

Forecasting of labour and skills demands in the Ministry of Economic Affairs and Employment

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Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet

Short-term forecasting of labour demand



- The focus in forecasting labour supply and demand is mainly on short-term perspective.
- In short-term, the Ministry provides twice a year an analysis on labour 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 labour 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 Centres for Economic Development, Transport and the Environment



- The Regional Centres 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 labour across Finland



- In 2022, the Ministry of Economic Affairs and Employment developed 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 sought short- and long-term solutions to improve the match between job vacancies and unemployed job seekers.
- Data gathered for the roadmap work help to build foresight models on the sectoral skills demands across Finland, which in turn helps to identify and meet training and education needs.
- Data is already widely used at the national and regional levels in analyzing the labour market situations and in making short-term forecasting

Long-term scenarios



- The Ministry of Economic Affairs and Employment provides long-term scenarios of the development of labour 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.

Development is continuous



- The Ministry of Economic Affairs and Employment commissions studies and surveys on both short-term and long-term forecasts in terms of labour supply and demand.
- Seminars and discussion events are organised 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 hence support personal foresight abilities.

Life-long learning and forecasting skills needs



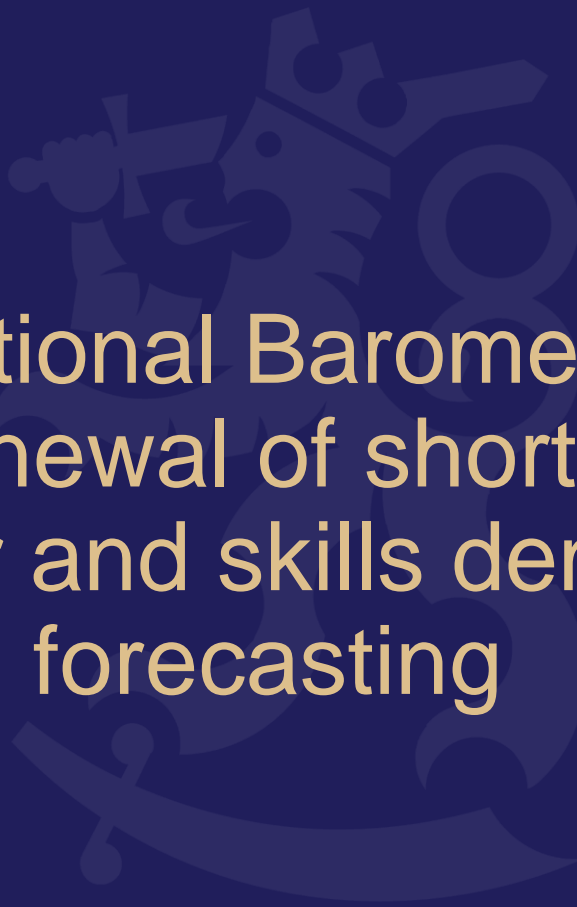
- In 2021 the Service Centre for Continuous Learning and Employment (JOTPA) was established to promote the competence development of working-age people and the availability of skilled labour.
- It 1) analyses the competence and labour market needs of working life, 2) finances education and training intended 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 labour market equilibrium.





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

Finnish Occupational Barometer in 2012-2022



- The aim of the OB is to promote occupational and regional mobility of labour force - also immigration
- Also, the aim is to support the knowledge-based decision making of employment, business, and training policies
- The first OB was developed in response to the region's need to better meet short-term labor needs. Regional expert boards including experts from PES assessed twice a year appr. 200 occupation in terms of expected development within coming half a year as regards demand and supply of labour force
- Expert boards were offered (simple) statistical information about open vacancies in the region as well as number of unemployed job seekers - average of the previous 6 months figures
- Based on this statistical information, the regional boards gathered to make a short-term forecast for their own region
 - The appr. 200 occupation are classified into three categories: 1) shortage, 2) balance, and 3) surplus of job seekers
- The regional forecasts were pooled into one data and published in the web site of the Ministry of Economic Affairs and Employment
 - In addition, the regional PES offices had a more detailed data at their disposal

Need for renewal of the Occupational Barometer



- TEM actively develops short- and long-term forecasting of labour and skills needs
- Occupational barometer was implemented in regional PES offices for 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 was not 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*

Reforming Finnish OB in 2022-2024



- Under the Recovery Plan of the European Union, Finland has committed to develop its short-term labour and skills demand forecasting
- In the project funded by the RRF, the whole process of Finnish OB is modernised: Data model, regional expert board assessment, and the public web site
- In the new OB, data includes more information of the labour market, the regional boards are more extensive (In addition to PES, educational institutions, employers and private personnel service companies are represented), and the public website has a modern look and is more versatile than before in terms of the information shown there (menu-based user interface)
- The basic idea still remains: the forecasting of short-term labour and skill needs will continue to combine quantitative statistical analysis and the assessment of regional experts in order to provide reliable and as accurate a picture as possible of the labour and skills needs in the regions

The logo for 'Next Gen EU' is displayed on a blue rectangular background. The text 'NEXT GEN' is in white, bold, uppercase letters, with 'EU' below it in a similar font. To the right of 'EU' is a small white circle containing a stylized representation of the European Union flag's stars.

Creating a new model of Finnish OB



- The project started with a preliminary study (2021), where the current state of the barometer and its use and development needs were reviewed. For the purpose of the investigation, both information producers and users from different organizations were interviewed.
- Based on the preliminary study, a project plan was made, which was included as part of the Finland's recovery plan (EU). More broadly, it was about developing the forecasting of labour and skills needs as part of the reform of continuous learning.
- Funding was obtained for the project, with which a project manager was hired. In addition, with the help of funding, the system's technical renewal work was commissioned.
- A new reporting system and a new public website have been created in the technical renewal project. Data collection according to the new model is underway and the reporting system is ready for use. The public website will be opened when the information is published at the end of November.
- The barometer's development work will continue with the support of RRF funding until the summer of 2025, and after that the maintenance and development of the system will become a permanent part of the ministry's foresight activities. Development is done systematically as part of the whole of management with the knowledge of the ministry.

The NEW Occupational Barometer in Finland



- The OB still bases on the expertise of the regional PES offices about the short term (now one year) prospects of the local labour market
- PES experts assess 1) the short term prospects of the supply and demand of the labour and 2) short term skills needs in the industries
- The assessments are made in local workshops – experts from several stakeholders are participating in the workshops
- Typically, the assessment takes 2-3 hours
- The regional expert groups are offered by the ministry a statistical data package with relevant unemployment and vacancy statistics on both national and regional level
- The end result is an assessment of the short-term development of labor supply and demand, and information on industry-specific and regional labor and skills needs
- The OB is implemented once a year (autumn)
- The first assessment of the new OB are published 29th November 2023 the official website: www.tyovoimabarometri.fi

Occupational Barometer in other countries



- Occupational Barometer is implemented e.g. in Poland:
<https://barometrzwodow.pl/en>
 - (See also https://www.researchgate.net/publication/337795984_Occupational_Barometer_as_a_Tool_for_Identifying_Shortage_and_Surplus_Occupations_on_Local_Labour_Markets_Evidence_from_Poland)
- Also, it is implemented e.g. in Slovenia and Estonia
(<https://www.tootukassa.ee/en/barometer/map>)
- Generally, the short-term forecasting of labour markets is done fully statistically based on quantitative econometric analysis - also in Finland we apply that model in assessing national trends in labour supply and demand
- Relying only on statistical analysis, however, leaves out of sight the extensive expert knowledge that the regions have regarding the labor market and its changes



Thank you!

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