

# concept

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### **English summary**

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## Summary

Economic impact assessment is frequently used both nationally and internationally to appraise and evaluate large public investment projects. It is used to demonstrate the consequences of using resources in the public sectors and determines whether a given project is economically viable or not. In this report, we compare the use of Cost-Benefit Analysis (CBA), which is an element of economic impact assessment, in prioritizing road projects, in Norway and Sweden. The overall objective is to shed light on the differences that may exist such that the two countries can learn from each other and improve their use of CBA when selecting investment portfolios. Specifically, we explore the differences in planning processes, methodological approaches used and the unit prices used in CBAs. Using data from the countries' latest national transport plans, we compare the significance of CBA in the prioritization of projects.

Transport planning in Norway and Sweden is found to have several commonalities. Both countries make long-term plans based on national strategic goals where individual projects that fulfil these goals undergo a thorough assessment; often as part of a wider political process. Both countries have strong economic-rationalistic planning traditions which emphasize the use of analytical tools such as models, forecasts and software programs. There is a long standing tradition in the use of CBA in both countries and, the CBA approaches are based on very similar principles.

An important difference between Norway and Sweden is with regards to the organizational framework of the institutions that deal with transport planning. In Norway the Public Roads Administration is an agency directly under the Ministry of Transport and Communication with its responsibility restricted to national roads. In Sweden, the Swedish Transport Administration has a more independent role and broader responsibility. These differences are manifested in the observed planning practices; Sweden has a more instrumental/rationalistic and expert driven planning processes whereas Norway has more communicative and politically driven planning processes at different levels. It should be noted that even though both countries use CBA in making their plans, goal conflicts may imply that the significance of CBA alone in selection of project portfolios may be reduced.

The main findings in this report are as follows:

1. The approaches to CBA in Sweden and Norway are very similar, and the development and improvement of the methods used follow each other very closely.

2. The unit prices used in CBA in the two countries, e.g. the value of time, are relatively similar and of the same magnitudes. For instance, both Norway and Sweden recently stipulated new values of time using the same approach and they have both decided to adjust unit values with changes in real prices.
3. Environmental impacts are valued lower in Norway than in Sweden.
4. The main benefit components of a road projects in Norway and Sweden are the reductions in accessibility costs (mainly reduction in travel time), typically 70%, and traffic safety benefits at 15% of the total benefits.
5. Norwegian projects are generally larger than Swedish projects as measured by project costs in Million NOK. The Swedish government seems to pre-select large projects for investments while the pre-selected projects in Norway are not larger than the average project.
6. Swedish road projects are generally more economically profitable than Norwegian road projects. There are several reasons, e.g., higher construction costs in Norway, larger traffic volumes in Sweden, and a more pronounced tendency in Sweden to prioritize and design projects that give positive net benefits.
7. In Sweden, economic viability is a determining factor in the selection of projects to be included in the national transport plan. In Norway, economic viability seems to have no significant impact on the selection of projects included in the national transport plan.
8. If Norway was to prioritize according net present value per budget kroner, then the gains for Norway from investments would be as high as the Swedish gains given the same total budget.

Based on these observations we concluded that Sweden makes more systematic use of CBA when prioritizing road projects as compared to Norway. Unprofitable projects are eliminated at an earlier stage in Sweden. In other words, economic profitability matters more in Sweden. In the case of Norway there is no statistical evidence to support that this is the case when projects are prioritized in the national transport plan. It is therefore clear that there are other factors than economic profitability that may explain how projects are prioritized in Norway. To uncover what factors this might be is beyond the scope of this study, but we argue that if these other factors are important, they should be documented as much as the results of CBA . We underline that the use of public resources should be transparent.

Our overall conclusion in this report is that Norway has a lot to learn from Sweden in terms of systematizing the planning process and the use of welfare maximizing principles when prioritizing projects. For an overview and ranking of a large number of projects, CBA is a useful tool.

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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.*

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