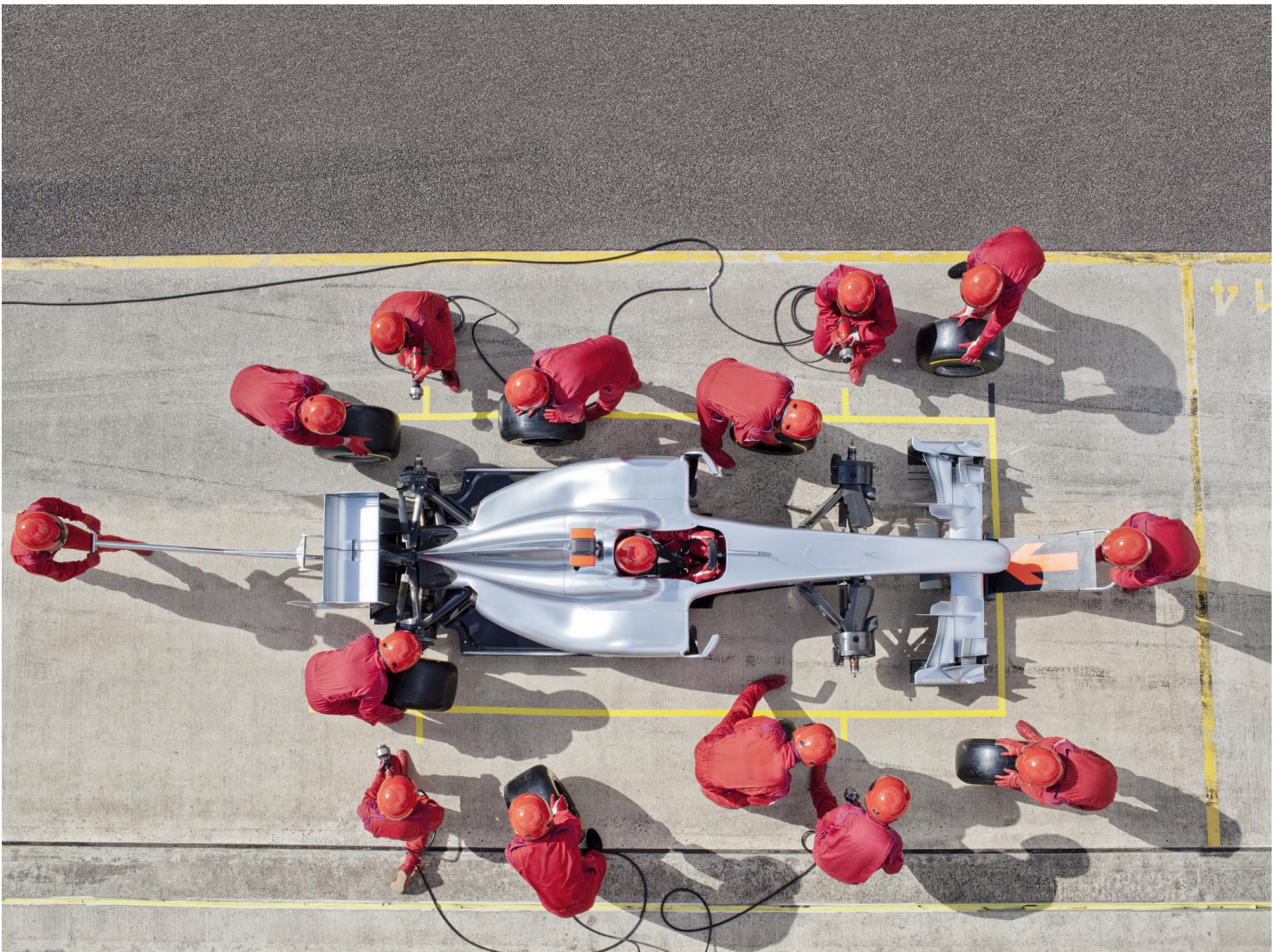


SUMMARY

# *EFFECT OF OWNERSHIP TYPES*

*AN ANALYSIS OF EMPLOYEE-OWNED COMPANIES AND COOPERATIVES*



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By Inger Nielsen Hole, Per Fredrik F. Johnsen, Jonas Erraia and Leo A. Grünfeld



## Preface

On behalf of the Finance Sector Union of Norway (Finansforbundet) and The Norwegian Co-operative Organisation (Samvirkene), Menon Economics has analysed the economic significance of different ownership types. This includes both an economic mapping of the size of employee ownership and cooperatives in Norway, and an analysis of whether different ownership structures matter for economic performance.

The project was led by Jonas Erraia with Per Fredrik Johnsen and Inger Nielsen Hole as project associates. Leo A. Grünfeld has been the quality assurer.

Menon Economics analyses economic issues and provides advice to businesses, organisations, and public authorities. We are a consulting firm operating at the interface between economics, politics, and markets. Menon combines social and business economics expertise in fields such as social profitability, economic impact, business and competition economics, strategy, finance, and organisational design. We use research-based methods in our analyses and work closely with leading academic environments in most fields.

We thank the Finance Sector Union of Norway and The Norwegian Co-operative Organization, for an exciting assignment.

This is the English summary from the published report *“Effekt av eierskapstyper - En analyse av ansatteide selskap og samvirker”*. The entire report is available in Norwegian on our website [www.menon.no](http://www.menon.no)

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July 2023

Jonas Erraia  
Project owner  
Menon Economics

## Summary

The ownership structures of firms are important as the right owners can create increased economic value by providing businesses with great ideas, ensuring motivation, a sense of belonging among employee-owners, as well as supplying capital and networks when needed. The majority of Norwegian companies are owned by Norwegian private individuals. Employee ownership is relatively common in Norway, and the most common form of employee ownership is through direct stock purchase programs. The motivation behind employee ownership is to give employees the opportunity to share in the profits and influence their workplace. Furthermore, it contributes to aligning interests between employees and other owners. However, employee ownership is not a categorical attribute of the company. Instead, it is a characteristic of the organisation of ownership in the company, where there are varying degrees of employee ownership across several dimensions.

Cooperatives are organisations owned by their members. The members are the ones who interact with the cooperative and thereby achieve direct benefit from the organisation's activities. Cooperatives aim to promote the interests of the members, who can be users, suppliers, or other stakeholders. Major players like Tine, Coop, Obos, Fellekjøpet, Norges Råfisklag, and Nortura are well-known examples of Norwegian cooperatives.

The economic literature on employee ownership is characterised by data of rather poor quality. Nearly all analyses of ownership are conducted on publicly listed companies, where there is (often) complete transparency over ownership. However, as employee ownership in publicly listed companies is usually very limited as a share of total ownership, the findings are therefore not readily transferable to the rest of the economy. This report contributes to closing some of the gaps that exist in the literature around employee-owned companies. More specifically, we offer three innovations in the economic literature. Firstly, we use a range of unique data sources to estimate the degree of employee ownership for the entire universe of Norwegian businesses. To our knowledge, this has never been done before. Secondly, we calculate the economic footprint of both cooperatives and employee-owned companies. Finally, we use a range of econometric models to test whether economic key figures such as productivity, growth, and profitability vary systematically between cooperatives, employee-owned companies, and the rest of Norwegian industry.

### Methodology for identifying ownership types

To identify employee-owned companies, one must have a clear understanding of what an employee-owned company is. In operationalising the concept of employee ownership, this study has developed a framework for identification based on three central dimensions of employee ownership that are particularly relevant to determining whether a company is employee-owned or not:

- The proportion of shares owned by employees (influence)
- The proportion of employees with ownership (coverage)
- Concentration of ownership (distribution)

We have a complete overview of the ownership in the companies, but not of who is employed by the company. This means that we must develop methods to likely prove that a company is employee-owned based on available information. We have chosen a two-step approach. In the first step, we have manually categorised a range of companies as either employee-owned or not employee-owned. The categorisation in this step is based on an overall assessment of characteristics of ownership in the company, such as the share of ownership held by employees, the proportion of employees with ownership, and the distribution of ownership. For many of these companies, we have used employee overviews on company website to assess the measures above.

In the second step, we have developed a machine learning model that predicts whether a company is employee-owned based on characteristics of the companies identified in the first step. We have used a random forest algorithm to predict the degree of employee ownership in all Norwegian companies. When we test the model's predictive ability, we find a surprisingly high precision. The model has an out-of-sample prediction accuracy of 90 percent.

For cooperative enterprises, there is no need for an identification algorithm, as these can be selected through the registered organisational form.

## Industry economic analysis of cooperatives and employee-owned companies

We have conducted an economic mapping based on the identified cooperatives and employee-owned companies. In 2021, we find about 1,500 cooperatives and 570 employee-owned companies. Cooperatives employed 62,000 employees and employee-owned companies had 14,000 employees in 2021. The total gross product in cooperatives was NOK 38 billion, which constitutes 1.8 percent of the Norwegian mainland GDP. The gross product in employee-owned companies was NOK 16 billion in 2021 and constitutes 0.8 percent of mainland Norway's value creation. Cooperatives and employee-owned companies make up an increasingly larger share of Norwegian business.

Over time, both value creation and employment have increased significantly among employee-owned companies and cooperatives, and these two types of companies constitute an increasingly larger share of mainland Norway's GDP. We also see that productivity and operating margin have increased among employee-owned companies and are currently higher than the average of Norwegian businesses. As for cooperatives, these have a lower productivity and operating margin than the rest of the business sector.

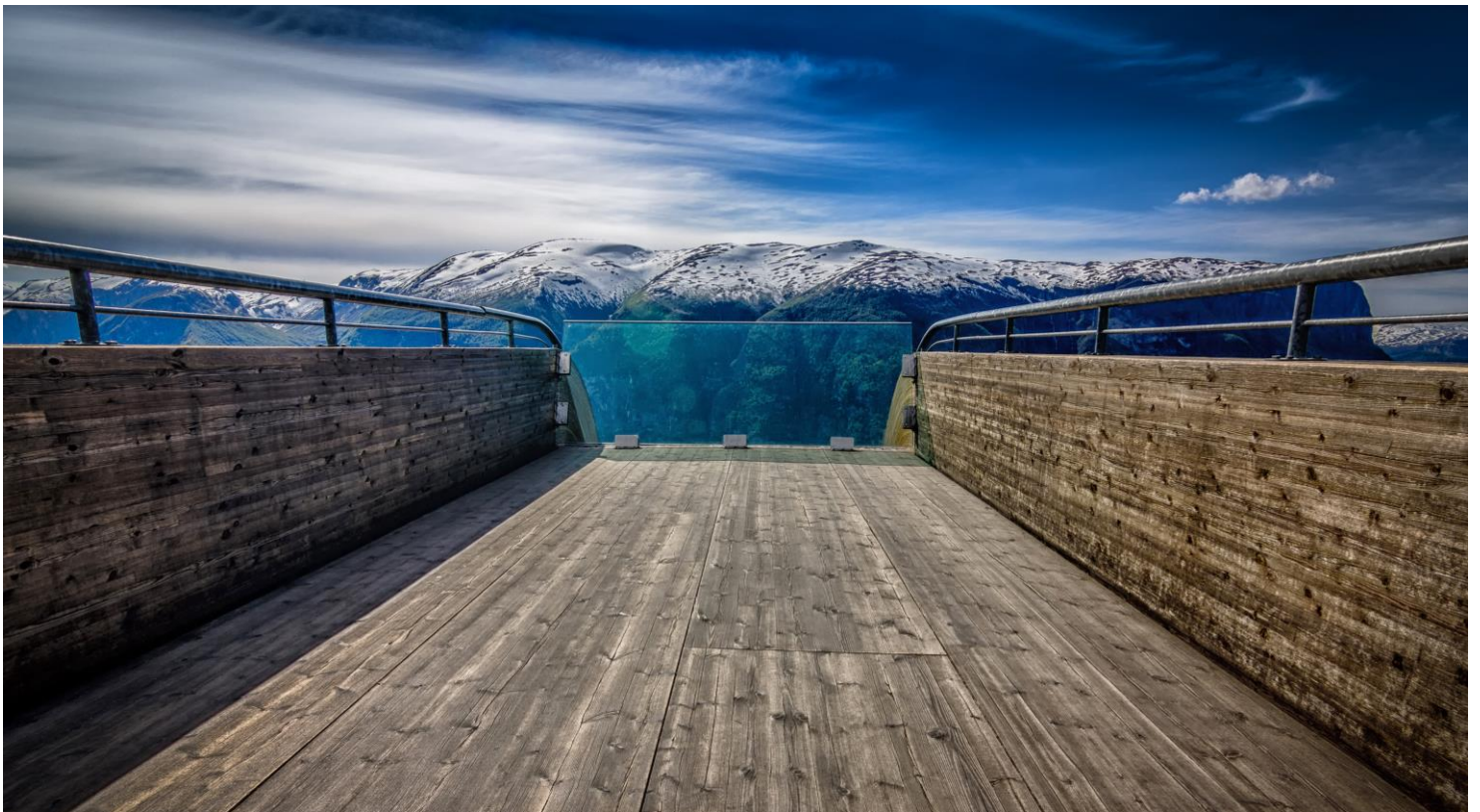
The concentration of cooperatives and employee-owned companies varies across sectors. Cooperatives are over-represented in trade, industry as well as health and social services, while employee-owned companies are over-represented in knowledge services and ICT. Employee-owned companies are somewhat more geographically spread across counties than cooperatives. At the same time, we see that cooperatives account for a higher share of value creation in rural areas, while employee-owned companies account for a far greater share of value creation in large cities and towns.

## Effect of ownership types on economic performance

We have conducted econometric analyses to see how types of ownership co-vary with economic development. We employ two main models, "pooled OLS" and "random effects", in addition to conducting numerous robustness checks. We find that when adjusting for industrial characteristics, employee-owned companies exhibit higher productivity than the rest of the Norwegian business sector. We do not find evidence that employee-owned firms demonstrate systematically different growth in value creation or employment compared to the rest of the business sector. Nor do we find any systematic differences when it comes to wage share and profitability. Finally, we test whether the economic development of employee-owned firms during times of crisis is significantly different from the development of other businesses in the same sector. Here too, we find no significant differences. All findings are robust across most specifications.

We find no systematic differences in value creation and employment growth between cooperatives and the rest of the economy. This suggests that cooperatives fare just as well as the general business sector in normal years, and in economic crises. When it comes to productivity and profitability, cooperatives systematically perform

worse than the rest of the business sector, even when we control for industry and other characteristics of the business. However, we find that wage earners in cooperatives retain a significantly larger share of the value creation in cooperatives, compared to the rest of the economy. The share of value creation that goes to workers in cooperatives is between 2 and 5 percentage points higher than in comparable businesses with different ownership.



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