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How to Deal with Competition Issues as Part of the Project Appraisal

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English summary

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Summary

Competitive markets are crucial to ensure efficient use of society's resources. Public investments may have direct and indirect effects on competition in one or several markets. This depends largely on the choices made in the front-end phase, the importance accorded to competition issues.

The purpose of this report is to raise awareness of possible competition effects of public investments. It identifies sources and effects on competition of public investments. By making an investment the state can affect both competition in the market where the investment will be used, but also in the markets where purchases are made from (supplier markets).

One should be aware of possible competition problems at an early stage in the planning of major investments. This report takes an economic approach and emphasizes the concept development phase (for major public investments in Norway subject to external quality assurance, this is referred to as the KVU/KS1 phase). Several issues, however, should also be examined further in later stages of the planning process, not least as part of choosing a contract strategy (KS2).

The report is divided in two parts, a theoretical section and a case section.

Theoretical section

A prerequisite for understanding how an investment project can affect competition is that you have an understanding of what drives the degree of competition in a market. For this reason, we start with a basic theoretical discussion of competition.

The importance of competition for economic efficiency

When there is strong competition in a market, companies are forced to produce more efficiently, to reduce their prices, and also be more focused on satisfying their customers' needs. Thus competition contributes to efficient allocation of society's resources.

Companies may try to restrain competition, e.g. by product differentiation strategies, by creating artificial barriers to entry, by concealing information or increasing customers' switching or transaction costs, and in some cases through coordinated behavior across competitors.

When a company has the opportunity to influence the market, we say that it has market power (monopoly power, if it controls the whole market). If a buyer on the other hand has the opportunity to influence their own or others' purchasing terms,

it has purchasing power (monopsony). In situations where either market power or purchasing power is exercised, competition is imperfect.

When evaluating the competition effects of a public investment, it is therefore useful to start with asking how the investment is likely to affect the actors' power, and how this in turn is likely to affect their behavior. It may be helpful to divide this analysis in two parts, respectively effect on competition in markets where the investment will be used, and the effect on competition in the markets where purchases are made.

1. *Investments' effect on competition in the markets where the investment will be used*

Certain types of public investments are made in, or have an effect on, competitive markets. (Other investments will only affect a government agency with a monopoly. We ignore this case here).

An investment could affect the behavior of the actors, and through this the degree of competition, in different ways. If an operator gets access to larger capacity, he will usually compete more aggressively. The result in the short term is often tougher competition, with consequent reduction of prices and higher production volumes. In the longer term, the effect is however more uncertain. As a result of the more intense competition, other sellers may choose to leave the market, resulting in reduced competition in the long term. One should always consider both short-term and long-term competition effects of an investment.

When assessing competition effects of infrastructure investments, one should particularly be aware of cases where infrastructure is of such a nature that it can only be used by a limited number of operators. Those who have access to the infrastructure will gain a competitive advantage in their markets. The way access is allocated (how many contracts, of how long etc.) is therefore crucial. Negative effects can often be avoided by designing the infrastructure for several operators.

In some cases, investments also have indirect effects on competition in markets entirely different to those that directly benefit from the investment. This typically applies to investments in transportation infrastructure and is an element of what is often referred to as the "wider economic benefits", which are rarely captured in ordinary cost-benefit analyses. This effect is often positive and goes through an expansion of the market's geographical dimension. A simple example is two craftsmen who have a monopoly on one island each. However, with a bridge between them they will both compete in a larger market, and the social surplus will increase.

2. Investment and competition issues in the supplier markets

Because of its size, and particular role in society, the state has in many cases purchasing power. A state purchaser should obviously be keen to push prices down and thereby make the best possible purchase. Collecting purchases in large contracts may be an appropriate strategy for achieving this.

The state, however, should also be aware of how the investment affects the competitive conditions in the market in the short and long term. An adverse effect of exercising purchasing power may be that some, typically smaller sellers, leave the market, the result being that competition among sellers is reduced in the longer term. Small byers will typically be hardest hit.

The public purchaser should seek to maximize the social surplus. In some cases this may involve deliberate focus on choosing small or new suppliers, so that they are helped into the market, achieving the required learning effects and economies of scale effects. An important gain in the long term may then be an increased level of competition in that market.

Collecting purchases in large contracts can also have a positive effect on market efficiency. This is particularly true in markets with risk of coordinated behavior between sellers (market sharing, bid rigging, collusion etc.). When contracts are long-term and large there is less to gain from coordination, and more to gain from competing hard so that one gets the contract. By selecting few, large contracts the public purchaser can thus obtain to crack any collusion or other forms of coordinated behavior.

Choices made in the front-end may affect competition at a later stage, when the purchase is actually to be made. If you decide early that a given solution must be chosen, this will exclude suppliers of other, inferior solutions. By including them in the competition on the other hand, this may have a disciplining effect on the provider of the preferred solution to provide a competitive price offer.

Case section

In the case section of this report, we have, on the basis of the theoretical part, looked at three specific public investment projects. We have identified competition issues in the three cases, and also looked at whether these issues have been addressed or taken into account in the appraisal process.

Container Terminal Alnabru

The first project involves an expansion of the freight terminal at Alnabru near Oslo. This is Norway's largest container terminal and is often referred to as the hub of Norwegian freight transport on train. This is due to the terminal being located in the Oslo area and being a crossing point for all rail lines in the same area.

Due to a strong growth in freight volumes carried across Alnabru, the capacity limit is now almost reached. Additionally, the technical condition is poor. But no decision on investment is so far taken.

1. Effects on competition in markets where the investment will be used: It is a political ambition to move freight from road to rail and boat. The development of Alnabru is intended to contribute to this. However, one should then set the project in conjunction with other measures that must be implemented to affect freight owners' choice of transport. The market for freight transport by rail is also highly concentrated, and one should ask whether it is likely that the benefits of improved terminal services and lower terminal costs really will reach the customers, or if it is more likely that they end up in the terminal operator's pockets. The new terminal is planned with only one terminal operator.

2. Effects on competition in the supplier markets: This is a large and complex investment project that requires deliveries from suppliers in a number of markets. Some of the purchase will be general construction services, while others are specific products (with special security requirements, etc.). In this type of government procurement, that requires suppliers to make relationship-specific investments, we should balance the need for an optimal delivery, against the need for efficient competition in the supplier market in the long term.

Inter-City triangle

A significant population increase is expected in the Oslo region up to 2040. To meet the expected increase in traffic volumes, large investments must be made in the transport system. There is a political desire that this growth will occur in the railway. Development of double tracks between Oslo and neighboring cities, respectively north, east and west (InterCity triangle) will enlarge the Oslo region and make it easier to commute daily between the cities.

1. Effects on competition in markets where the investment will be used: The investment will contribute to more capacity and lower costs for train

operators. The market for passenger trains, like the market for freight discussed above, is highly concentrated with NSB as the dominant actor. Facilitating increased level of competition on the rails, as part of the InterCity development project, would therefore be expected to have a positive impact on price as well as quality parameters such as punctuality and frequency.

2. Effects on competition in supplier markets: The investment will primarily be based on known technology, but it will be on a scale that is far beyond what until now has been handled in the Norwegian transport market. The scale itself could provide competition challenges since the project will tie up most of the relevant supplier markets. By spreading the procurements over several years such adverse effects could be reduced.

The Opera house

The reason for building a new opera house in Oslo was a desire to offer opera and ballet to an even greater and wider audience, and that the building was to be an engine for urban development in this part of Oslo.

1. Effects on competition in markets where the investment will be used: The ambition of activity growth is inherently a desire to affect competition in the markets that the Opera operate in. There are a number of public and private actors in Oslo that offer various entertainment products. Customers will more or less understand the different offers as substitutes. For other actors than the Opera, the investment could worsen their competitive situation. In particular, one should be aware of this if the Opera, which is publicly subsidized, should choose to go into pure commercial markets.

2. Effects on competition in the supplier markets: Most of the work would be related to a more general construction market, but requirements were strict to both the functional, technical and aesthetic solutions in the construction. Many people had opinions about the opera and tried to influence the choices made (e.g. the choice of stone) towards a very specific solution. They did not succeed and we did have a broad assessment of both price and quality of different solutions. Here too, as in the InterCity case, one should have considered choosing a longer construction period to reduce adverse competition effects.

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Rapport	Tittel	Forfatter
Nr. 1	Styring av prosjektporteføljer i staten. Usikkerhetsavsetning på porteføljenivå *Project Portfolio Management. Estimating Provisions for Uncertainty at Portfolio Level.*	Stein Berntsen og Thorleif Sunde
Nr. 2	Statlig styring av prosjektledelse. Empiri og økonomiske prinsipper. *Economic Incentives in Public Project Management*	Dag Morten Dalen, Ola Lædre og Christian Riis
Nr. 3	Beslutningsunderlag og beslutninger i store statlige investeringsprosjekt *Decisions and the Basis for Decisions in Major Public Investment Projects*	Stein V. Larsen, Eilif Holte og Sverre Haanæs
Nr. 4	Konseptutvikling og evaluering i store statlige investeringsprosjekt *Concept Development and Evaluation in Major Public Investment Projects*	Hege Gry Solheim, Erik Dammen, Håvard O. Skaldebø, Eystein Myking, Elisabeth K. Svendsen og Paul Torgersen
Nr. 5	Bedre behovsanalyser. Erfaringer og anbefalinger om behovsanalyser i store offentlige investeringsprosjekt *Needs Analysis in Major Public Investment Projects. Lessons and Recommendations*	Petter Næss
Nr. 6	Målformulering i store statlige investeringsprosjekt *Alignment of Objectives in Major Public Investment Projects*	Ole Jonny Klakegg
Nr. 7	Hvordan trur vi at det blir? Effektvurderinger av store offentlige prosjekt *Up-front Conjecture of Anticipated Effects of Major Public Investment Projects*	Nils Olsson
Nr. 8	Realopsjoner og fleksibilitet i store offentlige investeringsprosjekt *Real Options and Flexibility in Major Public Investment Projects*	Kjell Arne Brekke
Nr. 9	Bedre utforming av store offentlige investeringsprosjekter. Vurdering av behov, mål og effekt i tidligfasen *Improved Design of Public Investment Projects. Up-front Appraisal of Needs, Objectives and Effects*	Petter Næss med bidrag fra Kjell Arne Brekke, Nils Olsson og Ole Jonny Klakegg
Nr. 10	Usikkerhetsanalyse – Kontekst og grunnlag *Uncertainty Analysis – Context and Foundations*	Kjell Austeng, Olav Torp, Jon Terje Midtbø, Ingemund Jordanger, og Ole Morten Magnussen
Nr. 11	Usikkerhetsanalyse – Modellering, estimering og beregning *Uncertainty Analysis – Modeling, Estimation and Calculation*	Frode Drevland, Kjell Austeng og Olav Torp
Nr. 12	Metoder for usikkerhetsanalyse *Uncertainty Analysis – Methodology*	Kjell Austeng, Jon Terje Midtbø, Vidar Helland, Olav Torp og Ingemund Jordanger

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Rapport	Tittel	Forfatter
Nr. 13	Usikkerhetsanalyse – Feilkilder i metode og beregning *Uncertainty Analysis – Methodological Errors in Data and Analysis*	Kjell Austeng, Vibeke Binz og Frode Drevland
Nr. 14	Positiv usikkerhet og økt verdiskaping *Positive Uncertainty and Increasing Return on Investments*	Ingemund Jordanger
Nr. 15	Kostnadsusikkerhet i store statlige investeringsprosjekter; Empiriske studier basert på KS2 *Cost Uncertainty in Large Public Investment Projects. Empirical* Studies	Olav Torp (red.), Ole Morten Magnussen, Nils Olsson og Ole Jonny Klakegg
Nr. 16	Kontrahering i prosjektets tidligfase. Forsvarets anskaffelser. *Procurement in a Project's Early Phases. Defense Aquisitions*	Erik N. Warberg
Nr. 17	Beslutninger på svakt informasjonsgrunnlag. Tilnærminger og utfordringer i prosjekters tidlige fase *Decisions Based on Scant Information. Challenges and Tools During the Front-end Phases of Projects*	Kjell Sunnevåg (red.)
Nr. 18	Flermålsanalyser i store statlige investeringsprosjekt *Multi-Criteria Decision Analysis In Major Public Investment Projects*	Ingemund Jordanger, Stein Malerud, Harald Minken, Arvid Strand
Nr. 19	Effektvurdering av store statlige investeringsprosjekter *Impact Assessment of Major Public Investment Projects*	Bjørn Andersen, Svein Bråthen, Tom Fagerhaug, Ola Nafstad, Petter Næss og Nils Olsson
Nr. 20	Investorers vurdering av prosjekters godhet *Investors' Appraisal of Project Feasibility*	Nils Olsson, Stein Frydenberg, Erik W. Jakobsen, Svein Arne Jessen, Roger Sørheim og Lillian Waagø
Nr. 21	Logisk minimalisme, rasjonalitet - og de avgjørende valg *Major Projects: Logical Minimalism, Rationality and Grand Choices*	Knut Samset, Arvid Strand og Vincent F. Hendricks
Nr. 22	Miljøøkonomi og samfunnsøkonomisk lønnsomhet *Environmental Economics and Economic Viability*	Kåre P. Hagen
Nr. 23	The Norwegian Front-End Governance Regime of Major Public *Projects – A Theoretically Based Analysis and Evaluation*	Tom Christensen
Nr. 24	Markedsorienterte styringsmetoder i miljøpolitikken *Market oriented approaches to environmental policy*	Kåre P. Hagen
Nr. 25	Regime for planlegging og beslutning i sykehusprosjekter *Planning and Decision Making in Hospital Projects. Lessons with the Norwegian Governance Scheme.*	Asmund Myrbostad, Tarald Rohde, Pål Martinussen og Marte Lauvsnes

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Nr. 26	Politisk styring, lokal rasjonalitet og komplekse koalisjoner. Tidligfaseprosessen i store offentlige investeringsprosjekter *Political Control, Local Rationality and Complex Coalitions. Focus on the front-end of large public investment projects*	Erik Whist, Tom Christensen
Nr. 27	Verdsetting av fremtiden. Tidshorisont og diskonteringsrenter *Valuing the future. Time horizon and discount rates*	Kåre P. Hagen
Nr. 28	Fjorden, byen og operaen. En evaluering av Bjørvikautbyggingen i et beslutningsteoretisk perspektiv *The Fjord, the City and the Opera. An Evaluation of Bjørvika Urban Development*	Erik Whist, Tom Christensen
Nr. 29	Levedyktighet og investeringstiltak. Erfaringer fra kvalitetssikring av statlige investeringsprosjekter *Sustainability and Public Investments. Lessons from Major Public Investment Projects*	Ola Lædre, Gro Holst Volden, Tore Haavaldsen
Nr. 30	Etterevaluering av statlige investeringsprosjekter. Konklusjoner, erfaringer og råd basert på pilotevaluering av fire prosjekter *Evaluating public investment projects. Lessons and advice from a meta-evaluation of four projects*	Gro Holst Volden og Knut Samset
Nr. 31	Store statlige investeringers betydning for konkurranse- og markedsutviklingen. Håndtering av konkurransemessige problemstillinger i utredningsfasen *Major public investments' impact on competition. How to deal with competition issues as part of the project appraisal*	Asbjørn Englund, Harald Bergh, Aleksander Møll og Ove Skaug Halsos

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Forskningsprogrammet Concept skal utvikle kunnskap som sikrer bedre ressursutnytting og effekt av store, statlige investeringer. Programmet driver følgeforskning knyttet til de største statlige investeringsprosjektene over en rekke år. En skal trekke erfaringer fra disse som kan bedre utformingen og kvalitetssikringen av nye investeringsprosjekter før de settes i gang.

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The Concept research program aims to develop know-how to help make more efficient use of resources and improve the effect of major public investments. The Program is designed to follow up on the largest public projects over a period of several years, and help improve design and quality assurance of future public projects before they are formally approved.

The program is based at The Norwegian University of Science and Technology (NTNU), Faculty of Engineering Science and Technology. It cooperates with key Norwegian and international professional institutions and universities, and is financed by the Norwegian Ministry of Finance.

Address:
The Concept Research Program
Høgskoleringen 7A
N-7491 NTNU
Trondheim
NORWAY

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