda. Uncovering illegal price collusion and bid rigging have the highest priority. Results of the initiative are now beginning to emerge. The Competition Authority's investigation activity increased in 2010 - more than 70% of the total resources for handling cases were used to follow up on possible breaches of competition law. In 2010, the authority secured evidence in four cases, at a total of 19 locations - far more than in previous years. In addition, it took a total of 32 formal statements in six different cases. Since the Competition Authority intensified controls, a number of companies have themselves reported that they may be involved in collusion, and the Authority is currently investigating several major cases in parallel.

Several of the cases under active investigation the last few years are the result of leniency applications. Worth pointing out here is that the Norwegian leniency scheme was introduced in 2004, but used sparingly until 2010 when, following the intensification of the abovementioned fight against cartels, the Competition Authority received a total of six leniency applications.

Source: <http://www.konkurransetilsynet.no/en/news/archive/Cartel-commitment-brings-results/>

Another form of competition law infringement that can raise prices charged to customers considerably, is abuse of dominance, i.e. when a firm that is dominant in a market uses (abuses) its market power to charge prices well over the production costs in order to raise its own mark-up in a way which would not be possible in a competitive market. As an example, the abuse case regarding Faroese Telecom Net (FT Net) is presented in Box 3.4 below. This case also illustrates how mediation can be a successful implementation of competition law enforcement. Although mediation does have its drawbacks, for example it does not add to case law and is therefore not suitable to solve cases where a precedential outcome is desired, it has the advantage of being a quick and cost-effective solution to solve cases in apparent breach with competition law. The complexity of the case and the speed at which an adequate settlement can be reached are hence important factors to consider when considering mediation, which, as the example below illustrates, can work out remarkably well.

Box 3.4 Abuse of dominance - Faroese Telecom Net

A monopoly provider of internet infrastructure

Faroese Telecom Net (FT Net) is the sole internet infrastructure provider on the Faroe Islands, and is also the largest operator on the downstream market for MPLS/VPN connections. In September 2010, the Faroese Competition Authority received a complaint from one of FT Net's competitors for the provision of MPLS/VPN connections, who, by default, was equally a customer to FT Net with regard to infrastructure access. The complainant claimed that FT Net abused its monopoly position on the market by refusing to supply such connections without also supplying the routers to each connection, which is allegedly a case of illegal bundling. The complainant opposed to this procedure, since FT Net's routers did not live up to that firm's quality standards. Because of this, the complainant had to supply two routers to their clients: their own preferred choice, and FT Net's. As a consequence, the price charged for the MPLS/VPN product was 50% higher than it could have been without the addition of the FT Net router. In addition, the complainant objected to FT Net's pricing for switching supplier for MPLS/VPN services, which they argued hindered mobility on the market.

Excessive pricing

Interestingly, FT Net's license permitted them to charge a 15% mark-up above all actual costs to cover product development. However, upon the Faroese Competition Authority's review of FT Net's revenues and costs for the MPLS/VPN product, the Authority concluded that several costs were excessively priced, or even unnecessary, and that some terms of sales were unduly stringent.

Mediating a settlement

The Authority's analysis resulted in a proposal of a settlement commitment where:

- FT Net was to supply MPLS/VPN Connections without routers. This would reduce the price for each connection by 50%.
- The price charged for setting-up a new connection was to be reduced by 22%.
- Switching costs would be reduced by 31%.
- A 10% discount would be granted for 5-9 connections and 15% for 10 or more orders.

FT Net accepted the proposal and the case was closed on 1 April 2011.

Economic concepts and theory tend to play a greater role in competition law enforcement

In both antitrust and merger control cases there are two dominant approaches to competition law enforcement, the 'form-based' and the 'effects-based' approach, which may sometimes lead to different outcomes. According to a form-based approach, certain conducts are considered forbidden *per se* in which case it is not necessary for the competition authorities or courts to show that a certain conduct has or will cause consumer harm in order to prohibit the same and/or to impose sanctions. The effects-based approach, also labelled a 'more economic approach' in European and international competition law, may be described as a tighter integration of modern industrial organisation theory and economics into competition law enforcement. The effects-based approach corresponds to the more economic interpretation that has evolved as part of the modernisation of EU competition law.

In essence, the economics-based approach requires an analysis of the economic effects of certain business conduct. Anti-competitive effects need to be proven on a case-by-case basis and include an evaluation on whether efficiency gains outweigh negative effects. The identification of the harm to competition and of the likely harm to consumers must be based on economic theory and supported by empirical evidence. Both approaches, the form-based and the effects-based, have their strengths and weaknesses. Critics to the form-based approach mean that form-based prohibitions can eliminate market behaviour that is actually positive or neutral to the market's development. Others argue that the advantage of the form-based approach is that it provides greater legal certainty and faster resolution than effect-based methods. There is thus an inherent tension between, on the one hand, fostering legal certainty and ease of administration, and, on the other hand, accuracy of competition policy. However, as many precedents from EU and national courts are based on the form-based approach, the NCAs must be prepared to consider both approaches when analysing and handling competition cases in the future.

In a response to these trends and the future challenges that may arise from these developments, all NCAs have made efforts to boost their competence in industrial economics and related fields. Essentially, much has to do with the building-up of the competence of the authorities, education and training of staff, hiring of more economists in general, including the hiring of economists with a doctorate degree, appointing a chief economist and developing best-practices in economic analysis. In all likelihood, this strengthened competence should also reduce the risks of 'over-enforcement' (Type I error), such as

forbidding a 'good' merger which would increase efficiency in the market and have positive effects for consumer welfare, and 'under-enforcement' (Type II error), such as allowing a merger which can then exercise market power and exploit consumers.

Breaches of competition law may be costly for all parties involved

On a final note, breaches of competition law are costly, both from a consumer welfare perspective as well as from a tax-payer perspective. Enforcement cases require substantial resources, especially when cases are taken to court where reaching a final verdict may often take several years. Needless to say, this is costly for all parties involved. Hence, for competition law enforcement to be more effective with regard to the use of both personnel and budgetary resources, it is desirable that the legal system is adequately designed and that the competition authorities are also given the legal powers to settle cases out of court where possible. In this regard, it is noteworthy that the NCAs, in a general comparison with the EC, do not have as extensive legal powers regarding antitrust, merger control and sector inquiries. As the analysis that follows in Section 3.3 indicates, there is both need and scope for improvement of the Nordic countries' competition legal frameworks in order to increase the effectiveness of competition law enforcement.

3.1.2 Competition advocacy

Another main pillar of competition policy in the Nordic countries is competition advocacy, which refers to those activities conducted by competition authorities relating to the promotion of a competitive environment for economic activities by means of non-enforcement mechanisms, mainly through their relationships with other governmental entities and by increasing public awareness of the benefits of competition. Advocacy is closely connected with work aimed at deterrence effects from competition law enforcement. All NCAs devote significant resources on programmes to reach out to stakeholders. Common channels for the competition authorities to express their standpoints and reach out with their proposals are through the publication of reports, public statements and through keeping a dialogue with decision makers. It is also good practice for the NCAs to cooperate with other government and private sector stakeholders in their advocacy activities.

As previously mentioned in Chapter 2, regulatory reforms which favour competition have good potential to spur economic growth. An important part of the competition advocacy task is therefore to identify policies and regulations that may adversely affect competition and propose corrective actions, for example in promoting regulatory reform and trade liberalisation, and otherwise minimise excessive government intervention in the marketplace.

An illustrative example of successful competition advocacy work is given in Box 3.5 below, describing how the Danish Competition Authority (today the Danish Competition and Consumer Authority) (DCCA) did contribute to the liberalisation of the Danish Book market.

Box 3.5 Regulatory reform of the Danish Book market

Danish cultural policy places a high value on books as a 'cultural good', highlighting the importance of consumers having easy access to a wide selection of titles at a reasonable price, including a more narrow and specialised literature. For a long time, the general political view in Denmark was that this goal was best achieved through regulating *who* should be allowed to sell books to consumers, and at *what price*. It was believed that this regulation would protect authors, publishers and booksellers and guarantee them certain revenue and allow the publishing of a wide variety of books. In practice, the regulation was built upon a trading agreement between The Publishers and The Booksellers Associations (*Forlæggerforeningen* and *Boghandlerforeningen*).

Although the intention with regulating the market – a wide selection of titles at low prices - is an understandable objective, the anti-competitive features of the trading agreement in place were a cause of concern for the Danish Competition Authority (now Danish Competition and Consumer Authority). Therefore, in 1999 the Danish Competition Authority issued a discussion paper that questioned whether the prevailing trade agreement was the best way to satisfy the cultural policy objective, or whether a deregulated market would be more suitable.¹ This discussion paper was greeted with large scepticism at first, but nevertheless initiated a vivid debate among stakeholders and policy makers that actually resulted in changes to the cultural policy.

These events marked the start of a step-by-step regulatory reform of the Danish book market. As a first step booksellers lost their exclusive right to sell books in 2001, up until when publishing houses and booksellers were locked by a mutual exclusivity to trade books. Publishers' duty to fix the sales price charged to customers in bookstores was relaxed in 2006 when it turned into a right, and in 2006 this right became restricted to include a maximum of 10% of newly published titles. However, the industry did not use this right fully and in 2009 not more than 1% of Danish books had fixed prices. On 1 October 2010 the exemption of the market's fixed-price system from competition law was abolished and on 1 January 2011 the market was fully deregulated when the trading agreement between publishers and booksellers expired.

¹ Konkurrencestyrelsen (1999), *Debatoplæg – Bogbranchens erhvervsvilkår*, available in full via <http://www.kfst.dk/index.php?id=16971>.

3.1.3 Public procurement

The public sector constitutes a large part of each of the Nordic economies and public procurement, as further elaborated in Chapter 6, make up a large share of the Nordic economies. It is hence of great importance to all the Nordic countries not only that competition in the relevant markets is effective, but also that the public procurement processes is not distorted by anti-competitive conduct such as collusion by bid-rigging, or corruption.

There are several connections between competition policy and public procurement. However, the NCAs' responsibilities in this area differ between countries. While some regimes incorporate competition and public procurement under the same authority, others do not. First, the Swedish Competition Authority holds the most responsibility of the NCAs

regarding public procurement. The Swedish Competition Authority was made the supervisory body of public procurement in 2007 and is assigned the task to work for effective public procurement to the benefit of the society and the participants in the markets. The supervision activities are prioritised with a prominence towards illegal direct award of contracts and the Authority may take these cases to court. The Swedish experience is that since being appointed the supervisory task, the Authority has been able to pool expertise and research resources under one roof which has ensured better coordination of competition and procurement policies which has contributed towards more effective policy implementation in both areas.

In Denmark and Norway, the Competition Authorities have no authority to review public procurement procedures. Instead, the complaints boards for public procurement in Denmark (*Klagenævnet for Udbud*) and Norway (*Klagenemnda for offentlige anskaffelser, KOFA*), have the authority to decide whether public awarding bodies have violated procurement laws. In Norway, the competition authority merely hosts the board's secretariat. The two authorities operate under different sets of rules and there is thus no pooling of resources between the two bodies. In Denmark, the Danish Competition and Consumer Authority (DCCA) has the power to negotiate solutions for complaints on public procurement procedures, if the project has not yet reached financial close. Furthermore, the DCCA plays the role of a supportive body in the public procurement area, its main task being to safeguard and promote effective competition in the field of public procurement. As part of this task, the DCCA provides guidance and advice concerning the interpretation and the application of the rules on public procurement.

In the Faroe Islands, Finland and Iceland the competition authorities do not have any formal roles in respect of public procurement, except for what entails from the competition acts. Yet, irrespective of whether public procurement and competition authorities operate under different sets of rules and in separated organisations, the establishment of a collaborative relationship between procurement officials and the competition authorities should be a priority in all the Nordic countries. Development of effective leniency programs, innovative information campaigns and analyses of public procurement statistics in order to identify suspicious bid-rigging and other types of collusion are examples of activities which the NCAs could perform in order to foster effective public procurement.

3.1.4 Sector supervision

Sector supervision is a responsibility held by some of the NCAs and the mandates cover different areas. For example, the Danish Competition and Consumer Authority is responsible for certain regulations in the water works sector and the credit card payment market. The Finnish Competition Act provides certain provisions for the competition authority's cooperation with other institutions, such as the Financial Supervisory Authority and the Finnish Communications Regulatory Authority. In Iceland the competition authority is obliged by law to cooperate with the National Energy Authority on matters related to the transmission and distribution of electricity, and the Government has suggested that the Icelandic Competition Authority should be awarded increased powers according to Media

Law considering merger control and supervision of concentration on the media market. In the Faroe Islands, the competition authority shares a joint secretariat with five regulatory authorities, the authorities of telecommunications, postal services, insurance, electricity and company registration which share the same Director General. Finally, the Swedish Competition Authority is the supervisory body for the establishment of system of choice that is applied in the provision of certain types of healthcare and other related services that were previously supplied only by the public sector (see also Chapter 6). The Swedish Competition Authority also monitors the compliance with the so-called Transparency Act (2005:590) implementing EC Directive 2006/111/EC regarding transparency of financial relations between EU Member States and public undertakings as well as financial transparency within certain undertakings.

3.1.5 Consumer policy

Further variations in the tasks of the competition authorities may be observed in the area of consumer policy. Increasing consumer welfare is the common goal of both competition policy and consumer protection policy. From a competition policy perspective, a proactive consumer policy favours competition, the underlying reasoning being that well-informed, active and mobile customers make markets more dynamic and competitive.

The interrelation between the competition and consumer policy has, perhaps most clearly, been manifested in practice in Denmark and Finland with the merger of, first, the competition and the consumer authorities into the Danish Competition and Consumer Authority in 2010, and second, the unification of the Finnish Competition Authority and the Consumer Agency into the new Competition and Consumer Authority as of 1 January 2013 (Finnish Competition and Consumer Authority). The basic idea behind the mergers, despite the differences in the underlying legal frameworks, is to strengthen the significance of competition as well as consumer-related matters in society and to increase the effectiveness of the administration.

In Iceland, the opposite strategy has been employed. In Iceland, the Competition and Consumer Authority was a unified authority until 2005 when it was split up in two separate authorities: the Icelandic Competition Authority and the Icelandic Consumer Agency. The reason for the split up of the unified authority was that Icelandic legislators had concluded that incorporating the responsibility for competition issues and consumer protection within the same authority led to a dilution of the focus of the unified authority.

In Sweden and Norway, no merger between the competition authorities and the consumer authorities are planned and in both countries the two authorities are in fact located in different parts of the country. Still, they cooperate closely in certain areas. For example, the Swedish Competition Authority has, within the area of competition advocacy, focused strongly on the well-informed and active consumer as a crucial part of competitive and well-functioning markets. For example, the Swedish Competition Authority has worked closely with the Swedish Consumer Agency on several information campaigns aimed at consumers. Moreover, the Swedish Competition Authority has also advocated that an important task for

government is to create conditions that enable consumers to make the kinds of choices that increase the pressure on producers to supply good quality at the lowest possible price, for example by suggesting reforms aimed at increasing consumer mobility and reducing consumer switching costs in areas such as banking, financial products and utility services, which in turn would improve competition in those sectors.

3.2 Similarities in the Nordic countries' competition acts

All Nordic Competition Acts are harmonised with the main EU competition rules. Consequently, there are great similarities in the legal frameworks. An overview of the main similarities is presented in Box 3.6 below, and the respective competition legal frameworks of the Nordic countries are listed in Table 3.2.

Box 3.6 EU and Nordic competition rules

The main EU competition rules, which are applicable in cases where trade between member states may be affected, are found in Articles 101 & 102 of the Treaty on the Functioning of the European Union (TFEU). In addition, there are EU rules on merger control as well as legislation in the form of implementing regulations and block exemptions, which exempt agreements in certain fields from the application of article 101 TFEU. Article 101 is concerned with anticompetitive agreements and cooperation that restrict or distort competition such as cartels and price fixing, and Article 102 combats abuse of a dominant market position and is aimed at unilateral conduct, like for example refusal to deal or exploitative pricing. The EU Merger Regulation 139/2004 (EUMR) contains rules on the control of concentrations between undertakings.

The national competition rules of the Nordic countries contain prohibitions identical to those found in the TFEU and apply where the conduct in question has a domestic effect. Norway, Iceland and Greenland, who are not EU-members, apply articles 53 and 54 of the EEA Agreement instead of the said EU rules. However, these provisions also mirror the EU rules and apply in cases where trade between the 'Contracting Parties' of the EEA Agreement is affected. Hence, article 53 prohibits anticompetitive agreements and article 54 prohibits abuse of a dominant market position. In the case of the Faroe Islands, who is not an EU or EEA member, the Faroese Competition Act is however very similar to the Danish Competition Act.

On a final note, there is no requirement from EU on its member states to regulate mergers, and rules regarding merger control are nationally defined. However, there seem to be an increasing convergence between national merger regulations, e.g. as regards the substantive competition test that in most states has moved from 'dominance test' to the 'Significant Impediment on Effective Competition Test' (SIEC).

Table 3.2 The Competition Acts in the Nordic Countries

Country	Domestic Competition Act(s)
Denmark	Konkurrenceloven (Lovbekendtgørelse nr. 23 af 17. januar 2013)
Faroe Islands	Kappingarlógin (Løgtingslóg nr. 35/2007 um kapping, sum broytt við løgtingslóg nr. 18/2008)
Finland	Kilpailulaki/Konkurrenslag (948/2011)
Greenland	Landstingslov nr. 16 af 19. november 2007 om konkurrence
Iceland	Samkeppnislög (44/2005)
Norway	Konkurranseloven. (12/2004)
Sweden	Konkurrenslagen (2008:579) and Konkurrensförordningen (2008:604)

As previously mentioned in section 3.1.1, the rules laid down in the Nordic competition acts can be divided into two categories of prohibitions: prohibitions against concerted practices that aim to distort competition and abuse of dominance. In addition to these prohibitions, the acts also contain rules on merger control. In essence, these rules are fairly similar across the Nordic countries even though they may be labelled differently under each act.

3.3 Differences in legal powers between the Nordic Competition Authorities

Despite the substantive similarities described above, the Nordic competition acts include many differences in the powers that the NCAs possess to investigate, sanction or otherwise intervene against competition problems. In a general comparison with the EC, the NCAs do not have as extensive legal powers regarding antitrust, merger control and sector inquiries. The differences and similarities of the legal powers in antitrust, merger control and sector inquiries between the Nordic countries and the EC will be discussed and analysed below.

3.3.1 Decision-making powers in antitrust cases

As mentioned above, the Nordic competition acts contain prohibitions on anticompetitive practices and agreements as well as prohibitions on abuse of dominant position, mirroring those found in the TFEU. Tables 3.2 and 3.3 demonstrate the decision-making powers and the investigative powers of the NCAs in comparison to the EC, where the powers of the EC to enforce Article 101 and 102 TFEU under Council Regulation 1/2003 are shown in the first column. The purpose is to identify in which aspects the powers differ between, on the one hand, the EC and the NCAs, and on the other hand, between the respective authorities.

The decision-making powers refer to the different types of decisions and procedures for competition law enforcement. In this context, the main working tools of the NCAs will be addressed; prohibition decisions, imposing of fines, commitment decisions and other settlement procedures.

Table 3.3 The decision-making powers of the Nordic Competition Authorities²⁴

The Authority has the power to:	EC	DK	FO ²⁵	FI	IS	NOR	SWE
<i>Prohibition decisions</i>	✓	✓	✓	✓	✓	✓	✓
• Impose behavioural remedies	✓	✓	✓	✓	✓	✓	✓
• Impose structural remedies	✓	✗	✗	✗	✓	✓	✗
• Subject to periodic penalty payment/fines	✓	✓	✓	✓	✓	✓	✓
<i>Imposing of fines</i>	✓	✗	✗	✗	✓	✓	✗
• Fines imposed judicially	-	✓	✓	✓	-	-	✓
<i>Commitment decisions</i>	✓	✓	✓	✓	✗	✗	✓
• Subject to periodic penalty payments/fines	✓	✓	✓	✓	-	-	✓
• Accept commitments in case of serious infringements	✗	✗	✗	✗	-	-	✗
• Revoke a commitment decision under certain circumstances	✓	✓	✓	✓	-	-	✓
<i>Settlement procedures</i>	✓	✗	✗	✗	✓	✗	✗
• Other types of settlements	-	✓	✓	✗	-	✓	✓
• Award rebates to undertakings	✓	✗	✗	✗	✓	✗	✗
✓ Yes ✗ No							

Source: The Nordic Competition Authorities

Prohibition decisions

The first observations to be made from the above Table 3.3 concern prohibition decisions. All the NCAs may require an undertaking to terminate an infringement of any of the antitrust rules laid down in the Nordic Competition Acts and all NCAs can make that decision subject to penalty payments or fines in the event of non-compliance.

The EC has the power to impose both behavioural and structural remedies when issuing a prohibition decision, while most of the NCAs can only impose necessary behavioural remedies which are proportionate and necessary to bring the infringement effectively to an end. However, the Icelandic and Norwegian competition authorities have similar powers to the EC in this regard, possessing the power to impose structural remedies in cases where it is shown that there are no equally effective behavioural remedies or if a behavioural remedy will be a greater burden to the undertaking concerned than a structural remedy.

²⁴ Greenland not included.

²⁵ Faroe Islands

Imposing fines for infringements

The EC may, by decision, impose fines on undertakings for infringing the prohibitions in Articles 101 and 102 TFEU. Only the Norwegian and the Icelandic authorities have the same powers and may impose fines on undertakings for infringing the competition act and in the Icelandic authority's case even for violating the authority's decisions. The fining decision may be appealed to the national courts. In the Faroe Islands, Finland and Sweden the competition authorities must apply to the national court in a summons application in order to impose an administrative fine on an undertaking. In Denmark the competition authority must apply to the national prosecutor in order to have a fine imposed on an undertaking.

The EC may also issue prohibition decisions which combine cease and desist orders and the imposition of fines in cases of on-going breaches of the rules. Due to differences in the appeals procedure, this is not possible in Sweden. If the Swedish authority has issued a cease and desist order subject to a penalty payment, it may not request the court to impose an administrative fine regarding the same infringement for the time after the order was issued. However, the Norwegian authority may issue a cease and desist order even if the authority also imposes administrative fines on the undertaking for the same infringement.

In regards of other means of imposing fines, the Danish Competition and Consumer Authority may issue fixed penalty notices with the consent of the State Prosecutor for Serious Economic Crime, in cases where the breach is admitted by the concerned parties and clear case law exists. Similarly, the Swedish authority may issue a fine order in cases where the material circumstances regarding an infringement are clear, the parties do not contest the amount of the fine order and the case does not involve new or undecided legal issues of precedential value.

Commitment decisions

Commitment decisions are authorised in all jurisdictions except for in Iceland and Norway. The authorities can accept commitments offered by an undertaking and make the commitments binding and enforceable upon it. Commitment decisions do not make a finding of an infringement but generally conclude that there are no longer grounds for actions. The NCAs will not accept commitments in cases which involve serious infringements and in cases where a prohibition decision is deemed appropriate. The commitment decisions are, as a rule, combined with penalty payments or fines in the event of non-compliance. The NCAs may, in the same way as the EC, revoke a commitment decision where there has been a material change of facts underlying the decision; where the undertakings act contrary to their commitments; or where the decision was based on incomplete, incorrect or misleading information provided by the parties.

Settlement procedures

An important feature of EC antitrust legislation regards the settlement procedure, where the EC may settle cartel cases through a simplified settlements procedure. Under this procedure, parties, having seen the evidence in the EC file, can choose to acknowledge their involvement in the cartel and their liability for it. In return for this acknowledgement, the EC

can reduce the fine imposed on the parties by 10%. With the exception of Iceland, this possibility does not apply fully to the Nordic jurisdictions.

In Iceland the authority has the power at all stages of the case to conclude the case by a settlement, on the initiative of the parties involved. The settlement is binding for the parties once it has been accepted and its substance confirmed by the party's signature. A settlement may involve the admission of a violation of the competition act and a commitment to pay an administrative fine, when applicable. Further to this, a settlement may also involve a party's commitment to change a specified conduct on the market or accept instructions or conditions intended to protect or promote competition on the market. In some aspects the latter resembles a commitment decision except for the fact that the parties involved must accept their breaches of the competition act as a part of the settlement. In the event that an undertaking does not comply with the commitments set out in the settlement the Icelandic authority can revoke the settlement and impose fines on the undertaking or issue a prohibition decision.

Although not as extensive as the legal powers of the EC and Iceland, the Swedish Competition Authority may issue fine orders in cases where the material circumstances regarding an infringement are considered clear and the case is not contested by the company concerned. The fine order does not entitle the infringing undertaking to any rebate. Interestingly, this is based on an assumption that companies who choose to defend themselves in court should not be punished by a higher amount of fines, a principle not applied at the EU level. This means that, typically, larger Nordic firms settling an infringement case with the EC stand to benefit from such a rebate, whereas smaller firms settling with the Swedish Competition Authority would not. Despite the fact that no rebate applies, a fine order resembles a settlement procedure to the extent that it gives companies the benefit of avoiding a costly court procedure and of decreasing the amount of negative publicity associated with a court trial. Similarly, in criminal cases in Denmark, the State prosecutor for Serious Economic Crime and the Danish Competition and Consumer Authority can propose a ticket fine and thereby settle a case out of court. In Norway there are no formalized statutory bases for settlements, although in some cases the authority has decided to not pursue a case if the company has decided to take on certain obligations.

3.3.2 Investigative powers in antitrust cases

Regarding the NCAs' investigative powers in antitrust cases, in the following, the focus will be on powers related to inspections in business premises and non-business premises as well as those related to request for information and interviews. An overview of these powers is presented in Table 3.4 below.

Table 3.4 Investigative powers of the Nordic Competition Authorities

The Authority has the power to:	EC	DK	FO	FI	IS	NOR	SWE
<i>Conduct inspections of business premises</i>	✓	✓	✓	✓	✓	✓	✓
• Court warrant required	✗	✓	✓	✗	✓	✓	✓
• Conduct inspection of premises of unsuspected undertaking	✓	✓	✓	✓	✓	✓	✓
• Request assistance for enforcing an inspection	✓	✓	✓	✓	✓	✓	✓
• Possibility to seal premises	✓	✓	✓	✓	✓	✓	✗
• Possibility to ask questions/for explanations	✓	✓	✓	✓	✓	✓	✓
• Possibility to make copies and seize original documents	✓	✓	✓	✓	✓	✓	✓
• Possibility to collect/digital forensic evidence	✓	✓	✓	✓	✓	✓	✓
• Oblige companies to cooperate during the inspection	✓	✗	✗	✓	✓	✓	✗
• Impose fines for non-compliance	✓	✗	✗	✗	✓	✓	✗
<i>Conduct inspections of non-business premises</i>	✓	✗	✗	✓	✗	✓	✓
• Court warrant required	✗	N/A	N/A	✓	N/A	✓	✓
• Additional requirements (e.g. special reasons, serious infringement)	✓	N/A	N/A	✓	N/A	✓	✓
<i>Request information</i>	✓	✓	✓	✓	✓	✓	✓
• Subject to periodic penalty payments/fines	✓	✓	✓	✓	✓	✓	✓
• Sanctions for non-compliance and/or incomplete or misleading information	✓	✓	✓	✓	✓	✓	✗
<i>Conduct interviews</i>	✓	✓	✓	✓	✓	✓	✓
• Voluntary interviews	✓	✓	✓	✓	✓	✓	✓
• Compulsory interviews	✗	✗	✗	✗	✓	✓	✓
• Subject to periodic penalty payments/fines	✓	N/A	✓	✓	✓	✓	✓
• Sanctions for non-compliance and/or incomplete or misleading information	✓	N/A	✓	✓	✓	✓	✗

✓ Yes ✗ No N/A - Not applicable

Source: The Nordic Competition Authorities

Inspections of business premises

On the suspicion of infringements of competition law, all the NCAs have the power to conduct inspections of business premises. Generally, a court warrant is required for an inspection to be carried out. The exception is Finland, where the Director General of the Finnish Competition Authority has the power to sign an inspection order. The inspections powers apply equally to undertakings which are subject to an investigation and to unsuspected undertakings.

During the inspections, all the NCAs have the possibility to make copies of documents and seize original documents. In addition, all the NCAs may also collect digital forensic evidence. The Norwegian and Icelandic authorities may confiscate items that may have significance as evidence for further examination and seal business premises, books, or business documents. In Iceland the provisions of the Code of Criminal Procedure concerning search and seizure of article apply to the procedure of inspections and the Icelandic authority can request the assistance of the police in carrying out inspections. The Swedish authority may request assistance of the Swedish Enforcement Authority (*Kronofogden*) in carrying out inspections. For example, the Enforcement Authority has the power to seal premises and open locked doors.

Concerning the possibility to communicate with the party affected by the inspection, the EC may, during the inspection, ask for explanations on facts or documents relating to the subject-matter and purpose of the inspection, and also record the answer. The Danish, Faroese, Finnish, Icelandic and Norwegian competition authorities may ask questions and request oral statements during an inspection. The Finnish and Danish authorities can request explanations of facts and documents relating to inspections of the undertakings business premises. In contrast, the Swedish authority cannot ask questions that directly concern the suspected infringement, but may ask for oral explanations on the spot regarding for example abbreviations and names.

With regard to sanctions, the EC can impose fines or periodic penalty payments on undertakings that refuse to submit to inspections, do not cooperate with the EC or attempt to hinder an on-going inspection. The Norwegian authority and the Icelandic authority can impose fines for non-compliance to the authorities' inspections. In Sweden the undertakings subject to inspections do not have an obligation to cooperate with the Swedish Competition Authority during an inspection, but the undertakings do have an obligation to comply with a court warrant authorizing the authority to conduct an inspection. In Sweden, the authority cannot impose fines for non-compliance, but it can gain access, with the help of the SEA, in case of non-compliance. Similarly, in the Faroe Islands, the undertakings are not obliged to cooperation with the authorities during inspection and the authorities do not have the means to sanction undertakings for non-compliance. In Denmark the companies are obliged to cooperate with the authority during the inspection, but the authority does not have sanctional powers for non-compliance.

Inspection of non-business premises

Firms involved in illegal conduct may attempt to hide evidence of their collaboration off-site. Important in this regard is the ability to carry out inspections of non-business premises. In Finland, Norway and Sweden the competition authorities have the power to search also non-business premises for evidence. This includes the search of homes of directors, managers and other staff members of undertakings which are subject to investigation. In all three countries a court warrant is required in this case. In Sweden and Norway a specific reason must exist to believe that evidence of the infringement can be found at the non-business premises, and in Sweden, a warrant is only granted in case of serious infringements.

The Danish authority has no powers to inspect non-business premises except in cases of assistance to the EC in the context of Article 21 of Council Regulation 1/2003. Similarly, the Icelandic authority has no powers to inspect non-business premises except in cases of assistance to the EFTA Surveillance Authority and the EC. When investigating possible criminal Competition Act infringement of individuals, non-business premises may however be inspected by the Icelandic police.

Requests for information

All the NCAs have the power to request information relevant to the investigation from the parties involved in a suspected infringement of competition law. In Denmark and the Faroe Islands, fines may be imposed in case of failure to comply with requests for information. In Iceland the competition authority can impose periodic penalty payments on the undertaking until the requested information or documents are surrendered. The Finnish authority may make the request for information subject to conditional fines. In the same way in Sweden, the request for information may be imposed subject to penalty payments in case of non-compliance.

In respect of sanctions for providing false or misleading information, in Finland criminal sanctions (fine or imprisonment up to 6 months) are foreseen for persons providing false documents or comparable technical records. In Iceland the authority can impose fines on an undertaking for providing false or misleading information or the authority can refer the case to the police for criminal proceedings against individuals. In Norway, fines, or imprisonment for up to three years, may be imposed on anyone who intentionally or through gross negligence fails to comply with the authority's request for information, or provides incorrect or incomplete information to the authority. In Sweden there is no legal ground for sanctioning undertaking for failing to provide information or for providing false or misleading information.

Interviews

Interviews are often an important part of an investigation in order to clarify the factual circumstances about suspected competition law infringements. All the NCAs may carry out voluntary interviews. The Icelandic, Norwegian and Swedish competition authorities also have the possibility to conduct compulsory interviews, while this power is only awarded to the Public Prosecutor for Serious Economic Crime in Denmark and the Faroe Islands. In Sweden, the obligation to appear at an interview may be imposed subject to a penalty

payment, which can be enforced by a court. Considering the evidence given at an interview, giving false information is considered a criminal offence in both Finland and Iceland.

Potential for improved and/or additional powers for enforcement of antitrust rules

It can be concluded from the above analysis that there is room for strengthening the legal powers of the NCAs in the field of antitrust, making these more in line with the powers of the EC. First, Table 3.3 above demonstrates that basic elements of decision-making powers and procedures are generally present in all of the jurisdictions with a few exemptions. The Icelandic authority and the Norwegian authority have similar decision-making powers as the EC in regards of issuing prohibition decision combined with both behavioural and structural remedies. Further, these two authorities can impose administrative fines without applying to the national courts. When it comes to issuing commitment decisions all the NCAs can issue commitment decisions with the exception of the Icelandic authority and the Norwegian authority. The Icelandic authority has powers to settle a case with the undertakings under investigation in certain circumstances. The EC can also adopt a prohibition decision which combines cease and desist order and a fine. This is a possibility the Nordic authorities do not have.

As regards the comparison of the NCAs investigative powers made in Table 3.4 above, all the authorities have the powers to conduct inspections in business premises of both suspected and unsuspected undertakings, to request for information and to conduct voluntary interviews. The EC and the Finnish, Danish and Faroese NCAs cannot conduct compulsory interviews. The powers of the Icelandic, Norwegian and Swedish NCAs are more extensive in this regard as the NCAs can require a company to appear at an interview.

Moreover, sanctions are important means for effective competition law enforcement and it is therefore important that the NCAs have means to impose fines or penalty payments on undertakings in cases of non-compliance and/or in certain situations for providing the authority with wrong, incomplete or misleading information. The ECs powers to sanction for non-compliance are extensive and Regulation 1/2003 provides, for example, for the possibility to impose fines on undertakings that do not cooperate, do not provide information and do not submit to an inspection. In Denmark, the Faroe Islands and Sweden the NCA cannot impose sanctions on undertakings for non-compliance. Further, the same authorities cannot require an undertaking to cooperate during an inspection. In the case of interviews and request for information, the Swedish authority cannot impose fines on undertakings for providing incomplete or misleading information.

Notwithstanding the many similarities in the enforcement of antitrust rules in the Nordic countries there are still additional steps that may be made in order to improve the enforcement of the rules and thereby increase the effectiveness of competition policy. As emphasized above, in many aspects the EC has more extensive powers. Hence, it may be argued that there is both need and scope for certain improvements of the Nordic countries' competition law frameworks, and in some circumstances even for additional legal powers, so as to ensure a more effective enforcement of antitrust rules. Further to this, having similar enforcement tools and powers to enforce competition law would lead to a more homogenous

application and enforcement of the competition rules in the Nordic countries, which would also facilitate an effective cooperation between the NCAs.

3.3.3 Merger control in the Nordic countries

Mergers between, and acquisitions of, undertakings are normal transactions in a dynamic market economy.²⁶ Mergers may have both positive and negative effects on consumer welfare, depending on the circumstances. A competition authority's main concern is whether a merger creates or strengthens a market structure that is harmful to the competitive process. Effective merger control is therefore an important component of a potent competition regime, as it prevents consumer harm caused by transactions which could reduce competition among rival firms or foreclose competitors.

Contrary to antitrust, merger investigations are not about finding ex post evidence of an infringement of the law. Instead, merger control is about making an ex ante assessment of the future impact of a business transaction. Another characteristic is the speed at which the NCAs have to carry out the investigation, due to the rather short legal time periods stipulated for the process.

It should be stressed that not all mergers are investigated. Typically, the national laws stipulate that if the turnover of the merging parties exceeds certain thresholds, the parties will have to notify the merger to the NCA. The objective of the turnover thresholds is to capture mergers that could have a significant impact on domestic competition, while disregarding mergers that typically would not affect competition to any significant extent, for example because they are too small. Table 3.5 below provides an overview of the thresholds regarding the combined annual turnovers of the merging parties.

Table 3.5 Merger thresholds (currency units in '000s)²⁷

	Turnover thresholds (National Currencies)	Turnover thresholds (Euros)	Turnover threshold as% of national GDP
Denmark	900 000 DKK	120 849	0.051%
Faroe Islands	75 000 DKK	10 071	
Finland	350 000 EUR	350 000	0.195%
Iceland	2 000 000 ISK	12 354	0.130%
Norway	50 000 NOK	6 247	0.002%
Sweden	1 000 000 SEK	104 851	0.030%

¹ Exchange rates and GDP data from 2010

Source: Eurostat (2012), Information provided by the Nordic Competition Authorities.

²⁶ In the following, the term 'merger' denotes both mergers and acquisitions, where in the latter case, one party gains control over the other.

²⁷ Exchange rates and GDP data from 2010.

Ensuring effective merger control

Merger assessments often involve rather complex legal and economic considerations, including the handling and analysis of large qualitative and quantitative sets of data from both merging parties as well as from third parties. These assessments have to be made under a short period of time, which may pose a challenge to the investigating authority.

The circumstances of merger investigations call for continuous efforts by the NCAs to improve the effectiveness of the assessment process and refine the methods used. For example, the NCAs may participate in regular stakeholder discussions and share information of best-practices with other NCAs. Organisations and networks such as the OECD, ICN and ECN also provide an opportunity for the NCAs to keep up with, and contribute to, the latest developments, merger review guidelines and practices. Comparisons of decision powers and investigative tools also provide ideas on how to improve merger control.

The two phases of merger investigations

Merger investigations are generally divided into two phases: Phase I and Phase II. The first phase, Phase I, is fairly short, approximately one month, and the goal is to assess whether the merger raises any concerns *prima facie* that call for a deeper investigation in Phase II, or whether it may be cleared at once. In fact, most mergers are cleared during this phase, reflecting the fact that merger control intends to capture only those transactions that may cause significant anti-competitive effects.

Merger regulations also normally stipulate a 'stand-still' period, during which the merging parties are prohibited to implement the merger and coordinate their conduct before notification to and clearance from the NCA. A breach against this prohibition is often called 'gun-jumping'. Gun-jumping may also appear in transactions that do not have to be notified, if two competitors coordinate their conduct before they have actually completed a transaction. In these cases the gun-jumping may constitute an infringement of the antitrust regulation.

Some factors may typically complicate or threaten an effective merger investigation, notably with regard to the complexity of analysis and the short time limits. It is therefore of interest to identify tools that facilitate a smooth and effective process investigation process. As a part of this analysis, a comparative overview of the NCAs' decision-making powers in merger control in relation to the EC's, is given in Table 3.6 below.

Decision-making powers in merger control – a comparison between the NCAs and the EC

The decision-making powers of the NCA together with the available investigative tools are key aspects of merger control. In order to assess how the NCAs' powers relate to those of the EC, Table 3.6 compares the decision-making powers and investigative tools of the NCAs

against those of the EC under the European Merger Regulation (ECMR),²⁸ shown in the first column.

Table 3.6 Merger control – decision-making powers and investigative tools in the hands of the Nordic Competition Authorities

Decision-making powers and investigative tools	EC	DK	FO	FI	IS	NOR	SWE
<i>Outcome of the investigation</i>							
• Clear a merger	✓	✓	✓	✓	✓	✓	✓
• Clear a merger with conditions and obligations (remedies)	✓	✓ (by the Competition Council)	✓	✓	✓	✓	✓
• Prohibit a merger	✓	✓ (by the CC)	✓	✗ (Appl. to court)	✓	✓	✗ (Appl. to court)
• Revoke a clearance decision based on e.g. incorrect or misleading information	✓	✓	✓	✗	✓	✗	✓
• Revoke a clearance decision with remedies, where the parties commit a breach of an obligation attached to the decision	✓	✓ (by the CC)	✓	✗ (Appl. to court)	✓	✗	✗
• Prohibition to implement a merger during investigation (stand-still)	✓	✓	✓	✓	✓	✓	Phase I: ✓ Phase II: ✗ (Appl. to court)
• Impose a fine should the parties implement a concentration before notification (gun-jumping)	✓	✗ (Appl. to court)	✓	✗	✓	✓	✗
• Impose a fine should the parties implement a concentration during stand still (gun-jumping)	✓	N/A	✓	✗ (Appl. to court)	✓	✓	Phase I: ✓ Phase II: ✗
<i>Investigation of mergers falling outside mandatory notification</i>							
• The NCA may issue an injunction to notify a merger not fulfilling the turnover thresholds for mandatory notification	✗ (apart from referrals)	✗	✗	✗	✓	✓	✓
<i>Content of the notification</i>							
• The NCA decides on which information to be included in the merger notification in order to start the legal time periods for the investigation	✓	✓	✓	✓	✓	✓	✓

²⁸ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation)

Decision-making powers and investigative tools	EC	DK	FO	FI	IS	NOR	SWE
<ul style="list-style-type: none"> The NCA determines whether a filed notification fulfils the required information or not 	✓	✓	✓	✓	✓	✓	✓
<i>Legal time periods</i>							
<ul style="list-style-type: none"> Indicated in 'working days' 	✓	✗ (Week-days)	✓	✗ (months 1+3)	✓	✓	Phase I: ✓ Phase II: ✗
<ul style="list-style-type: none"> Suspend the time period in case information is not provided in time ('stop-the-clock') 	✓	✗	✗	✓	✗	✓	✗
<ul style="list-style-type: none"> Time periods extended automatically in case the parties propose remedies 	✓ (Partly)	✓ (Partly)	✗	✗	✗	✗	Phase I: ✓ Phase II: ✗
<ul style="list-style-type: none"> The NCA may prolong the time period at the request of the parties (for example if they propose remedies) 	✓	✓ (Phase II only)	✓	✗ (Appl. to court)	✓	✓	✗ (Appl. to court) (phase II only)
<ul style="list-style-type: none"> The NCA may prolong the time period without consent from the parties on particular grounds (e.g. if information has not been provided in time) 	✗	✗	✓	✓	✓	✓	✗ (Appl. to court) (phase II only)
<i>Request for information</i>							
<ul style="list-style-type: none"> Issue an injunction towards the merging parties in order to obtain information 	✓	✓	✓	✓	✓	✓	✓
<ul style="list-style-type: none"> Issue an injunction towards third parties in order to obtain information 	✓	✓	✓	✓	✓	✓	✓
<ul style="list-style-type: none"> Require persons who are likely to have relevant information to appear at a hearing/interview 	✗	✗	✗	✓	✓	✓	✓
<ul style="list-style-type: none"> Issue above mentioned injunctions/requests for hearing under penalty of fines 	✓ (Injunctions only)	✓ (Injunctions only)	✓ (Injunctions only)	✓	✓	✓	✓
<ul style="list-style-type: none"> Require to carry out an inspection at the site of the parties 	✓	✓	✓	✓	✗	✓	✗
<i>Imposing of fines</i>							
<ul style="list-style-type: none"> Impose fines on undertakings/persons e.g. in case an injunction is not followed or there is a breach against a condition that was part of a clearance decision 	✓	✗ (Appl. to court)	✗ (Appl. to court)	✗ (Appl. to court)	✓	✓	✗ (Appl. to court)

✓ - In the hands of the NCA; ✗ - Not applicable/possible; ✗ + explanation - Not decided directly by the NCA

Source: The Nordic Competition Authorities

Potential for improved and additional legal powers and tools in the NCAs' merger control

Despite the similarities in the merger control legal frameworks between the EC and the NCAs, the main conclusion to be drawn from the comparative overview in Table 3.6 is that most NCAs lack some of the vital legal powers and investigative tools which would have the potential to increase the effectiveness of merger control in their respective country.

As regards the final decision, it can be noted that all the NCAs except Finland and Sweden have the power to prohibit a merger. Further, as regards gun-jumping, the EC as well as the competition authorities of the Faroe Islands, Iceland and Norway, have the ability to impose sanctions against parties who have implemented a concentration before notification or during the investigation. In Iceland, Norway and Sweden, the competition authorities may, under certain circumstances, issue an injunction to the merging parties to notify a transaction that does not fulfil the turnover thresholds for mandatory notification. This possibility may, for example, be used in certain cases where third parties have expressed concerns about possible anti-competitive effects of a merger.

All NCAs have the power to decide which information should be included in a merger notification in order to start the legal time limits. However, in mergers which give rise to concerns regarding anti-competitive effects, this 'basic' set of information is generally not enough to make an informed assessment. In practice, the NCAs will need considerably more information, documents and data from the parties, and sometimes also from third parties. Due to the strict time limits, the NCAs must be able to promptly receive and analyse the information requested. This is however not always possible. It may take time for the parties to collect the data, they may have difficulties to extract it in the way it is needed for this particular situation, and sometimes the parties may even be reluctant to provide the NCAs with requested information. In these situations, valuable investigation time may be lost. Tools ensuring the effective collection of information are therefore crucial to the investigation.

In the case where the requested information is not submitted in time, the EC and the competition authorities in Norway and Finland all have the possibility to 'stop-the-clock', whereby the legal time period for investigation is stopped from the day of the deadline for submitting the information until the day the information originally requested is in fact submitted. The competition authority in Denmark has the possibility to 'stop-the-clock' in case of complaints concerning procedural questions from the parties.

Another tool relevant to obtaining relevant information in a case, is the possibility of all the NCAs to request information under penalty of fines. In addition, the competition authorities of Finland, Iceland, Norway and Sweden may also request people, who are likely to possess relevant information, to a hearing at the authority, if necessary also under penalty of fines. Only the EC and competition authorities of Iceland and Norway have the power to also impose fines in case an injunction is not followed, if the parties indulge in gun-jumping or if there is a breach against a condition that was part of a clearance decision. All the competition authorities but Iceland and Sweden may request to carry out an inspection at the premises of the parties to gather relevant information.

A clearance decision that turns out to be based on misleading or incorrect information from the parties may be revoked by the European Commission and the competition authorities of Denmark, the Faroe Islands and Iceland. The same applies if the parties commit a breach of a condition/an obligation that was attached to the decision. In Finland, the competition authority has to file an application for annulment to court, while the possibilities to rectify these situations seem limited in Norway and Sweden. In contrast to the Icelandic and the Norwegian authorities, the Swedish and Finnish competition authorities may not impose fines or block mergers. The Danish competition authority may block mergers but may not impose fines. These kinds of interventions must be decided by the competent courts.

3.3.4 Sector inquiries

The aim of a sector inquiry is often to assess competition in a particular market and recommend pro-competitive measures which can increase consumer welfare in the relevant areas. A sector inquiry normally involves an inquiry into a particular sector of the economy or into a type of agreement across various sectors, in which there are indications of competition being restricted or distorted but where it is not clear if, and to what extent, problems can be attributed to the behaviour of particular undertakings. As such, a sector inquiry or market study often forms part of the NCAs' task to promote competition in a certain sector or market. In addition to its main objective, a sector inquiry may also unearth evidence of competition law infringements of individual firms and as such form the basis for regular enforcement actions in the relevant industry sectors. As will be further discussed in Chapter 4, sector inquiries are often complex and resource intensive as they require both extensive quantitative and qualitative analysis.

In order to perform a valid analysis of competition in a specific sector or market the NCAs do not only need the relevant resources and skills but also require access to relevant data such as company data on market shares, strategies, prices, margins and costs, which companies can be reluctant to disclose. In such circumstances, all the NCAs can order undertakings and public authorities by law to provide certain information and/or documents. The NCAs may impose such an order under penalty of a fine if the undertaking fails to fulfil its obligation. The scope of this obligation covers in general data regarding market and competition conditions necessary to perform the required analysis. However, there is some variation to the NCAs' legal powers in this respect.

In terms of sector inquiries most NCAs' investigative powers are basically limited to information requests, while the European Commission possesses more far-reaching powers in this regard. The EC's powers of investigation in relation to sector inquiries are laid down in Council Regulation (EC) No. 1/2003, according to which the EC may request undertakings and associations of undertakings to provide all necessary information, take statements from any natural or legal person or, in contrast to most NCAs, carry out any necessary inspections. In addition, the EC may impose fines where undertakings, intentionally or negligently, supply incorrect or misleading information in response to a sector inquiry.

The nature and scope of the investigative powers that are available for the NCAs during a sector inquiry differ. The most striking differences are the legal powers to carry out inspections and to impose fines in situations where the information that is supplied is either incorrect or misleading. It is probably far from always necessary to carry out inspections within the framework of sector inquiries in terms of assessing competition in a particular market. However, if there is an indication that an infringement inquiry may fall within the area of regular law enforcement, all NCAs have the legal powers to carry out inspections in this case.

3.3.5 Concluding remarks

Breaches of competition law are costly for society. Through the enforcement of competition law, anticompetitive conduct may be stopped and sanctioned, and a forceful implementation of competition will also have a preventive effect and deter infringements of competition law. Hence, making competition law enforcement more effective, not only with regard to the use of personnel and budgetary resources, but more generally with regard to the preventive function should be a priority of the NCAs.

However, the analyses carried out in this chapter show that, overall, the NCAs tend to have less effective legal powers regarding competition law enforcement in comparison to the EC. This finding indicates that there is both need and scope for strengthening the Nordic countries' competition legal frameworks in order to increase the effectiveness of competition law enforcement in the areas of antitrust, merger control and sector inquiries. It is however beyond the scope of this report to propose amendments to the national laws. Such proposals would be made at the discretion of each individual competition authority.

Appendix 1 - Competition Law Enforcement: Institutional frameworks

This appendix serves to provide a schematic overview of the institutional framework surrounding competition law enforcement in the Nordic countries.

Denmark

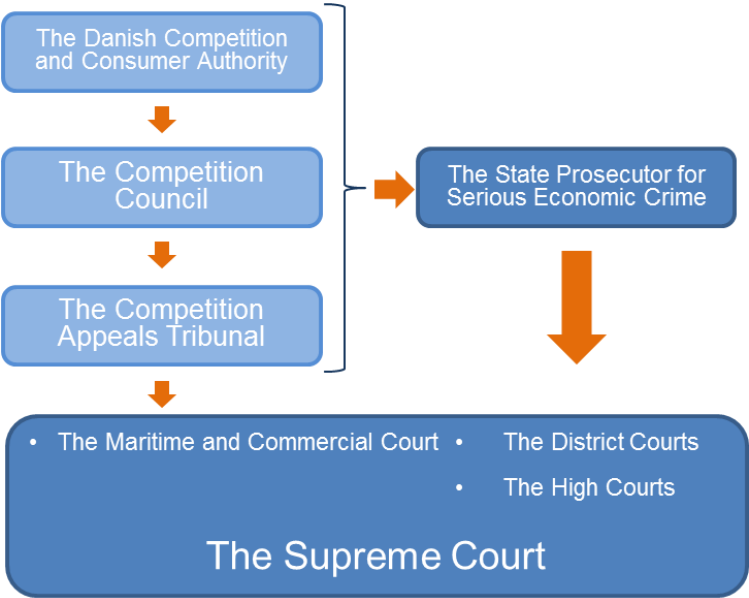


Figure 1 The Danish Institutional framework for Competition Law Enforcement

The Danish Competition and Consumer Authority (*Konkurrence- og Forbrugerstyrelsen*) together with the Competition Council, have the responsibility to administer the Competition Act. The Act, pursuant to section 14, entrusts the Competition Council (*Konkurrencerådet*) with the enforcement responsibility and provides for a secretariat - the Competition and Consumer Authority - to handle the day-to-day running of the Act. The Competition and Consumer Authority sorts under the Ministry of Business and Growth, while the Competition Council is independent of the Government and composed by 18 members which must have a ‘comprehensive insight into public and private enterprise activity, including expertise in legal, economic, financial and consumer-related matters’ as prescribed by the Act. In practice, the Council delegates some of its powers to the Authority. Usually, the Council decides on the most significant or leading cases, whilst the Authority decides the remaining cases in accordance with the case-law and directions of the Council. The decisions are subject to appeal before the Competition Appeal Tribunal, and thereafter the ordinary courts.

In connection with the process of harmonising the Competition Act with Articles 101 and 102 TFEU in 2000, it was decided that the domestic rules on penalties and competition law infringements would remain in place. Therefore, some competition law infringements are also offences under the Danish criminal code. Where this is the case, the competition rules continue to be governed by the general rules on criminal offences. This type of enforcement is entrusted to the State Prosecutor for Serious Economic Crime (*Statsadvokaten*). The State Prosecutor decides whether to raise charges and, if appropriate, to institute proceedings before the courts in order to impose fines. The State Prosecutor may institute criminal proceedings on the basis of a report from an individual or an undertaking. However, the prosecution by the State Prosecutor is most often instituted at the request of the Competition and Consumer Authority, who may also transfer cases to the State Prosecutor. Cases may also be reported to the State Prosecutor in continuation of a Competition Council decision that an undertaking has breached the Competition Act.

The Faroe Islands

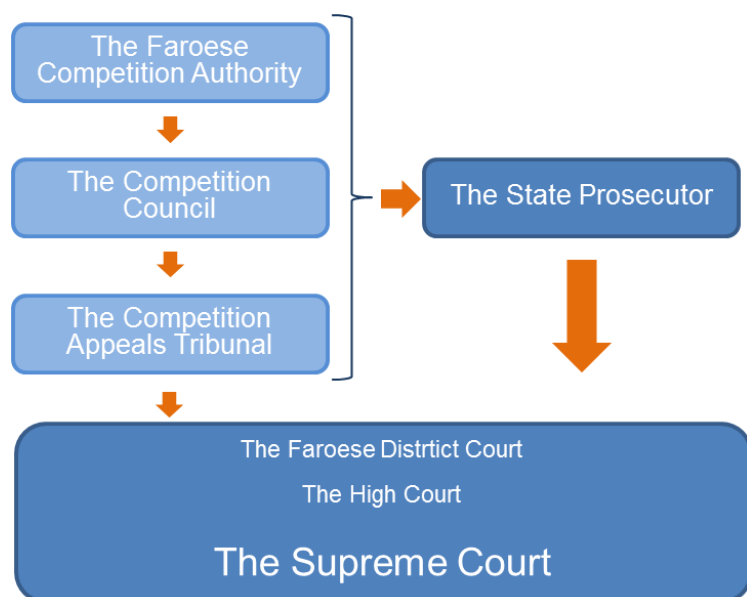


Figure 2 The Faroese Institutional framework for Competition Law Enforcement

The Faroese institutional framework shares several similarities with the Danish one. The Competition Council (*Konkurrenserådet*) is responsible for the enforcement of the Competition Act and any subordinate rules issued. The Council consists of a chairman and four members, appointed by the Minister of Industry and Trade for a term of up to four years. Council members must have comprehensive insight into public as well as private enterprise activity, including expertise in legal, economic, financial and consumer-related matters. The chairman and two members of the Council must be independent of commercial and consumer interests. The Competition Authority (*Kappingareftirlitið*) serves as a secretariat to the Competition Council in competition cases and handles the day-to-day administration of the act on its behalf.

The decisions of the Competition Council can be appealed to the Competition Appeals Tribunal. Decisions made by the Competition Appeals Tribunal may be brought before the courts of law within eight weeks after the decision has been communicated to the party concerned. If this time limit is exceeded, the decision of the Appeals Tribunal shall be final.

Finland

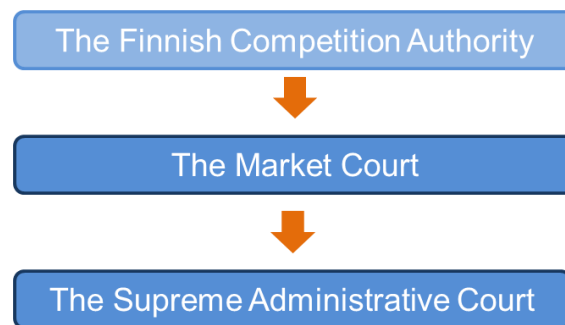


Figure 3 The Finnish Institutional framework for Competition Law Enforcement

The Finnish Competition Authority (*Kilpailuvirasto*) operates under the Ministry of Employment and Economy. The Director General is in charge of the activities and operations of the Authority, which has extensive powers at its disposal to enforce the Competition Act. It may investigate anticompetitive conduct, monitor, assess and clear notified mergers and impose conditions on proposed mergers before clearance. The authority is not empowered to impose fines or block mergers. These measures fall within the domain of the Market Court. However, the court may only act upon the proposal of the Authority.

The Market Court is a specially designated court that deals with cases in the areas of competition law, public procurement and unlawful business practices. A decision adopted by the Competition Authority may be appealed to the Market Court, and decisions by the Market Court may, in their turn, be appealed to the Supreme Administrative Court. The process is adversarial in nature, thus the Authority takes the role of a prosecutor in appeals.

Accordingly, the system in Finland leads to the Market Court having two functions where it concerns the enforcement of the competition law. First, the Court has the exclusive power to impose fines and block mergers. Second, appeals against the decisions of the Authority are heard at this court.

Iceland

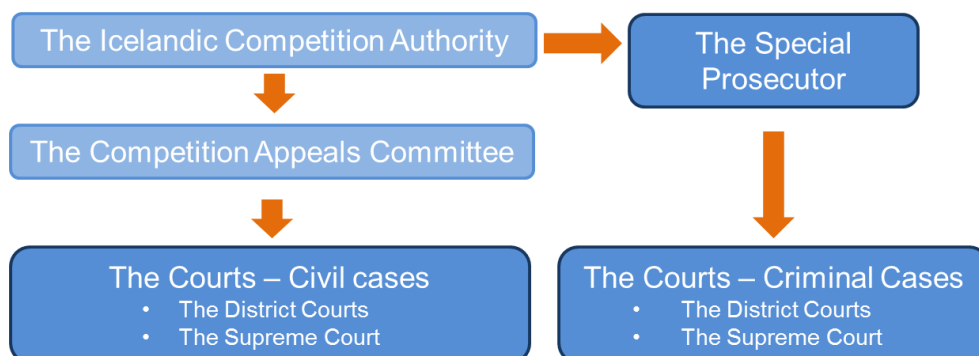


Figure 4 The Icelandic Institutional framework for Competition Law Enforcement

The Icelandic Competition Authority (*Samkeppniseftirlitið*) is an independent body under the Ministry of Economic Affairs. The minister appoints the board of directors of the Authority, who in their turn appoint the Director General. The authority is authorised, with the consent of the parties involved, to conclude all matters related to an infringement of the provisions of the competition act or the decisions of the authority, with a settlement. This includes infringements of the prohibitions contained within the Competition Act. The same applies in the case of mergers that obstruct effective competition. Such settlements are binding for the parties involved once they have been accepted. Major material decisions by the Authority are to be submitted by the Director General to the board for approval or rejection. Major decisions in this sense are for instance decisions on annulments of mergers, and decisions to impose fines on undertakings.

Within four weeks from the date of the decision of the Authority, it may be appealed to the Competition Appeals Committee, composed of three members appointed by the minister following nomination by the Supreme Court. The decision of the Competition Appeals Committee shall be rendered within six weeks from the date of appeal. The decision of the Competition Appeals Committee can, in turn, be referred to a District Court within six months from the date of the committee's decision if a party to the case (there amongst the Competition Authority) is not willing to accept the decision of the committee. Such a legal action does not in general suspend the entry into force of the committee's decision. Judgements of the District Courts can be referred to the Supreme Court. When a decision by the Competition Appeals Committee is referred to the courts, the Competition Authority defends the decision of the committee before the courts.

In circumstances when individuals are suspected of criminally breaching the Competition Act, the Competition Authority refers their cases to the Special Prosecutor. The Prosecutor deals in general with financial and economic crimes. He investigates and prosecutes individuals for their alleged criminal behaviour in this respect. However, the Special Prosecutor may neither investigate nor prosecute individuals for their alleged infringement of the Competition Act unless the Competition Authority submits a formal complaint to his office.

Norway

The Norwegian Competition Authority (*Konkurransetilsynet*) sorts under the Ministry of Government Administration and Church Affairs and the King in Council. The Authority enforces the Competition Act independently from the Ministry. While the Ministry may order the Authority to investigate or deal with a certain case, according to Section 8 in the Competition Act, the Authority may not be instructed with regard to decisions in individual cases.

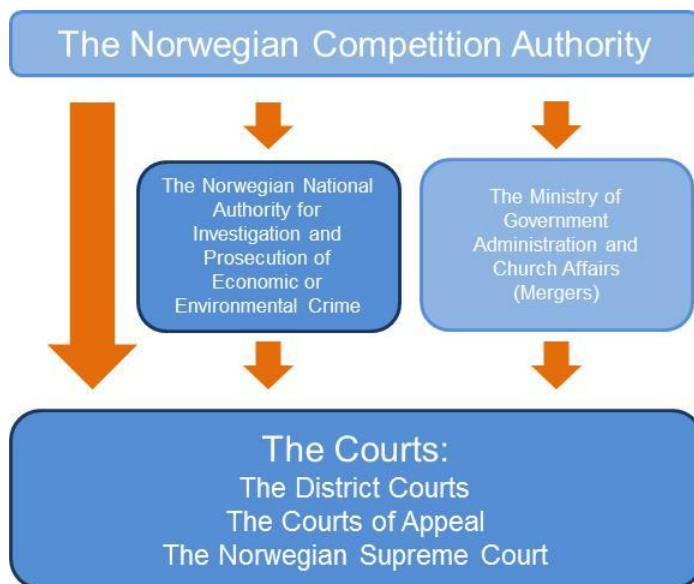


Figure 5 The Norwegian Institutional framework for Competition Law Enforcement

The Ministry is the appellate body of the Authority's merger decisions. The Courts are however the appellate bodies of decisions according to the prohibition regulation. Therefore, the Ministry's decisions on appealed merger decisions are in effect final. Though all administrative decisions may in principle be referred to the Courts, however, the merger decisions of the Ministry have never been brought before the Courts.

The Authority investigates and decides on most cases of suspected breaches of the prohibition regulations of the Competition Act. Severe cases where criminal sanctions, eg. imprisonment are relevant, will be referred to the Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime (ØKOKRIM). In these cases, the Competition Authority cooperates with ØKOKRIM during the investigation of competition cases and the court proceedings.

Sweden

The Competition Authority (*Konkurrensverket*) is an independent authority operating under the Ministry of Enterprise, Energy and Communications. While the Ministry is responsible for the implementation of the Swedish Competition Act, the Authority is responsible for the surveillance and the day-to-day administration of the Act.

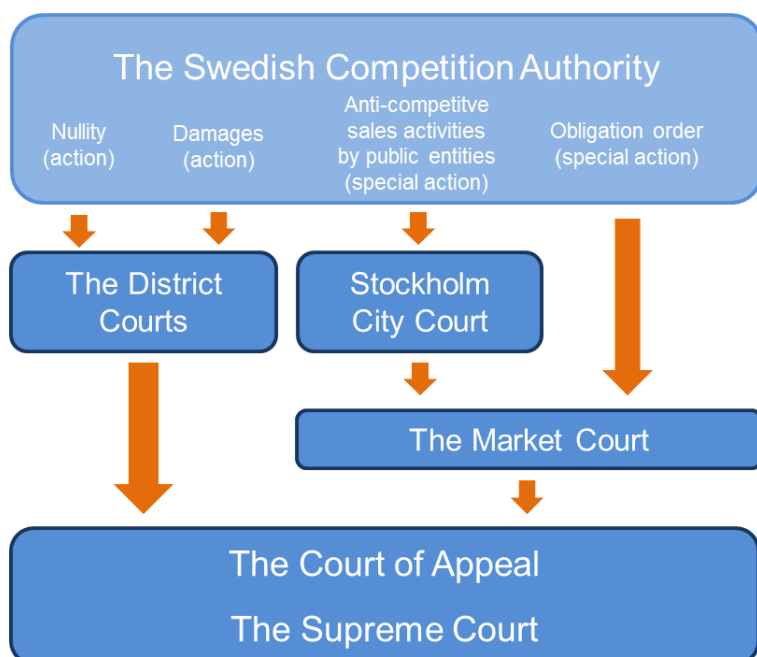


Figure 6 The Swedish Institutional framework for Competition Law Enforcement

The Authority may require an undertaking to terminate infringements of the prohibitions laid down in the Competition Act or Articles 101 or 102 of the TFEU. Appeals against such decisions may be lodged directly with the Market Court. If the authority does not take action against an infringement of the said prohibitions, undertakings that have been affected by the infringement are entitled to institute court proceedings themselves. In the latest reform of the Swedish Competition Act, the authority was given a new tool in order to make the handling of the cases more efficient. Instead of instituting court proceedings regarding administrative fines, the authority now has the power to issue a fine order. The fine is meant to be equivalent to the amount of the administrative fine which the authority would have claimed had the case been taken to court. Such a fine order may only be issued if the material circumstances regarding the infringement are clear and there is no precedential interest from the Authority's point of view of having the case settled in court. If the fine order is accepted by the party involved, it becomes legally binding.

For other types of decisions the Authority does not have decisional powers, but acts as a prosecutor and may ask the Stockholm City Court to impose administrative fines, trading prohibitions, bans on anti-competitive activities by public entities, and prohibitions of anti-competitive mergers. Investigations at the premises of undertakings also require prior permission from the Stockholm City Court. Appeals against judgments on damages are lodged with the Court of Appeal and ultimately the Supreme Court.

In addition to competition law enforcement, the Swedish Competition Authority is also the supervisory body for public procurement. Public procurement matters are handled by the Administrative Courts.

4 Implementing and evaluating Competition Policy – Learning from experience

Alongside the legal and institutional frameworks that govern the Nordic competition regimes, discussed in the previous Chapter 3, the work practices and processes of the Nordic Authorities (NCAs) also matter to the effectiveness of competition policy implementation. In this context, it is important, as for all governmental institutions funded by public resources, that the NCAs assure that they are effective in their policy implementation and that they provide value for tax payers' money. Moreover, to remain effective as institutions in an ever-changing world also in a longer-term perspective, it is crucial that the NCAs are apt to adjust to, and accommodate, the changes that the future may hold. Against this background, the NCAs are committed to developing and improving effective and efficient work practices and tools which may increase the authority's so called 'agency effectiveness', that is, its ability to generate positive welfare effects for society through its activities.²⁹

Drawing on a selection of examples from the Nordic countries, this chapter aims to provide an insight into some key operational areas in competition policy which are common to the NCAs: detection of competition problems using different analytical methods and tools; prioritisation of cases allowing competition authorities to generate the most value given the limits to their resources; efficient investigation, minimising any burden on businesses; and finally, the evaluation of the effects of competition policy activities and the communication of these effects to stakeholders.

As this chapter will show, competition policy implementation involves the handling of complex issues which ultimately means that it is not always possible to assign an exact figure on the welfare gains generated from competition authorities' work. Nonetheless, the overall conclusion is that competition authorities generate consumer welfare gains far in excess of their budgetary costs. Put simply, competition policy is a cheap tool to achieve greater goals.

4.1 Identifying competition problems – Tools and methods used

As previously explained in Chapter 3, identifying, correcting and deterring competition problems is a major task of all the NCAs. In essence, this task can be divided into two main areas of equal importance: law enforcement and advocacy activities. Both involve legal as well as economic considerations. Law enforcement activities place particular emphasis on combating cartels and other forms of anticompetitive agreements, as well as taking action against public and private actors who abuse a dominant market position. The assessment –

²⁹ See for example ICN, www.internationalcompetitionnetwork.org for information about the Agency Effectiveness Working Group (AEWG) and its joint efforts to identify key elements of a well-functioning competition agency and good practices for strategy and planning, operations, and enforcement tools and procedures.

and potential prohibition - of notified mergers and acquisitions is another important law enforcement activity.

While law enforcement activities mainly target specific market players, competition advocacy takes a broader approach to competition problems; for example by analysing entire market sectors, submitting proposals for changes of rules and laws that hamper competition and other measures to increase the knowledge of, and respect for, the competition rules. This section will briefly describe some methods and tools that may be used to identify competition problems with regard to both law enforcement and competition advocacy activities.

4.1.1 Developing the Tip-off function - Encouraging whistle-blowing and leniency applications

Complaints and tip-offs are often crucial to the identification of competition problems such as abuse of dominance and anti-competitive agreements given the limited resources of the competition authorities. Without information from market participants and others close to the root of any competition problem, many market distortions may remain undetected.

Tip-offs, complaints and inquiries from consumers, undertakings and other stakeholders are hence key to the detection and correction of competition problems. On the one hand, an effective competition authority must hence facilitate the in-flow of information that may shed light on a market dysfunction. On the other hand, it also needs an efficient way to systematically filter through the large in-flow of tip-offs, complaints and inquiries that reach the authority with the aim to identify the most relevant matters. Having a prioritisation policy in place is a useful tool for this purpose, which is further elaborated in Section 4.3.

The NCAs work actively to increase the amount of relevant tip-offs, for example by informing trade associations and public procurers about competition law, the benefits of efficient competition, and how to spot indications of illegal conduct. This information is generally disseminated through different channels such as seminars and advertisement for leniency schemes targeted at market players.

One successful and illustrative example of such an activity aimed at raising awareness of anti-competitive practices is the Swedish Competition Authority's web-based interactive tool 'Go for Green' (*Kör på grönt*), described in Box 4.1 below.

Box 4.1 Go for Green – Raising awareness of anticompetitive practices among stakeholders

In 2006 the Swedish Competition Authority distributed a questionnaire to 880 trade associations active in Sweden. The objective was to increase the Authority's general understanding of trade associations, and notably inform the Authority of the extent to which the associations' activities and services were in compliance with competition laws. The questionnaire focused on three types of trade association activities which may raise competition law concerns:

- Price recommendations (also including standard price lists and price adjustment)
- Recommendations in response to costing and pricing support
- Information sharing

The results of the survey showed that approximately one third of the trade associations surveyed engaged in one or more of the three activities listed above, and therefore found themselves in a legal grey area where they could be at risk of breaching competition law. Based on the results, the SCA found that there was a need for practical and accessible additional guidance aimed at trade associations and their members.

Development of a web-based interactive tool for accessible practical information

In response to the findings, the Swedish Competition Authority developed a web-based interactive tool which helps trade associations and their members to self-assess their practices. The tool, called 'Go for Green' (*Kör på grönt*), can be accessed via the Authority's website, is based on a 'traffic light' assessment system. The tool is constructed as a flowchart, where the start page lists a range of types of practice, all categorised as red, amber, or green, as illustrated below. The user can then click on the type of practice which they think applies to them, and is then taken through a number of questions designed to gauge the circumstances in the specific case, and whether they are likely to give rise to competition law concerns.

Overview of the Go for Green web-based interactive tool

Prohibited

- Price cooperation
- Price recommendations
- Limitation of production or sales
- Market sharing

Allowed or not allowed?

- Costing and pricing support
- Information gathering and information sharing

Allowed

Examples of generally allowed collaborations within trade associations:

- Education and training
- Information gathering
- Lobbying targeting governmental bodies
- Elaboration of standard contracts (without elements which influence prices)
- Advice on legal issues

The **green** category includes examples of practices compliant with competition law. These are simply listed and not discussed further in the flowchart. The activities listed under the **red** category are those that do not comply with competition law. Each of the activities listed links to a page where the anti-competitive nature of the relevant practice is explained further. In the case of price recommendations, there are further links providing examples of Swedish and EU case law on the issue. All of these practices are described as clear infringements of competition law.

The **amber** category lists the two types of activities which might be allowed, or prohibited, depending on the circumstances. This category includes costing and pricing support and information sharing. Depending on answers given to interactive questions, the user will ultimately be shown a green, amber or red light.

Results – increased awareness of competition law

Use of the interactive test is completely anonymous, and no results are stored by the Authority. Therefore, it cannot be used to measure compliance, but it is nonetheless an important means to raise awareness and increase businesses' knowledge of the competition rules. However, the Swedish Competition Authority's annual stakeholder survey indicates increasing competition law awareness among trade associations and it is quite likely that this interactive tool has contributed to this positive development. The last two published surveys, conducted in 2010 and 2011, indicate a significant rise in awareness of competition law and knowledge of the rules among trade association executives/officials, in comparison to previous years.

http://www.kkv.se/t/CalculationSupportStart____4502.aspx

² Statistics as of 31 May 2011. The launch was advertised in the trade press, and the first week alone over 1,000 users visited the *Go for Green* webpage.

4.1.2 Detecting competition problems - Sector inquiries using composite analysis

Sector inquiries or market studies form an integral part of the NCAs task to promote effective competition in the economy. This kind of study may be initiated by the competition authority itself, or commissioned by the government. The aim of a sector inquiry is to assess competition in a particular area and recommend ways of improving it to the benefit of consumers, for example by advocating changes in laws, regulations and practices that affect competition negatively. Another potential outcome of a sector study can be the identification of one or more cases that may be pursued as violations of the competition law. While Section 3.3.4 briefly introduced the legal framework surrounding sector inquiries in the Nordic countries, this section aims to describe how sector inquiries may be applied to detect competition problems, but also to highlight the pitfalls of relying exclusively of traditional quantitative indicators to assess competition in a specific industry or market.

Quite often, the concerns about the competitive climate in a sector are based on some quantitative measure(s) being interpreted as indicative of underlying competition problems. However, most quantitative measures share the disadvantage that they cannot fully mirror the complex characteristics of a market, and must therefore be used cautiously. Still, if handled correctly, quantitative analysis can often be a powerful tool in competition analysis. Table 4.4.1 below presents an overview of a selection of relevant competition indicators which the NCAs regularly employ when assessing competition in a market or industry.

These indicators describe key competition aspects such as concentration levels, barriers to entry, mobility, innovation, prices, productivity, profits, and product quality.³⁰ They all have their strengths and weaknesses and no single measure is sufficient on its own to conclude whether competition in a market is effective, or whether there are some distortions in the market. Some of the listed indicators are described in more detail below.

Table 4.4.1. Overview of quantitative competition indicators

Quantitative competition indicators	
• Concentration	• Barriers to entry
• Mobility	• Innovation
• Price	• Productivity
• Profits	• Product quality

Source: Copenhagen Economics (2007)

High market concentration may dampen competition

As a general rule, the higher the number of firms in a market, the better the conditions for effective competition. A higher level of concentration may indicate less competition resulting from the ability of one or a few firms to influence market prices. Measuring markets shares does however not explain much of how competition really works in the market place. Highly concentrated markets may still face fierce competition due to for example product characteristics, consumer behaviour or low barriers to entry.

Barriers to entry may limit competition

A firm's potential to exercise market power can be counteracted by a new competitor entering the market. Hence, the possibility of new firms entering the market can provide a powerful constraint on the competitive behaviour of firms already in the market, and even prevent firms who enjoy very high market shares from exercising market power.

Barriers to entry include, for example, technological patents or patents on business processes, a strong brand identity, strong customer loyalty or high customer switching costs. Entry barriers may also be the result of government intervention such as rules and regulations which favour a certain kind of firms, such as domestic over foreign, or large over small. In the latter case, quantitative data analysis might be of little use. Instead, qualitative analysis such as having a dialogue with the market players to understand the entry problems and reviewing the laws, rules and regulations that cause these problems, can be a more efficient way to go.

The double nature of innovations

Quantitative proxy indicators of innovation activity like patent ratio or the ratio of R&D expenditure to revenue, are sometimes used as indicators of competition in a certain market or within a certain industry. Still, as will be seen in Chapter 5, the relationship between

³⁰ For a general introduction to economic theory regarding competition, markets and firms, see e.g. Viscusi W.K. *et al.* (2005), Belleflamme P & Peitz M. (2010), or Davis P. and Garcés E. (2010).

competition and innovation is complex, and varies according to the kinds of competition and innovation involved. On the one hand, in most situations competition favours innovation, either by reducing production costs which can attract consumers through lower prices, or by offering a product that is superior to what the competitors can offer. However, there are also circumstances under which extensive competition might have a dampening effect on innovation, e.g. when there is no scope to recover the R&D costs spent on innovations. On the other hand, innovations may also reduce the competitive pressure, for example when the introduction of a new original product gives a company the possibility to exercise market power.³¹

Competition usually results in lower prices

In a competitive setting characterised by price competition, the study of price levels and price trends within a sector is an indirect but highly informative method to assess competition, and consequently also widely used. However, it is difficult to completely isolate price changes due to competition from other factors which also influence the price of a product such as world market events, international price levels, or technological advances.

For international comparisons, price levels expressed in purchasing power parities (PPPs) are normally employed and compared against some benchmark average. Ideally this would indicate if competition in one country is more intense than in another. A word of caution is however due since price levels to a great extent reflect other country-specific underlying economic conditions than simply competition.

Productivity measures can indicate competitive pressure

Efficient competition drives firms to increase internal efficiency and lower their production costs, as previously explained in Chapter 2. From a consumer perspective, productivity gains will be most beneficial when passed on to them through lower prices. In a more competitive market, the differences in productivity between firms tend to level in the long run, since those firms that do not apply the most efficient production methods will be driven out of the market. Productivity dispersion can hence be regarded as a competition indicator, the underlying logic being that the less consumers switch between competitors, the greater the productivity dispersion that can be sustained in a long-run equilibrium.

However, high productivity dispersion alone may equally suggest a highly innovative industry. Therefore, this indicator should ideally be combined with measures of market mobility, where a situation characterised by high productivity dispersion together with low levels of entry and exit, is likely to raise competition concerns.

Decreasing profit levels may indicate intensified competition

Increased competition may translate into lower profit margins of firms through an increased downward pressure on prices. But this is not always the case. Put simply, the more effective the firm – the higher the profit. Consequently, as an industry becomes more competitive, the profits of the more efficient firms can increase in relation to the less efficient ones. In

³¹ Boone, J. (2000). Refer also to Chapter 5 in this report for a more extensive discussion on this topic.

addition, profits are also determined by other factors such as business structure and risk, complicating the task to isolate the effects of competition on productivity.³²

Competition may increase quality

In most markets, price is one important factor that consumers take into consideration when choosing between different products. Another important factor is service or product quality, which can have large effects on demand and consumer welfare. In theory, faced with the risk of customers switching to a higher quality product, competition provides a strong incentive for investments in product quality improvement. However, there is ambiguous empirical evidence in this respect, where concentration and product quality have been found to be positively correlated.³³ In addition, product quality is difficult to assess quantitatively. For example, how measure the quality of a product such as a supermarket shopping experience? One way to assess quality is through consumer complaints, but the problem is that these are just one aspect of a multidimensional characteristic. Hence, product quality also often requires some qualitative assessment, such as consumer surveys.

Limitations to the use of quantitative indicators

To sum up, different quantitative competition indicators each hold their strengths and weaknesses. It is clear that when applied, a combination of indicators must be used in order to assess competition in a selected market or industry. Still, even if used in combination, quantitative indicators alone may not be sufficient to correctly assess competition.

Using combined analysis to detect competition problems yields more reliable results

It follows from the above that as a general rule, sector inquiries are most effective when quantitative and qualitative methods, correctly applied, are used in combination in a composite analysis where the specific mix of analytical tools is assessed on a case-by-case basis. To illustrate this, Box 4.2 below summarises a sector analysis of the Swedish food market that exemplifies the benefits of combining quantitative and qualitative analysis when evaluating competition in a specific sector.

Box 4.2 Assessing competition in the Swedish food market

The quantitative analysis indicated that competition was weak...

In 2010-2011 the Swedish Competition Authority carried out an analysis of the competition in the food supply chain on instruction from the Government. Quantitative competition indicators showed that Sweden had the highest market concentration among retailers in the OECD¹ while Swedish food prices and profit margins among retailers did not appear to be higher than those in other comparable countries. This result was somewhat counterintuitive and in order to gain an understanding of what might cause this situation, the SCA combined both quantitative and qualitative methods in the assessment of competition among retailers in the Swedish grocery market.

³² For a brief discussion on these topics see Boone, J. (2008)

³³ Crespi J.M. & Marette S. (2006)

... but the qualitative analysis revealed a different picture

In-depth interviews with retailers indicated that although market concentration among retailers is high on the national level, there is still competition, in particular at the local level. Local retailers often control prices and product selection in-store even when they belong to a chain of retailers. This favours competition in local markets to a higher extent than if retail chains controlled prices, product range and quantities from their headquarters, a practice which seems to be more common in other countries. The element of local competition was also confirmed by quantitative analysis comparing food prices in different grocery stores and supermarkets in Sweden, revealing relatively large price differences both between and within store concepts (e.g. ICA Maxi, ICA Kvantum and ICA Supermarket).

The interviews with company officials also highlighted that large retail chains with high market shares also benefit from large economies of scale and a relatively strong buyer power in relation to suppliers. Both factors combined contribute to lower prices which, as long as competition is effective among retailers, will be passed on to consumers.

¹ Metro Group

As illustrated above, sector inquiries of the competition in specific sectors are a complex and resource intensive activity for competition authorities as they require extensive quantitative and qualitative analysis. Furthermore, in order to perform a valid analysis of competition in a specific sector or market the NCAs do not only need the relevant resources and skills but also access to relevant market data such company data on market shares, strategies, prices, margins and costs, which companies are often reluctant to disclose. For an overview of the legal powers with reference to sector inquiries, see the discussion in previous Chapter 3.

4.2 Effective project delivery

Effective project delivery is a prerequisite for being an effective and efficient competition authority, able to fulfil its legal mandate irrespective of the complexity and diversity of cases, procedures and special tasks.³⁴ In every project carried out by the agencies, there are several factors and constraints derived from the very nature of each project. Therefore, competition agencies need to consider all these elements so that in overall they effectively contribute to the outcome of a project.

The NCAs all engage in continuous efforts to improve and increase effective project delivery. One crucial factor in this context is the NCAs' ability to prioritise among the inflow of matters and projects. The development of prioritisation models has hence been a top priority for the NCAs. The development of a clear prioritisation model forces the management team and organisation to mutually agree upon and clearly define what types of activities and projects should be prioritised, and which should not.

³⁴ In the following, 'effective project delivery' refers to the application of project management techniques to achieve expected project results in an efficient and effective manner. A 'project' in the context of a competition agency, will most often be a case investigation, but can also be a market study, an advocacy effort, or an information campaign.

Other relevant areas to improve project delivery that the NCAs work actively with are the development and implementation of effective project management tools and methods, training of staff in project management and knowledge management in order to be able to make use of existing knowledge generated in various projects. Knowledge management systems are particularly important to develop as they may serve as a mechanism to create an institutional memory and facilitate the work in case of a high turnover of staff. Furthermore, in efforts to improve operations, organisations must be open to embrace and implement new tools and methods that have the potential to improve project delivery. For example, for the Swedish Competition Authority a source of inspiration for improvement efforts is the principles and methods developed in 'lean public management' and lean production. Lean public management basically aim at improving results and efficiency by streamlining processes, identifying and eliminating activities that are not vital for high-quality services delivery, and fostering a culture of continuous improvement.³⁵

4.3 Prioritisation - making the most of available resources

In the light of the above, it needs to be stressed that faced with budget constraints, the NCAs cannot monitor every industry and every market. From this perspective, it is crucial for continued effective competition policy implementation that the methods and tools used for competition problem detection keep developing, and that the NCAs are on par with international best practices in a world where new markets, products, services and technologies constantly evolve. As mentioned above, another crucial component to effective competition policy implementation is the ability of the NCAs to prioritise amongst their cases in a way which maximises consumer welfare gains given the constraint on the authorities' resources. The development of prioritisation policies is a continuous activity that must be adapted to the changing environment and provide a mechanism for the NCA's to allocate resources to the most relevant matters and to decide what balance of law enforcement, advocacy and research and development work the NCAs should have.

Among the NCAs, a common factor is that priority is given to the matters which are considered most harmful to effective competition in a market, or have the largest impact on the economy. In order to be flexible and to adapt the NCA's work and activities to a continuously changing environment, several of the NCAs have based their prioritisation policies on dialogues with stakeholders and taken their points of view and suggestions into consideration when designing their prioritisation policies.

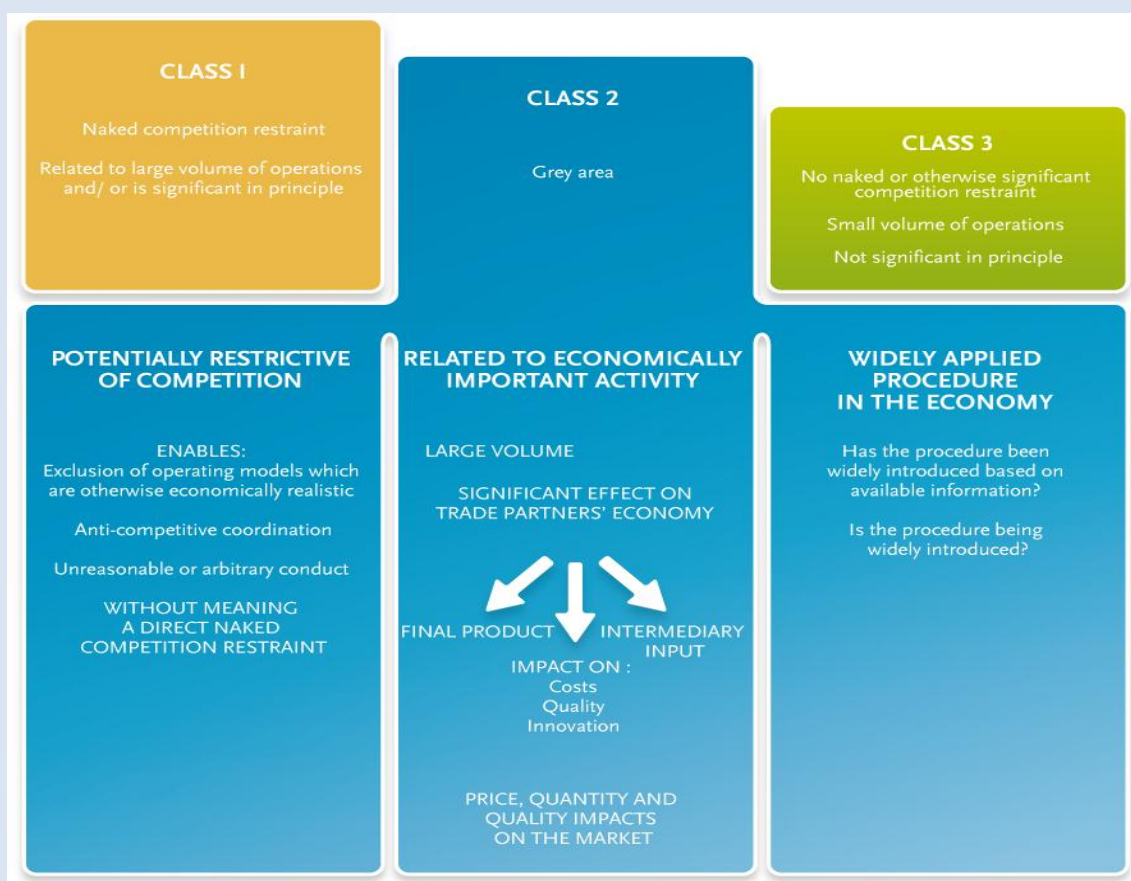
It should be stressed here that depending on factors such as individual country-specific legal and institutional characterises and available resources, there is no one-size-fits-all design of a prioritisation scheme. Schemes and prioritisation principles consequently differ between the Nordic countries and are not easily comparable against each other. Having said this, one example of a prioritisation scheme, from the Finnish Competition Authority, is highlighted in the Box 4.3 below for illustrative purposes.

³⁵ See for example, Modig N. and Åhlström P. (2012) or McKinsey & Co (2006)

Box 4.3 Prioritisation principles of case handling in Finland

Looking at the whole picture

In their prioritisation of cases, the Finnish Competition Authority (from 1 January 2013 The Finnish Competition and Consumer Authority) bases its decisions on an overall assessment of the gains to the society and to the consumers from intervention in a competition restraint. The gravity and importance of the competition restraint are factored in in this assessment. Class 1 mark the most serious competition restraints and involve, notably, naked competition such as hard core cartels. The Authority also pays attention to how common the conduct is in the economy and what kind of generally restrictive effects intervention in the competition restraint would have on other undertakings and sectors. The potential gains to be achieved from an intervention are also weighed against the estimated investigation costs. The figure below illustrates and comprises the allocation of cases into Classes 1 to 3 according to the prioritisation criteria.



Fixing time limits

The effective implementation of competition policy also requires setting of appropriate time limits. The Finnish Competition Authority seeks to respond to various inquiries, notifications and so-called citizens' initiatives and to close cases which will not be investigated within one month. If the matter does not fall within this category, the Authority seeks to make a preliminary investigation within four months, during which a general assessment of the nature and gravity of the competition is made.

If the case is found to be of minor importance in the preliminary investigation, the Authority will close the case within six months from the institution of proceedings. Cases which are thought to be of higher importance are handled in the Authority's steering group which will decide about further measures. If this is the case, an investigation plan is drawn up, and the parties will be notified of the opening up of a more detailed investigation if this can be done without jeopardising the investigations.

A useful tool for internal processes and external communication

The implementation of this rather newly developed model has improved the prioritisation work significantly at the Authority. The main reason for this is that the structure of the model facilitates the internal dialogue and communication concerning prioritisation issues, and the model is today a part of a 'common language' or 'common vocabulary' when the Authority deals with prioritization issues.¹

The prioritisation model is not only for internal use but is published in the Finnish Competition Authority's yearbooks and used in dialogue with various external stakeholders. The Finnish prioritisation model shows that explicit models and processes may benefit the NCAs as they facilitate both internal and external communication and thus the speed and efficiency of the case handling process.

¹ The 'Common Language Concept' is a crucial part in Knowledge Management literature, and is considered a crucial factor for learning and knowledge sharing between individuals and organisations. See for example Carlile, (2004) "Transferring, Translating and Transforming: An Integrative Framework for Managing Knowledge across Boundaries", *Organization Science*, Vol 15 No 5, pp. 555-568.

Source: The FCA Yearbook 2010

4.4 Evaluating the Effects of Competition Policy

Spurred by recent developments of the economic climate, governments worldwide are under pressure to reduce public expenditure. In many cases, this has translated into demands on increasing the effectiveness of public bodies. In line with these developments, governments are taking keen interest in assessing the effectiveness of their policies and institutions.

Many competition authorities across the globe are experiencing demands for evidence demonstrating and exemplifying the beneficial effects to society resulting from their activities. For example, the authorities may be asked to demonstrate that their interventions in market operations favour the common good and enhance public welfare, for example by increasing consumer choice, encouraging innovation and spurring economic growth.

As a response to this global trend and equip competition authorities to adequately address the increasing demands on evaluation of competition policy effects, is also well-illustrated by the fact that the OECD Competition Committee has made competition policy evaluation a top priority on their 2012-2014 agenda. The increased importance of evaluations is also mirrored in the growing academic literature on the subject.

4.4.1 Why, what and how to evaluate?

Evaluations of competition policy effects fill different purposes, take on many forms and are carried out both in-house or by external expertise such as academics or independent consultants. The purposes of competition authority evaluations can be grouped under three broad categories, which overlap to some extent: evaluation for accountability, evaluation of specific interventions, and evaluation of the broader impact of competition policy, described in turn below.

Similar to the detection of competition problem areas described previously in this chapter, the evaluation of competition policy effects can employ both quantitative and qualitative methods, each holding its strengths and weaknesses. In this regard, following Bergman's (2008) categorisation, quantitative studies refer to a specific type of evaluations which will render a quantitative estimate of consumer savings, or welfare gains to society. These include studies of price effects, consumer and welfare gains or losses from a specific event (notably mergers), or aggregate welfare gains from the competition authority's enforcement activities. In the Nordic countries, the evaluation of competition policy effects are less concerned with estimating aggregate economic effects and tend to employ more qualitative evaluation techniques which are by no means any less valid to illustrate the effects and benefits from competition policy implementation.

Quantitative evaluations

Quantitative evaluations of competition policy effects have attracted an increasing research interest in recent years and have also gained hold in some jurisdictions, notably in the UK, the US and the EC. For example, the UK Office of Fair Trading (OFT), estimates that for the years 2008-2011 the ratio of the consumer benefits from its activities to its costs was 10:1, nearly double its target of 5:1. Most of these benefits derive from remedying/prohibiting otherwise anti-competitive mergers, breaking cartels and from the impact of market studies.³⁶

The methodologies applied have certain merit to ascertain the positive welfare effects of competition policy. Yet, they are under development and still exhibit some considerable question marks with regard to the reliability of estimating the magnitude of these gains. Quantitative assessments of this kind also pose high demands on data and tend to be rather resource intensive.

Based on Davies (2012), a summary of the three key quantitative approaches employed by competition authorities carrying out quantitative evaluations: simulation, event studies and difference-in-differences (DiD), is given in Table 4.2 below.

³⁶ Davies S.(2012)

Table 4.2. Quantitative evaluation methods

Method	Description
<i>Simulation of structural models</i>	Modelling the nature of competition in a market to assess how a specific intervention will change the market equilibrium compared to the assumption of what would happen without the intervention.
<i>Event studies</i>	Event studies attempt to measure the effects of economic events (e.g. announcement of a merger) on the value of firms by examining stock market data. Providing that share prices reflect the underlying economic values of assets, changes in equity values will properly capture expected changes in the economic profitability of the firm.
<i>Difference-in-differences</i>	Comparison of prices or other competition indicators before and after an event (e.g. merger or dawn raid), compared to a similar market without the event, or to firms in the same market not involved in the event.

Source: Davies, S. (2012)

Evaluations can be carried out either *ex-ante* or *ex-post*. In practice, both are typically conducted retrospectively, and the meaning of the distinction relates mainly to the nature of the data used in the evaluation. In brief, an *ex-ante* analysis looks forward and tries to model ‘what happens next’ after a certain intervention or decision, and compare that to a ‘counterfactual’ – a hypothetical non-observable situation depicting the ‘what if’ scenario of an event taking/not taking place.³⁷

As the name suggests, *ex-post* analysis is backward-looking and uses the information of ‘what actually happened next’ compared to the hypothesised counterfactual of what would have happened absent the specific event. In general, *ex-ante* evaluation is simpler to conduct given that it makes lesser demands on data – employing information which should be available at the time of the policy decision. *Ex-post* evaluation, on the other hand, can only be conducted some years after an intervention when accurate data on what actually did happen becomes available. *Ex-post* evaluations are also confounded by the likelihood that what happens next may not be ascribed exclusively to the intervention under scrutiny.

A central issue when it comes to aggregate the effects of competition authorities activities, is that only the known can be estimated, with more or less certainty of course, and it is only a fraction of potentially harmful cases that are investigated. To illustrate this, Figure 4.1 suggests a stylised classification scheme to describe the full distribution of all potential competition cases in an economy. Some of these cases are deterred and therefore never occur and amongst the undeterred cases, some will be detected while others will not. Then, within the detected set of cases, some will be investigated while others will not.

³⁷ For example: How long would a cartel have survived if it had not been detected by the competition authority? How is the affected market defined and how large a share of that market is likely to be affected by competition policy enforcement? The choice of counterfactual has both conceptual and empirical dimensions – which counterfactual is theoretically most tenable, and how should it be calibrated with plausible estimates of key parameters? The choice of the counterfactual is hence a central issue running throughout most quantitative evaluation assessments. Nonetheless, any particular quantitative methodology used to evaluate a specific case must necessarily entail a choice of counterfactual, even if it is sometimes only implicit.

Denoting the conditional probabilities by deterrence rate (ω), detection rate (ϕ), and investigation rate (σ), it follows that the investigated cases, σ , represent only a fraction of the total number of all potentially anticompetitive cases. Moreover, the analysis fails to capture any beneficial deterrent effect and also the 'missed opportunities' represented by harmful cases that are either wrongly un-investigated or totally undetected.

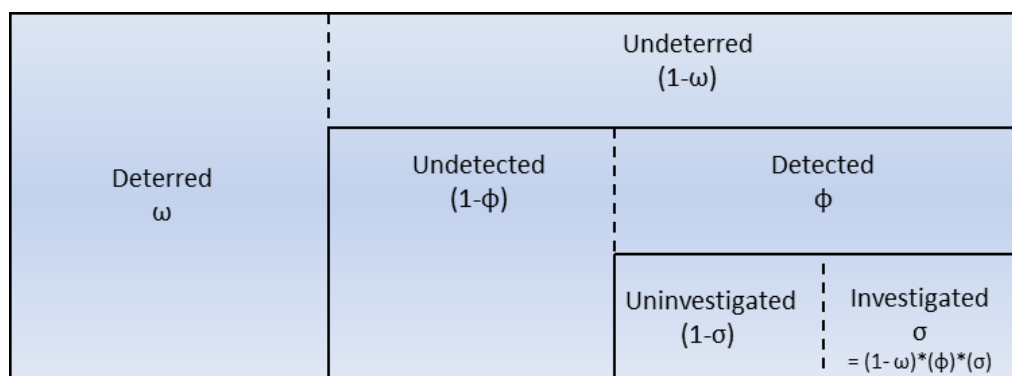


Figure 4.1 A general classification of potential competition cases

Source: Davies, S. and Ormosi, P. (2010)

Partially as a consequence of the above, many uncertainties surround the quantification of consumer welfare effects of competition policy as a means to showcase the overall effects of competition policy, and the critiques of this type of evaluations stem from these facts. Notably, it is widely acknowledged that the beneficial deterrent effects of competition enforcement are likely to be considerable, probably far outweighing the measurable benefits of the actual caseloads of competition authorities. Consequently, a valid critique of quantitative evaluations is delivered by Bergman (2008), in that the predictable outcome of such evaluations will be that competition authorities generate welfare gains far in excess of their budget costs. While this might be appreciated by stakeholders, there is little to be learned from repeated use of such an exercise. Instead, there are other, more qualitative, ways to evaluate and describe the effects of competition policy which are no less valid and that have the advantage of also informing policy, help competition authorities to better prioritise among their cases, make the most out of their limited resources, and improve their overall performance.

Qualitative evaluations

Qualitative evaluations of the effects of competition policy undertaken by the NCAs generally focus on specific interventions, such as mergers; or on policy reforms, like, notably, liberalisation of certain sectors.³⁸ Through a systematic examination of how market entry and expansion conditions have changed in the years following a certain intervention, it is possible to assess whether the predictions at the time of the decision turned out to be accurate, or not. To assess the effects, competition authorities make use of both quantitative competition indicators such as changes in market concentration and price levels, or questionnaires or surveys to capture effects which are not easily measured quantitatively.

In general, the NCAs do not evaluate the effects of competition policy with any fixed frequency. Instead, evaluations tend to be more ad hoc and carried out when there are relevant cases to assess and when sufficient time has passed since an event for an evaluation to generate meaningful results. However, annual stakeholder surveys, employed by the Swedish Competition Authority for nearly 20 years, is an example of a recurring evaluation tool that, among other things, provides indications of competition advocacy effects and that helps the Authority to prioritise among its activities. Also, since some years, the Norwegian Competition Authority, as the only NCA, publishes an overview of the social impact of competition policy in their annual reports, where the effects of a selection of its interventions or advocacy initiatives are summarised.

Below, a selection of qualitative evaluations carried out or commissioned by the NCAs is given. Follow-up studies of policy changes aimed to favour competition are a common theme. Two illustrative examples are those of the regulatory reform of the Danish book market (Box 4.4), which has proved positive for Danish consumers in many ways, and the abolishment of custom duties on Icelandic vegetable imports (Box 4.5) which has favoured the consumption of vegetables on the island.

Box 4.4 Danish bookworms – Winners of policy reform

As previously described in Box 3.5, the Danish book market was gradually deregulated in the 2000s, and the reform was preceded by a heated debate regarding cultural policy considerations. In 2010, the Danish Competition Authority (since 19 August 2010 the Danish Competition and Consumer Authority) published a follow-up study of the market developments following regulatory reform.¹ The evaluation concluded that the regulatory reform of the Danish book market did not seem to have harmed the cultural policy objectives. On the contrary, it appeared have favoured them on every level.

The evaluation focused on consumers' access to books, the supply of titles, prices, and the quality of the buying experience. The main conclusion to be drawn is that the liberalisation of the book market seems to have yielded positive effects in all areas.

First, consumer access to books has increased significantly as other outlets than book stores are now allowed to sell books. Especially supermarkets, kiosks and internet book stores have facilitated this

³⁸ Recall that in this context, quantitative refers to the evaluations that result in an estimate of consumer welfare gains, while all other evaluations, even if they may contain some numerical indicators, are defined as qualitative following Bergman's (2008) definitions.

development. Second, there is now greater variation in the supply of books. For example, between 2003 and 2009, the publication of fiction titles increased by 22%. Third, there are indications of a price decrease of books relative to other goods and services where 40% of consumers in the customer survey perceived that book prices had fallen following the reform. Moreover, consumers also express a greater satisfaction with the whole shopping experience due to the development of new sales channels better targeted to their demands. This seems to have increased peoples' willingness to buy books.

Finally, a noteworthy result is that new consumer groups, consisting of people with low incomes and low levels of education, have begun to buy books. All in all, more people are buying books than before the reform, and those who buy books buy on average more books than prior to the reform. This can only be regarded as a successful policy reform where Danish bookworms are the ultimate winners.



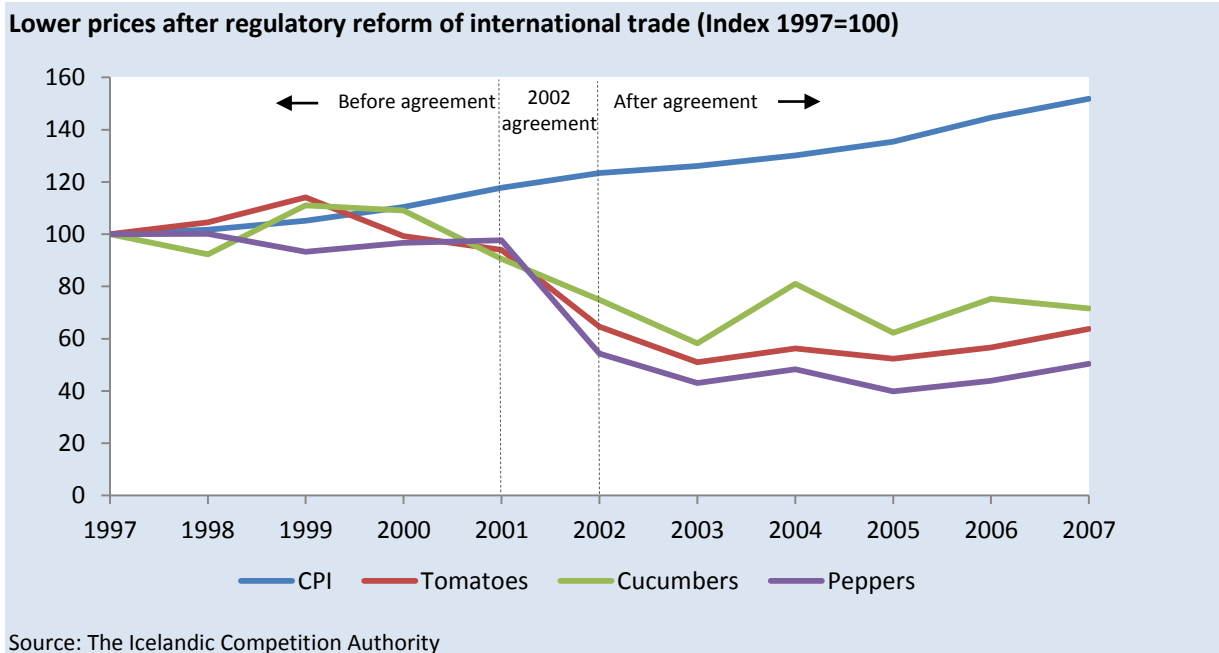
¹ The Danish Competition Authority (2010)

Box 4.5 Lower prices in the Icelandic vegetables market

In 1999 the Icelandic Competition Authority received a tip-off by a vegetable producer that led to the uncovering and exposure of extensive illegal price collusion in the production and distribution of vegetables in Iceland in 2001. During the investigation, the ICA became aware that the domestic distributors, through their coordinated provision of information and advice to the authorities, had great influence over the customs duties on vegetable imports. The customs duties increased the prices of the imported vegetables and gave the domestic market players the possibility to keep their prices on a high level on par with imports.

This led the Authority to issue a reasoned opinion to the Minister of Agriculture, requesting the Minister to initiate a review of the relevant provisions of the Customs Act and the agricultural law that hindered the commerce in vegetables and distorted competition on the market for import and distribution of vegetables. The outcome was that custom duties on tomatoes, cucumbers and peppers were abolished in 2002. At the same time, direct production subsidies were introduced according to an agreement between the state and the producers, which would remain in effect until 2013.

As can be seen from the graph below, the nominal retail prices dropped dramatically between the two years 2001 and 2002 when the custom duties were abolished and the subsidies introduced. For example, the average retail price of peppers in the years 1997 – 2001 was 546 ISK/kg but decreased to an average of 276 ISK/kg in 2002 – 2005. The production and consumption of these vegetables in Iceland have also increased since. The subsidies per kilo of domestically produced vegetables relative to prices have decreased in later years.



Another example of the positive effects of competition authority advocacy activities is the one of the Norwegian Competition Authority's role in giving more Norwegian football lovers the possibility to watch games from the comfort of their own living rooms, as highlighted in Box 4.6 below.

Box 4.6 More football to the people of Norway

During the winter of 2007/2008 the Norwegian Competition Authority entered into negotiations with the Norwegian Football Association about the forthcoming sale of broadcasting rights of Norwegian Premier League football for the period 2009-2012. The NCA was concerned that the continuation of exclusive sales in the next contractual period would result in negative competitive consequences to the detriment of consumers. In order to secure the most effective competition over rights, the Authority contacted the Football Association to provide guidance on a number of specific issues about the formulation of the competitive basis for the forthcoming sales process.

The broadcasting rights for 2009 to 2012 were sold to a number of different parties and dispersed among several competing providers. This resulted in both increased access to pay-tv and more matches on free (digital) terrestrial television than before. When several parties compete for the same customers this normally results in lower prices and/or increased quality. The Norwegian Competition Authority's analysis shows that in 2009, viewers had a wider selection of games to choose from compared to the year of 2008. At the same time, prices have dropped and become more differentiated with respect to the different games options on offer. The distribution of broadcasting rights for football games among several providers and the subsequent competition has thus helped to create a wider product selection and lower the prices charged to the benefit of consumers.

The Media Agreement resulted in a greater selection of football games products, particularly on the Internet-based platforms which have enabled consumers to access a range of new services, including a greater degree of interaction between consumers and providers and the opportunity to view clips from matches or whole matches after a match has been played. It can thus be argued that the new Media

Agreement has also served as a driver for innovation in respect of the provision of football as a product and has extended the competition arena between traditional TV and online TV.

One essential condition that applies to this has been ensuring adequate quality of online TV services. Online TV providers have also made adjustments to ensure that the capacity of the underlying infrastructure, the Internet, can cope with more simultaneous viewers without crashing. TV2 and Schibsted have indicated that this appears to have functioned well during the 2009 season.

Source: The Norwegian Competition Authority (2009)

Another reason for evaluation is for competition authorities to review previous cases (most often mergers) in order to evaluate the correctness of their own decisions, to improve the methodologies used and to verify whether the predictions they made at the time of a decision came to prove right or wrong. An example of such a case is the analysis carried out by two independent researchers on behalf of the Swedish Competition Authority (Box 4.7) of a merger which the Authority wished to stop, but that was cleared by the legal system. This case exemplifies a situation where the Authority seems to have been right in their decision to try and block a merger, which, when consummated, did not deliver on its promise to decrease prices through efficiency gains.

Box 4.7 Optiroc/Stråbruken - A merger where the alleged consumer welfare gains never materialised

In 1998, the Swedish Competition Authority tried to block a merger between two domestic firms supplying various construction materials: Optiroc Groups AB (Optiroc) and Stråbruken AB (Stråbruken) but the court ruled against the Authority and allowed the merger.

At the time of the merger, the combined market share of the two companies amounted to 60-80% in most relevant markets. In the motion to seek to have the merger blocked by the court, the Swedish Competition Authority argued that the merger would be anti-competitive as it would create or reinforce dominance. The parties argued, however, that the merger would generate efficiency gains and that competition from international players was expected to increase.

Two years after the merger was consummated, the Authority commissioned two researchers, Bengtsson and Marell, from Umeå University to perform a follow-up study of the case.¹ The purpose of the ex-post study was to evaluate the effects of the merger on competition in the affected markets, for which the researchers analysed case material and performed interviews and surveys among market participants. One of the conclusions made from the analysis, was that Optiroc's acquisition of Stråbruken had affected the conditions for competition intensity negatively on the relevant markets by increasing market concentration.

With regard to prices, given the scope of the exercise, it was not possible to collect all relevant data on prices from all market participants. Instead, the researchers opted for a qualitative assessment, asking the buyers' opinions of changes in prices and discounts. The results were mixed and even though the general view was that prices had increased by a small amount it was, in the absence of raw price data, not possible to conclude that the merger effectively had raised prices. On the other hand, Bengtsson and Marell found no evidence of materialised efficiency gains, which the parties had argued as a reason for

the court to allow the merger. Nor was any expansion of imports from international players, which could have increased the competitive pressure on the Swedish market, noted.

¹ Bengtsson, M. and Marell, A. (2001)

As a final example of qualitative evaluations of competition policy effects, is the Swedish stakeholder survey, which has been carried out annually for nearly 20 years. The stakeholder survey is described briefly in Box 4.8 below, together with the results of the latest available survey from year 2011, with specific reference to law enforcement.

Box 4.8 Evaluation of stakeholders' views of competition policy

A common practice amongst competition authorities is to study stakeholder awareness of competition law and the public views of competition policy in general. As an example, the Swedish Competition Authority has since 1994 commissioned annual surveys where stakeholders are asked questions about their knowledge about the competition rules and regulations, and how they perceive that the Authority contributes to more effective competition. The stakeholders in question include large companies (200 employees or more), small and medium-sized companies (fewer than 200 employees), trade associations, municipalities and county councils, commercial lawyers, journalists, and public authorities and administrations.

Regarding the effects of competition policy, the latest survey (2011) reveals a highly positive attitude to competition, and a broad perception that competition benefits consumers. On the topic of whether competition law has contributed to well-functioning markets, a significant share among all stakeholder groups, with the exception of the group including public authorities and agencies, state that this is the case. A potential worry is though that the perception that market players deliberately violate competition law, has increased among all stakeholder groups with one exception: major companies and trade associations. In all subgroups, except for the public bodies, a majority believe that the Authority actively counteracts harmful anti-competitive conduct. The negative attitude of authorities and agencies is probably linked to the Authority's recent expansion of regulatory functions in public procurement and public sector commercial activities.

The results from the stakeholder survey relating to law enforcement is presented in the Authority's annual reports and the results from the survey are taken into consideration when deciding on the prioritisation of outreach information activities in the forthcoming year.

Source: The Swedish Competition Authority (2011)

4.5 Concluding remarks

Effective competition policy implementation requires efficient and effective legal and institutional frameworks, as emphasised in Chapter 3, and, as this chapter has served to show, it also rests upon the agency effectiveness of competition authorities. In an ever-changing world, agency effectiveness is an on-going challenge to the NCAs where they must develop, adapt and implement even more efficient and effective tools and methods for carrying out their work. Moreover, the increasing general interest of governments to

evaluate policy effects is likely to put pressure on the NCAs to demonstrate positive welfare effects from their activities.

Against this background, this chapter has served a twofold objective. First, it has focused on operational issues common to the NCAs and, drawing on some examples from the Nordic countries, aimed to demonstrate how the NCAs operate in practice in order to safeguard an effective implementation of competition policy. Second, it has discussed, briefly, the possibilities and limitations to evaluate the effects of competition policy.

Summarising the main insights from this chapter, the first conclusion to be made is that the analysis of competition problems is not a straightforward exercise. It often requires a combined approach of both quantitative and qualitative analytical methods on a case-by-case basis, since either method used on its own might provide misleading results. Second, for competition policy implementation to be effective given limited resources, it is important that competition authorities not only operate within an adequate legal framework and hold effective legal powers, but also possess effective tools and efficient work methods so as to maximise the welfare effects of competition policy. Moreover, competition authorities must also strive to have a persuasive advocacy voice that permits the elimination of identified competition problems with regard to rules and regulations.

Finally, with regard to the evaluation of competition policy effects, this chapter has given a brief introduction to some general quantitative as well as qualitative evaluation methods, together with some examples of evaluations carried out by the NCAs. Here, it should be stressed that while a quantification of the effects of competition policy may be tempting from the perspective of policy makers, there are limitations to the methodological and practical possibilities of quantifying the effects of competition policy. Notably, such quantifications tend to be resource intensive, make large demands on data that may not always be accessible, and the methods developed to date also rely heavily on assumptions, which risks to compromise the accuracy of the obtained results.

Nevertheless, even though the effects of competition policy may not be easily measured in terms of an aggregate economic value, qualitative evaluations of competition policy are no less valid to identify and assess competition policy effects. As the examples presented in this chapter have shown, competition policy in the Nordic countries has led to visible results in terms of lower prices, increased availability and quality. This leads on to the final insight from this chapter, namely that competition policy is 'cheap': irrespective of whether the welfare gains to society from competition policy enforcement are quantifiable or not, effective competition authorities generate welfare effects in excess of their budgetary costs.

5 Competition policy – A tool to stimulate innovation

Challenging trends to sustained economic growth together with an ambition to maintain the welfare ideals of the Nordic model, underline the need of improving productivity and competitiveness of the Nordic economies. Innovation and innovative activities are essential in this regard. Against this background, all Nordic countries have put innovation policy on their agendas in order to promote the prosperity of the Nordic economies towards year 2020 and beyond.

Because of the linkages between competition and innovation, this chapter wishes to highlight, on the one hand, the possibilities of competition policy and its implementation to help the Nordic governments achieve their goals in innovation policy and, on the other hand, the challenges that competition and competition policy may face in promoting a fruitful innovation climate.

A brief overview of how innovations can be defined and why innovations are fundamental to our societies introduce this chapter, followed by a review of both the theoretical foundations and the empirical research on the effect of competition and competition policy on innovation. As a next step, the chapter briefly discusses how innovation aspects may be assessed within the competition law frameworks in the Nordic countries, and provides some relevant examples both at the EU and the Nordic level. Finally, the interconnections between innovation policy and competition policy, and specifically how competition concerns are dealt with within the Nordic countries' respective innovation policies, are briefly reviewed.

5.1 What are innovations?

No doubt, the word 'innovation' has positive connotations, signalling renewal, efficiency improvements and solutions to problems. Still, it is a somewhat fuzzy concept and an array of different definitions exists, although the common element to most definitions is some sort of 'novelty', and that an idea becomes an innovation only when disseminated in the market. There are also different types of innovations, of which five general types are listed in Table 5.1 below.

Table 5.1 The different types of innovation

Product innovation	A good or service that is new or significantly improved. This includes significant improvements in technical specifications, components and materials, software in the product, user friendliness or other functional characteristic. <i>Example: Smartphones vs. feature phones</i>
Process innovation	A new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software. <i>Example: Online versus physical banking services</i>

Organisational innovation	A new organisational method in business practices, workplace organisation or external relations. <i>Examples: Lean Production</i> ³⁹
Business model innovation	New markets or ways to reach new markets. <i>Example: Music streaming services compared to buying physical CDs.</i>
Input innovation	New competences, resources or material <i>Example: Maxfas, which is a material substituting gold.</i>

Source: IVA (2010) and OECD (2005)

5.2 Why do we need innovations?

Innovation is central to our societies. Perhaps most importantly, innovation spurs economic growth and welfare through the creation and transformation of new knowledge into new products, processes and services that meet market needs. As such, innovation helps to create new businesses and constitutes a fundamental source of growth. Ultimately, innovation is vital for the progress of society and for the progression of human well-being.

Modern growth theory emphasises strong linkages between investments in knowledge in the form of education, research and development (R&D), and economic growth. Although estimates differ, most studies have indeed shown a high correlation between R&D expenditures and productivity growth, after accounting for investment in ordinary capital. Private returns to R&D activity may be substantial, but the academic literature shows that the social return to investment in R&D is even higher.⁴⁰ Consequently, policies which support and foster innovation can pay large dividends for society. One way to achieve these benefits is to promote those industry structures and policies that offer greater incentives for innovation. Competition, and competition policy, constitutes one channel through which innovations can be stimulated. Nonetheless, the relationship between competition and innovation is characterised by a realm of complex interactions, which will be discussed further below.

5.3 How can competition and competition policy favour innovations?

A traditional line of reasoning, associated with Schumpeter (1943), argues that market concentration stimulates innovation. The underlying idea is that innovation often creates temporary monopolies, which, according to Schumpeter, provide the necessary incentives for firms to invest in innovation. An early challenge to this view came from Arrow (1962), who sought to establish the reverse proposition; that more competitive environments would provide stronger incentives to innovate. However, the discussion is much more versatile and profound than this, with a number of distinct forces simultaneously at work. One way to

³⁹ Womack J.P., *et al.* (1990)

⁴⁰ Griliches Z. (1992)

structure the thinking about the relationship between competition and innovation is to describe the various effects related to the issue.

Whereas innovation is generally deemed to have virtuous effects on growth and development, one needs to be concerned with the role, impact and implementation of competition policy, because it can strongly influence the basic conditions of competition. As noted by Ahn (2002), for example, the predictions of theoretical models are mixed, as is perhaps best shown in the Schumpeter versus Arrow discussion. There are a number of theoretical examples explaining why competition has, or conversely may not have, the desired effect of enhancing innovation and growth. Four main theories are summarised in Box 5.1 below.

Box 5.1 Theories of the linkages between competition and innovations

The **Darwinian effect** rests upon the argument that intensified product market competition may force managers to faster adopt new technologies in order to avoid loss of control rights due to bankruptcy (Aghion *et al.*, 1999). In other words, firms have to innovate in order to survive under competitive pressure (cf. Porter, 1990b).

The effect of **'neck-and-neck' competition** relates to the model of 'creative destruction', which in essence means that something new replaces something older in the, some think endless, cycle of innovation.⁴¹ The incumbent (dominant) firm (or firms), in contrast to the entrants, has weak incentives to innovate. If technology was to develop gradually with the incumbent firms engaged in step-by-step innovative activities, competition may increase innovation. This follows from the more intensive product market competition between firms with neck-and-neck technologies, which will increase each firm's aspirations to take or increase its technological lead over its rivals.⁴²

The **mobility effect** refers to the learning-by-doing model of endogenous growth. The steady-state rate, or the rate that growth converges to over time, may be increased if skilled workers become more adaptable in switching to newer production lines. In such a scenario, intensified competition between new and old production lines will incentivise the skilled workforce to switch from old to newer lines more rapidly (Aghion and Howitt, 1996).⁴³ An effect that illustrates the challenges in this topic is **Arrow's replacement effect**. This effect explains that if an incumbent lacks a R&D advantage, it has a weaker incentive to innovate than 'outsiders', since the incumbent captures only the incremental rent associated with the innovation. However, outsiders earn no rents if they fail to innovate but if they succeed, they will themselves become monopolies. Then, the monopoly rents of a successful innovator decrease when the environment becomes more competitive and the incentive to invest by an outsider also clearly decreases.

⁴¹ For empirical findings regarding creative destruction see for example Maliranta, M. (2005)

⁴² See the figure below on the relationship between competition and innovation, where more neck and neck competitive industries are isolated.

⁴³ Intensified competition refers here to increased substitutability between products.

5.3.1 Incentives to innovate and the degree or type of competition

Theoretical considerations have tried to establish the causality between intensity of competition and the incentives to innovate. As increased profitability is a universal incentive behind action, Bonanno & Haworth (1998) studied the relationship between intensity of competition and the profitability of innovative activity. The main question was whether more intense competition is associated with a stronger or weaker incentive to introduce a cost-reducing innovation.⁴⁴ In order to answer this, they compared two identical industries (same demand and cost functions, same number of firms) that differed only in the regime of competition: Bertrand style (price competition) versus Cournot style (quantity competition).⁴⁵ What Bonanno and Haworth found was that the incentive to introduce a cost-reducing innovation is stronger for a Cournot competitor, the implication of which being that lessening the degree of competition could improve the incentives for cost-saving innovation. The regime, or intensity, of competition may indeed matter for different firms in the sense that:

- For the high quality firm, the result shows that *if* there is a difference between the choice made by a Bertrand competitor and the choice made by a Cournot competitor, then the Bertrand competitor will opt for product innovation (improvement in the quality of its product), while the Cournot competitor will prefer process innovation (cost reduction).
- For the low quality firm, on the other hand, the result is reversed: whenever there is a difference, the Bertrand competitor will favour process innovation, while the Cournot competitor will favour product innovation.

These results seem to suggest that for a 'high quality' firm, the intensified competition leads to a stronger emphasis on product quality improvements. Less intense competition seems, on the other hand, to streamline the production process in order to achieve efficiency gains. For the 'low quality' firm the choices may be the opposite.

5.3.2 Market entry and innovation incentives

To briefly sum up the theoretical discussion above, it is fair to say that increasing the number of firms seems to reduce R&D effort of firms, whereas increases in the degree of product substitutability increases R&D effort, under the assumption that the total market for varieties does not shrink. A growing market size is thought to increase R&D efforts, but has ambiguous effects on the number of product varieties on offer.⁴⁶ It is, however, important to

⁴⁴ Following Delbono, F. and Denicolo, V. (1990) and Bester, H. and Petrakis E. (1993)

⁴⁵ Bertrand competition indicates that firms will compete in an oligopoly market by using price as their strategic decision variable. In Cournot competition, the strategic variable (or weapon) is the quantity supplied. The Bertrand model predicts that a duopoly is enough to push prices down to marginal cost level, meaning that a duopoly will result in perfect competition. In the Cournot model, the market price is pushed to marginal cost level as the number of firms increases towards infinity.

⁴⁶ Reducing the cost of entry is argued to increase the number of entrants and varieties but to reduce R&D effort per variety, which is in line with the first point.

notice that the ease of market entry has been found to influence innovation through increased competitive pressure. Vives (2005) describes these effects as follows:

- *In markets with restricted entry:* More competitive pressure in terms of a larger number of firms means less R&D effort per firm, whereas more competitive pressure in terms of a greater product substitutability (that does not shrink the total market for varieties) means more R&D effort per firm.
- *In markets with free entry:* Increasing the market size or product substitutability (without shrinking the total market for product varieties) increases innovation effort and per firm output. Increasing the market size may increase or decrease the number of varieties introduced (product innovation) although the former is more likely than the latter. Increasing product substitutability will decrease entry and product variety if the market does not expand. Lowering entry costs will increase the number of entrants and lower (individual) innovation effort.

5.3.3 Empirical findings

The surveyed body of empirical work exploring the relationship between competition and innovation tends to stress the importance of industry level knowledge. The inter-industry empirical studies suggest that any existing relationship at a general economy-wide level between industry structure and R&D, comprise the presence of significant industry-level differences in the underlying decisive factors, such as technological opportunities, demand, and the appropriateness of inventions. These are all important features to the innovation process, but a direct comparison of the studies that find either a positive or a negative relationship between competition and innovation is difficult, because the underlying factors may significantly affect the results.⁴⁷

Aghion *et al.* (2005) provide compelling evidence on the so called inverted U-relationship between competition and innovation, illustrated in Figure 5.1 below.⁴⁸ Their findings are especially important with reference to effects of neck-and-neck competition; more neck-and-neck competition industries show a higher level of innovation activity (measured by citation weighted patents) for any level of product market competition (measured by using the price cost margins)⁴⁹ and the inverted-U curve has been found to be steeper for industries characterised by more neck-and-neck competition. Consequently, the intuition is that restrictions of competition are detrimental to innovation. Cartels and exclusionary abuse of

⁴⁷ Successful innovative performance and creativity depend on a broad set of favourable institutional conditions. It has been argued that this set includes, for example, tax and regulatory systems that stimulate the creation, diffusion and productive use of knowledge in all sectors of the economy.⁴⁷ Many of these have been out of the main focus of this report. (See: Braunerhjelm, P.(2012)

⁴⁸ Aghion, P *et al.* (2005). It may also be noted that Kilponen J. & Santavirta T. (2007) find empirical evidence in favour of the inverted U-curve in the context of R&D subsidies in Finland.

⁴⁹ Aghion *et al.* (2005) used 1- (Lerner index) to measure competition. The Lerner index can be defined as the relative price cost margin, i.e. (price – marginal cost)/price. A high Lerner index value is taken to reflect a low intensity of product market competition. Consequently, a low value of 1-L is thought to reflect less intense product market competition.

dominance that radically reduce competition in the market are particularly harmful due to the magnitude of their anticompetitive effects.

In a more general perspective relating to the NCAs' policy priorities and the focus on industries and sectors that show sign of ineffective competition, these are likely to be found in a context characterised by high market concentration and high barriers to entry, and that corresponds to the left-hand side of the inverted U-curve in Figure 5.1. Hence, an effective competition policy focusing on such industries have the potential to foster innovation and thereby generate benefits to society. This holds for industries with neck-and-neck competition as well as for other industries.

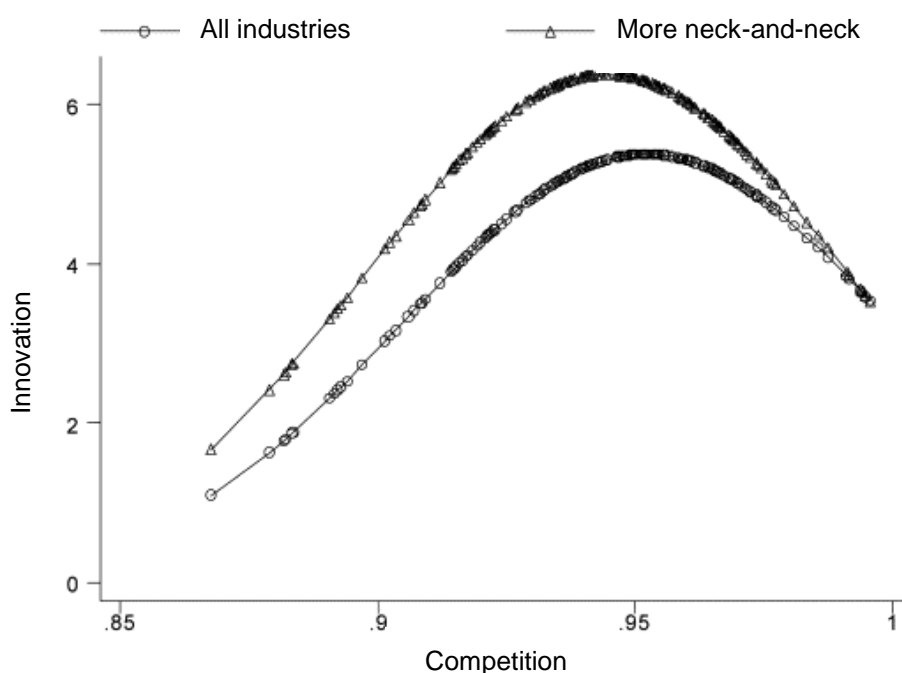


Figure 5.1 Innovation and competition with a neck and neck split

Source: Modified from Aghion *et al.* (2005), p. 720

Empirical studies that find a negative relationship between competition and innovation give credit to the Schumpeterian idea that a competitive market may not be the optimal environment to foster innovation. On the other hand, several empirical studies have discovered a positive relationship, reinforcing Arrow's findings at least in the case of process innovations. The theory of the inverted U-curve thus reconciles these opposing lines of argumentation.

Despite the multidimensional nature of the issue, the existing studies can be categorised according to the factors that they highlight, or to the methods they use for measurement. These include the role of intellectual property rights, the availability of funding, and technological opportunity. A survey of the empirical results must also include specifications related to how the intensities of competition and innovation are defined and measured. The

degree of competition has most commonly been measured by industry concentration or firm size, with modifications depending on the object of study. Innovation has been measured by number of patents, R&D expenditures, R&D employment and the number of innovations.

Product and process innovation are often distinguished from one another, as they produce different results. Appendix 1 provides a non-exhaustive list of empirical research in support of the competition-innovation relationship, which together with the above results can be contrasted with the findings of Dasgupta & Stiglitz (1980) and Spence (1984), who show that increasing the number of firms, which is a typical measure of increased competitive pressure, reduces innovation effort. These are interesting findings, which highlight the need of thorough case-by-case consideration of the details, such as entry conditions and type of competition, in each specific innovation-related case under assessment by a competition authority.

5.4 Balancing static vs. dynamic effects within competition law enforcement

A challenge in the application of competition law is posed by the dynamic efficiencies of innovation that manifest in the longer term, and the more static assessment of competition effects which arise in the short term. Competition policy in the Nordic countries and the EU aim at stopping anti-competitive behaviour in order to protect innovation and consumer choice and ensure equal opportunities to compete, and the common attitude among the Nordic Competition Authorities (NCAs) is to avoid prohibitions whenever possible. An overview of how the static and dynamic concerns may be balanced within the legal framework is outlined below.

All the Nordic competition acts have sections whose contents and interpretation correspond to Article 101(3) and Article 102 of TFEU.⁵⁰ This framework allows for a case-by-case assessment of innovation concerns in the following way: First, agreements by undertakings which contribute to improving the production or distribution of goods, or to promote technical or economic progress, while allowing consumers a fair share of the resulting benefit, should be exempt from the prohibition. Second, it is prohibited for one or more undertakings which hold a dominant position to abuse that position by limiting production, markets or technological development and innovation to the prejudice of consumers.

Still, while collaboration on innovations may hold the promise of potential positive long-run effects, these are often difficult to foresee, let alone quantify, to include in the evaluation of market power that may be much easier to assess in the short to medium term. Under current competition law practice, it is therefore internationally commonplace to require those proposing or defending restrictive practices or concentrations to present evidence of clear and convincing long term efficiencies that will be, to a reasonably degree at least, passed on to consumers, if these practices or concentrations are to be allowed to proceed despite having negative short-term effects. Notably, dynamic, innovation-related efficiencies expected to

⁵⁰ A country-by-country overview of the competition acts and how they do, or do not, treat innovation aspects, is presented in Appendix 2 to this chapter.

materialise only in a more distant future are, by their very nature, more uncertain and may, therefore, fail to meet such evidential requirements. It is particularly merger control in which prohibitions of this kind have been made (Monti, 2001; Bishop and Caffarra, 2001; Veljanovski, 2001).

5.4.1 Competition law enforcement and innovation concerns – European and Nordic experiences

At a European level, the EC has initiated several anti-trust cases in order to protect continuous innovation in specific markets, not the least in the information and communication technology (ICT) industry. The Rambus 'Patent Ambush' Case⁵¹ is one example. 'Patent ambushing' is an inherent risk of standard-setting organisations (SSOs). This occurs when an SSO member, while participating in the development and setting of a standard, withholds information about a patent that the member or the member's company owns, has pending, or intends to file, which is relevant to the design of standard in question, and once the standards are adopted subsequently asserts that a patent is infringed by use of the agreed standards. In 2007, the EC initiated proceedings against US based company Rambus, who they believed, had engaged in patent ambushing for standard setting of Dynamic Random Access Memory chips (DRAMs), standardised by the US standard setting organisation JEDEC, and subsequently claiming 'unreasonable' royalties for the use of certain DRAM patents which they had withheld from the standard-setting procedure. The EC argued that through this patent ambushing practice, Rambus Inc. had abused its dominant position, thereby infringing Article 82 of the EC Treaty (now Article 102 TFEU). In December 2009 the EC adopted a decision that rendered legally binding commitments offered by Rambus which, in particular, put a cap on its royalty rates for certain DRAM patents.

A second example is the 'Microsoft Internet Explorer bundling case',⁵² in which the EC argued that, with Internet Explorer (IE) being tied to the Windows operating system on 90% of the world's PCs, Microsoft was distorting competition by providing IE with an artificial distributional advantage. The EC's concern was that this practice shielded IE from neck-and-neck competition from other browsers, and that this practice would be detrimental to the pace of product innovation in the market, as well as to the quality of products which consumers ultimately obtain. In addition, the EC was concerned that the ubiquity of IE was creating artificial incentives for content providers and software developers to design websites or software primarily for IE, which ultimately risked to further erode competition and innovation in the provision of services to consumers. The EC and Microsoft reached a settlement in December 2009, whereby Windows' PCs sold in the European Economic Area are since required to present users with a 'Choice Screen' upon installation, which will offer them the ability to install up to twelve of the most widely used web browsers that run under Windows, including their own Internet Explorer. However, in July 2012 the EC opened new proceedings against Microsoft to investigate their possible non-compliance with the browser

⁵¹ IP/09/1897

⁵² For details see IP/10/216

choice commitments based on information that Microsoft had failed to roll out the choice screen with Windows 7 Service Pack 1, released in February 2011.

Finally, a third EU-level high-profile case refers to Google's alleged abuse of dominance of its search engine business. The EC has argued that Google abuses its dominant position in the market through the way in which they display search results and give preference to their own vertical products such as Google Maps or Google Images, their unauthorised copying and use of content from competing vertical search services, and how they handle advertising on their main search website.⁵³ In May 2012 the EC offered Google the opportunity to come up with a remedies package that addresses the EC's concerns. Although Google disagrees with the EC's allegations, they have expressed a willingness to initiate discussions of such a package, thereby avoiding to engage in lengthy proceedings with the EC and ultimately running the risk of being fined up to 10% of their global turnover if found guilty to breaches of EC competition law. The EC has expressed a desire to reach a swift resolution to the case, 'for the benefit of competition and innovation' in the 'fast moving markets' concerned.⁵⁴

At the Nordic level, there are, to date, relatively few cases where innovation aspects have been central to the NCAs' investigations. Below follows an overview of some relevant experiences regarding innovation in law enforcement matters and competition advocacy activities. First is a Swedish example from the area of antitrust, concerning network sharing in the Swedish mobile telecom market, summarised in Box 5.2 below.

Box 5.2 Network sharing in the Swedish mobile market

On four separate occasions, the Swedish Competition Authority has investigated joint venture matters in the fast-moving industry of infrastructure for mobile telecom and computer services, each case involving new technological developments.⁵⁵ The most recent conclusion from such a matter was made in September 2010.

The matter in question concerned two Swedish telecommunication companies, Tele2 and Telenor, who had agreed to collaborate on the ownership, development, operation and maintenance of network infrastructure for mobile phone and broadband communication.⁵⁶ Among other things, the collaboration included an expansion of the next generation mobile networks (4G) and modernisation of a joint GSM network (2G). The agreement did not include supply of services.⁵⁷ The question was thus how to commercialise major technical innovations in the most efficient way.

⁵³ As an indication of the possible harm caused by these practices, it can be said that by June 2012 Google controlled 94% of the search engine market, 98% of mobile search and 92% of search advertising. In 2011, Google generated 96%, or \$36.5 billion, of its total revenue from advertising. Source: <http://www.fairsearcheurope.eu/wp-content/uploads/2012/03/FairSearchEurope-European-Commission-Overview-EN.pdf> accessed 02-10-2012.

⁵⁴ SPEECH/12/372 by Joaquín Almunia, 21-05-2012.

⁵⁵ For details see: <http://www.kkv.se/beslut/01-0321.htm> (Telia and Tele2); Case.no: 579/2001 (Hi3G Access and Europolitan) and 62/2002 (Tele2 and Telenor)

⁵⁶ Case no. 374/2009

⁵⁷ SCA's press release in English: http://www.kkv.se/t/NewsPage_6474.aspx; SCA's decision: <http://www.kkv.se/upload/Filer/Konkurrens/2010/Beslut/01-0321.htm>

In its ruling, the SCA stated that the joint venture concerned a relatively small share of each operator's total costs for the supply of mobile phone and broadband services. It also noted that rapid technological development (i.e. innovation) in the mobile market makes it difficult for companies to enter into, and to sustain, anti-competitive collaboration. Consequently, the SCA decided to close their investigation.

With regard to mergers and innovation concerns, a relevant example is the Finnish Sonera/Digita networking case, presented in Box 5.33 below. The Finnish Competition Authority wanted to prohibit the merger on the grounds that it would foreclose competitors but the Competition Council approved the merger, although on such strict conditions that the parties never went ahead with their intended plans.⁵⁸

Box 5.3 The Finnish Sonera/Digita case

The Sonera/Digita case involved a merger in which the intention was to place Digita Oy, the subsidiary of the public service broadcasting company Yle, under the joint control of Yle and Sonera, the latter of which operates in mobile telecommunications, Internet and data transmission services, the traditional telecom operating areas of landlines and local cable network markets. The motivation for this was the digitalisation of the analogical radio and television network. However, a strategic alliance was clearly involved through which a cluster governing the transmission services of both sectors could have developed in the interface of telecom operations and media companies. Through the Digita deal, the Sonera Group could offer a comprehensive package including transmission services, compatible service platforms and other technical solutions in all the digital networks and terminals. Sonera could have hence offered a full product palette in the networks applicable for data transmission.

Due to the threat of foreclosure of competing service providers, the FCA proposed prohibiting the deal. However, the Competition Council decided against this recommendation and approved the deal, but on such tight conditions that Sonera decided to withdraw from it. Yle, on their part, sold 49% of the company to TDF, a French developer of wireless communications systems, in late 2000.

In addition to competition law enforcement, the NCAs also have a role to play in the field of advocacy in order to further innovation through competition policy, as illustrated by experiences from Finland and Denmark. In the case of Finland, the Finnish Competition Authority issued a statement regarding the government proposal for a new waste management act, expressing concern for the safeguarding of the incentives for innovation and adoption of new innovations in the relevant area (Box 5.4).

Box 5.4 Statement regarding the Finnish government proposal for a new Waste Management Act

In its statement regarding the government proposal (HE 199/2010 vp) for a new waste management act,¹ the Finnish Competition Authority stressed on several occasions the negative consequences that the proposal might yield to effective competition and innovation.² The FCA recognized the need and motivation for a new Waste Management Act. However, the FCA pointed out the evident challenges that prevail in combining the development of the institutional framework in waste management to support to enable efficient and purposeful and use for energy and recycling purposes, and simultaneously preserve the incentives for innovation and adoption of new innovations in this area.

⁵⁸ Decision by Competition Council 53/690/2000.

The competitiveness of the Finnish economy requires a continuously increasing efficiency in the use of resources, and the area of waste management could potentially be a future source of comparative advantage. Consequently the FCA stressed the competitive situation in the waste management sector could be fine-tuned so as to enable it to be among the forerunners in terms of innovativeness. According to the FCA statement, the market mechanism and competition provide incentives for firms to develop and adopt new innovations. Therefore a preferable and more natural course of development would be the enhancing the freedom of choice and supporting various alternatives, than a restriction of these freedoms or a monopolisation.

¹ Dnr 39/14.00.20/2011, 20.1.2011.

² Case. IV/35.691/E-4 (OJ L24/1; 30.1.1999)

In Denmark, a cartel case has come to illustrate how cartel members could use industry standards to delay innovations (Box 5.5) which is an issue where competition advocacy can promote change in favour of innovations.

Box 5.5 The Danish pre-insulated pipes cartel

In Denmark the pre-insulated pipe cartel was established in 1990 and extended to Italy and Germany during 1991.⁵⁹ The cartel was re-organised in 1994 to cover the entire common market. Cartel members engaged in market sharing, price setting, bid rigging, coordinated predation and delaying of innovation.⁶⁰

An EU-level matter, the cartel was detected following a complaint of a Swedish competitor, Powerpipe, and subsequent dawn raids of nine producers of pre-insulated pipes for district heating systems and their trade association were carried out on 28 June 1995, from which the EC found detailed evidence that the companies had conspired to share markets, fix prices and rig bids in various markets during the period 1990 – 1996, and that they had attempted to eliminate Powerpipe by organizing a boycott of suppliers.

In this case, the delaying of innovation refers to the findings in the inspection that the firms had used industry standards to delay introduction of new, cost-saving technology. Møllgaard (2006) acknowledges that this is in line with cartel members' lack of incentives to cut costs and to obstruct the Darwinian effect, according to which more efficient firms will grow and inefficient firms shrink to eventually disappear if they do not manage to become more efficient.

5.5 The complementary relationship between innovation policy and competition policy

Successful innovation policy nowadays requires effective coordination of public policies in related fields. Competition policy is one of the foremost branches of public policy to consider in this context.⁶¹ However, the official recognition of the importance of competition and markets, and thereby competition policy, does not by itself imply that the coordination between the various branches of public policy is realised.

⁵⁹ Case IV/35.691/E-4 (OJ L24/1; 30.1.1999)

⁶⁰ See Møllgaard, P. (2006)

⁶¹ This text is based on Kyläheiko, K. & Virtanen, M. (2007)

The goal of innovation policy is to set in motion a dynamic economic process in which further development of the commodities and systems of commodities takes place through collaboration among economic actors. Under these circumstances, continued innovation is possible, which would safeguard sustainable competitive advantages and a steady stream of dynamic efficiency benefits that is certain to compensate any temporary losses from static market power. As argued in this report, forceful competitive pressure should be brought to bear in the relevant economic environment to encourage the economic actors to proceed on a dynamic path of further innovative development. Clearly, a purely static optimality-inspired competition policy would stand in stark contradiction with a forward-looking innovation policy. However, a proper understanding of innovation policy and its results does inform competition policy-making in view of its intellectual foundations and challenges. But, as clearly suggested above, effective competition policy itself may actually be regarded as a prerequisite for a successful innovation policy.

Against this background, it is argued here that the coordination of innovation and competition policies have great scope to mutually reinforce each other. It should also be stressed that there is no inherent contradiction between the two policies with regard to balancing static and dynamic effects within the current competition legal framework. It is quite likely, however, that the increasing significance of innovations in business rivalry will increase the frequency of cases in which various kinds of restrictive practices that competition law deals with display both substantial static efficiency losses and the prospect of substantial dynamic efficiencies (i.e. innovations).

5.5.1 Innovation policy in the Nordic countries

In the light of the above discussion, follows below a brief country-by-country overview of innovation policy goals in the Nordic countries, with emphasis on how competition policy is dealt with within these policies.

Denmark

The Danish Government Programme explicitly emphasizes the connection between competition and innovation.⁶² It states that there is scope for more intense competition, especially in the smaller industries (construction and services, for example) that face mainly domestic demand. The programme shows strong confidence in the effects of competition, stating that: "Efficient competition forces firms to do their best and promotes a high productivity and innovation. This is why competition will be promoted across all industries".⁶³

Hands-on suggestions include the establishment of a strategy on how to foster innovation with a more efficient use of public procurement. This aims at supporting firms' incentives to innovate, for example in utilisation of modern welfare technologies. A clear strive to increase innovation capacity in the economy is also visible in the Danish Government Programme, and stated to require the identification of already strong areas and key clusters in the

⁶² " See Regeringsunderlaget (The Danish Government's Political Platform), October 2011

⁶³The Danish Government's Political Platform, p.14

economy where capacity of innovative capacity can be increased. Regarding productivity, the programme notices that the development of productivity has remained relatively weak since the mid-1990s. In order to deal with this, the government will establish a committee to investigate the reasons behind this development. It is left open as to how much emphasis is put on competition and innovation in this investigation.

Faroe Islands

In the Faroe Islands, the Coalition Paper of the newly formed government states that the government will actively encourage business innovation and entrepreneurship. Yet, it does not describe in detail how this will be achieved. The document *Vækstur og Virkseimi* (Growth and Industry), published in 2009, focuses primarily on promoting innovation and entrepreneurship through i) increasing focus on innovation and entrepreneurship in the educational system; ii) establishing a system of government funded business development and advisory services; and iii) increased focus on innovative ventures in public funding and seed money schemes. Competition policy has thus no explicit mention among these promotional activities.

Finland

In the case of Finland the Government's goal is to increase the employment rate and to bring unemployment down to the 5% level. In the list of credible and effective measures that will be launched in keeping with the Government Programme, a notion of a realignment of innovation policy is found. This is in line with the Europe 2020 strategy and the agenda of Nordic cooperation. Chapter 6 in the Government programme deals with economic, employment and innovation policies. The programme identifies the importance of innovation, but measures fostering innovation are largely connected to funding and promotion of R&D activities with subsidies and institutional arrangements aiming at intensified cooperation between science and the business sector. However, the programme notes that "The Finnish industrial policy must guarantee a competitive operating environment both domestically and in open international competition." The programme also emphasizes the need to promote efficiency in the service sector. Regarding the health care sector the Finnish government programme does, unlike the Danish programme, not emphasize competition as a separate means to this end.⁶⁴

Iceland

The collapse of the Icelandic financial system in 2008 led to a fresh perspective on the future of innovation and scientific progress in the 21st century. After the collapse, the Icelandic government saw an increased importance in the focus on education, science, technology and innovation for economic growth within the country. Now, a Science and Technology Policy Council has been installed and operates under the direction of the Prime Minister. Its role is to promote scientific research, research training in the sciences, and encourage technological

⁶⁴ "Research and product development related to social welfare and health care will be bolstered. Study into effectiveness will be increased. Research into social welfare and health care as well as research and education funding through specified government transfers will be revised as part of the service system reform. Cooperation with Tekes – the Finnish Funding Agency for Technology and Innovation will be fostered. (p.104)

progress in Iceland, for the purpose of strengthening the foundations of Iceland's culture and boosting the competitive capacity of its economy, although competition policy receives no explicit mention. The council formulates public policy on scientific research and technological development.⁶⁵ In the policy, the council stresses the importance of continuing to use innovation and scientific research to stimulate economic growth. Likewise, the council identifies the use of knowledge and the creation of new technologies as a fundamental basis for new opportunities for Icelandic industry and society.

Norway

In Norway, the government states that competition contributes to an innovative and adaptive industry structure that produces goods and services in an efficient manner and which will strengthen Norway's competitiveness internationally. Perhaps the clearest notions on the relationship between competition and innovation are found in *An innovative and sustainable Norway*,⁶⁶ which lays down the foundations for the government's innovation policy. In addition to better conditions for small and medium-sized enterprises (SMEs), strengthening of education and research, the main parts of the government's innovation policy include the goal of a more innovative public sector. In stating this, the government expresses concerns that the major challenges now faced by the public sector cannot be solved merely by increasing labour and capital resources. It is also necessary to find new innovative solutions and to organise work in a more efficient way. This refers to both product and process innovations and applies not the least to the healthcare sector.

Sweden

Clear and highly prioritised innovation policy work is mentioned as particularly important for Sweden as a trade-oriented country. The current *Swedish Innovation Strategy* which was published in October 2012 and which leads up to 2020 explicitly mentions good general framework conditions for businesses and entrepreneurship as crucial for the innovation climate and in order for Sweden to be an attractive prospect for investments, businesses and individuals and in order to facilitate structural transformation.⁶⁷ Examples of regulation and framework conditions that the Innovation Strategy emphasises as important for the innovation climate include competition legislation, state aid regulation, standards and intellectual property rights, and the design of the tax system.

5.6 Concluding remarks

A first general conclusion to be drawn from this chapter is that both economic theory and the reviewed government policies identify innovation and competition as important drivers of continued economic development and for safeguarding the competitiveness of domestic industries in a global economy. In this regard, innovation and competition policies

⁶⁵ On its homepage, www.vt.is, the council has published its policy for the years 2010 to 2012.

⁶⁶ White Paper, Report No. 7 to the Storting (2008–2009). An English short version is available at: http://www.regjeringen.no/upload/NHD/Vedlegg/brosjyrer_2008/innomeld_kortv_eng.pdf

⁶⁷ The Swedish Innovation Strategy is available through <http://www.government.se/sb/d/2025/a/202558>

complement each other, although there are some differences between the Nordic innovation policies concerning the expressed reliance on, or at least in the emphasis of, competition and competition policy as drivers for innovation.

Second, to date, innovation concerns have played a limited role in the NCAs' work and have only been voiced in a handful of cases. However, in the years to come, network industries, two-sided markets, e-markets and other dynamically competitive industries are expected to play an ever increasing role in the Nordic economies, which may result in innovation aspects being present in future cases to a greater extent than today. In this context, two things should be noted. First, there is a common willingness amongst the NCAs to, to the greatest extent possible, not hinder the development of new products and processes. Yet, in this regard, undertakings also have a responsibility to reduce the possible anticompetitive effects of innovation related cooperation and incumbent firms with an innovation related competitive advantage must be careful not to abuse their market position, like in the high-profile EU-level cases of Rambus and Microsoft mentioned in this chapter.

Third, while some may argue that there is a potential conflict within the competition legal frameworks between balancing dynamic efficiency gains from innovation which are likely to occur in the longer term, against static assessments of short-term effects on competition – like in the case of a temporary monopoly arising from a competitive innovation related advantage – it is the NCAs' shared view that the current legal framework in place offers sufficient leeway to adequately weigh-in both long and short term effects on a case by case basis. This should assure that competition policy concerns do not enter into conflict with innovation policy objectives.

Finally, within the field of competition advocacy the NCAs have a potentially important role to play in favouring innovation through the promotion of regulatory reforms that facilitate market entry and enhance competition. A both striking and illustrative example in this regard is the liberalisation of the telecommunications markets, which has lowered the price of communicating, encouraged innovation and investment in new services and networks and contributed to improved competitiveness and increased employment.

Appendix 1 - Empirical studies that support the positive competition-innovation relationship

Author(s)	Data	Measure of competition	Results
Aghion <i>et al.</i> (2005)	17 two-digit industries from 1973 to 1994	(1-Lerner index) in the industry-year	Competition discourages laggard firms from innovating, but encourages neck-and-neck firms to innovate. Together with the effect of competition on the equilibrium industry structure, these generate an inverted-U.
Carlin, Schaffer & Seabright (2004)	4,000 firms in 24 transition countries	Number of competitors	The presence of at least some rivalry in the market is important, because it ensures that the resources available to a firm from any market power are efficiently used.
Galdón-Sánchez & Schmitz (2002)	Panel data from six countries for production and transport costs of iron ore, production levels, labour productivity btw 1960s and 1990s.	Increase in the mine's probability of closure resulting from the steel market collapse.	An increase in competitive pressure faced by producers, resulting from the shrinking of the producer's market, led to large gains in the labour productivity of those producers. [Behind the increase in labour productivity lies a case of process rather than product innovation, because the technology and products did not change]
Blundell, Griffith & Van Reenen (1999)	Company accounts, share price information and a count of innovations for 340 manufacturing firms listed on the LISE for which at least nine continuous years of data were observed.	Industry concentration, import penetration.	1) The more competitive an industry is, the greater the number of innovations; 2) Increased product market competition in the industry tends to stimulate innovative activity; 3) Within industries, high market share firms commercialize more innovations; 4) High market share firms benefit most from innovations through an increase in stock valuation.
Nickell (1996)	Panel data on 670 UK manufacturing companies.	Numbers of competitors and levels of rents.	1) Market power, as captured by market share, generates reduced levels of productivity; 2) Competition, measured by increased numbers of competitors or by lower levels of rents, is associated with higher rates of total factor productivity growth.
Geroski (1990, 1994)		Industry concentration.	1) Negative correlation between concentration and innovation. 2) The positive correlation between innovation and industry concentration seems to arise because industries rich in technological opportunity also tend to be highly concentrated.

Appendix 2 – The Nordic Competition Acts and how they treat innovations

All the Nordic competition acts have sections whose contents and interpretation correspond to Article 101(3) in that the prohibition against certain anti-competitive agreements shall not apply if agreements between undertakings, decisions made by an association of undertakings or concerted practices between undertakings

- i) contribute to improving the efficiency of the production or distribution of goods or services or to promoting technical or economic progress;
- ii) provide consumers with a fair share of the resulting benefits;
- iii) do not impose on the undertakings restrictions that are not necessary to attain these objectives; and
- iv) do not afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products or services in question.

Denmark

In Denmark, innovation is acknowledged in the Competition Act in that the prohibition of agreements that restrict competition does not apply if they contribute to technical and economic development.⁶⁸ Moreover, the Danish Competition Act includes a block exemption regulation for some categories of R&D agreements; e.g. joint research and product development and common utilisation thereof. The agreements are covered by the block exemption as long as the R&D cooperation lasts, and in case of an agreement of common utilisation, for seven years from the initial marketing of the object. If the cooperating firms are competitors, the cooperation is covered by the exemption as long as the participants' combined market share does not exceed 25%.

Faroe Islands

In the Faroe Islands, neither the Faroese Act on Competition nor the preparatory documents explicitly deal with 'innovation' or 'dynamic efficiency' as independent objectives. However, Section 8 of the Competition Act echoes the paragraphs of TFEU 101(3) as mentioned above.

⁶⁸ "Danish Competition Law §8.

Finland

In Finland, the guidelines for merger control⁶⁹ refer to the connection between market power and the possible diminished incentives to innovate.⁷⁰ Moreover, these guidelines (p. 91) note that innovations can constitute technical entry barriers. Regarding dynamic efficiency, the guidelines explicitly state that consumers can benefit from dynamic efficiencies, such as new and improved products resulting from innovations in production or distribution. This is especially mentioned regarding non-horizontal mergers, as an integration of complementary activities, products, or services within a single undertaking can produce significant efficiencies, and consequently increase the ability and incentive of the merging undertakings to operate pro-competitively. More precisely, the guidelines state that:

‘[...] integration may provide the merging parties with a joint incentive to increase sales at one level in order to gain benefits at another by investing in services or product innovations, for example, or to increase efficiency by investing in new production processes or by improving coordination between production and distribution.’

Despite the notions in the Competition Act and the merger guidelines of the connection between competition and innovation, only superficial notions are found in the principles of prioritisation of cases at the FCA. This is due to the complexity and case specificity of this connection, which tends to place these cases in the so called ‘grey zone’.⁷¹

Iceland

The Icelandic Competition Act does not explicitly point out ‘innovation’ as an independent goal of the act. However, in article 15 of the Act it is stated that the Icelandic Competition Authority may grant exemptions from the prohibitive provisions in Articles 10 and 12 of the Act. These clauses prohibit agreements, resolutions and concerted practices between undertakings that restrict competition. One of the conditions for such exemptions is that the agreements or practices contribute to improving the production or distribution of goods or services, or promote technological or economic progress.

⁶⁹ Finnish Competition Authority (FCA) Guidelines on merger control. Available at:

<http://www.kilpailuvirasto.fi/tiedostot/Suuntaviivat-1-2011-Yrityskauppavaltvonta-EN.pdf>

⁷⁰ "Merger control is aimed at preventing mergers that, by increasing the market power of one or more undertakings, would be likely to give undertakings the ability to profitably increase prices, reduce output, choice, or quality of goods and services, diminish innovation, prevent the entry of new potential competitors or restrict mobility within the market, or otherwise influence the parameters of competition"

⁷¹ See p. 12 in ‘The principles of prioritisation of the FCA’, available in Finnish only at:

<http://www.kilpailuvirasto.fi/tiedostot/Suuntaviivat-4-2011-Priorisointi.pdf>. The "grey zone" refers to a situation where the analysis of the case and the theory of harm is particularly complex and involves a thorough and refined assessment.

Norway

In the Norwegian Competition Act, a number of sections relate to the effects on competition restraints or mergers on innovation.

With respect to Section 11 on abuse of dominance, it is clear that one of the forms of abuse which is prohibited is to limit production, markets or technical development to the prejudice of consumers. Finally, in Section 16 on mergers, it is stated that the Competition Authority shall intervene against a concentration if the Competition Authority finds that it will create or strengthen a significant restriction of competition, contrary to the purpose of the Act, which is (to quote:) '[...] to further competition and thereby contribute to the efficient utilisation of society's resources.'. The Norwegian Competition Authority has, according to section 50 of the patent law, the power to impose a compulsory licence. A compulsory licence is a licence issued by a public authority permitting the exploitation of patented inventions without the consent of the patent holder. A compulsory licence can according to section 47 of the patent law be imposed if this is i) necessary due to general interest and ii) the patent rights are exploited in a way that significantly restricts competition.

Sweden

The Swedish Competition Act nor its preparatory documents point out 'innovation' or 'dynamic efficiency' as independent goals. A reference according to which attention has to be paid to innovation, stems from the obvious parallels that the Act has with the Article 101(3) of TFEU.

6 Competition policy – A tool to promote efficiency in the public sector

Driven by a need to reduce costs, increase efficiency, improve quality and availability, the public sector in the Nordic countries has undergone systemic reforms over the last two decades. These reforms have gradually introduced market mechanisms and opened up for private service provision of welfare services. These developments have raised the role of competition and competition policy also in the public domain.

Against this background, this chapter aims to describe and discuss the role that competition, competition policy and the Nordic Competition Authorities (NCAs) can play to increase efficiency and effectiveness in the public sector across the Nordic countries.⁷² The role of competition with regard to public services will focus on three important domains: public procurement, the development and implementation of systems of choice, and the importance to ensure that private and public entities compete on equal terms.

Throughout the chapter, specific emphasis is put on the healthcare sector. The main reason for this choice is that the sector constitutes a significant part of public spending, and also faces constant calls to reduce costs, increase efficiency and improve quality and availability. Yet, the issues discussed – and the points concerning the role of competition – are relevant also to other parts of the public sector and public services. Moreover, the projected demographic changes discussed in previous chapters may increase the demand on public services in general and health care services in particular, making opportunities of efficiency gains in the provision of care and health care services all the more important.

6.1 Public procurement

Effective and efficient public procurement is of strategic importance to economic growth and welfare in the Nordic countries. The value of public procurement amounts to 15-20% of GDP in the Nordic countries and hence constitutes a considerable share of public expenditure. For economic reasons it is therefore vital that the public procurement system exploits the opportunities of competition. Healthy competition in public procurement reduces the contracting public entities' costs, enhances the quality of goods and services procured and makes it easier for suppliers to sell their products.⁷³ Moreover, carefully implemented, public

⁷² Efficiency refers to doing things in a right manner. Scientifically, it is defined as the output to input ratio and focuses on getting the maximum output with minimum resources. Effectiveness, on the other hand, refers to doing the right things. It constantly measures if the actual output meets the desired output. Since efficiency is all about focusing on the process, importance is given to the 'means' of doing things whereas effectiveness focuses on achieving the 'end' goal.

⁷³ Swedish Competition Authority, 2009,

procurement can boost market entry and expansion among small and medium-sized companies.

6.2 The public procurement process

A standard public procurement procedure is illustrated in Figure 6.1 below. The process begins with the identification of a need and an analysis of how this need can be satisfied. After that, the procurement is planned and advertised and exposed to competition in accordance with the procurement regulations. This is followed by the award phase. Finally, the contract period will commence, calling for continuous follow-up.

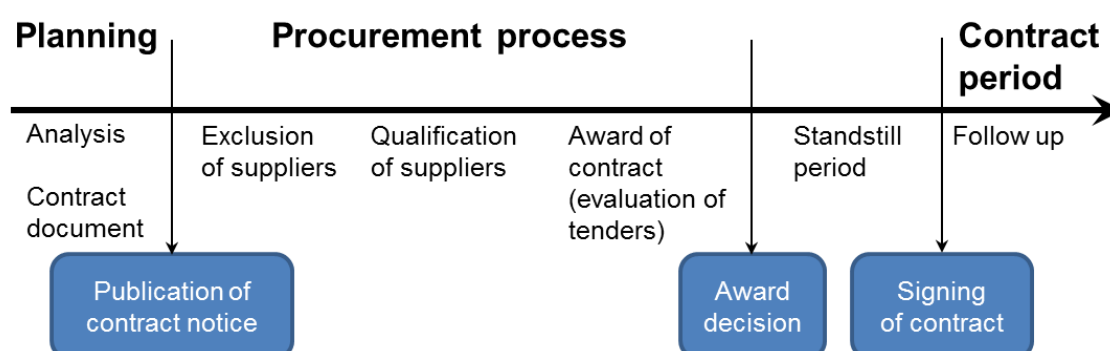


Figure 6.1 The public procurement process

Source: Swedish Competition Authority (2012)

Framework agreements are a common feature of public procurement. Framework agreements refer to agreements concluded between one or more contracting authorities and one or more suppliers, with the purpose to establish the terms for a later award of contracts during a given period of time. A framework agreement may relate to products, services or construction works.

6.2.1 The fundamental principles of public procurement

In the Nordic countries, the regulatory frameworks for the public procurement process aim at ensuring fair competition between suppliers and to provide the opportunity for them to compete on equal terms in every contract bidding process. The Nordic countries' public procurement rules are largely based on EU Directive 2004/18/EC on the coordination of procedures for the award of contracts for public works, public supply and public services. The fundamental principles of the public procurement rules are summarised in Box 6.1 below.

Box 6.1 The fundamental principles of public procurement

Non-discrimination: It is prohibited to discriminate suppliers, directly or indirectly, on grounds of nationality.

Equal treatment: All suppliers should be treated equally and be placed on an equal footing. All suppliers must, for instance, have access to the same information at the same time.

Transparency: It is an obligation for the contracting authority to provide information on the procurement procedure and how it will be conducted. In order for tenderers to be afforded the same opportunities for the submission of tenders, contract documents must be plain and clear and contain all of the requirements regarding the subject matter of the contract.

Proportionality: Requirements for the supplier and requirements in the specification must have an obvious link with and be proportionate in relation to the subject matter of the contract. The requirements imposed must be both appropriate and necessary to achieve the aim of the public procurement. If there are several alternatives, the alternative chosen should be the one which is the least intrusive or onerous for the suppliers.

Mutual recognition: Diplomas and certificates issued by authorities authorised by a Member State shall also apply in other EU/EEA countries.

6.2.2 Safeguarding competition in public procurement

Competition policy has a general role to promote competition in the marketplace. As a general comment, it is important that the public sector procurements are tendered in a way that supports competition. However, this consideration must be balanced against the goal of reaching efficient results. With regard to public procurement, some features of the procurement process are of particular importance.

First, considering that the public sector is a large buyer, it has the potential to affect the competitive market climate through its procurement decisions. In this regard, the NCAs' focus is on guidance to public procurers on how to design and implement procurement strategies and tenders to promote competition in the markets for public services and ensure that value for money is achieved also in the long run. However, through their size and possibility to exercise buyer power, public procurement tenders risk to favour larger firms which can reap the benefits of economies of scale to the disadvantage of SMEs. While this may be tempting in the short run, this risks to reduce competition in the long run. The same applies to joint procurement, aggregating and bundling of contracts and over-complex procurement processes. By carefully designing the procurement process, and assessing the short and long term effects of joint procurement in the relevant market, public purchasers can achieve efficient procurement without reducing competition in the short run, thus nourishing a competitive market structure also in the longer term.

Second, and highly important, due to the transparency requirements and the relative inflexibility of the public procurement process, it is widely recognised that public procurement is susceptible to collusive behaviour among bidding firms. Most severe are bid-rigging cartels which eliminate competition and counteract the purpose of public procurement. The risk for collusive behaviour is particularly high in markets characterised by high barriers to entry and a large degree of transparency, and where there are relatively few potential bidders who encounter each other regularly over time. Illustrative examples are the asphalt cartels in Finland, Sweden and Norway, where the leading companies in the road paving sector agreed in advance on the tenders each would submit in a large number of tendering procedures by central government, municipalities and the private sector. The companies divided the markets between them and agreed on prices. The government, the municipal authorities and consequently the taxpayers incurred substantial losses as a result of the cartels' collaboration to keep price levels high.

Fighting collusion in public tenders is a crucial task and future challenge for the NCAs, not the least as bid-rigging is difficult to detect. Effective law enforcement is of course crucial to deter bid-rigging, but advocacy activities aimed at promoting both effectiveness and efficiency of public procurement, as well as cartel awareness are equally important. The latter includes proactive activities like informing public procurement officials and potential bidding firms about the competition law framework and the benefits of competition. For example, some of the NCAs have issued guidelines on how to detect bid rigging. In general, the guidelines aim at lowering the incentives to form cartels by:

- Helping procurement officials reduce the risks of bid rigging through careful design of the procurement process
- Assisting procurement officials to detect and report suspected bid-rigging conspiracies during the procurement process
- Making the Competition Authority a trusted partner in detecting and prosecuting competition law infringements

As an example, the Swedish Competition Authority has issued a checklist that sets out twelve signs indicative of bid-rigging cartels, summarised in Box 6.2 below. The Swedish Competition Authority organises outreach activities for procurement officials which include information about the twelve signs of bid-rigging cartels and also emphasise the importance of people with a public procurement purchasing function to tip-off suspected bid-rigging to the authority. Following these outreach activities, the authority has received some tip-offs about bid-rigging cartels in public procurement which have resulted in bid-rigging being detected and participating firms being fined.

The NCAs may also need to intensify the advocacy initiatives to promote and safeguard competition in public procurement. Examples of this may be to promote policies to lower barriers to entry, reduce the ability of bidding cartels to detect and punish deviation from the collusive agreement, and policies which enhance enforcement of the legal framework governing public procurement.

Box 6.2 Twelve signs of bid-rigging cartels

1. **Suspiciously high prices** – May indicate ‘cover bidding’, meaning that companies submit tenders for the sake of appearance only, in the knowledge that another company will submit a more competitive tender.
2. **Prices that are suspiciously inconsistent** - A company submitting tenders that are significantly higher in some tendering procedures than in others, without any obvious reason such as differences in costs, may suggest it is involved in a bid-rigging cartel.
3. **Suspiciously big differences in prices** - If the difference between the winning tender and the other tenders is inexplicably large, it may suggest that some companies in the sector have formed a bid-rigging cartel to keep price levels up.
4. **Suspiciously similar prices** - If several companies have submitted tenders with identical or suspiciously similar prices, it may indicate that they have agreed to share the contract.
5. **Suspected boycott** - If no tenders are received, there may be a coordinated boycott with the purpose of influencing the conditions of the contract. The aim of a coordinated boycott may, for example, be to divide a certain market between the members of a cartel.
6. **Suspiciously few tenders** - May indicate the existence of a market-sharing cartel.
7. **Suspiciously similar tenders** - If tenders refer to industry agreements that affect the price, the companies may have agreed to apply, for example, common price lists, delayed payment fees or other sales conditions for the sector. Such agreements are generally illegal.
8. **Suspicious patterns** - If the same company wins the contract every time it is renewed, there may be a market sharing agreement between the companies in the market. Another way in which companies illegally divide the market between themselves is when they take turns to submit the lowest tender.
9. **Suspicious subcontracting arrangements** - If the company that won the contract assigns or subcontracts part of the contract to a competitor that submitted a higher tender in the same procedure, this may suggest a bid-rigging cartel. In this case, the companies may have agreed that the winner will compensate its competitors by engaging them as subcontractors.
10. **Suspiciously careless tenders** - If the winning tender is the only one that has been compiled in a thorough and detailed way, while the others have been drawn up more carelessly, it may suggest a bid-rigging cartel.
11. **Suspicious wording** - Similar oddities in several different tenders or in the questions that the companies ask the contracting authority may suggest that the companies are colluding, like for example identical wording, identical errors in calculations or using the same notepaper and standard forms.
12. **Suspected joint tenders** - A joint tender submitted by more companies than necessary to perform the assignment may be illegal.

The NCAs have successfully detected and fined firms for bid-rigging and other collusive practices in public tenders in a number of cases, three of which that have connection to the healthcare sector are described in Boxes 6.3 and 6.4 below.

Box 6.3 Bid-rigging in the Danish market for laboratory testing services

In February 2007, two regional state-owned environmental centres in Denmark – Miljøcenter Roskilde and Miljøcenter Nykøbing Falster – called for offers in a tender for the supply of laboratory testing services, but the offers received raised concerns of collusion between two undertakings: Miljølaboratoriet I/S and Milana A/S. The Danish Competition Authority argued that the two firms had coordinated their prices and divided the contracts between them, where Milana submitted a bid for the Nykøbing Falster tender and Miljølaboratoriet for the one in Roskilde. The environmental centres received no other quotes which meant that the prices got significantly higher than expected, and the two centres had to reduce their activities as a consequence.

The case was brought before the District Court by the Public Prosecutor for Serious Economic Crime, and in March 2011 both laboratories and their directors were found to have infringed the Competition Act. Because the two laboratories had low market shares and had gained limited profits from their unlawful cooperation, the District Court set the fines to DKK 500 000 for each laboratory and in line with case law DKK 25 000 for each company director, although the District Court emphasised that the infringement did constitute a serious breach of the Competition Act.

Source: The Danish Competition and Consumer Authority

Box 6.4 Collusion in patient transport tenders in Norway

In Norway, about NOK 2 billion is spent annually on patient transport. Most of this is related to taxi journeys. The Regional Health Authorities (RHAs) are responsible for the procurement of patient transport and use competitive tender procedures to stimulate competition and thus reduce their patient transport expenditure, making more funds available for patient treatment. Both the licensing authorities (the county administrations) and the purchasers (RHAs) are able to influence the degree of competition in tenders for patient transport. The county administrations may, for example, promote competition by allowing more taxi central dispatchers in an area and by increasing the number of taxi licences. The RHAs can influence the competitive situation through how they formulate the call for a tender and by acting as vigilant purchasers who keep an eye out for signs of illegal collusive tendering, like in the two cases summarised below.

Case 1. In September 2006 Taxi Midt-Norge AS – a countywide dispatch service that organises taxi licence holders in the county of Nord-Trøndelag – submitted a tender on behalf of all the taxi dispatchers and taxi licence holders in a tender for patient transport advertised by the Central Norway Regional Health Authority (CNRHA) in Nord-Trøndelag. The CNRHA reacted to this practice and submitted a complaint about the alleged bid-rigging to the Norwegian Competition Authority. After investigating the case, the Competition Authority concluded that the bid constituted an illegal collusive tender in breach of Section 10 of the Competition Act. In March 2009 Taxi Midt-Norge was fined NOK 300 000 for violation of the Act.

In 2008, the CNRHA conducted a new call for tenders with a view to entering into new contracts and having new suppliers from 1 January 2009. However, the round was cancelled because the bids submitted would have resulted in considerably higher costs than budgeted for patient transport in Nord-Trøndelag. The CNRHA therefore engaged in direct negotiations with several potential providers in the market leading to awarding three providers with contracts for patient transport in various parts of Nord-Trøndelag during the period 1 January 2009 to 31 December 2011, with the option of a 1-year extension to the contract.

According to the Nord-Trøndelag Health Trust the savings achieved through competition for patient transport contracts amount to approximately NOK 2 million per year and the CNRHA has stated that the Competition Authority's notification of its intervention against Taxi Midt-Norge played an important part in gaining acceptance for the outcome of their subsequent negotiations with the potential providers.

Case 2. The second case dates from 2010. In a tender for patient transport advertised by the Oslo University Hospital, two competing taxi dispatchers, Follo Taxisentral and Ski Taxi, collaborated through a jointly-owned company, Ski Follo Taxidrift AS, on submitting bids in two tenders worth approximately NOK 20 million and NOK 30 million respectively. In the first round, Oslo University Hospital received only one offer and decided to cancel the tender due to lack of competition. In the subsequent call for bids, the two companies also filed a joint bid through the joint company. In this round however, there were two other competing bidders.

The Norwegian Competition Authority concluded that Follo Taxisentral and Ski Taxi are competitors in the taxi market in Follo and that there was nothing in the tender documents from Oslo University which prevented companies to submit individual bids. When the two companies instead chose to cooperate, they acted in violation of paragraph 10 of the Competition Act. In their decision, the Norwegian Competition Authority fined Ski Follo Taxidrift NOK 2.2 million, Follo Taxisentral NOK 400 000 and Ski Taxi was fined NOK 250 000. This case was brought before the District Court by the parties in 2012 but was not settled by the time of issuing of this report.

Source: The Norwegian Competition Authority

6.3 Competition and public procurement in the Nordic healthcare sector

Against the background of constant calls to increase efficiency and improve quality and availability, together with the projected demographic changes discussed in previous chapters, the demands on public services in general and health care services in particular are likely to increase. This makes efficiency gains in the provision of care and health care services crucial to maintain the provision of high quality welfare services in the future.

All Nordic healthcare systems build on central principles of universalism and equity, and although there are individual differences between the different countries' systems, they share some common characteristics such as equal access to

health services for all, high levels of tax-based financing, public ownership of hospitals and decentralised systems for health care service provision.⁷⁴

To put health expenditure in the Nordic countries in an economic perspective, as Figure 6.2 below shows, health expenditure corresponds to around roughly 10% of GDP in the Nordic countries and public health expenditure far outweighs private health expenditures in all countries.

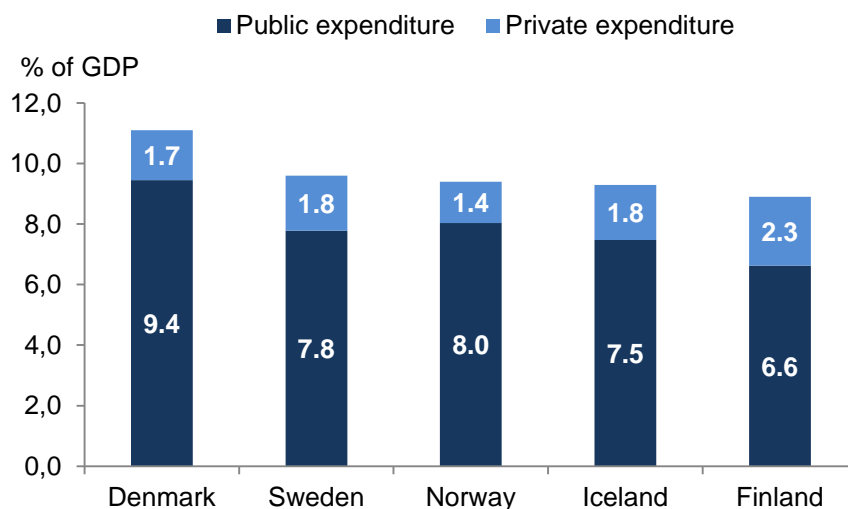


Figure 6.2 Health expenditure as share of GDP in 2010

Source: OECD Health Data 2012

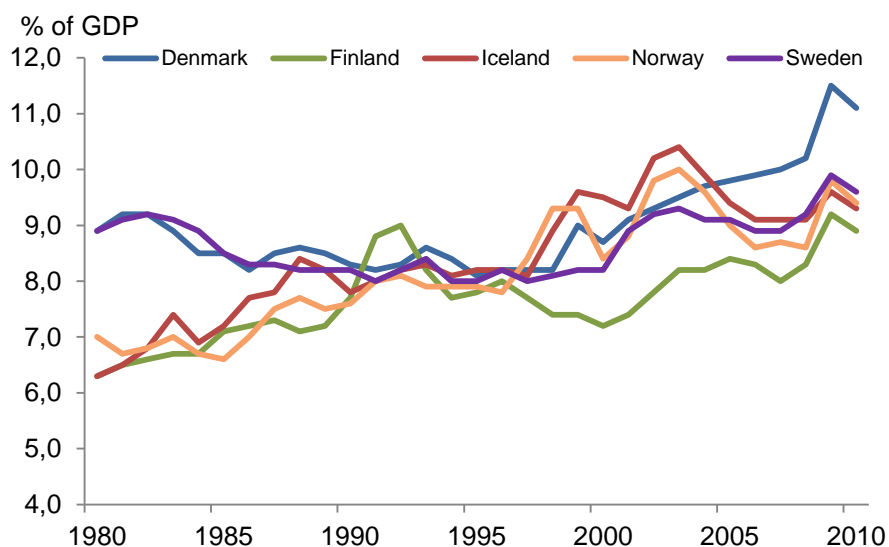


Figure 6.3 Health expenditure as share of GDP 1980-2010

Source: OECD Health Data 2012

⁷⁴ Kristiansen I.S. and Pedersen, K.M., (2000)

Seen over time, health expenditure as a share of GDP has risen, albeit slowly, as illustrated by Figure 6.3 above. If the development where an ageing but also wealthier population whose health status is changing due to for example lifestyle changes, demands more health care services, health care expenditure is projected to be in excess of 20% of GDP in most OECD countries in year 2050.⁷⁵ Inevitably, such a development would pose a major challenge to the financing of the healthcare sector in its current scope and design and would most likely call for some reform of the system in addition to the reforms that the Nordic countries have experienced over the past decades.

As part of the systemic reforms of the healthcare sector to date, the Nordic countries now make use of public procurement of in terms of both goods and services, like procurement of vaccines and patient transport, in order to make the most out of the available resources. One example of how public procurement can help to lower the cost for healthcare service provision is presented in Box 6.5 below.

Box 6.5 Procurement of medical laboratory services reduces cost

As part of the Swedish Competition Authority's mandate to supervise the law on system of choice, the Authority performed a survey of competition in medical laboratory services. The mapping shows that the prices for medical laboratory services are significantly lower in the case where these have been subject to a competitive tendering process. For example, the cost for a so-called CRP-test, (indicative of inflammatory activity) varied from SEK 33.57 in the most expensive county council Örebro, to SEK 4.31 in Stockholm county council where a procurement of medical laboratory services had been made.

Following the survey, the Authority concludes that tendering through procurement is a key factor to lower prices and clear quality demands for these services. Moreover, the Authority recommended that county councils consider to customize laboratories also to primary care needs - not only hospital care, and pointed out that county councils demands on IT-systems affect the ability of laboratories to establish themselves in the market which may affect the competitive climate in the market. The Authority also underlined the importance of creating competition neutrality between different laboratories through for example the same accreditation requirements for all.

Source: Swedish Competition Authority (2012).

6.3.1 Buyer power in public procurement

As briefly mentioned in Section 6.2.2 above, buyer power is an aspect of public procurement that may impact on the conditions for competition in a market. It is commonplace for public procurers to cooperate in their procurement activities in order to achieve rationalization gains as well as to increase their buyer power. For instance in Norway, the health enterprises have a drug procurement cooperation, *Legemiddelinnkjøps-samarbeidet* (LIS). The purpose of LIS is to form the basis for

⁷⁵McKinsey & Co (2008).

agreements on purchasing and delivering of pharmaceuticals on the instructions of the state owned hospitals, and thereby reduce the costs.

Joint procurement, particularly when resulting in extensive framework agreements, tend to impede the participation of SMEs, does not necessarily generate value for money for the authorities, and risks to provide the cooperating authorities with a 'one-size-fits-all' arrangement that does not adequately correspond to the demands, expectations and characteristics of any of the authorities. These concerns stem from academic research as well as from extensive contacts with both economic operators and contracting authorities.⁷⁶

For instance, the Swedish Competition Authority has on numerous occasions expressed concern with regard to joint procurement. Considering that aggregate procurement is increasingly used, notably through the new form of central purchasing bodies allowed in the Swedish Procurement Act of 2007, the Swedish Competition Authority has found reason for increased concern in this respect.

The general conclusion stemming from these concerns are that framework agreements should be used with caution and that agreements should be designed with a careful assessment of the relevant market and the participation of SMEs in mind. Moreover, it should be stressed that the concerns have not arisen from the procurement rules themselves, but rather from the application of the rules to individual procurements by contracting authorities.

6.3.2 Public procurement from voluntary or not-for-profit organisations

Public sector services are not always provided by public institutions or private profit-maximising entities. In some cases, voluntary and not-for-profit organisations also act in this 'market'; on a negotiated basis, or through tenders involving a limited or specific group of tenderers, or with full competition from private for-profit providers. The rules and regulations regulating procurement from voluntary or not-for-profit entities, or providing exceptions from the procurement rules, differ between the Nordic countries.

In Sweden, there are no specific rules or regulations that apply to procurement from voluntary or not-for-profit organisations. In Norway, 'hospitals owned and operated by non-governmental organisations shall be ensured good terms through agreements with the public authorities'.⁷⁷ Moreover, the Government Policy Declaration on 'Competition policy, public support and public procurement' at the Ministry website also includes a commitment to community solutions and public control instead of compulsory competitive tendering in important welfare fields like education, health and care services, reflecting the political platform of the

⁷⁶ This includes research funded by the Swedish Competition Authority, the European Commission, interest groups, public authorities and other stakeholders.

⁷⁷ The Norwegian Government's political platform 2005

current Norwegian government as laid down in the so-called 'Soria Moria Declaration'.⁷⁸ Also note that according to the regulations on public procurement (Section 2-1 (3)), procurement of health and social services can be reserved for voluntary and not-for-profit organisations.

In Finland, non-profit organizations are allowed to participate in public tenders, but there are however some regulations related to procurement from such organizations that the contracting entity is required to take into account worth mentioning. Section 64 of the Act on Public Contracts (348/2007) concerns procurement from units in connection with the procuring entity. It stipulates that any subsidies received should be taken into account when comparing the actual prices of the tenders received. According to Section 63 of the Act the procurer can discard tenders containing exceptionally low prices or if the bidder has received unlawful state aid. Before discarding such bids, the procurer has to provide the bidder sufficient time to show that the state aid concerned has been granted on legitimate grounds.

6.3.3 Innovation procurement – a compelling opportunity for Nordic health care provision

To date, public procurement is chiefly applied to procurement of standard products and solutions. However, the sustainability of the Nordic countries' public healthcare systems will, in large part, depend on innovations that can enhance the efficiency, safety and quality of health care services. These demands extend also outside the Nordic borders where a global market demands innovative health care solutions which will help to reduce costs and increase health care output. In many areas the Nordic countries have a health industry which is highly competitive on a global scale, notably in the fields of pharmaceuticals, biotechnology and medical technology. This means that not only do these industries have a role to play in increasing cost-effectiveness within the Nordic healthcare systems, but they may also contribute to economic growth in their home countries through exporting these solutions.

Because of their considerable purchasing power, public entities are often considered to have the power not only to promote the provision of cost-efficient products and services, but also to promote the development of sustainable technologies, as well as process and product innovation both in the public and private sector.⁷⁹ In this regard, public procurement can work as a means to stimulate continuous innovation and increased productivity in both the public and

⁷⁸ A version in English of the Soria Moria Declaration is available at <http://arkiv.sv.no/partiet/english/dbaFile127882.pdf> (Accessed 29 June 2012)

⁷⁹ SOU (Swedish Government Official Reports) (2010) and Nordic Competition Authorities (2010)

the private sector. Innovation procurement has been advocated as an important means to how the Nordic countries can become more innovative.⁸⁰

The concept of innovation procurement covers the three main components of innovation procurement:⁸¹

- *Procurement of innovations* – Procurement of prior unknown solutions to a defined problem or the need for a solution that is not yet established on any market or seldom used in the country. The strategic choice to develop an innovation is made by the procurer.
- *Innovation-friendly procurement* – The contracting organisation opens up the procurement process to take advantage of suppliers' ideas about innovation, meaning that the strategic choice to develop an innovation is made by the supplier. In principle, all public procurement processes should be innovation-friendly in the sense that innovative solutions should not be excluded or disadvantaged.
- *Innovative procurement* – The procurement process is performed in an innovative manner, in the sense that the process is organised in a new or improved way.⁸²

Even if several studies have emphasized the potential for innovation procurement, it still plays a relatively modest role in the Nordic countries. Several studies indicate that procuring entities consider innovation procurement to be much more complicated than traditional procurement processes.⁸³ As in all types of public procurement, the procuring entities must follow the regulatory procurement framework. However, the main barriers to innovation procurement do not seem to be of a legal character, but often appear to be related to other factors, such as the organisation of the public procurement processes, a lack of legal and technological competencies at the procuring entities, risk aversion among procuring entities, and not least the difficulty of estimating life cycle cost for different types of equipment and systems.⁸⁴

In order to develop innovation procurement into a tool for innovation in the public and private sector, it is important to encourage leadership, vision and special expertise on part of the public procurement officers and ensure that knowledge and best practices are passed on to suppliers and other stakeholders. A project initiated by the Nordic Council, 'Procurement and Innovation within the Health Sector', described in Box 6.6 below, is one example of an initiative to promote the use of

⁸⁰ Nordic Council of Ministers (2011b)

⁸¹ SOU (2010), Vinnova (2012)

⁸² Nordic Council of Ministers (2011b)

⁸³ See for example SOU (2010) (2011b), Rolfstam (2010)

⁸⁴ Ibid.

innovation procurement. Two Swedish innovation procurement initiatives, described in Box 6.7, constitute other examples regarding this issue.

Box 6.6 Nordic cooperation on the development of Innovation Procurement

In October 2010, the Nordic Ministers of Industry and Trade decided on a new industrial and innovation policy cooperation programme focusing on green growth. The program was launched 2011 and will be evaluated 2013 and includes six joint Nordic projects, one of which is labelled 'Public Procurement and Innovation within the Health Sector', organised by Nordic Innovation within the Nordic Council together with the Nordic countries. The aim of the project is to improve public health services through competence building and collaboration, and to develop the supplier industry through closer contact with public procurers. The main target group for the project is organisations that engage in public procurement within the health sector, meaning hospitals, regions/county councils and municipalities. The idea is that by raising awareness and knowledge of the potential of innovation procurement at the management level, the Nordic health sector could become an even more innovative and demanding procurer, thereby increasing both the effectiveness and efficiency in the provision of health care services. A longer term objective is to make the Nordic region a global frontrunner in the field of innovation procurement in the health sector.

The project is made up of two main themes. The first theme is about creating a Nordic competence network for innovation and procurement within the health sector, where experiences, methods and best practices can be shared and disseminated to a wider audience – focusing on procurement projects of common cross-border interest. The second theme is a Nordic project for market knowledge and dialogue between procurers and suppliers, which is basically about creating a better information flow, raising awareness and encouraging cross-border learning and partnerships.

Source: Nordic Council of Ministers (2012) *Nordic Innovation*, <http://nordicinnovation.org>.

Box 6.7 Innovation Procurement Initiatives in Sweden

Innovation capacity in the public sector is one of Swedish Innovation Agency VINNOVA's strategic areas. VINNOVA supports the development of an innovation-oriented public sector by stimulating and enabling investment in research and innovation activities which clearly address the public sector's capacity to promote innovation. VINNOVA runs two programmes within this area: 'Innovation procurement' aiming to increase and extend the development of innovation procurement, chiefly in the public sector, and 'Innovation Channels within the Health Service' which will support the development of ideas into needs-driven innovations from the health service within county councils and municipalities. The aim is to boost innovation in both the Swedish public and private sector and is partly inspired by the fact that several of Sweden's currently largest companies were built up around major public contracts in the mid-20th century. These public innovation contracts brought about strategic alliances between industry and society which, in some cases, lasted for decades. Such partnerships are no longer possible due, inter alia, to modern procurement directives and state aid principles.

In April 2012, the Swedish Government assigned three governmental agencies: VINNOVA, The Swedish Transport Administration and the Swedish Energy Agency, the task to work actively with innovation procurement with the objective to strengthen Swedish innovativeness further.

The initiative forms part of the Swedish government's innovation strategy and covers SEK 30 million until 2014. The idea is that VINNOVA and the Swedish Energy Agency together with the relevant stakeholders shall work with innovation procurement that can drive new and improved environmental solutions in the relevant areas forward, of which transport is one. The Swedish Transport Administration is a major player in public procurement and their mission is to analyse how they can use innovation procurement to stimulate the development of more efficient processes and new technologies and also put these solutions into practice. Another aim with this initiative is to add valuable practical experience to the field of innovation procurement, which may also benefit other public entities.

Source: VINNOVA (www.vinnova.se) and the Swedish Ministry of Enterprise, Energy and Communications, press release 19 April 2012 'Ökad innovationsupphandling för framtidens samhällslösningar och affärsidéer'" ("Increased Innovation Procurement for future social solutions and business ideas")

6.4 Systems of Choice in the Public Sector

As previously mentioned, all Nordic countries have systems of choice in the public sector in place and under development. Systems of choice equip public institutions with a tool to use in situations where they wish to expose in-house provided services to competition by transferring the choice of provider to the user.

The opportunity for individuals to exercise choice, makes publicly funded services more responsive to the needs and demands of the individual user. It can also lead to better opportunities for private companies and NGOs to operate and develop by being able to compete in a simpler way with public welfare providers' in-house services. Furthermore, systems of choice are considered to favour diversity and provide greater opportunities for small businesses, value-based activities and cooperatives of various kinds to enter the market.

6.4.1 Nordic examples of systems of choice from the social and healthcare sectors

While systems of choice in areas such as child care and schooling have a longer tradition in the Nordic countries, systems of choice have also been implemented in social and health care services like job centre services, care for elderly and disabled, home care services, as well as for primary and certain specialist care. In the healthcare sector, the main purpose of introducing a system of patient choice is to increase freedom of choice for users, promote quality, accessibility and efficiency by encouraging competition and diversity among social care and health care providers. Brief descriptions of systems of choice in the Finnish, Norwegian, Swedish and Danish healthcare systems are presented below.

Finland

The Act on service vouchers of social care and health care entered into force in 2009, extending to almost all social and health care services in Finland. The Finnish Competition Authority had long advocated for the reform, one of the reasons being that service vouchers spur providers to develop their activities in accordance with consumers' preferences. At the same time, they enable competition born out of the alternative nature of production methods and the creation of a functional service market. Vouchers are also considered as a means to reduce waiting lists and meet immediate needs for care. Service vouchers are however only suitable for some services and works the best with standardised procedures with highly predictable treatment processes. For example, the Hospital District of Helsinki and Uusimaa which is the largest provider of specialised health care services in Finland, uses service vouchers for cataract operations and glaucoma treatment. Some orthopaedic operations and hand surgery may also be subject to service voucher use. Common for all these is that they have predictable treatment processes.

In January 2011, the Finnish innovation fund Sitra performed a survey of the use of service vouchers at the municipality level. According to the survey approximately one third of all the municipalities used service vouchers in providing 338 different social and health care services.

Norway

Since 2001 Norwegian patients are free to choose the hospital at which to receive scheduled treatment, specialist consultations, and/or diagnostic services.⁸⁵ The patient's travelling costs, and costs for food and accommodation, are reimbursed by the regional health authority (RHA) and the patients only pays a limited amount themselves. To facilitate patients' rights to choose where to receive treatment, since 2003 the Norwegian Ministry of Health provides an information service on the Internet called 'Free Hospital Choice Norway' which offers patients, next of kin and clinical personnel up to date quality information concerning patient's rights, waiting times and quality information about the different hospitals, as well as other relevant information. This enables patients to make better informed decisions regarding which hospital/institution to choose for different types of treatment. The patients may ask their GP to assist with their choice, book treatment themselves through an online service, or call a toll free telephone number. In addition to the internet service, an existing telephone service was improved to support the peoples' right of free choice of hospital. The information covers all public and private hospitals that have an agreement with the RHAs to perform selected treatments. One purpose of this service is to contribute to a better utilization of the capacity of treatment within the Norwegian health care services, and to increase competition among state-run hospitals.

⁸⁵ See <http://www.frittisyrkehusvalg.no/english> for more information.

In general, promoting consumer ability to choose is important for making markets work more efficiently and reduce waiting times, and there is evidence that this has been the case in Norway.⁸⁶ For this to work well, it is the Norwegian Competition Authority advocates that patients must have good, reliable, comparable and easily accessible information on relevant aspects of the different options available. However, in 2011 the Norwegian Board of Technology presented a report to the Norwegian Parliament on free patient choice.⁸⁷ One conclusion was that the information available to patients was highly inadequate. This finding was later confirmed by the Office of the Auditor General's investigation, which found that patients receive inadequate information from hospitals about the possibility of shortening waiting times by changing hospitals – despite the fact that many hospitals have long waiting times for many types of treatment. Another finding from the investigation was that the free choice of hospital is unequally exercised by patients, and for this reason, The Office of the Auditor General's recommended that the Ministry of Health and Care Services ensure that GPs and hospitals make more active use of the free choice of hospital system in order to achieve health policy goals. The Norwegian Board of Technology also runs a project, 'Patient 2.0' which will look into what kind of information patients need, and how this information can be presented in a best possible way online. Better guidance can contribute to the provisions of the Patients' Rights Act concerning free hospital choice combining the goals of increased patient participation in decision-making and equal access to health services. At the same time, increased utilization of the free choice of hospital system can help to improve utilisation of the specialist health service's capacity.

Sweden

The Act on System of Choice in the Public Sector (2008:962) entered into force in 2009 and applies when a contracting authority opens parts of its activities for competition by establishing a system of choice for the services covered by the system. In this sense, the Act on System of Choice is thereby an alternative to the Public Procurement Act (2007:1091). The Swedish Competition Authority has been assigned to monitor the system of choice reform from the perspective of competition and in order to prevent infringements, the Swedish Competition Authority also gives general guidance and information concerning the Act. In Sweden, the principles for systems of choice are basically the same as for public procurement (Box 6.1, p. 108) which means that service providers within the contracting authority's own organisation and the private suppliers in the system of

⁸⁶ In its OECD submission in 2005, the Norwegian Competition Authority confirmed that the freedom of choice reduces the waiting time for each patient that uses this right. A recent report from the Office of the Auditor General's, submitted to the Norwegian Parliament fall 2011, confirms that patients who make use of the free choice of hospital scheme experience shorter waiting times. (Document 3:3 (2011-2012) 'The Office of the Auditor General's investigation into the free choice of hospital system '. A summary in English is available at <http://www.riksrevisjonen.no/en/Formedia/PressReleases/Pages/freechoice.aspx>). See also 'Four Essays on Health Care Reforms in Norway ', PhD dissertation from the University of Bergen (January 2012) for evidence that free choice of hospital has increased patient mobility.

⁸⁷ The Norwegian Board of Technology is an independent body for technology assessment established by the Norwegian Government in 1999, following an initiative by the Norwegian Parliament (Stortinget).

choice must be treated equally, and that discriminatory or disproportional requirements for suppliers to enter the system are not allowed

In establishing a system of choice the contracting authority transfers the possibility to choose a service provider within the system to the users of the services. The users may, in many cases, choose between private suppliers with whom the contracting authority has concluded a contract within the system of choice, or service providers within the contracting authority's own organisation. The level of payment given to the suppliers is set by the contracting authority and stated in the contract documents, and is depending on the number of users choosing the particular supplier as their service provider. According to the Act, contracting authorities are county councils, with regards to primary care, and municipalities who have decided to establish systems of choice in health care and social services. According to the Health and Medical Service Act, since 1 January 2010 it is mandatory for county councils to introduce a healthcare choice system within their primary health care service, which mainly concerns medical clinics.

The Swedish Competition Authority has carried out a number of evaluations of different aspects of the reform. The overall conclusion from these is that the reform has proved successful in increasing the number of suppliers and thus widened patient choice. The reform has also had positive effects on SMEs, as nearly all start-ups are SMEs of which the majority is owned and/or run by female entrepreneurs. Moreover, there has been a significant increase in the opportunities to choose health care clinic and accessibility has improved, which manifests through shorter distances to access clinics in many less populated areas. In the first year following the introduction of the reform the number of health care clinics increased by 223, or 23 %. Also, there had been an increase in the number of privately run alternatives to the county councils' public health care clinics, increasing from 28% in 2009 to 37% in 2010.⁸⁸

Denmark

Danish citizens have a right to free choice within many areas of welfare services. One of the largest areas where free choice has been introduced is in the choice of hospitals. Free choice of hospitals was implemented in Denmark in 2002. Day care and elderly care represent two other large areas where free choice has been introduced in Denmark.

In the areas of free choice, citizens may choose between services provided by different public providers typically within the municipality. In some cases the choice includes services provided by private providers or public providers in other municipalities. In some areas subsidies may be transferred between municipalities.

⁸⁸ Swedish Competition Authority , (2010)

In some areas of free choice the services covered are fully publicly financed whereas in other areas a user fee coexists. User fees are typically fixed by the municipality. As the service is either completely publicly financed or fixed to a certain price no matter which operator is chosen, the Danish system of free choice creates no price competition thus making service quality the prime driver of competition.

As the markets on which free choice is established often produce complex services, consumers may find it difficult to assess differences across providers. Furthermore, waiting lists exist within several of the areas of free choice thus limiting effective free choice between different providers. It is important to keep these barriers in mind to achieve the benefits the system of choice might deliver.

The systems of free choice are enforced by various Danish Authorities. The Danish Competition and Consumer Authority has a law enforcement capacity in the area of free choice of care for the elderly with regards to the prices that the municipalities set. Furthermore, the Danish Competition and Consumer Authority regulates the markets on which free choice is established in regard to the general Danish regulation of competition.

6.4.2 Systems of Choice in the Public Sector – new challenges

Despite the reforms of the Nordic healthcare and social sector which have opened up for competition and welfare service provision by private firms, public entities are still dominating. However, against the background of increased introduction of systems of choice for a wider spectrum of welfare services it is reasonable to assume that an ever increasing part of public sector services will be opened for competition in the future and that the contribution by private players will increase. The safeguarding of competition neutrality - public and private undertakings competing on a level playing field – will be paramount to avoid distortions to competition. One of the main challenges is to design compensation systems which do not distort competition between public and private undertakings and secure that provision of services is based on the correct cost basis.

6.5 Increased interaction and competition between private and public undertakings may enhance competition concerns

The market-based reforms implemented in the Nordic countries have changed not only the way how public services are developed and provided but have also created new markets in which private undertakings and public entities both interact and compete. While these reforms are expected to lead to increased cost-effectiveness and increased availability and quality, one has to be aware that competition concerns may arise since public activities and intervention in markets

also inhibits a risk to distort competition, as indicated above. Possible sources of competition distortions from public sector activities can be:⁸⁹

- Market failures that arise from governance and regulatory arrangements, including for example regulations, taxation, subsidies, cross-subsidies, and cost of capital requirements
- Legal or practical exemptions from competition law
- Subsidies from government to fund public service obligations, if used to cross-subsidise commercial activities
- Market distortions caused by lax public procurement rules where public sector providers are allowed to set prices below full cost

Cross-subsidisation is an issue which can easily arise when one entity fulfils public functions such as universal service provision, financed through public funding and a related entity competes in a market place if these two units are linked by ownership. Thus, market distortions can arise if the entity competing in the market gets a financial advantage over competing private providers.

In such situations, the solution is either to prohibit a public entity from offering products in competition with private enterprises, introduce some accounting-type measures to ensure that there is no cross-subsidisation, and/or to organisationally break the link between the two entities. Opening the balance sheet for publicly-owned entities can affect their basic cost structure and flow through to the prices they can charge. If assets are undervalued, and if debt and equity positions do not conform to private sector norms, the publicly-owned entity has an advantage over private sector rivals. It is important to assign asset values at the market price. In practice however, it is difficult to evaluate whether this is actually being done.

To add to the difficulties, accounting systems differ between the public and private sectors and comparable private sector firms may not exist at the outset. In Sweden, the Swedish Competition Authority's experience shows that achieving competitive neutrality between public and private actors is no easy matter and in response to the competition issues that had emerged because of the increased public-private interaction, the Swedish Parliament passed an amendment to the Swedish Competition Act to prevent unfair competition between public entities and private undertakings. The new rules for anti-competitive public sales activities came into effect in 2010, and are further described in Box 6.8 below.

⁸⁹ When discussing competitive neutrality related to general or local government enterprises, we most often are concerned with structural and statutory advantages enjoyed by public undertakings. It should be mentioned however, that the principle is just as important and applicable to any disadvantages suffered by government enterprises.

Box 6.8 **Anti-competitive sales activities of public entities**

In order to address the competition issues that arise when the public sector competes with private undertakings on the open market, an amendment to the Swedish Competition Act went into force in January 2010. According to the new rule, the Swedish Competition Authority has recourse to Stockholm City Court, which refers as a rule all competition cases, to order to request the prohibition of sales activities by public entities that are considered to distort or impede competition and which are not found to be justifiable on public interest grounds; and activities which are compatible with law (such as the Local Government Act (1991:900)). Stockholm City Court will decide on whether to prohibit the activity or conduct. A prohibition may be imposed under penalty of fine for default.

A prohibition issued under the rule addresses future conduct or activities, i.e. similar to 'cease and desist' obligations in cases concerning Articles 101 and 102. A violation of such a prohibition decision can be made subject to a fine.

Since the introduction of the new rule, the Swedish Competition Authority has received an increasing amount of tip-offs and complaints related to sales activities by public entities. As a result, the SCA has initiated a large number of matters in a broad range of sectors and markets. Of the 900 tip-off and complaints, received by the tip-off function at the SCA concerned with anti-trust legislation, during 2010 and 2011, about one-fourth of the tip-offs and complaints, were related to anti-competitive sales activities by public entities.

One of the most immediate effects of the new competition rules was that several public entities have taken stock of which of their operations compete with private undertakings and have eliminated existing and potential competition problems by self-examination and self-correction. In a written communication regarding the evaluation of the effect of the competition to the Swedish Government, the Swedish Competition Authority concluded that preventive work and public entities' self-examination and self-correction have been an important and effective way of eliminating the identified competition problems. Several public entities have ceased to conduct the questioned sales activities or have adapted their sales practices so that they are in accordance with the new competition rules. Furthermore, other matters have been concluded following voluntary measures by the public entities concerned which are monitored by the Swedish Competition Authority. However, in some cases it has not been possible to settle the matters through voluntary measures and the Swedish Competition Authority has first issued a statement of objection to the public entities concerned and taken the matters to Stockholm District Court.

In 2005, the Norwegian Competition Authority commissioned a report that discussed competition between public and private enterprises. The report reached four main conclusions which can be noted:⁹⁰

- Accounting systems should causally attribute costs to the activities generating the costs

⁹⁰ Norwegian competition Authority (2005)

- Public entities should only be allowed to enter competitive markets as long as there are clear and documented synergies between the competition exposed and the core activity, and these benefits accrue to the core activity
- Revenues from the competition exposed entity must more than cover fully distributed costs and prices must reflect these costs
- Competitive branches of public companies should be separated into separate legal entities which are managerially, personnel-wise and physically separated from the core activity.

If a public measure violates these recommendations, negative effects on competition might arise.

6.6 Applying competition law to the healthcare sector

As discussed above, the increasing interaction and competition between private and public undertakings in the Nordic healthcare sector can lead to new types of competition issues in the healthcare sector which the NCAs will have to address in the future. A brief overview of the legal provisions to deal with possible competition issues in the healthcare sector is provided below.

The legal framework for enforcement related to the different providers within the healthcare system is relatively similar among the Nordic countries, in the sense that the competition law applies to any private or public entity that exercises commercial activities; the so-called 'undertakings criterion' whereby an undertaking is defined as any private or public entity that carries out commercial activities.

In general, competition law applies fully to public and state-owned enterprises in the healthcare sector in the same way as to private corporations to the extent they are involved in commercial activities. Thus, a public body in the healthcare system can be considered as an undertaking in the context of competition law for certain parts of its activity, even if other parts fall outside of the scope of the law.

However, in relation to health care services, there are some specific features of the regulatory framework that limits the scope for enforcing competition law. First of all, a similar feature between the countries is that, to the extent that the activities involve the exercise of public authority or when special legislation applies to the activities or entities in question, they fall outside the scope of enforcement. For instance, The Faroese Competition Act does not apply to anti-competitive practices that are a direct or necessary consequence of public or municipal regulation, which

is often the case with public entities within the healthcare sector.⁹¹ Also in Denmark, in those situations where a restriction to competition follows directly from public regulations, the prohibition regulations in the competition law do not apply. In Denmark, most of the core services in the health and care services are indeed subject to the Health Act and the Act on Social Services, respectively, which implies that the prohibition regulations do not apply.

The organisation of services provision may also matter. For instance, if a public entity chooses to provide health care services to patients in-house, whereby the service is not exposed to competition from private undertakings, the public entity may not be defined as an undertaking, and is thus not subject to competition law.

Admittedly, in the Nordic countries, relatively few cases where competition law has been applied in relation to the health care services exist to date. However, from the NCAs' horizon, the transformation of the healthcare sectors and changes on both the supply and the demand side, may lead to the emergence of new competition problems. In response to this, NCAs must not only focus on assisting the development process, advocating effective future reforms, but must also be capable to deal with the future competition issues which may arise and thus have the relevant skills, tools and legal powers to address them in an effective manner.

6.7 Concluding remarks

Comprehensive and universal welfare services are a common feature of the Nordic economies, even though the way in which these services are organised and governed may differ between the countries. In the last decades, as a response to past, present and future challenges, systemic reforms have introduced more market-based solutions and opening up for private providers also to the domain of publicly financed welfare services. Notwithstanding, the overall responsibility of financing these services remains a public affair and the services are still mainly produced by public service providers.

Following the reforms, competition and competition policy have come to play a role in the context of publicly financed welfare services. In addition to enforcing the competition law, the NCAs can also promote competition through their advocacy work. For example, the NCAs can contribute by pointing out restrictive effects to competition and lay the foundations for competition neutrality. The NCAs may also support procurement officials in designing competition enhancing tenders and

⁹¹ The Faroese Competition Authority (FCA) cannot on its own decide whether a certain practice by a public entity is a direct or necessary consequence of regulation as this must be determined by the respective Minister. In such cases where the FCA deems that a certain practice is detrimental to competition, the Authority can publicly issue a reasoned opinion to the relevant minister and to the Minister of Trade and Industry explaining the potentially adverse effects on competition and presenting recommendations for promoting competition in the area concerned.

to detect signs of collusion. The NCAs also possess valuable insights and experiences that can be drawn upon when assessing, designing and improving soft competition mechanisms in the public sector such as benchmarking, provider payment systems and other economic incentives.

Generally, and specifically with regard to the healthcare sector which makes up a large part of public expenditures, competition and competition policy within the realm of the NCAs' missions, have the potential to promote value for money, cost-effectiveness, quality and accessibility of these services. To promote efficient and effective public procurement, systems of choice drawing on principles of competition in the market as well as competition neutrality between public and private service providers, will be important in this regard.

Still, the continued sustainability of the Nordic countries' healthcare systems is challenged by demographic developments and increased demand on high quality services which, in addition to the gains that can be brought about by traditional public procurement and systems of choice, is likely to require innovations that can enhance the efficiency, safety, quality, and productivity of health care services. Even if a relatively limited activity in the Nordic countries to date, innovation procurement has the potential to stimulate continuous innovation, productivity and growth both in the public and the private sectors.

On a final note, the healthcare sector in the Nordic countries has not been characterised by competition law interventions so far. Instead, the main competition problems have been related to public procurement issues. Yet, from the NCAs' horizon, the transformation of the healthcare sectors and changes on both the supply and the demand side, are changing the sector in a way that may lead to the surfacing of new competition problems. Thus, the NCAs must prepare to deal with the competition issues which may arise in the future as new market mechanisms are put into play and increasing tensions between the public and the private domain related to service provision. This may not only require the development of the relevant knowledge and skills but also that the NCAs are provided with the right legal powers and tools to address the future competition problems in the interests of consumers and the economy.

Given the importance of the Nordic public sectors and care and healthcare sector, in terms of GDP spending, but also for the quality of life among citizens, the NCAs foresee that this will be a steadily growing area of focus for them in the years leading up to 2020, and beyond.

List of references

Aghion, P & Howitt, P, (1996), "Research and Development in the Growth Process", *Journal of Economic Growth*, Spring, vol. 1(1), pp 49-73, March.

Aghion, P., Bloom, N. Blundell, R. Griffiths, R. and Howitt, P. (2005) "Competition and Innovation: An Inverted U-Relationship", *Quarterly Journal of Economics*, pp. 701–728.

Aghion, P., Dewatripont, M, Rey, P. (1999),. "Competition, Financial Discipline, and Growth". *Review of Economic Studies*. 66(4):825-852

Ahn, S. (2002), *Competition, Innovation and Productivity Growth: A Review of Theory and Evidence*, OECD Economics Department Working Papers, No. 317, OECD Publishing

Arrow, K. J. (1962), "Economic Welfare and the Allocation of Resources to Invention." In Nelson, R. R. (Ed.), *The Rate and Direction of Economic Activity*, N.Y., Princeton University Press.

Belleflamme, P. and Peitz, M. (2010), *Industrial Organization: Markets and Strategies*, Cambridge University Press, New York.

Bengtsson, M. and Marell, A. (2001), *Utvärdering av Optirocs förvärv av Stråbruken (Evaluation of Optirocs acquisition of Stråbruken)*, Swedish Competition Authority, Report August 2001

Bergman, M. (2008), "Quis Custodiet Ipsos Custodes? or Measuring and Evaluating the Effectiveness of Competition Enforcement", *De Economist*, Volume 156, Issue 4, pp. 387-409.

Bester, H., Petrakis, E. (1993), "The incentives for cost reduction in a differentiated industry". *International Journal of Industrial Organization* 11, pp. 519–534.

Bigoni, M., Fridolfsson, S-O., Le Coq, C. and Spagnolo, G. (2012), "Fines, Leniency, and Rewards in Antitrust", *RAND Journal of Economics*, 43, pp. 368-390

Bishop, W. and Caffarra, L. (2001) *Merger control in new markets*. ECLR, pp. 31–33

Bloom, N., Dorgan, S., Dowdy, J., and van Reenen, J. (2007), *Summary report: Management Practices and Productivity: Why they matter*, Centre for Economic Performance and McKinsey & Co.

- Bonanno, G. & Haworth, B. (1998), "Intensity of competition and the choice between product and process innovation". *International Journal of Industrial Organization*, Volume 16, Issue 4, pp. 495–510.
- Boone, J. (2000), "Competitive pressure: the effects on investments in product and process innovation". *RAND Journal of Economics*, Vol. 31, No. 3, pp. 549–569
- Boone, J. (2008), "A New Way to Measure Competition." *The Economic Journal*, 118: pp. 1245–1261.
- Braunerhjelm, P., Eklund, K. and Henrekson, M. (2012), "A Framework for Innovation Policy", *The Journal of The Economic Society of Finland* 2/2012
- Buccirosi, P., Ciaro, L., Duso, T., Spagnolo, G. and Vitale, C. (2009) Discussion papers //WZB, Wissenschaftszentrum Berlin für Sozialforschung, Schwerpunkt II Märkte und Politik, Forschungsgruppe Wettbewerb und Innovation, No. SP II 2009-14."
- Calviño, N. (2006), "Public Enforcement in the EU: Deterrent Effect and Proportionality of Fines" in C-D. Ehrlemann & Isabela Atanasiu (Eds.) *European Competition Law Annual 2006: Enforcement of Prohibition of Cartels*, Hart Publishing. Oxford/Portland, Oregon
- Carlile, P.R. (2004), "Transferring, Translating and Transforming: An Integrative Framework for Managing Knowledge across Boundaries", *Organization Science*, Vol 15 No 5, pp. 555-568.
- Connor, J. (2006), "Effectiveness of Antitrust Sanctions on Modern International Cartels", *Journal of Industry, Competition and Trade*, Vol. 6, pp. 195-223
- Copenhagen Economics (2007), *External report on competition indicators and relevant methods for The Norwegian Ministry of Government Administration and Reform*, The Norwegian Ministry of Government Administration and Reform (FAD)
- Crespi, J.M. and Marrette, S. (2006),. *Quality and Competition: An Empirical Analysis across Industries*, Working Paper 06-WP 420, Center for Agricultural and Rural Development, Iowa State University.
- Danish Competition and Consumer Authority (2010). *Konkurrenceredegørelse (Competition Report) 2010*, available via <http://www.kfst.dk/service-menu/publikationer/>
- Danish Competition Authority (Konkurrencestyrelsen) (1999), *Debatoplæg – Bogbranshcens erhvervsvilkår* (Discussion paper – *The Book Industry's business conditions*), available in full via <http://www.kfst.dk/index.php?id=16971>.

Danish Competition Authority, (2009), *Konkurrence - vækst og velstand, Konkurrenceanalyse 01/2009. (Competition – growth and welfare, Competition analysis 01/2009)*

Dasgupta, P. and Stiglitz J (1980), "Industrial Structure and the Nature of Innovative Activity", *Economic Journal*, 90: 266-93.

Davies, S. & Ormosi, P. (2010). *Assessing Competition Policy: Methodologies, Gaps and Agenda for Future Research.*, CCP Working Paper 10-19. Available at SSRN: <http://ssrn.com/abstract=1723115> or <http://dx.doi.org/10.2139/ssrn.1723115>

Davies, S. (2012). *A survey of the approaches and methods used to assess the economic effects of a Competition Authority's work*, Swedish Competition Authority, Stockholm. Uppdragsforskningsrapport (Research Report) 2012:1

Davis, P. and Garcés, E. (2010), *Quantitative Techniques for Competition and Antitrust Analysis*, Princeton University Press.

Delbono, F., Denicolo, V. (1990), "R&D investment in a symmetric and homogeneous oligopoly", *International Journal of Industrial Organization* 8, 297–313.

Erlandsen, E. and Lundsgaard L. (2007). *How regulatory reforms in Sweden have boosted productivity*, OECD Working Paper No. 577.

European Commission (2005), *Public Procurement for Research and Innovation. Developing procurement practices favourable to R&D and innovation*, Expert Group Report September 2005

European Commission, (2012), *The 2012 Ageing Report: Economic and budgetary projections for the 27 EU Member States (2010-2060)*

Finnish Competition Authority (2004). "FCA proposes heavy fines for members of asphalt cartel". Published online 31 March 2004. Available at <http://www.kilpailuvirasto.fi/cgi-bin/english.cgi?luku=news-archive&sivu=news/n-2004-03-31>

Griliches, Z. (1992), "The Search for R&D Spillovers", *The Scandinavian Journal of Economics*, Vol. 94, 1992 Supplement, pp. 29-47.

International Competition Network (2009), *Seminar on Competition Agency Effectiveness - Summary Report*, Brussels.

IVA (2010) *Innovationer, Entreprenörskap och Tillväxt (Innovations, Entrepreneurship and Growth)*, IVA Stockholm 2010

Kilponen, J. & Santavirta, T. (2007). *When do R&D subsidies boost innovation? Revisiting the inverted U-shape*. Research Discussion Papers 10/2007, Bank of Finland.

Kristiansen I.S. and Pedersen, K.M. (2000). "Sundhedssystemerne i de nordiske lande - flere ligheder end forskelle" ('Health care systems in the Nordic countries-- more similarities than differences') *Tidsskrift Nor Laegeforen* Jun 30;120(17):2023-9.

Kyläheiko, K. and Virtanen, M. (2007),. "Are Technology and Competition Policies Contradictory?" In Sherif, M.H. and Khalil, T. (Eds): *Management of Technology: New Directions in Technology*, Elsevier Science Ltd

Magnussen, J., Vrangbaek, K. and Saltman, R. (Eds.) (2009). *Nordic Health Care Systems. Recent Reforms and Current Policy Challenges*. McGraw-Hill, Open University Press, Maidenhead.

Maliranta, M. (2005) "R&D, International Trade and Creative Destruction— Empirical Findings from Finnish Manufacturing Industries". *Journal of Industry, Competition and Trade*, Vol. 5 (1), pp. 27–58.

McKinsey & Co (2006). "Applying Lean Principles in the Public Sector", *McKinsey Quarterly* June 2006

McKinsey & Co (2008). "Health care costs: A Market based view", *McKinsey Quarterly* September

McKinsey & Co (2010). *Creating Economic Growth in Denmark Through Competition*, November 2010

Meggison, W.L. and Netter, J. M. (2001). "From state to market: A survey of empirical studies on privatization", *Journal of Economic Literature*, 39(2), June.

Modig N. and Åhlström P. (2012), *This is Lean – Resolving the Efficiency Paradox*, Rheologica Publishing, Stockholm

Monti, M. (2001), SPEECH/01/340 on The Future for Competition Policy in the European Union, Merchant Taylor's Hall, London, 9 July 2001.

Møllgaard, P. (2006), *Assessment of damages in the district heating pipe cartel*. Working Paper 10-2006. Copenhagen Business School.

Nicoletti, G. and Scarpetta, S. 2003. "Regulation, Productivity and Growth: OECD Evidence", *Economic Policy*, Vol. 18, No. 36, pp.9-72

Nordic Competition Authorities (2010). *Competition Policy and Green Growth*, Joint Nordic Report

Nordic Council of Ministers (2011a) *Shared norms for the new reality – The Nordic Way* – World Economic Forum, Davos, 2011

Nordic Council of Ministers (2011b). *Innovative Public Procurement and Health Care. Nordic Lighthouse Project*. TemaNord 2011:567

Nordic Council of Ministers (2012) ,Nordic Innovation . *Innovation in the Health Sector through Public Procurement and Regulation*, published online 03/01/2012. <http://nordicinnovation.org/en-GB/projects/lighthouse-projects/public-procurement-and-innovation-within-the-health-sector/>

Nordregio (Nordic Centre for Spatial Development) (2008), *The Demographic Challenge to the Nordic Countries* Nordregio Working Paper 2008:1

Norwegian Competition Authority (2005), *På like vilkår? En analyse av konkurranse mellom offentlige og private foretak (On equal terms? An analysis of competition between public and private enterprises)* 1/2005

Norwegian Competition Authority (2009). *Annual Report 2009, 'Effects on Competition Policy - The Football Agreement'*, available at <http://www.konkurransetilsynet.no/en/2009/Social-impact/Effects-of-competition-policy/The-Football-Agreement/>

OECD (2004), *Understanding Economic Growth - A Macro-level, Industry-level, and Firm-level Perspective*. OECD publishing.

OECD (2005), *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data*, 3rd Edition

OECD (2011) *OECD Competition Assessment Toolkit Volume 2 - Competition Assessment Guidance*. <http://www.oecd.org/dataoecd/17/33/45544507.pdf>

OECD (2012) *Indicators of Product Market Regulation Homepage*, www.oecd.org/eco/pmr (2012-11-20)

OFT (Office of Fair Trading) (2012). *OFT's guidance as to the appropriate amount of a penalty*. OFT 423.

OFT (Office of Fair Trading) (2007) *The deterrent effect of competition enforcement by the OFT*. Discussion document. OFT 963.

Porter M. E., (1990a), *Competitive Advantage of Nations*, Free Press New York

Porter, M.E. (1990b) "New global strategies for competitive advantage", *Strategy & Leadership*, Vol. 18 Iss: 3, pp. 4 - 14.

Rolfstam, M. (2009), "Public procurement as an innovation policy tool: The role of institutions", *Science and Public Policy* (2009) 36(5): pp. 349-360

Scarpette, S. Hemmings, P., Tressel, T., and Woo, J (2002), *The role of policy and institutions for productivity and firm dynamics: Evidence from micro and industry*, OECD Economics Department Working Paper no. 329

Schumpeter, JA (1943). *Capitalism, Socialism and Democracy*, George Allen and Unwin, London, U.K.

SOU (Swedish Government Official Reports) (2010), *Innovationsupphandling* (Innovation Procurement) 2010:56

Spence, M. (1984), "Cost Reduction, Competition, and Industry Performance", *Econometrica* , Vol. 52, No. 1 (Jan., 1984), pp. 101-122

Swedish Competition Authority (2010). *Uppföljning av vårddval i primärvården. Valfrihet, mångfald och etableringsförutsättningar (Follow-up system of choice in primary care. Choice, diversity and establishment condition)* Rapport/Report 2010:3

Swedish Competition Authority (2011), *Annual Report 2011*,

Swedish Competition Authority (2012). *Konkurrens inom laboratorietjänster (Competition in Laboratory Services)* Rapport/Report 2012:5.

Swedish Competition Authority, (2009), *Action for better Competition*, Report 2009:4

Swedish Ministry of Enterprise, Energy and Communications (2012).

Sölvell Ö., Zander I, and Porter M. E. (1991) *Advantage Sweden*, Nordstedts, Stockholm

Veljanovski, C. (2001). 'EC Antitrust in the New Economy - Is the European Commission's View of the Network Economy Correct?' *European Competition Law View*, Vol. 22, pp. 115-121, 2001. Available at <http://ssrn.com/abstract=1758640>

Vinnova (Swedish Innovation Agency) (2012). Program: *Innovationsupphandling* (Programme: *Innovation Procurement*) available at <http://www.vinnova.se/en/Our-activities/Innovation-management/Innovation-procurement/>

Viscusi, W.K., Harrington J.E. Jr. & Vernon J. M. (2005). *Economics of Regulation and Antitrust*, 4th edition. MIT Press.

Vives, X. (2005), *Innovation and Competitive pressure*, INSEAD and INCREA-UPF Workings Papers Series

Womack, J.P., Jones D.T. and Roos D. (1991), *The Machine That Changed the World : The Story of Lean Production*, Harper Perennial



			Kappingareftirlitið Skálatrøð 20, P. O. Box 73, FO 110 Tórshavn, Faroe Island Telephone: +298 35 60 40 Telefax: +298 35 60 55 www.kapping.fo	
	Konkurrence- og Forbrugerstyrelsen Carl Jacobsens Vej 35, DK-2500 Valby, Denmark Telephone: +45 41 71 50 00 Telefax: +45 41 71 51 00 www.kfst.dk			
			Konkurrensverket SE-103 85 Stockholm, Sweden Telephone: +46 8 700 16 00 Telefax: +46 8 24 55 43 www.kkv.se	
		Konkurransetilsynet P.O. Box 439 Sentrum, NO-5085 Bergen, Norway Telephone: +47 55 59 75 00 Telefax: +47 55 59 75 99 www.konkurransetilsynet.no		
		Samkeppniseftirlitið P.O. Box 5120, IS-125 Reykjavik, Iceland Telephone: +354 585 0700 Telefax: +354 585 0701 www.samkeppni.is		
		Kilpailu- ja kuluttajavirasto/Konkurrens- och konsumentverket P.O. Box 5, FI-00531 Helsinki, Finland Telephone: +358 29 505 3000 Telefax: +358 9 876 4398 www.kilpailuvirasto.fi		
	Konkurrencenævnet Hans Egedes Vej 5, B-46, P.O.Box 689, 3900 Nuuk, Greenland Telephone: +299 32 80 33 Telefax +299 32 78 50 www.unammineq.gl			