

How to predict the demand of labor in the short and long term

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Short-term forecasting of labor demand



- The focus in forecasting labor supply and demand is mainly on short-term perspective.
- In short-term, the Ministry provides twice a year an analysis on labor demand and supply as well as on the development of unemployment (incl. structural unemployment).
- Also, the Ministry provides systematic overviews of the regional development in terms of labor markets and businesses.
- Forecasts are based on register data where possible.
- In addition, survey data are used to provide a comprehensive picture of the functioning of the labor market.

Regional Centers for Economic Development, Transport and the Environment



- The Regional Centers for Economic Development, Transport and the Environment, which belong to the administrative branch of the Ministry of Economic Affairs and Employment, are responsible for analyzing the short-term labor and training needs of their area.
- This materializes, for example, in the planning and acquisition of workforce training.
- The Regional Centres for Economic Development, Transport and the Environment also participate in longer-term forecasting coordinated by the provincial associations, bringing expertise and guidelines in national education, employment and business policies to it.

Sectoral roadmaps to ensure the availability of labor across Finland



- In an ongoing project, the Ministry of Economic Affairs and Employment is developing a) the communication between industries and social partners and b) data model in order to better ensure the availability of skilled labour in all sectors throughout Finland.
- Sectoral working groups will seek short- and long-term solutions to improve the match between job vacancies and unemployed job seekers.
- They will also take steps to identify ways of guaranteeing that the objectives set for labor migration can be met.
- Data gathered for the roadmap work will help to build foresight models on the sectoral skills demands across Finland, which in turn helps to identify and meet training and education needs.
- Project continues until the end of 2022

Long-term scenarios



- The Ministry of Economic Affairs and Employment provides long-term scenarios of the development of labor markets in different industries
- Together with other Ministries, the Ministry of Economic Affairs and Employment is involved in the dialog about the future of Finland
- Since 1993, the Government has submitted a report on the future to Parliament once during each government term in which it discusses long-term issues related to Finland's future.
- In response, the Parliament's Committee for the Future prepares a report with measures to be undertaken by the Government.
- In its annual report, the Government reports to Parliament on the progress of these measures.
- The report contributes to future preparedness and building the Finland of the next generations.

Data and science



- The Ministry of Economic Affairs and Employment commissions studies and surveys on both short-term and long-term forecasts in terms of labor supply and demand.
- Seminars and discussion events are organized for the researchers, ministry officials and politicians to meet and discuss relevant research results.
- There are many digital development projects underway, one of the goals of which is to produce better information as a basis for forecasting.
- In the extensive project led partly by the Ministry of Economic Affairs and Employment, continuous learning digital services are developed
 - The goal is that with the help of new services people can more easily map their situation and get information about education and work opportunities and guidance to support decisions. Digital services also support anticipation and utilization of information.

Life-long learning and forecasting skills needs

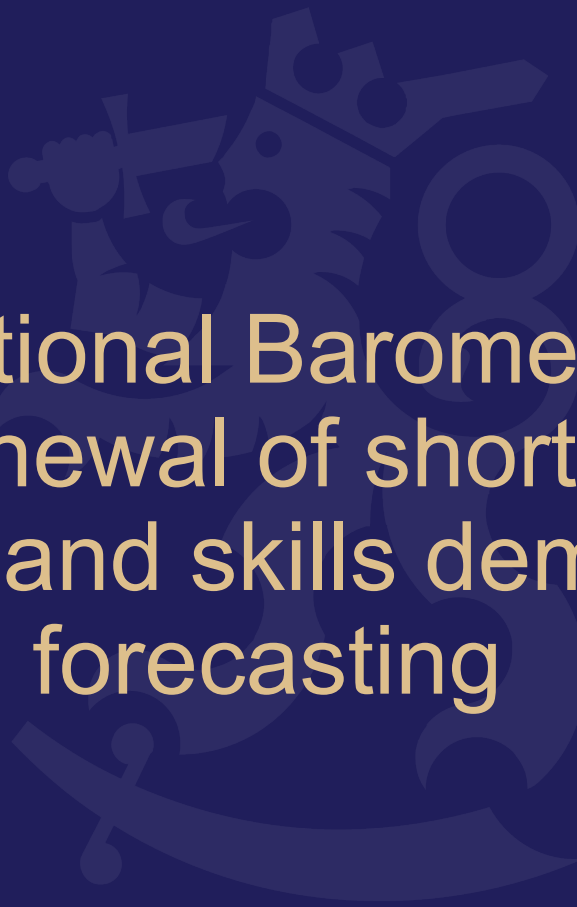


- Newly established Service Centre for Continuous Learning and Employment promotes the competence development of working-age people and the availability of skilled labor.
- It 1) analyses the competence and labor market needs of working life, 2) finances education and training intended for working-age people, 3) develops information, advisory and guidance services, and 4) supports regional and other cooperation.
- The Service Centre also participates in the work to develop a digital service package for continuous learning.
- In its work, the Service Centre also makes use of the forecasts provided by the Ministry of Economic Affairs and Employment.

Forecasting in the Next Generation EU



- Finland's Recovery and Resilience Plan responds to Finland's structural challenges and promotes sustainable growth through investments in the green transition and the digital transformation.
- Funds are partly targeted to develop digital forecasting as part of investing in research, development and innovation activities.
- One important aim is to strengthen knowledge based decision making and thereby find new measures to positively affect labor market equilibrium.



Occupational Barometer and the renewal of short-term labor and skills demand forecasting

Occupational Barometer in Finland



- The OB bases on the expertise of the regional PES offices about the short term (half a year) prospects of the local labor market
- PES experts assess 1) the short term prospects of the demand and 2) the balance between demand and supply of the occupations
- The assessments are made in local workshops – experts are participating in the workshops in sub-regions
- Workshops are assessing appr. 200 core occupations of the local labor market (ISCO classification)
- Typically, the assesment takes 2-3 hours
- The assesments are made in a database with the access to the unemployment and vacancy statistics (historical data) of the Ministry of Economic Affairs and Employment and to the national database of vacancies
- In a summary, the occupations are classified into three categories: shortage, balance, and surplus occupations
- The OB is implemented twice a year (spring and autumn)
- The Ministry of Economic Affairs and Employment publishes the Occupational Barometer on a website: www.ammattibarometri.fi

Aims for the Occupational Barometer

- To improve matching of the vacancies and job seekers
- To provide a practical and easy-to-use forecasting tool for the PES employment consultants and for the customers
- To collect and sum up information from the local labour market and disseminate the information to job seekers, employers, educational institutions, media etc.
- To promote occupational and regional mobility of labour and also immigration
- To support the decision making of employment, business and training policy

Renewal of the Occupational Barometer



- TEM actively develops short- and long-term forecasting of workforce and competence needs
- Occupational barometer has been implemented in regional PES offices for more than 10 years – very similar to those implemented e.g. in Poland and Slovenia
- While recognized as a central tool to provide short-term forecasting information for the regional and national policy making, it has not been developed much since its launch in 2012
- The goal of the renewal of the barometer is to produce a new higher-quality, more reliable and more effective tool that better meets today's information needs and digital operating environment

The new Occupational Barometer 2023



- The original idea of utilizing regional expert knowledge is to be preserved
- We want to build a more complete whole from regional and national forecasting than before, which better serves information needs of various actors in the labor market
- In the renewal of the Occupational Barometer, the latest technology and also machine learning are used without forgetting the importance of qualitative labor market information - we will continue to go behind the numbers and the emphasis is on the interpretation of phenomena.
- Only by combining statistical and qualitative information can we get the best understanding of the labor market's workforce and skills needs in the future.



Thank you!