

## LAB-MOVIE

### Labour Market Observatory in Vietnam universities

## Report on European Labour Market Observatories

<b>Project reference:</b>	<b>609653-EPP-1-2019-1-IT-EPPKA2-CBHE-JP</b>
<b>Objective:</b>	Outcome 1.2 - Report on European Labour Market Observatories
<b>Date:</b>	12 <sup>th</sup> June, 2020
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<b>Version of the document</b>	1.0



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## Section 1 - Introduction to Labour Market Observatories

### 1. WHAT THEY ARE

Labour Market Observatories (LMO) are institutions that provide information about trends on labour market evolution by gathering and analysing data on the demand of qualifications and skills in a region or sector.

According to the European Training Foundation, observatories are increasingly asked to work on labour market and skills forecasting

- monitoring labour market and skills dynamics – data and analysis
- providing evidence-based recommendations for policy making and action
- stimulating debate with important stakeholders such as public institutions, professional organisations, regional bodies, business communities, civil society, and academia.

Observatories provide a broad range of services: data sets, indicators, trends analysis, catalogues of occupations and qualifications by sector, barometers of occupations, analytical reports on labour market forecasting, guidance and information on occupations and sectors, tracking of graduates, and studies of performance of specific training policies.

The main goal of LMOs is to help labour market agents make better choices and reduce the mismatch between skills demand and supply. Their main users are current and future labour market participants, such as job seekers and students, who need timely and relevant information to make educational, training, and occupational decisions; intermediaries who help these end users make informed choices, such as public employment service workers and career guidance counsellors; policymakers, especially in the areas of labour and education; educational and training institutions, whose degrees should be based on the information available on labour markets; and investors and employers, whose investment decisions should also be conditioned on such data. Therefore, the key objective of LMOs is to guide individuals in making informed choices on skills development.

In summary, LMOs aggregate relevant existing data on skills and labour demand (from employers) and supply (from the working-age population), analyse these data and provide timely, relevant, and accessible labour market information to job seekers and students, public employment service workers and career guidance counsellors.

Some important features that a LMO should display are the following:

- Offer a common platform for information on labour market and skills dynamics

- Connect with different sources of data on the labour market
- Provide the necessary information and make it available on a timely basis
- Maintain historical data
- Be coordinated effectively with other information systems
- Be accessible to all public institutions and government bodies concerned with the design of labour market policies and enable them to undertake further analysis with the data
- Support public authorities and policy-makers in strategic decision making providing relevant and systematic information on trends and changes in the labour market
- Provide access to its data to the academic community in order to promote additional research on current labour markets
- Provide quantitative and qualitative information on the labour market regarding the supply and demand of professional competencies
- Provide the necessary tools to analyse the causes and effects of mismatches between supply and demand of skills
- Allow for different levels of disaggregation (sectoral and regional) on the available data
- Provide forecasts on the labour demand and supply to identify mismatches between demand and supply of skills and qualifications
- Disseminate labour market and skills information by publishing labour market reports through an interactive Web platform to exchange experience
- Support basic and advanced data analytics
- Identify data gaps and seek alternative sources and approaches
- Undertake comparative analysis in an international and global context
- Analyse the implementation of policies (either active or passive)
- Provide data analytics for the monitoring of the labour market developments, trends, impact of policies, behaviour of main players and stakeholders
- Provide the necessary mechanisms for the evaluation of policies (active or passive)
- Support the elaboration of reports on a periodical basis as automatically as possible.

## 2. WHAT TYPES OF LABOUR MARKET OBSERVATORIES WE CAN FIND

Although Labour Market Observatories share common features, observatories have adopted different strategies to adapt to specific countries and regional contexts. LMOs differ in terms of mandate and objectives, the organizational setting, the profile of stakeholders involved and the relationship with them, the scope of activities, the range of issues that they address, the main target users, their geographical or sectoral

coverage, and the degree of interaction with policy and decision makers. Some observatories provide data and analysis only whereas other observatories add interpretation and recommendations for policy-making at either national, regional or sectoral levels.

Labour market and training observatories operate in many institutional settings. They can be independent structures or be embedded under other umbrella structures, such as public or academic and research institutions. They might also operate at various levels: supra-national networks, national, regional and sectoral. Finally, they might use a mix of resources: public (either national, regional, or local) and non-public (for example, from sectoral confederations). Some observatories benefit from a supporting legal framework and public funding, but other observatories operate without public support, and must rely on their ability to be competitive to get funds.

### 3. CHALLENGES FACED BY LABOUR MARKET OBSERVATORIES

Through our survey of European Labour Market Observatories, we have identified several challenges that they have faced over time. In this section, we review some of them.

An important feature of effective observatories is their capacity to produce analyses of labour market and skills dynamics for specific regions, sectors and occupations. Addressing the special needs of their target groups – either sectors or regions – strengthens their value for society.

The link between results from analysis and recommendations for policy and action has been considered a desirable service of LMO. For observatories that entirely rely on their professional autonomy to be credible in their market, it can be crucial to keep independence from public policy making.

Key actions of LMOs include skills matching and the interactions between education and training and the labour market demand. This fact has had an effect on the skills and capacities of observatory staff, who are required not only to perform surveys and analysis, but also to use newer methodologies and IT tools to analyse large data sets, to customise the results and to lead stakeholders into fruitful discussions. In addition, the availability and need to analyse big data will open new horizons within the scope of LMOs activities.

The sustainability of LMOs is a well-known challenge. To address it some countries have integrated regional observatories in larger networks or have diversified funding sources.

Another crucial challenge observed in many countries is the lack of coordination between labour market needs on the one hand and educational choices and skills development policies on the other. Given that the end users of the reports produced by

the LMO would be job seekers and students, the Ministry of Labour and the Ministry of Education (or however they are named in each country) should share information and goals. Most of the current LMOs around the world are placed under the Ministry or Department of Labour and the Ministry or Department of Education.

The effectiveness of LMOs depends on the management and structure of these institutions and the final use of the information that they generate. It is crucial that policy makers and other users specify what type of information should be provided by the LMO. Sometimes, lack of interest, poor knowledge, resistance to change, or political factors can reduce the potential advantages of LMOs. In those situations, the information produced by the LMO may be of little value added, low quality and become irrelevant for the users.

#### 4. GOOD PRACTICES CONNECTED TO SUCCESSFUL LABOUR MARKET OBSERVATORIES

Successful observatories share characteristics such as:

- Methodological credibility
- Combination of tools and approaches
- Data generation, data analysis and data interpretation
- Ability to evolve and adapt to new analysis, products and demands from target users
- Networking and cooperation with data generation agencies, social partners, state agents, other observatories, and international cooperation (within the EU and beyond)
- Supply of final products to users in a readable and attractive fashion with online access
- Research independence
- Capacity to link research results with public policy dialogue and recommendations for action.
- Sustainable funding
- Endowed with the optimal amount of human and technological resources

## **Section 2 - Report on the European and international labour market observatories**

At international and, in particular, European level, there are some observatories managed by the main European and international institutions (European Commission, European Economic and Social Committee, European Centre for the Development of Vocational Training, Organisation for Economic Cooperation and Development).

These observatories deal with various issues such as youth employment, the integration of refugees and asylum seekers into the labour market, the integration of the long-term unemployed into the labour market, educational and vocational training, and the effects of digitisation and greening of the economy on employment, skills and fair labour mobility.

However, in addition to conducting quantitative research, they also work at a qualitative level, especially in the identification and collection of good practices. Indeed, these observatories aim to improve the process of European and national employment policy making, the definition of European vocational education and training (VET) policies and their implementation, but also to examine labour market challenges and trends and much more.

Once again, none of these observatories seem to deal with framing and describing the professional figures, except when talking about training and skills linked to specific target groups of workers or to professional figures classified, in this case, through the European Classification of Occupations (ESCO).

However, it is interesting to note that CEDEFOP (European Centre for the Development of Vocational Training) is joining forces with Eurostat to develop a comprehensive system at EU level to collect and analyse data on skills demand using online job offers. It is therefore a system for the textual analysis of job advertisements similar to the one adopted by the Politecnico di Milano and soon also by the University of Padua.

We are therefore talking about a survey system that could actually represent a very interesting tool not only to monitor job advertisements, but also to detect the demand for skills and, more generally, to frame and describe the professional figures sought by companies.



## International labour market observatories

Institution
OECD (Organisation for Economic Cooperation and Development)
Country
SupraNational/International
Name of the Observatory
The Programme for the International Assessment of Adult Competencies (PIAAC) - Survey of Adult Skills
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
SupraNational/International
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)
<p>The Programme for the International Assessment of Adult Competencies (PIAAC) is a programme of assessment and analysis of adult skills. The major survey conducted as part of PIAAC is the Survey of Adult Skills. The Survey measures adults' proficiency in key information-processing skills - literacy, numeracy and problem solving - and gathers information and data on how adults use their skills at home, at work and in the wider community.</p> <p>This international survey is conducted in over 40 countries/economies and measures the key cognitive and workplace skills needed for individuals to participate in society and for economies to prosper.</p> <p>Data from the Survey of Adult Skills allows investigation of the links between key information-processing skills and a range of variables, constituting a rich evidence base for policy-relevant analysis. In particular, data from this Survey facilitates a better understanding of:</p> <ul style="list-style-type: none"> <li>• Performance of education and training systems.</li> <li>• The extent and dimensions of illiteracy and poor literacy.</li> <li>• Gaps between labour markets and education and training.</li> <li>• Equity levels in access to education and intergenerational mobility.</li> <li>• Young people's transition from education to work.</li> <li>• Identification of at-risk populations.</li> <li>• Links between key cognitive skills and variables, such as demographics, educational background, health, etc.</li> </ul>
Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)
<p>The Survey is administered every 10 years and has had two cycles so far. In the First Cycle, there were three rounds of data collection, between 2011-2018. In 2018, the Second Cycle of the Survey has begun, with results for this cycle to be published in 2023.</p> <p><b>The Survey is implemented by:</b></p> <ul style="list-style-type: none"> <li>• interviewing adults aged 16 to 65 in their homes – 5 000 individuals in each participating country</li> <li>• answering questions via computer, although the Survey can also be implemented via pencil-and-paper</li> <li>• assessing literacy and numeracy skills and the ability to solve problems in technology-rich environments</li> </ul>

- collecting a broad range of information, including how skills are used at work and in other contexts, such as the home and the community.

**The Survey is designed:**

- to be valid cross-culturally and internationally
- for countries to be able to administer the survey in their national languages and still obtain comparable results
- to provide comparative analysis of skill-formation systems and their outcomes, and international benchmarking regarding adult skills
- as a survey that will be repeated over time to allow policy makers to monitor the development of key aspects of human capital in their countries.

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

Generally, the data/results of the survey are disseminated through publications, public use files and through a data navigation system (International Data Explorer).

Public Use Files containing individual unit record data in SAS, SPSS and CSV format are available for downloading for each of the countries participating in the Survey of Adult Skills.

The International Data Explorer (IDE) allows you to create statistical tables and charts to explore adults' performance in literacy, numeracy, and problem solving in technology-rich environments. Data can be analysed by country as well as in relation to demographic characteristics, social and linguistic background, education, use of skills and employment status.

**References (website or other references, where possible in English)**

<http://www.oecd.org/skills/piaac/>

## European labour market observatories

Institution
European Commission
Country
SupraNational/International - Europe
Name of the Observatory
European Employment Policy Observatory (EEPO)
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
SupraNational/European
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)
The European Employment Policy Observatory (EEPO) aims to improve European and national policy-making by providing information, analysis and insights on the design, implementation, monitoring and evaluation of policies.
Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)
<p>There is not much material regarding the methodology adopted by the EEPO.</p> <p>In principle, the Observatory conducts surveys among employers and workers in European countries, with the support of several national institutions such as EURES, Public Employment Service, etc.</p> <p>However, the methodological aspect that distinguishes the EEPO is that, in developing its research, it makes use of a network of experts from across the EU. They specialise in a range of topics relating to the labour market and employment, such as unemployment, work-life balance, education systems, skills supply, and wages. There are three types of expert in the EEPO network: thematic experts, country experts and experts on public employment services.</p> <p>Their areas of specialism include:</p> <ul style="list-style-type: none"> <li>• Labour market participation</li> <li>• Labour market functioning and segmentation</li> <li>• Social dialogue and public employment service</li> <li>• Active labour market policies</li> <li>• Work-life balance</li> <li>• Job creation options</li> <li>• Gender equality</li> <li>• Skills supply and productivity</li> <li>• Lifelong learning and education systems</li> <li>• Wage setting mechanisms</li> <li>• Active ageing and working-life duration</li> <li>• Self-employment and entrepreneurship</li> <li>• Unemployment and monitoring of vacancies</li> <li>• Use of European Social/Structural Funds for employment</li> </ul>

<p>The EEPO core team works closely with the experts to produce research papers, as well as giving staff from the European Commission the chance to communicate with them on a diverse range of themes.</p>
<p><b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b></p>
<p>The main purpose of the EEPO is to produce high-quality research papers on the labour market and employment, which can be accessed through the EEPO's library. Using a search function, it is possible to navigate through Observatory research in different policy areas, document types, years of publication, and countries. The EEPO produces a wide range of research:</p> <ul style="list-style-type: none"> <li>• <b>Country-specific research</b> (Policy assessment, provided on a regular basis, considering the progress made towards the European employment strategy and Europe 2020 strategy at country level).</li> <li>• <b>Thematic research</b> (Thematic monitoring at EU-level).</li> <li>• <b>Analysis of employment services</b> (Analytical input on employment services).</li> </ul> <p>Document types:</p> <ul style="list-style-type: none"> <li>• <b>EEPO Reviews (Synthesis).</b> Released every six months, this Review focuses on one 'hot topic' in the labour market and compares what different countries have been doing in this area. For example, the 2014 Reviews compared wage subsidies across European countries and examined incentives introduced across Europe to encourage unemployed individuals to start their own businesses.</li> <li>• <b>EEPO Review - National Articles.</b> These national reports, released every six months, focus on one labour market 'hot topic' in a particular country and serve as the basis for the EEPO Review Synthesis.</li> <li>• <b>EEPO Meeting Materials.</b> This section of the library pulls together all the materials from the meetings EEPO has hosted, such as Youth Workshops and conferences for Employment Services, the PARES Strategic Dialogue etc.</li> <li>• <b>MISEP Meeting Materials.</b> These are the reports from meetings of the Mutual Information System on Employment Policies (MISEP) meetings up to 2009.</li> <li>• <b>Employment Policy updates (EEPO Regular Reports and EEO Quarterly Reports).</b> These reports are produced by EEPO's network of country experts three times a year, summarising key reforms in their country's labour market across selected policy areas (employment protection legislation, active labour market policies, social security systems, work-life balance and gender equality, education and training systems, labour taxation, wage setting institutions and dynamics)</li> <li>• <b>Thematic Papers.</b> This section of the library brings together all research papers that focus on a particular topic in one or more countries, including research papers and materials from thematic meetings.</li> </ul>
<p><b>References (website or other references, where possible in English)</b></p>
<p><a href="https://ec.europa.eu/social/main.jsp?catId=1086&amp;langId=en">https://ec.europa.eu/social/main.jsp?catId=1086&amp;langId=en</a></p>

<b>Institution</b>
European Economic and Social Committee (EESC)
<b>Country</b>
SupraNational/International - Europe
<b>Name of the Observatory</b>
Labour Market Observatory (LMO)
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
SupraNational/European
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>
<p>The objective of the Labour Market Observatory (LMO) is to identify and analyse labour market trends and challenges, bringing added value to the work of the EESC and its Section for Employment, Social Affairs and Citizenship (SOC).</p> <p>The observatory looks at labour market challenges and trends, collects examples of good practices and produces reports or studies on topical issues. It also organises public events as well as internal meetings, stimulating discussion among institutions, socio-professional stakeholders, civil society organisations and academia.</p> <p>It works on various key topics such as youth employment, the integration of refugees and asylum seekers into the labour market, the inclusion of the long-term unemployed in the labour market, vocational education and training (VET), and the effects of digitalisation and greening of the economy on employment and skills as well as on fair labour mobility.</p>
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
<p>The studies are conducted by way of:</p> <ul style="list-style-type: none"> <li>• questionnaires that will be sent to the main social partners and civil society organisations of some selected countries</li> <li>• interviews on the ground with representatives of the main umbrella trade unions and employers' organisations, other CSOs, public authorities, national economic and social councils</li> <li>• desks research – collection of relevant documents from European and international institutions, agencies, think-tanks, ministries, national ESCs, social partners, civil society, etc.</li> </ul>
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
The Observatory produces reports and studies that are published periodically and organizes thematic public events.
<b>References (website or other references, where possible in English)</b>
<a href="https://www.eesc.europa.eu/en/sections-other-bodies/observatories/labour-market-observatory">https://www.eesc.europa.eu/en/sections-other-bodies/observatories/labour-market-observatory</a>

<b>Institution</b>
CEDEFOP (European Centre for the Development of Vocational Training)
<b>Country</b>
SupraNational/International - Europe
<b>Name of the Observatory</b>
VET (vocational education and training) and employment policies - Identifying skills needs
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
SupraNational/European
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>
<p>Cedefop is one of the EU's decentralised agencies, it is involved in shaping European vocational education and training (VET) policies and contributes to their implementation. The Agency supports the European Commission, EU Member States and social partners in developing European policies in VET.</p> <p>To inform the design of VET (vocational education and training) and employment policies, Cedefop identifies and anticipates future skill needs and potential skill mismatches. It provides high quality evidence on trends in the labour market and skill needs by producing regular skill supply and demand forecasts for Europe and analysing the potential labour market mismatches and imbalances. Cedefop also investigates skill and competence needs in selected sectors, has collected its own European data on skills and jobs and is currently working on collecting and analyzing data on skill demand using online job postings.</p>
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
<p>In particular, the projects related to the identification of skills needs are:</p> <ul style="list-style-type: none"> <li>• <b>Anticipating and matching skills:</b> In 2017 Cedefop began to provide technical advice to countries asking for its support to improve their 'governance of skills anticipation and matching'. In doing so, Cedefop works to identify country-specific challenges, bottlenecks and policy solutions for achieving effective skills governance.</li> </ul> <p>The country support that Cedefop provides aims at improving methodological instruments that collect labour market and skills intelligence and seeks to facilitate effective dissemination and use of results in different policy spheres (e.g. education and training, employment, active labour market policies etc.), in collaboration with key national stakeholders.</p> <p>To effectively carry out the country reviews, Cedefop has developed a comprehensive skills governance analytical framework that identifies key elements and ingredients of well-functioning systems of skill needs anticipation in EU countries. On the basis of this generic framework, Cedefop, in close consultation with National Steering Committees comprised of key Ministries and stakeholders in each country, refine and customise the framework so as to address national-specific priorities and challenges. Cedefop subsequently deploys additional methodological tools (stakeholder interviews, focus groups, Delphi methods) to collect in-depth information and facilitate policy consensus among national stakeholders.</p>



- **Big data analysis from online vacancies:** Cedefop is joining forces with Eurostat and DG EMPL to develop a fully-fledged EU-wide system to collect and analyse data on skill demand using online job postings.

This new type of labour market intelligence is based on information gathered from more than 30 million online job vacancies collected in the second half of 2018 in Czechia, Germany, Spain, France, Ireland, Italy and the UK. The classification of European skills, competences, qualification and occupations (ESCO) and complex big data analysis techniques were used to extract information on skills from the vacancies. The results are presented in the Skills Online Vacancy Analysis Tool for Europe (Skills OVATE).

- **Digitalisation, AI and the future of work:** Cedefop's 'Digitalisation and the future of work' project analyses the impact and drivers of automation, robotics, artificial intelligence and other digital technologies on employment and changing skill needs of jobs. It also examines the implications of new forms of digital labour, such as platform or crowd work.
- **European Company Survey:** Cedefop and Eurofound are sharing expertise and resources to carry out the next European Company Survey. The survey will explore the strategies deployed by companies to meet their skill needs, through recruitment, HR development practices and work organisation. In this context, special emphasis will be put on the impact of digitalisation.

The ECS 2019 is the first large-scale, cross-national survey to use a push-to-web approach. Over 25,000 establishments across all EU Member States will be contacted via telephone to identify a management respondent, and, where possible, an employee representative respondent. Respondents will then be asked to fill out the survey questionnaire online. This approach reduces the burden on respondents and is expected to improve the quality of responses. Moving the questionnaire administration fully online makes the ECS well and truly future-proof.

The overview report for the ECS 2019 will be published in autumn 2020. It will describe patterns in workplace practices and relate them to managerial strategies and outcomes for businesses and their employees.

- **European skills and jobs (ESJ) survey:** is the first survey on skill mismatch carried out in the EU28 Member States, examines drivers of skill development and the dynamic evolution of skill mismatch in relation to the changing complexity of the tasks and skills required in people's jobs.
- **European skills index:** The objective of a skills system is not only to continually develop the skills of the population, but also to activate and effectively match these skills to the needs of employers in the labour market. Cedefop's European Skills Index (ESI) is a composite indicator that measures the performance of a country's skills system. ESI monitors member states performance over time and identifies areas calling for improvement. ESI can assist the implementation of the European Pillar of Social Rights. The European Skills Index is comprised of three pillars, each of which measures a different aspect of a country's skills formation and matching system; these pillars are used to organise and aggregate 15 individual indicators into a single summary measure.
- **Skills forecast:** Cedefop produces regular skill supply and demand forecasts for Europe and analyses the potential labour market imbalances.

The Skills Forecast does not intend to replace skills anticipation and forecasting initiatives taking place at national level, which are often built around more sophisticated methodologies and may offer a greater level of detail. The strength of the Cedefop Skills Forecast is that it uses harmonised data and a single methodology to make results comparable across countries which can be aggregated to provide an overall picture of labour market trends and skill development in the EU. The results cover all EU Member States plus a few more countries.

- **Skills for the green economy:** Since 2008, Cedefop explores employment effects, skill requirements and policy implications of the transition towards a greener economy. By comparing experiences and strategic responses across countries, Cedefop provides stakeholders and social partners with examples of good practice to shape the way in which education and training systems can be adjusted, upgraded and/or refocused so that learners and workers are suitably equipped with the right skills.
- **Skills Panorama:** Cedefop manages a unique central access point for data information and intelligence on skill needs in occupations and sectors across Europe.

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

Cedefop disseminates the data/results of research through publications and through a special online consultation tool (*Skills Panorama*).

**References (website or other references, where possible in English)**

<https://www.cedefop.europa.eu/it/themes/identifying-skills-needs>



## Labour market observatories in Italy

There are many observatories on the labour market in Italy, starting from the institutional ones whose activities are part of the National Statistical Programme. In particular, on one hand we have institutions that constantly collect, manage and monitor administrative data, and, on the other hand, we have institutions that monitor the labour market through specific official statistical surveys (repeated over time), as well as institutions that monitor the labour market through processing both administrative and official statistical data.

The main institutions managing administrative data are:

- The Ministry of Labour and Social Policies which manages the data of the Statistical Information System of Mandatory Communications (SISCO).
- The National Institute of Social Security (INPS) which manages data on the agricultural and non-agricultural employment structure, the wage and pension system, the beneficiaries of social security and family benefits.
- The National Institute for Insurance against Accidents at Work (INAIL) which manages data on risks and accidents related to the performance of work activities.
- The Employment Centres that manage the personal and professional data sheets.

As far as these institutions are concerned, we have not dwelt on the observatories managed by INPS, INAIL and the Employment Centres, since they deal with very particular and specific information that is beyond the scope and therefore beyond the type of information that one wishes to manage with a labour market observatory designed for universities.

The main institutions that, on the other hand, manage statistical surveys that are part of the national statistical programme are:

- The National Institute of Statistics (ISTAT) which manages the Labour Force Survey and the Survey on Graduates' employability.
- The National Institute for Public Policies Analysis (INAPP ex Isfol) which manages the Survey of Professions (with ISTAT) and the Survey of Professions and Skills in Companies or the Audit Survey on Professional Needs.
- The Italian Union of Chambers of Commerce, Industry, Crafts and Agriculture (Unioncamere), which, through the Excelsior information system, conducts periodic surveys aimed at reconstructing the forecast picture of labour demand and the professional, training and skills needs expressed by companies.

On the other hand, the main institutions managing processing of both administrative data and official statistical data are:

- The National Agency for Active Labour Policies (ANPAL and, in particular, the ANPAL Services Division), which through its LaborStat (Observatory on Local Labour Markets) carries out data processing from official sources and administrative data.

- The regions.

Regarding the regions, many (including Veneto) have their own labour market observatory. These observatories were created thanks to the commitment of ANPAL (in collaboration with the Ministry of Labour and Social Policies) which, in order to support the development of new observatory systems, has developed a series of models and methodologies with the aim of transferring to the Regions (who request them) methods and techniques of analysis already tested at national level. The aim is to enhance the regional statistical and administrative patrimony, therefore, to guarantee information contributions functional to the decision-making process and to the planning of labour policy interventions.

The main sources used by the regional observatories are:

- ISTAT data (Survey on Labour Force).
- Data from the Employment Centres (Personal and Professional Data Sheets).
- Unioncamere/Infocamere data (Excelsior).
- INPS data.

In general, all these observatories are based on data describing the "working life" of Italian workers or on information collected by interviewing working-age people. Only the Excelsior information system is based on data collected by interviewing companies (as was easy to expect since it is a system developed and managed by the Italian Chambers of Commerce). In any case, as far as the professional figures are concerned, all the observatories (including Excelsior) refer to the professional figures classified through the CP2011 classification of professions.

All these institutions (in particular INAPP and ISTAT) collaborate jointly to the management of the Information System on Professions, a national system of permanent observation of the professions and their needs that allows to link the main data on the topic of the labour market professions produced and provided by each institution.

Beyond the institutional observatories, whose activities are part of the National Statistical Programme, there are other observatories set up and managed by Italian universities. In particular, the University of Padua, the Politecnico di Milano and the University of Turin have their own observatory on the labour market.

All these observatories work on the basis of obtaining data from official sources and through their own surveys. However, while Milan and Turin, as for almost all official surveys, interview workers and graduate students or privileged witnesses, Padua seems to be the only one (together with Unioncamere with its Excelsior Information System) interviewing companies. Padua, in fact, is the only institution that talks about professional figures, framing and describing them based on information provided by employers (companies) and not based exclusively on the classification of professions CP2011 or on information collected through privileged witnesses such as professionals, sector experts, teachers and chairmen of degree courses.

It should be pointed out, however, that the Politecnico di Milano has recently equipped itself with a system that, through the textual analysis of job advertisements published on the Career Service website by companies, makes it possible to develop forms that show for each degree course the number of advertisements,

the degree level required, the main areas of employment, the roles offered and the type of contract offered. It is therefore an innovative and very interesting system that can certainly be used not only to monitor job advertisements, but also to frame/describe the professional figures sought by companies.

The University of Turin, on the other hand, has an Atlas of Professions which describes the professional figures linked to the University's degree courses based on a standard structure according to Le Boterf's approach. In this regard, it must be said that there are many Repertories of professions (institutional, regional and university) that describe the professions according to this type of approach, which is based on the analysis of information gathered through in-depth interviews with privileged witnesses (professionals, professors and chairmen of degree courses, sector experts) and on the consultation of information and data already collected by other institutions for similar purposes. The distinctive feature of this approach is the choice to describe the professional figures in terms of the activities carried out, focusing on the procedural dimension articulated by skills, knowledge and abilities necessary to carry them out. Le Boterf's approach is certainly interesting but specific for the creation of Repertories of the professions and not Observatories on the labour market even if, however, they can be a further source of information that can help in the definition and description of professional figures.

We would also like to point out the activities carried out by the Interuniversity Consortium AlmaLaurea, which has been interviewing all graduates for twenty years, one, three and five years after obtaining the degree. We have not dwelt on the activity carried out by AlmaLaurea, even though it is a reality that provides important information on the job placement of graduates (data usually used by university observatories), as it is now well known to all partners involved in the project.

Finally, it is worth pointing out that there are many job guidance and training sites providing in-depth descriptions of the main professional figures employed in specific sectors. In these cases the description of the professional figures seems to be the result of bibliographic research and testimonies of specialists/professionals and trainers. These realities have not been taken into consideration in this survey, believing that they cannot be classified as real observatories on the labour market, but they can also constitute a further source of information that can help in the definition and description of professional figures.

In conclusion, what emerges from this survey is that in Italy almost all observatories interview workers and graduate students or privileged witnesses, while very few (Unioncamere, University of Padua and partly the Polytechnic of Milan) interview directly companies and employers, i.e. those who create work through their own entrepreneurial activities. In particular, it is important to highlight once again how the observatory of the University of Padua is the only one that explores professional figures, framing and describing them based on information provided by employers (companies) and not based exclusively on the classification of professions CP2011 or on information

collected through privileged witnesses such as professionals, experts in the sector, teachers and coordinators of degree courses.

In this context, the system that allows the textual analysis of job advertisements adopted by the Politecnico di Milano is particularly interesting, so much that the University of Padua is equipping itself with the same system, calibrated, however, on the textual analysis, not of the job advertisements published on the notice board of the Career Service, but of all the job advertisements published on the main ad sites in Italy and abroad. It is, in fact, a tool that can be used not only to monitor job ads (already very interesting in itself), but also to frame/describe the professional figures sought by companies. However, it is important to underline that it is a rather complex IT tool to implement (but very easy and intuitive to use) that requires very diverse high-level skills; in fact, it has been developed and commercialized by a spin-off of the Bicocca University of Milan. In any case, the idea of analysing job advertisements through text analysis is certainly the most interesting spark that emerged from the survey of the main observatories on the labour market in Italy. So much that also at European level Eurostat, Cedefop and DG EMPL are working together to develop a system to collect and analyse data on skills demand using online job postings.

## Italian labour market observatories

Institution
National Institute for Public Policy Analysis (INAPP ex Isfol), National Institute of Statistics (ISTAT)
Country
Italy
Name of the Observatory
Professions Information System (SIP)
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
National and regional
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)
<p>The information system on professions, the most important source of information on the professions in the country, was created with the aim of having a permanent National observation System of the professions and their needs.</p> <p>The system provides a wide range of information on professions, professional needs and employment starting from the Classification of Occupations (CP2011).</p> <p>In particular, for each professional unit, it is possible to find:</p> <ul style="list-style-type: none"> <li>• Data relating to the stock of employed persons.</li> <li>• Job descriptions (knowledge, skills, attitudes, activities, etc.).</li> <li>• Data on accidents.</li> <li>• Job vacancies.</li> <li>• Short- and medium-term recruitment forecasts.</li> <li>• Local labour market data (at regional level).</li> <li>• University training offer.</li> <li>• Local training offer.</li> <li>• Registers' Administrative data.</li> </ul>
Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)
<p>The System involves various public and non-public bodies who, for their own purposes and for different reasons, produce and provide information in Italy regarding professions, work, employment and training.</p> <p>In particular, linked to the information set on professions, professional needs and employment forecasts guaranteed by Isfol (now INAPP) there are data provided by Istat (survey on the labour force), Ministry of Labour and Social Policies (Cliclavoro portal, in particular labour supply and demand), Unioncamere (short-term hiring forecasts), Inail (accidents) and Regions (observatories on the labour market and training).</p> <p>The Professions Information System is based on sharing information generated by other sources and on connecting it to the system via web, maintaining the ownership and the visibility of the authority who generated it. The system then traces web open paths to consult a wide variety of data on the professions, starting from any point of the network thus built.</p> <p>The information system on the professions is an example of "Linked Open Data", in which similar and uneven data are linked together via the web through the code of the profession (CP 2011).</p>

This means that it is an updated set of information from the statistical and administrative heritage of various institutions on the subject of professions in the labour market.

For further information on the data managed by the main bodies involved in the Professions Information System (Istat, INAPP, Unioncamere), please refer to the individual data sheets:

- Istat (Labour Force Survey, Survey on Graduates' Employability).
- INAPP (ex Isfol) (Sample survey on professions, Survey on professions and skills in companies or Audit Survey on professional needs).
- Unioncamere (Excelsior Information System).

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

Constantly updated web portals.

The navigation path is simple and intuitive: just enter one of the sites of the bodies involved in the SIP and choose the code of the profession of your interest. At that point it will be possible to view the access nodes to the sites of the other bodies that produce information on that professional unit and go deeper in the analysis through the reading of other qualitative and quantitative data.

**References (website or other references, where possible in English)**

<http://fabbisogni.isfol.it/> (in Italian)  
<http://professionioccupazione.isfol.it/> (in Italian)  
<http://professioni.istat.it/sistemainformativoprofession/cp2011/> (in Italian)  
<http://www.sistemainformativoprofession.it/> (in Italian)  
<https://www.cliclavoro.gov.it/approfondimenti/Pagine/Il-Sistema-informativo-sulle-professioni.aspx> (in Italian)  
<http://apponline.inail.it/BancaDatiProfWEB/> (in Italian)



Institution
Italian National Institute of Statistics (Istat)
Country
Italy
Name of the Observatory
Labour force survey; Survey on Graduates' Employability.
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
National
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)
<p><b>Labour force survey</b></p> <p>The labour force sample survey represents the main source of statistical information on the Italian labour market. The information collected from the population is the basis for official employed and unemployed estimate, as well as information on the main labour supply aggregates - occupation, sector of economic activity, worked hours, type and duration of contracts, training. The Labour Force Survey is aligned at European level and is part of the National Statistical Programme (statistics of public interest).</p> <p><b>Survey on graduates' employability</b></p> <p>The sample survey on graduates' employability aims at knowing the conditions and the employment paths of graduates few years after the title achievement. In addition to the employment condition and the characteristics of the job, information is collected on the curriculum of studies, the job search and the family of origin and current.</p> <p>The system represents a relevant source of information for the comparative analysis of the performance of different qualifications on the labour market, and a useful tool for assessing the effectiveness of the higher education system as a whole. The surveys also make it possible to study the influence of social origin, both on the school and university selection process and on the process of transition to work.</p> <p>The survey is included in the National Statistical Programme.</p>
Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)
<p><b>Survey on the Labour Force</b></p> <p>The survey involves a sample of households and all household members over 15 years of age are interviewed.</p> <p>The households to be interviewed are extracted from the municipal registry lists according to a sampling strategy aimed at building a statistically representative sample of the population living in Italy with respect to the variables surveyed.</p> <p>Since January 2004, the survey is continuous, i.e. information is collected with reference to all the weeks of each quarter, through a uniform distribution of the sample in different weeks. The survey is carried out during all weeks of the year. The sampled households will be interviewed 4 times over a period of 15 months. Each household is interviewed for two consecutive quarters, followed by a break for the following two quarters, after which it is interviewed again for two more quarters.</p>

The survey foresees that the first interview is usually carried out at the household's home, then adopting the CAPI (Computer Assisted Personal Interviewing) method/technique. The interviews following the first one, for the household with an available telephone number, are normally carried out by telephone, then using the CATI (Computer Assisted Telephone Interviewing) method/technique.

#### **Survey on graduates' employability**

Istat carries out the sample survey on graduates' employability by interviewing a sample of graduates who obtained the title four years earlier.

The information is acquired through a mixed CAWI/CATI technique.

#### **Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

##### **Labour force survey**

The results of the survey are disseminated through monthly or quarterly press releases and data tables are available in the I.Stat data warehouse under the subject "Labour and wages/labour offer". They are then disseminated in the main Istat publications (Annual Report, Italian Statistical Yearbook, Noi Italia, Italy in figures). The data are disseminated at regional level every quarter and at provincial level in the middle of the year. In addition, the elementary data collected during the survey are made available free of charge to users and researchers who make a justified request for scientific research purposes (standard and research files).

##### **Survey on graduates' employability**

The survey data are made available through the release of micro-data files. Researchers and scholars can access the Elementary Data Analysis Laboratory ("ADELE") to carry out their own statistical analysis of the survey micro-data, in compliance with the rules on the confidentiality of personal data. The main results of the Survey are also disclosed in the general volumes of Istat (Italian Statistical Yearbook, Compendium, etc.) as well as through specific editorial products.

#### **References (website or other references, where possible in English)**

<https://www.istat.it/en/>

##### **Continuous survey of the workforce**

<https://www.istat.it/it/archivio/8263> (in Italian)

<https://www.cliclavoro.gov.it/Barometro-Del-Lavoro/Pagine/Rapporti-ISTAT.aspx> (in Italian)

##### **Survey on the employment placement of graduates**

<https://www.istat.it/it/archivio/8338> (in Italian)

<https://www.istat.it/it/archivio/94564> (in Italian)



<b>Institution</b>
National Institute for Public Policies Analysis (INAPP ex Isfol)
<b>Country</b>
Italy
<b>Name of the Observatory</b>
Sample survey on professions; Survey on Professions and Skills in Companies or Audit Survey on Professional Needs.
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
National
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>
<p><b>Survey on professions</b></p> <p>The survey on professions is carried out jointly by INAPP and Istat and is included in the National Statistical Programme.</p> <p>The survey aims at collecting useful information to represent the characteristics of all the professions of the Italian labour market (starting from the Classification of Occupations CP2011), with particular reference to the content of the work carried out and the organisational context in which the work is carried out.</p> <p>The survey focuses on the nature and content of the work, with the aim to describe, with a high analytical detail, all the existing professions both in terms of requirements and characteristics required by the worker, and in terms of activities and working conditions that the profession implies. Ultimately, the aim is to know the contents of the professions with respect to a specific set of characteristics, knowledge, skills, work styles, values, tasks.</p> <p>The information, in particular, is useful to make a catalogue and describe the universe of existing professions (Classification of Occupations CP2011); analyse the changes in professional profiles and monitor the evolution of the labour market.</p> <p><b>Survey on professional needs</b></p> <p>The survey (carried out on behalf of the Ministry of Labour and Social Policies) aims at collecting qualitative information on private enterprises' (excluding the Public Administration sector) needs in terms of lack of specific knowledge/competences related to the professional figures (defined starting from the Classification of Occupations CP2011).</p> <p>In fact, entrepreneurs and HR managers of large, medium and small companies in Italy are asked to indicate with reference to the professions exercised in the company if in the following months it will be necessary to strengthen some specific areas of knowledge and skills to improve the performance. Companies are therefore invited to reflect on and report, in particular detail, not on the training that has been carried out in recent times but on the training that should be carried out in the near future to meet specific needs.</p> <p>The information gathered through the survey is used to improve policies and public investment for the training of workers in Italy and to reduce the gap between the current knowledge and skills of workers and those really needed by the productive world to respond effectively to market demands.</p>
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>

### Survey on professions

The survey involves a sample of workers from all 800 Professional Units (UP, fifth digit) of the Classification of Occupations (CP 2011). In particular, 20 interviews with workers are planned for each of the 800 Professional Units.

The sample of workers is selected from lists of companies or entities in which the professional unit under investigation is likely to be found.

The interviews are carried out face-to-face, using a CAPI (Computer Assisted Personal Interviewing) system.

### Survey on professional needs

The reference sample for the survey is made up of private enterprises (35,000) with at least 1 employee from all economic sectors, thus excluding the Public Administration and foresees a longitudinal quota.

The survey is carried out with CATI (Computer assisted telephone interviewing) technique.

### Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)

### Survey on professions

The survey data are made available through the portal <http://professionioccupazione.isfol.it/> and through periodic reports or on request (micro-data).

### Survey on professional needs

The survey data are made available through the portal <http://professionioccupazione.isfol.it/> and through periodic reports or on request (micro-data).

### References (website or other references, where possible in English)

### Survey of professions

<https://inapp.org/it/dati/ICP> (in Italian)

<https://www.indagineprofessioni.it/> (in Italian)

<https://www.istat.it/it/archivio/18368> (in Italian)

### Survey on professional needs

<https://inapp.org/it/dati/Audit> (in Italian)

<b>Institution</b>
Italian Union of Chambers of Commerce, Industry, Crafts and Agriculture (Unioncamere), in collaboration with the Ministry of Labour, the National Agency for Active Labour Policies (ANPAL) and the European Union.
<b>Country</b>
Italy
<b>Name of the Observatory</b>
Excelsior Project - Information system for employment and training.
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
National
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>
Excelsior annually describes the forecast picture of labour demand and of the professional, training and skills needs expressed by companies, providing useful indications to support the planning choices of training, orientation and labour policies. Excelsior is one of the most comprehensive surveys provided by the National Statistical Programme and represents the most complete information tool available in Italy for the knowledge of the professional and training needs of enterprises. For each enterprise, the recruitment programmes for the following three months are surveyed, broken down by professional profile and level of education required.
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
<p>Administrative data processing (data from chambers of commerce - Business register - integrated with employment data from source INPS - Istituto Nazionale Previdenza Sociale. This is the monthly mandatory notification sent to the INPS by the employers in the private sector who act as tax substitutes. These data provide precise information on stocks and flows generated by each individual company with reference to employees and collaborators registered under "separate management") and data collected through sample surveys of companies (the survey is included in the National Statistical Programme and it is mandatory).</p> <p>The survey techniques adopted are CATI (Computer Assisted Telephone Interviewing) and CAWI (Computer Assisted Web Interviewing).</p> <p>The survey is fully based on forecasting.</p> <p>The survey is monthly based - "continuous" - (for each survey the time horizon extends for three months after the month in which the survey is carried out).</p> <p>The data processing methodology is based on a specific modelling of the historical series of data from administrative sources integrated with the data of each monthly survey.</p> <p>The information made available by Excelsior is based on the Classification of Economic Activities (ATECO 2007), the Istat Classification of Occupations (CP2011) and the Excelsior Classification of Qualifications. According to the requirements of the Excelsior Information System, the data are processed by dividing the results obtained in such a way as to guarantee output structured by:</p> <ul style="list-style-type: none"> <li>• territorial detail corresponding to the Provincial Employment Centres and their higher levels (provinces, regions, large subdivisions);</li> <li>• sectoral detail, corresponding to 98 aggregations of ATECO divisions/groups and relative higher levels;</li> </ul>

- enterprise size detail calculated on employees corresponding to 7 aggregations of size classes (1-9 employees, 10-49 employees, 50-99 employees, 100-249 employees, 250-499 employees, 500-999 employees, 1000 employees and more);
- grading level detail, 3 aggregations (managers, white collars and blue collars);
- detail of the demographic components of the flows such as gender and age groups of incoming personnel (currently under test).

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

**Continuous survey dissemination tools (monthly)**

The dissemination of monthly data takes place through the production of three types of tools:

- monthly statistical survey volumes (or reports) at national, regional and provincial level;
- bulletins at national, regional and provincial level, intended as summary reports containing the main information obtained from the survey;
- web interface for querying monthly data.

The first two products are static and aim at offering a standardized view of the monthly data periodically produced.

The data query interface allows, in addition to the navigation of the monthly forecast database through particular infographic views, to carry out the task of identifying the potential demand for work.

**Annual survey dissemination tools**

The annual statistical volumes are organised in sections/subjects that make it possible to analyse, by sector of activity, profession and level of education, in more detail than the monthly volumes, the guidelines of the enterprises, the employment needs and the professional figures required. The study guidelines and required skills are also analysed in detail.

**The annual bulletins**, similar to what is produced monthly, are expected to be delivered for the whole year. The breakdown follows that of monthly products: one national bulletin, 20 regional bulletins and 104 provincial bulletins. The national bulletin provides keys to understanding the evolution of the Italian reality, trying to capture the emerging needs of companies and the professions of the future. In addition to the variables analysed in the monthly reports, the annual territorial bulletins deal in greater depth with topics such as job opportunities for young people under 30, for women, the professions most in demand in the territory, the skills required for the figures hired and the training of staff already employed in the company.

**Databases** freely searchable by users. Three categories of dynamically searchable databases are made available online:

- “sectors”: including forecasts of the recruitment of employees and tout-court revenue by economic sector and associated characteristics;
- “professions”: including forecasts of recruitment and tout-court revenue by profession and associated characteristics (professions are expressed according to the ISTAT classification, up to the 4th digit);
- “qualifications”: including forecasts of recruitment and tout-court revenue by study qualification and associated characteristics.

The stratification variables in the archives are the following:

- with regard to the enterprise: main economic activity sector, headquarter territorial area, size (in terms of employees) and craft or non-craft activities;
- with respect to the professional figures required by the enterprises: profession, qualification, level of classification (only for employees hirings), age, experience required, training required, difficulty in finding, gender, functional area and transversal skills.

Depending on whether the focus is on the sector of economic activity, profession or qualification, the other stratification variables are investigated at more or less detailed levels.

**References (website or other references, where possible in English)**

<https://excelsior.unioncamere.net/> (in Italian)

<https://www.cliclavoro.gov.it/Barometro-Del-Lavoro/Pagine/Rapporto-Excelsior.aspx> (in Italian)

<b>Institution</b>
ANPAL Servizi s.p.a. (under the control of the National Agency for Active Labour Policies - ANPAL).
<b>Country</b>
Italy
<b>Name of the Observatory</b>
LaborStat - Observatory on local labour markets
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
National and European
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>
<p>The Observatory carries out statistical studies and analyses on national and territorial labour market trends, employment service systems, employment transition and the working conditions of the main labour policy targets.</p> <p>The Observatory is managed by the Statistical Studies and Analysis Directorate, which guarantees the participation of ANPAL Servizi to the National Statistical System (SISTAN), taking care of the required fulfilments, data flows with Istat and the other Sistan bodies, ensuring the participation in the National Statistical Programme and carrying out research activities. In particular: it guarantees to the top management and to the company management adequate analysis services and studies on the development dynamics of the market and labour policies. It takes care of the production of research reports, in the economic and statistical field, aimed at analysing the trend of the labour market, with particular reference to specific targets of interest. It carries out studies and scientific relations with the ANPAL Studies Office. It produces newsletters and dissemination tools also in collaboration with other Institutions and Research Bodies. It evaluates and monitors labour policies on the basis of ANPAL guidelines.</p> <p>Ultimately, ANPAL Servizi processes labour demand and supply data in order to carry out analyses by target and socio-economic field, and studies methodological solutions for data processing.</p>
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
<p>Official sources (ISTAT and EUROSTAT) and administrative data (Ministry of Labour and Social Policy - MLPS and National Social Security Institute - INPS) processing.</p> <p>In particular, the most processed data are:</p> <ul style="list-style-type: none"> <li>● Continuous Labour Force Survey (RCFL) of ISTAT.</li> <li>● Survey on graduates' employability of Istat.</li> <li>● Labour Force Survey (LFS) of Eurostat.</li> <li>● Statistical Information System of Compulsory Communications (SISCO) of the Ministry of Labour and Social Policy.</li> </ul> <p>For further information, please refer to the ISTAT and Ministry of Labour data sheet.</p>
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
<p>Publication of periodical bulletins, analysis, reports, working papers and statistical insights.</p> <p>The Observatory also has interactive databases that provides data consultation through tabs that allow dynamic interaction (through special drop-down menus) with the databases in order to obtain multidimensional reports that can be displayed both in tabular and graphical form (bars, cakes, territorial maps).</p>



<b>References (website or other references, where possible in English)</b>	
<a href="https://www.anpalservizi.it/attivita/knowledge/osservatorio-sui-mercati-locali-del-lavoro">https://www.anpalservizi.it/attivita/knowledge/osservatorio-sui-mercati-locali-del-lavoro</a>	(in Italian)
<b>Institution</b>	
Ministry of Labour and Social Policies (Mlps)	
<b>Country</b>	
Italy	
<b>Name of the Observatory</b>	
Statistical Information System for Mandatory Communications (SISCO)	
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>	
National	
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>	
<p>As part of its institutional prerogatives, the Ministry of Labour and Social Policies carries out activities of statistical analysis on the labour market, social security and social protection. The statistical production activity of the Ministry is coordinated by the Statistics Office, in conjunction with the National Statistical System (SISTAN), which provides the country and international bodies with official statistical information.</p> <p>The Ministry carries out statistical studies and analyses on national and territorial labour market trends, mainly with respect to subordinate and consultant employment contracts.</p> <p>In particular, it focuses on the description of the dynamics of the labour market, through a series of statistics concerning:</p> <ul style="list-style-type: none"> <li>• the flow of employment contracts;</li> <li>• consultant employment contracts;</li> <li>• employment contracts in the Public Administration (PA).</li> </ul> <p>The statistics concern all economic sectors, including the Public Administration, and also involve foreign workers currently, albeit only temporarily, in Italy (self-employed workers are excluded).</p>	
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>	
<p>Processing of (administrative) data of the Statistical Information System of Mandatory Communications (SISCO).</p> <p>Mandatory Communications (Co) are the communications that all employers, public and private, must transmit in the event of activation, extension, transformation and termination of employment, associate, traineeships and other professional experience provided for by current legislation, as well as transfer of business and change of name. Every single communication is sent to the regional IT services where the company's premises are, then transmitted to the national coordination node established at Anpal/Mlps and implemented by the latter in the Statistical Information System of Mandatory Communications (SISCO), following a data processing process. The use of specific modules and terminology dictionaries necessary for the classification of information, allows the SISCO System to provide homogeneous and comparable information at national level.</p>	
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>	

Publication of an annual report on Mandatory Communications, quarterly business reports, flash publications and periodicals on special topics on the data in the aforementioned Annual Report.

**References (website or other references, where possible in English)**

<https://www.lavoro.gov.it/documenti-e-norme/studi-e-statistiche/Pagine/default.aspx> (in Italian)  
<https://www.cliclavoro.gov.it/Barometro-Del-Lavoro/Pagine/Andamento-Mercato-Lavoro.aspx> (in Italian)

**Institution**

University of Padua

**Country**

Italy

**Name of the Observatory**

Observatory on the Local Labour Market

**Type of Observatory (SupraNational, National, Regional, Sectoral, ...)**

Regional (Veneto)

**Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)**

The Observatory on the Local Labour Market aims to strengthen relations between universities and the world of work by drawing, through its research, a reliable picture of the situation of companies in the Veneto region belonging to different economic sectors and identifying the professional and skills needs.

In particular, for each economic sector analysed, it classifies and describes the main **professional figures** employed and the **organisational structure of the companies** in which they work (companies in the sector involved in the study).

The professional figures are described through:

- short classification of the figure within the organizational structure;
- description of the activities;
- qualifications;
- description of technical-specialist skills;
- language and computer skills;
- description of aptitudes, personality qualities and availability;
- description of any specificities and peculiarities of the figure.

In addition, are detected a whole series of information classifiable as:

- **General information**; information to describe the general characteristics of the companies such as their areas of activity, size, breakdown by province and links with foreign markets.
- **Employees**; information to describe the characteristics of the employees such as the type of contract, the percentage of women, the percentage of graduates, the presence of external consultants and university interns.
- **Employees trends, prospects and changes**; information on the economic performance and future prospects of companies and the sector, the consequent changes in personnel, as well as investment objectives and, therefore, the professional figures who will have the best employment prospects in the near future.

The Observatory provides also a whole series of information concerning the **employment trends** and the **number of companies and employees** working in the sector involved in the study both



at national and regional (Veneto) level, distinguishing according to specific sub-sectors and according to the companies' size, but above all observing their trend over time.
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
<p>The organizational structure of the companies and the professional figures are surveyed through face-to-face interviews and/or Focus Groups with the Owners or Human Resources Managers of a sample of companies operating in the sector involved in the study.</p> <p>The general information, on the personnel and on the trend, perspectives and changes of the personnel are, instead, collected through a CAWI survey of the companies of the Veneto region that are part of the sector involved in the study.</p> <p>Finally, information on the number of companies, the number of employees and employment trends are re-elaborated from official sources. In particular, the number of companies and employees come from census data by Istat (National Institute of Statistics), while information on employment trends comes from the databases of the Excelsior Information System (Unioncamere).</p>
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
<p>The Observatory's research takes the form of periodical publications of journals in the PHAROS series (Pursuing Home-market Accessibility and Raise of Occupational Standing) directly downloadable from the University of Padua's website, or available in a free paper copy upon request at the Career Service desk.</p> <p>In addition, the results of the research are officially presented in conferences followed by a round table with some companies that have participated in the research and some professors of the departments or courses of study most requested by the sector being studied to discuss professions and skills.</p>
<b>References (website or other references, where possible in English)</b>
<a href="https://www.unipd.it/osservatoriolavoro">https://www.unipd.it/osservatoriolavoro</a> (in Italian)

<b>Institution</b>
Polytechnic of Milan
<b>Country</b>
Italy
<b>Name of the Observatory</b>
Career Service of Polytechnic of Milan
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
Sectoral (the information collected refers to graduates of Politecnico di Milano).
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>
The Career Service of Politecnico di Milano provides two kind of information: employment data of Politecnico graduates (employment statistics) and a framework on the professional figures required by the job market, therefore on the real job opportunities for Politecnico graduates (job market information).
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
<p><b>Employment statistics</b></p> <p>Every year, the Politecnico di Milano carries out an employment survey on graduate students one year after graduation, in order to verify the effectiveness of educational careers in the world of work and for further professional guidance purposes.</p> <p>It is carried out through a mixed method (CAWI and CATI) and consists of a multiple-choice questionnaire of about 20 questions.</p> <p><b>Job market information</b></p> <p>The Career Service manages an internet portal where the companies can insert job offers so it has available update data on professional figures required by the job market.</p> <p>Through a text analysis of job advertisements published on the website of the Career Service by registered companies, for each course report cards have been developed with the number of ads, the level of degree required, areas of employment insertion, job titles and the type of contract offered.</p>
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
<p><b>Employment statistics</b></p> <p>A book with employment statistics of graduates after 12 months after the graduation is made with an overview on graduates and a detail view of the 3 Schools (Architecture, Design, Engineering). In particular, information is given on:</p> <ul style="list-style-type: none"> <li>• time to enter the labour market (percentage of employed 6 months and 1 year after graduation, split by bachelor and master degrees);</li> <li>• contractual aspects (percentage of graduates with employee status, percentage of graduates with a permanent type of contract, average net monthly salary);</li> <li>• work context (percentage of graduates employed in the private sector, percentage of graduates employed in a small-medium enterprise, percentage of graduates who work in Italy);</li> </ul>

- satisfaction with studies done (percentage of graduates who would enrol again at the Politecnico, percentage of graduates who believe that education and training acquired at the university is adequate for the current job, percentage of graduates who believe that they need their qualification or an equivalent one in order to carry out their job).

Furthermore, it is possible to consult an extract of employment data for each Course of study directly on-line, choosing the School and the Course through a dropdown menu.

#### **Job market information**

Data are available online. Setting the parameters related to the School (Architecture, Design, Engineering) and the Course, report cards are automatically produced and contain: number of job and internship offers of the year, company size, the country (Italy or abroad), the contract type (permanent, fixed-term, apprenticeship, internship, other), the top 10 sectors of companies and the main job offered in the top 4 sectors.

#### **References (website or other references, where possible in English)**

<https://cm.careerservice.polimi.it/en/>

Institution
University of Turin
Country
Italy
Name of the Observatory
Atlas of professions
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
Sectoral (the information collected refers to graduates of the University of Turin).
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)
<p>The Atlas of Professions offers in-depth descriptions of the <b>professional figures</b> trained in University of Turin degree courses and beyond and <b>statistics on the employment outcomes of graduates</b>.</p> <p>The descriptions of the <b>professional figures</b> have a standard structure articulated in the following items:</p> <ul style="list-style-type: none"> <li>● <b>Identity card</b> - which in addition to a brief description of the figure also includes a section dedicated to the list of similar professional figures (where present), a section dedicated to the description of the rules that may regulate the profession, and the indication of the EQF level (European Qualifications Framework).</li> <li>● <b>What it does</b> - which takes the form of a list of the main activities described in the identity card and in the activities and competences (this table was no longer drawn up in the most recent professions because it offered redundant information).</li> <li>● <b>Where he/she works</b> - which lists and describes the main sectors and working environments (companies, institutions, associations, ...).</li> <li>● <b>Working conditions</b> - which provides information on the main contractual and working conditions (shift work, existence of work peaks) that those who work in the profession are faced with.</li> <li>● <b>Activities and skills</b> - a section that is articulated internally in required skills organized by main objectives and activities that that professional figure must achieve, knowledge and skills (in turn organized in specialized and general), a selection of working behaviour, training path (formal and recommended).</li> <li>● <b>Info</b> - which collects links or additional and in-depth information.</li> </ul> <p>As mentioned above, the Atlas of Professions also hosts a section dedicated to <b>graduate employment statistics</b>. The statistics are structured by disciplinary areas (scientific, health, economic, legal and socio-political, humanistic), which in turn are divided into groups that take into account both disciplinary specificities and labour markets (economic and management sciences, legal sciences, social sciences, health sciences, life sciences, motor sciences, mathematical, physical and natural sciences, linguistic, literary and documentary disciplines, cultural and artistic disciplines, education and teaching). The following statistics are compiled for each group: trends in the number of enrolments and graduates, an estimate of the average duration of studies, the time needed to obtain a job, the employment and unemployment rate, the most frequent occupations and their average salaries (where available), sectors of</p>

employment, prospective working conditions (estimate of the incidence of contractual forms, working hours).

**Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)**

For the selection of the **professional profiles** to be described, the Atlas uses the lists of outgoing professional profiles declared by the university degree courses. From 2013, in fact, all degree courses must list the professional profiles they train for and indicate them using the ISTAT classification of professions (CP2011). Therefore, the Atlas is updated and expanded following the updating and expansion of the University of Turin's educational offer.

The professions' description is structured into main activities and objectives to be achieved, broken down into knowledge, skills and competences. The decision to describe the professions in terms of the activities carried out, focusing on the procedural dimension articulated by competences, knowledge and skills necessary to carry them out, as well as on the system of relationships in which a certain profession is inserted, is inspired by **Le Boterf's theoretical approach on competences\***.

*\*According to **Le Boterf's approach**, in order to carry out professional activities and achieve objectives, workers must mobilise personal resources (knowledge, skills, working behaviour) and external resources. Competence is in fact defined as "being able to select, mobilise and dynamically structure - in a relevant and effective way - a set of resources of different nature (knowledge, skills, behaviours) to carry out an activity and obtain a result". In this framework, knowledge is the information possessed, skills indicate the ability to apply the knowledge possessed, while competences refer to that ability to activate and combine knowledge and skills in an appropriate way in order to carry out an activity.*

In particular, the description of the professional figures is the result of an analysis of information gathered through in-depth interviews with privileged witnesses (professionals, lecturers and chairmen of degree courses, experts in the field) and the consultation of information and secondary data, i.e. already collected by other institutions for similar purposes. The secondary data used comes from the following sources:

- the main institutional repertoires focused on the study of the world of work and the professions to which they belong: Inapp (ex Isfol), Anpal (ex Italia Lavoro), Istat, AlmaLaurea and for the descriptions previously elaborated also Thesaurus, Rome, Onisep, O'net);
- guidance (including: Jobtel, Informagiovani Torino, Jobsoul) or advertisement sites (including: LinkedIn, Indeed, Sole 24 ore-Monster);
- reference documents integrated by specific sources for areas of professions (e.g. Bocconi for economic area figures, DSS Environmental Professions Observatory in the UK, etc.).

**Statistics on graduates' employment**, as highlighted above, are drawn up for groups that take into account both disciplinary specificities and the characteristics of the labour markets they serve (Economic and management sciences, Legal sciences, Social sciences, Health sciences, Life sciences, Motor sciences, Mathematical, physical and natural sciences, Linguistic, literary and documentary disciplines, Cultural and artistic disciplines, Education and teaching). To process

these statistics, the Atlas makes use of data from many institutional sources: Ministry of Education, University and Research (MIUR), Istat, AlmaLaurea Interuniversity Consortium. The data on enrolment trends and the number of graduates of the University of Turin are the result of information processed by the Statistical Office of the MIUR. Based on data from Istat surveys on the Labour Force, estimates are elaborated on the employment trend and its characteristics of graduates under 35 and resident in Northern Italy: employment sectors, forms and types of contracts (employed or self-employed, full-time or part-time, fixed-term or permanent), professions and salaries. Finally, in order to provide an overview of the employment outcomes of graduates at the University of Turin, statistics are compiled from data released by the Consorzio Interuniversitario AlmaLaurea, which has been interviewing all graduates for the last twenty years, one, three and five years after obtaining the title.

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

Most of the results of the observatory's activities are published and disseminated in the form of an Atlas that can be consulted online and which contains the detailed and updated description of about 170 highly specialized professionals for whom the degree courses of the University of Turin, and not only, train. The portal also publishes statistics on the employment outcomes of graduates of the University of Turin and beyond.

The user can access the descriptions of the professional figures through three search keys:

- the professional figure (in alphabetical order);
- the professional area (which groups the professions that possess knowledge and use similar skills);
- the degree courses (grouped by disciplinary areas).

As highlighted above, there are five professional and disciplinary areas and they coincide: economic area, legal and social-political area, health area, scientific area and humanistic area. In turn, the areas are organized into 11 disciplinary groups: Economic and management sciences, Legal sciences, Social sciences, Health sciences, Life sciences, Motor sciences, Mathematical, physical and natural sciences, Linguistic, literary and documentary disciplines, Cultural and artistic disciplines, Education and teaching.

The section devoted to statistics on graduates' employment is also structured by fields of study, which are in turn divided into different groups according to disciplinary specificities and labour markets.

**References (website or other references, where possible in English)**

<https://www.atlantedelleprofessioni.it/> (in Italian)



## Labour market observatories in Spain

In Spain, we can find LMOs at different levels, in a similar fashion as what we have seen in the previous section devoted to Italian LMOs. There are observatories that operate at a national level, and, being Spain a very decentralised country, there are labour market observatories in most regions. The main national LMOs are the following ones:

1. Observatorio de las Ocupaciones del SEPE (SEPE's Observatory of Occupations). The main LMO in Spain is coordinated by the Ministry of Labour and affiliated to the Public Service for Spanish Employment (SEPE).

It is a technical unit that analyses the situation and trends in the labour market, occupations, groups of interest for employment and the transformations that occur in it, anticipating the challenges and requirements that the labour market poses and thus facilitating decision-making.

Its main tasks are the following ones:

- reply to needs on employment and training policy
- study the activities and occupations in which employment is being created or generated
- offer information on profiles of occupations and the training needs of workers
- carry out studies and reports on the labour market, employment and occupations, as well as their trend and prospects, and the generation of employment in the short and medium term
- encourage the search for new sources of employment, the shifts and changes that take place in the labour market and modify occupations
- prepare information and provide technical advice to agents and managers of training and employment policies, and inform citizens about the labour market
- participate in conferences, lectures, seminars and forums on the labour market
- collaborate with the Observatories of the Autonomous Public Employment Services and with other institutional Observatories, at a national and international level

2. The University section of the Ministry of Education (QEDU) offers a web platform called *What to study and where at* that provides information about the level of employability associated to each University degree.

The data on labour insertion contained in this section refer to university graduates who are registered as employed in the Social Security Register on 23 March of each of the four years of study analysed after completing their studies.

3. The Barometer of Employability and Employment of University Students, financed as a UNESCO Chair, generates reliable and timely information for the design of measures

to improve the employability and employment of university students in Spain. To this end, they have established the following objectives: to produce information that is homogeneous and comparable among studies and autonomous communities; to promote collaboration and the exchange of information among public administrations, employment and educational bodies and the institutes and centres that provide information on employability and labour insertion; to encourage research activity; and to support with information the decision-making of future students, current students and university graduates, as well as employers, politicians and university managers with responsibilities in education and employment [<https://datos.oeeu.org>].

4. The Survey on Labour Market Insertion of Graduates carried out by the National Institute of Statistics (INE). It provided information on various aspects of the transition from university to the labour market of university graduates from the 2009-2010 academic year. The survey responded to a national demand from society concerning the need to increase the public information available on the insertion of university graduates. The information was collected using a combined method consisting of direct interviews and use of administrative data.

5. University Observatories. During the last decades, we can observe a greater prevalence and relevance of University employment observatories, with a subsequent increase in the number of studies published in recent years (and their greater dissemination), and in the approval of employability strategies by Universities. There is also an increase in the number of job fairs organised by the respective Career Offices linked to the observatories, but all these fairs have had a mainly supply-side approach, with less attention to the new needs of labour demand.

The main study that all the University observatories undertake is a survey to their graduates. However, some of them do not include questions related to the quality of employment or the type of contract in the first job. Both questions are of great relevance if the final objective of the university is to have its graduates employed in jobs that are not precarious and well matched to their education and training. Universities seem to be more focused on showing good rates of employability, in order to attract potential students in the future. More emphasis would be needed in analysing and verifying whether the acquired knowledge and competencies of the students are applied in the company or graduates felt the need of any additional knowledge or skill.

There are fewer studies on emerging professions or skills demanded by employers, and the current ones are very much linked to specific sectors. In general, the studies that analyse the new skills requested by employers are carried out in coordination with the teaching staff responsible for each degree so that degree programs could be modified and adapted to the new labour market needs.



In the sample of selected University observatories that follows, we have found a closer relationship between universities and companies than in other Higher Education institutions because the main objective of their LMOs has been to foster and enrich it.

<b>Institution</b>
Universidad Autónoma de Madrid (UAM)
<b>Country</b>
Spain
<b>Name of the Observatory</b>
Observatorio de Empleabilidad - Oficina de Prácticas Externas y Empleabilidad
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
Sectoral because the Observatory only focuses on the graduates of this University and Madrid region.
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
The Employability Observatory of the UAM (OPE) provides three different types of information coming from a focus group with Human Resources staff and the coordinators of the University degrees (Study about employers); a survey to the companies which participated in Foro del Empleo UAM 2018/19 and Foro del Empleo Jurídico UAM 2018/19 (both of these meetings were organised by the OPE); and finally, a study of the labour insertion of UAM Graduates.
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.</b>
<p><b>Study about employers</b></p> <p>The OPE organises different focus groups framed in the week of employment. The focus groups gather Human Resources managers of companies and degree coordinators. Also, students can ask some questions and obtain information. After this session, the Observatory transcribes what they have said and elaborates a document adding some recommendations that will be published on the OPE's Webpage. Each focus group meets for 60-90 minutes with a moderator.</p> <p><b>Survey to the companies which participated in Foro del Empleo UAM 2018/19 and Foro del Empleo Jurídico UAM 2018/19</b></p>

Each year the OPE organises Job Fairs and employment meetings in order to bring firms closer to the university. After the meeting, the Observatory gives the companies which participated in a handed questionnaire. This survey contains questions about the activities that they were doing in the forum, such as interviews, workshops, conferences... and also questions about the organisation of the meeting itself and the quality of it. In the last Job Fair, there were 37 companies, and in the specific one for Law students, there were 19 companies.

### **Study of the labour insertion of UAM Graduates**

Every year, the Universidad Autonoma de Madrid implements a questionnaire on graduate students between 12 and 18 months after they complete their degree. The aim of this survey is to know how students deal with the challenge of finding a job and how the quality of this job is.

It is made with a CAWI survey of all university graduates, with some reminding email messages to deal with no responses. For students who finished their degrees in 2016/2017, 4066 graduates received the questionnaire but only 40.4% of them answered it. For master's students, the percentage was 48.1% and for doctorates was 46.1%.

### **Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

#### **Study about employers**

Online transcription of the focus group meetings. Normally they organise 2 or 3 focus groups per year and each group is for a different degree.

#### **Survey to the companies which participated in Foro del Empleo UAM 2018/19 and Foro del Empleo Jurídico UAM 2018/19**

There exists a PowerPoint presentation uploaded on the webpage with the analysis of these surveys. Firms are interviewed about the activities that they organised during the forum and about the organisation and the quality of the installations. Also, it includes some concluding remarks on the perception of the students about this forum.

#### **Study of the labour insertion of UAM Graduates**

Online reports of the surveys which are done every year.

### **References (website or other references, where possible in English)**

<https://alumni.uam.es/minisite/observatorio-de-empleabilidad/presentaci%C3%B3n-0>

<https://www.observatorio-uam.es/uploads/1617/informeconjuntoUAM1617.pdf>

[http://www.uam.es/ope/pdf/Inicio/Lineas\\_estrategicas\\_de\\_empleabilidad.pdf](http://www.uam.es/ope/pdf/Inicio/Lineas_estrategicas_de_empleabilidad.pdf)

<https://www.observatorio-uam.es/uploads/otrosinformes/Estudioempleadores20182019.pdf>

<https://www.observatorio-uam.es/uploads/otrosinformes/ResultadosEncuestasForoEmpleo2019.pdf>

<https://www.observatorio-uam.es/uploads/otrosinformes/InformeEncuestaempresasEncuentroJuridico2018.pdf>

<b>Institution</b>
Universitat de Valencia
<b>Country</b>
Spain
<b>Name of the Observatory</b>
Observatorio de Inserción Profesional
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
The Observatory is Sectoral because it only focuses on the graduates of this University.
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
This Observatory provides three different types of information: a study of the demands of employers of university students of the province of Valencia to improve the employability of their graduates (Second Employer Study); a study about the competencies and skills that the students were training and developing during their practices in a company (Study of students' competencies according to the internship tutors); and, an Observatory which focuses on the job offers managed by the OPAL (ObservEM).
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.)</b>
<b>Second employer study</b>
In order to undertake this study, the Observatory chooses among all the companies, private and public, settled on Valencia, a sample of 832 interviews and 327 graduates. This sample was chosen by stratified random sampling. Mainly, the receivers of the interview were human resources

managers or the staff in charge of supervising graduates. The interview was made using CATI techniques.

### **Study of students' competencies according to the internship tutors**

The questionnaire designed for the collection of information was sent by email from the Internship University Service or Career Office to all external tutors of undergraduate students. So, it is a CAWI with 81.5% of responses. However, the sample is not obtained through random sampling, so this sample is not representative.

### **ObservEM**

The analysis unit of this study is each one of the job offers managed in the period analysed. In the last edition, 600 job offers involving 1426 jobs were managed.

### **Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

#### **Second employer study**

It is an online report, published on the webpage. It is the second edition, being the first one made in 2007.

The bottom line of this study is that the most valued skills by employers are: teamwork, problem resolution, assuming responsibilities, adaptation to changes and flexibility and oral and written communication skills. In addition, 36.1% of employers think that the job offer for university graduates in their company will increase in the next 5 years.

### **Study of students' competencies according to the internship tutors**

It is an online report for each University degree, both undergraduate and masters. The study is divided into six different groups which correspond to the MECES skills:

1. Be able to transfer theory to practice.
2. Solve problems.
3. Critical Analysis Capability.
4. Creativity.
5. Social abilities.
6. Be a self-taught person.

### **ObservEM**

This online report contains the data of the study and some relevant conclusions. The main characteristics of the job that have been taken into account are its geographical scope, its schedule, and the type of contract and sector (private or public). They conclude that the main requirements to find a job are the following ones: carrying out research tasks, holding a disability certificate, knowledge of English, previous professional experience, and specific university degrees required.

Furthermore, the Observatory has developed an app with the different indicators by degree of employability of the graduates. This name is aPRIL and it also contains information on how graduates perceive the quality of their degrees.

**References (website or other references, where possible in English)**

<https://www.uv.es/uvempleo/es/uvempleo.html>

<https://www.uv.es/uvempleo/es/estudios-analisis/analisis-demanda-empresarial/segundo-estudio-empleadores.html>

<https://www.uv.es/uvempleo/es/estudios-analisis/observem-observatorio-ofertas-empleo/observem-observatorio-ofertas-empleo.html>

<https://www.uv.es/uvempleo/es/estudios-analisis/analisis-demanda-empresarial/estudio-competencias-estudiantes-tutores-practicas.html>

<https://www.uv.es/uvempleo/es/estudios-analisis/aplicacion-resultados-insercion-laboral-april/-es-april.html>

<b>Institution</b>
Instituto Valenciano de Investigaciones Económicas (IVIE)
<b>Country</b>
Spain
<b>Name of the Observatory</b>
Corporate Governance, Strategy and Competitiveness Observatory in the Valencian Region (GECE)
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
Regional because it focuses on the employment of the Valencian Regional Community.
<b>Information collected (professional figures, employment fallouts, skills and competencies, education degrees, employment rate, job placement)</b>
The Observatory provides four different types of information, publishing a report every four months: a study about the evolution of the competitiveness of Valencian companies (Evolution of the competitiveness of Valencian companies: trends and associated factors); a study about the internationalisation of the companies in this region (The international activity of Valencian companies and their relationship with competitiveness); a study about property and governance (Property structure and governance systems of Valencian companies: characterization and relationship with competitiveness); and a study about the competitiveness of the Valencian

companies (Examination of the state of competitiveness of the companies of the Valencian Community).

**Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.)**

For all reports the database is the same: the sample of companies used for this report comes from the AMADEUS and SABI (Bureau van Dijk) databases. These databases contain historical data of the Annual Accounts deposited in the Commercial Registers, in addition to the sector of activity of the company, the state, the legal form... This database is based on detailed and rigorous information of the companies, obtained from their annual accounts, in order to diagnose the current situation and evaluate their relationship with the characteristics of their governing bodies and strategic behaviours.

**Evolution of the competitiveness of Valencian companies: trends and associated factors**

The initial sample on which this report is based consists of 243,268 Spanish companies in the 2014-2017 period. For a total population of Spanish companies of 1,445,868 companies in the same period, according to the Central Business Directory (DIRCE) of the National Statistics Institute, the sample offers a maximum margin of error of 0.2% for a 95% confidence interval.

**The international activity of Valencian companies and their relationship with competitiveness**

The initial sample consists of 210,888 Spanish companies. For a total population of Spanish companies of 1,444,6763 companies, according to the Central Business Directory (DIRCE) of the National Statistics Institute, the sample offers a maximum margin of error of 0.2% for a 95% confidence interval.

**Property structure and governance systems of Valencian companies: characterization and relationship with competitiveness**

In this case, the initial sample consists of 278,467 Spanish companies, from a total population of Spanish companies of 1,444,673 companies. The sample offers a maximum margin of error of 0.2% for a 95% confidence interval.

**Examination of the state of competitiveness of the companies of the Valencian Community**

The initial sample on which this report works is 234,676 Spanish companies, from a total population of Spanish companies of 1,432,876 companies. Again, the sample offers a maximum margin of error of 0.2% for a 95% confidence interval.

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

**Evolution of the competitiveness of Valencian companies: trends and associated factors**



It is an online report, with a double purpose. On the one hand, it analyses the evolution of the competitiveness of Valencian companies, paying attention to the changes that have occurred in the factors associated with it: sector specialization, business size, ownership structure, and government systems. On the other hand, it offers a specific analysis of the competitive evolution of Valencian family businesses, comparing their situation with all Spanish family members.

#### **The international activity of Valencian companies and their relationship with competitiveness**

It is an online report. In this report, the objectives achieved are two. First, describe and characterize the international profile of Valencian companies, both concerning export activity and regarding direct investment abroad through foreign subsidiaries. Second, the report studies the relationships between international profiles and levels of competitiveness in companies.

#### **Property structure and governance systems of Valencian companies: characterization and relationship with competitiveness**

It is an online report. Several events are organised to present this report and share the analysis of this database. The main objectives of this report are:

- Characterize the ownership structure and governance systems of Valencian companies.
- Study the relationships between these aspects (ownership structure and government systems) with those factors associated with the success and survival of companies: business size and different levels of competitiveness.
- Analyse the differences observed in these aspects between Family and Non-Family Businesses.

#### **Examination of the state of competitiveness of the companies of the Valencian Community**

The report is divided into two main sections. First, they characterize the companies of the Valencian Community and compare them with national averages. And, secondly, they measure the competitiveness of Valencian companies, studying their productivity, their ability to pay, the levels of efficiency of human capital, profitability and financial stability.

#### **References (website or other references, where possible in English)**

<https://www.observatoriogece.es/>

[https://www.ivie.es/en\\_US/ptproyecto/observatorio-de-gobierno-estrategia-y-competitividad-empresarial-observatorio-gece/](https://www.ivie.es/en_US/ptproyecto/observatorio-de-gobierno-estrategia-y-competitividad-empresarial-observatorio-gece/)

<https://www.ivie.es/wp-content/uploads/2019/02/INFORME-02-GECE.pdf>

[http://www.ivie.es/wp-content/uploads/2018/06/2018\\_Informe01\\_Bankia\\_Ivie\\_GECE\\_Junio\\_optimizado.pdf](http://www.ivie.es/wp-content/uploads/2018/06/2018_Informe01_Bankia_Ivie_GECE_Junio_optimizado.pdf)

[https://www.ivie.es/wp-content/uploads/2017/11/INFORME-04-GECE\\_web.pdf](https://www.ivie.es/wp-content/uploads/2017/11/INFORME-04-GECE_web.pdf)





<https://www.ivie.es/wp-content/uploads/2019/04/INFORME-03-GECE.pdf>

<b>Institution</b>
Universitat Jaume I
<b>Country</b>
Spain
<b>Name of the Observatory</b>
Observatorio Ocupacional
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
The Observatory is Sectoral because only focuses on the graduates of this University.
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
The Employment Observatory is a strategic project established as a permanent observatory for studying graduates' career paths and employment situations. The Observatory of the Universitat Jaume I provides three different types of information: a study about employers, a survey to recent graduates and a survey to graduates in general.
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.)</b>
<b>Survey of Employers</b>  <b>Recent Graduates Survey</b>  <b>Job Placement Survey</b>
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
<b>Survey of Employers</b>  <b>Recent Graduates Survey</b>  <b>Job Placement Survey</b>  This Observatory also organises some dissemination activities such as reports published in newspapers, indicators presented on conferences or sharing good practices and recommendations with other universities in certain forums.
<b>References (website or other references, where possible in English)</b>

<https://www.uji.es/serveis/oipep/base/programes/obsoc/?urlRedirect=https://www.uji.es/serveis/oipep/base/programes/obsoc/&url=/serveis/oipep/base/programes/obsoc/>

<https://www.uji.es/serveis/oipep/base/programes/obsoc/informes/?urlRedirect=https://www.uji.es/serveis/oipep/base/programes/obsoc/informes/&url=/serveis/oipep/base/programes/obsoc/informes/>

<https://www.uji.es/serveis/oipep/base/programes/obsoc/difusio/?urlRedirect=https://www.uji.es/serveis/oipep/base/programes/obsoc/difusio/&url=/serveis/oipep/base/programes/obsoc/difusio/>

<b>Institution</b>
Universidad de Murcia
<b>Country</b>
Spain
<b>Name of the Observatory</b>
Observatorio de Empleo
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
The Observatory is Sectoral because only focuses on the graduates of this University.
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
The Occupational Observatory of the University of Murcia provides three different types of information: a report on the demands of the business network, with the aim at improving the employability of graduates and fostering the University/Company relationship (Employer Demand Report); a survey of professional perspectives that collects information on the main professional objectives of graduates (Professional Perspective Report); and studies of labour insertion to understand the processes of access to the labour market and the characteristics and conditions of graduates labour insertion (Job Insertion Report).
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.)</b>
<b>Employer demand report</b>
The report is the result of the dialogue that the University maintains with companies with the aim of identifying the issues highlighted by the companies regarding the training of university

professionals. There were 4 different focus groups that shared opinions and experiences in order to reach some conclusions. These focus groups were related to industry 4.0, food industry, chemical and pharmaceutical industry, and tourist and cultural sector. There were between 8 and 12 participants with human resources profiles in each group and the meetings lasted between 1.5 to 2 hours.

### **Professional perspective report**

Every year, the University of Murcia delivers a questionnaire to graduate students at the moment when they are going to request their degree. The survey contains information about work activity during the career, other activities that improve employability, professional objectives or career guidance needs. Therefore, it is a handed questionnaire and in the last edition was filled by 1945 graduates, which represented 46.4% of the total population of graduates.

### **Job insertion report**

Every other year, the Observatory sends a digital survey to graduates students. The main objective of this study is to analyse the process of incorporation of graduates to employment and to describe their professional careers in a period of 2-3 years immediately after the completion of their degree. Likewise, complementary information on their satisfaction with their university education and employment is collected.

It is made with a CAWI with some CATI to deal with no responses. By the end, 3470 graduates answered the survey.

### **Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

#### **Employer demand report**

This on-line report tries to focus on the relationship between University and companies, and its main commitments are:

- Maintain dialogue with companies and develop new models of relationship with them.
- Strengthen the intermediary role of COIE, bringing the needs of companies closer.
- Design and establish measures for the identification of university talent.
- Improve training in professional and digital skills among university students.

#### **Professional perspective report**

Annual online report, carried out in collaboration with the Management Department. The report analyses data from surveys and focuses on the professional perspectives that people have at the time of completing their university studies.

<p><b>Job insertion report</b></p> <p>Online reports elaborated every two years. These reports contain information about the answers by field of study and by degree and some conclusions about graduates' job insertion.</p>
<p><b>References (website or other references, where possible in English)</b></p> <p><a href="https://observatorio.um.es/observatorio/observatorio.contenidos.inicio.do">https://observatorio.um.es/observatorio/observatorio.contenidos.inicio.do</a></p> <p><a href="https://observatorio.um.es/observatorio/observatorio.contenidos.mostrarinformacion.do?apartado=54&amp;menu=infoumu">https://observatorio.um.es/observatorio/observatorio.contenidos.mostrarinformacion.do?apartado=54&amp;menu=infoumu</a></p> <p><a href="https://observatorio.um.es/observatorio/observatorio.contenidos.mostrarinformacion.do?apartado=52&amp;menu=infoumu">https://observatorio.um.es/observatorio/observatorio.contenidos.mostrarinformacion.do?apartado=52&amp;menu=infoumu</a></p> <p><a href="https://observatorio.um.es/observatorio/observatorio.contenidos.mostrarinformacion.do?apartado=53&amp;menu=infoumu">https://observatorio.um.es/observatorio/observatorio.contenidos.mostrarinformacion.do?apartado=53&amp;menu=infoumu</a></p>

<b>Institution</b>
Universidad de las Palmas de Gran Canaria
<b>Country</b>
Spain
<b>Name of the Observatory</b>
Observatorio de Empleo y Empleabilidad
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
The Observatory is Sectoral because only focuses on the graduates of this University.
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
The Observatory is linked to the Vicerrectorado for Business, Entrepreneurship, and Employment to inform graduates and society about labour market prospects. For this reason, it provides three different types of study and a section on its webpage with some statistics. Regarding the studies, the Observatory provides information about an entrepreneurship program which is developing currently (ULPGC Emprende 2019); a summary of the study "Strategic analysis for the development of SMEs in Spain" which focuses in the Canary Island; and studies about labour insertion of their graduates (ULPGC Emplea). It provides information about the main indicators related to the insertion of the graduates (degree and master) in the labour market.

**Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.)**

**ULPGC Emprende 2019**

Coming soon the Observatory will provide the information related to the methodology of this study.

**Strategic analysis for the development of SMEs**

The Observatory makes a summary about the National study and focuses only on Canarias, so the methodology is the same as for the national context. This means that the information comes from a CATI to the employers. This questionnaire is divided into four different sections: general information, use of IT in the company, corporate social responsibility, and innovations related to items or processes.

**ULPGC Emplea**

The Observatory does not provide any information about the methodology and the sample.

**Statistics**

The Observatory does not provide much information about the methodology and the sample but it has the surveys with the questions that they ask to graduates, employers, and entrepreneurs on its webpage.

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

**ULPGC Emprende 2019**

The Observatory will offer the output of this study soon.

**Strategic analysis for the development of SMEs**

Online PowerPoint presentation with the main features of the National report and a summary of the results for Canarias. Also, it provides a comparison between the situation of the SMEs in Canarias and Spain divided into six different groups: orientation to the innovation, orientation to the technology, social orientation, international orientation, Human Resources orientation and performance orientation.

### ULPGC Emplea

Online presentation with a summary of the main indicators of this report. This presentation has some dynamic contents to filter and obtain different results according some items, such as gender, degree, field of study and qualification.

### Statistics

Dynamic toolbar, posted on their webpage to provide relevant information of degrees.

### References (website or other references, where possible in English)

<https://empresayempleo.ulpgc.es/>  
<https://empresayempleo.ulpgc.es/observatorio/area-de-publicaciones-observatorio/>  
<https://empresayempleo.ulpgc.es/ulpgc-emprende-2019/>  
<https://empresayempleo.ulpgc.es/faedpyme/>  
<http://www.faedpyme.upct.es/sites/default/files/article/83/informefaedpymeespana2018.pdf>  
<https://empresayempleo.ulpgc.es/ulpgc-emplea-2020/>  
<https://empresayempleo.ulpgc.es/observatorio/estadisticas-observatorio/>

Institution
Universidad de A Coruña
Country
Spain
Name of the Observatory
Observatorio Ocupacional
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
Sectoral
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)
The information provided by this Observatory can be divided into three different sections: studies about professional competencies, studies about the insertion of graduates (Job placement of

graduates) and finally other studies. In this category, it includes studies about new jobs, innovation necessities or employment trends in a particular sector.
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.)</b>
<b>Professional competencies</b> <b>Job placement of graduates</b> <b>Other studies</b>
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
<b>Professional competencies</b> <b>Job placement of graduates</b> <b>Other studies</b>
<b>References (website or other references, where possible in English)</b>
<a href="https://www.udc.es/es/emprego/">https://www.udc.es/es/emprego/</a> <a href="https://www.udc.es/en/observatorioocupacional/">https://www.udc.es/en/observatorioocupacional/</a> <a href="https://www.udc.es/en/observatorioocupacional/publicacions/">https://www.udc.es/en/observatorioocupacional/publicacions/</a>

<b>Institution</b>
Universidad de Salamanca
<b>Country</b>
Spain
<b>Name of the Observatory</b>
Observatorio ocupacional
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>



The Observatory is Sectoral because it only focuses on the graduates of this University, which comprises the campuses in Salamanca, Zamora and Ávila.

**Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)**

The Occupational Observatory of the University of Salamanca provides different types of information: a report about what jobs are emerging and how to deal with the new skills that are required at the labour market (Study of Emerging Professional Areas and Business Innovation); a study about employability of students who finished a degree in Humanities, Social Sciences or Arts (Diagnosis on the employability of graduates in the fields of Social Sciences, Art and Humanities of the Public Universities of Castilla y León); a study about satisfaction and labour insertion of the graduates of this University (Biennial Study of Job Satisfaction and Insertion of graduates of the University of Salamanca for Undergraduate Degree and Master); and, finally, a report about the employability of PhDs (Labour insertion report of the PhDs of the University of Salamanca).

**Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.)**

**Study of Emerging Professional Areas and Business Innovation**

The Observatory gathers data from National Surveys such as EPA (Labour Force Survey) and from the number of the companies which are set up in Salamanca, Ávila and Zamora.

**Diagnosis on the employability of graduates in Social Sciences, Arts and Humanities of the Public Universities of Castilla y León**

The study is divided in six different categories: employability, degrees, companies, employers, academic orientation and professional insertion in order to analyse the employability of Social Sciences, Arts and Humanities graduates to provide guidance and recommendations to Public Administrations, students, companies and universities. The methodology is different for each area:

1- Employability: the data come from national and international reports.

2- Degrees: the data come from RUCT of the Ministerio de Educación y FP, for graduates the data come from the database of Consejo de Universidades, and for employment they use the Informe Anual de Mercado de Trabajo de Titulados Universitarios made by the Observatorio Nacional de Ocupaciones del Servicio Estatal Público de Empleo.

3- Companies: the information comes from DIRCE and focuses on the companies which are related to the aim of this study (8.7%).

- 4- Employers: CAWI to a sample of 405 from 161.354 employers.
- 5- Academic orientation: web analysis of the centres and CATI to 113 of them.
- 6- Professional insertion service: the data come from the universities involved.

### **Biennial Study of Job Satisfaction and Insertion of graduates of the University of Salamanca (Degree and Master)**

Every two years, the University of Salamanca delivers a questionnaire to graduate students who completed their degree two years earlier in order to analyse their employability and their satisfaction with their degree.

It is done using a CAWI system, followed by email messages to deal with no responses. In the last wave, 4083 graduates received the questionnaire but only the 21% of them answered it. For master's students, 1144 received the survey and 28% of them answered it.

### **Labour insertion report of the doctors of the University of Salamanca**

The objective of this study is to present data about doctors to develop new lines of action to improve the quality of doctorate programs and the employability of graduates. It is made with a CAWI of doctors. 174 students received the questionnaire but only the 40.23% of them answered it. It consists of 33 items.

### **Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

#### **Study of Emerging Professional Areas and Business Innovation**

Online report in collaboration with Caja Rural, a local bank, with no regularity. The report tries to focus on the economy's new jobs in order to develop new degrees or adapt the existent degrees to the future labour markets needs. In particular, the Study is divided in three steps to improve the employability of the graduates:

1. To describe and analyse the characteristics of the labour markets of Salamanca, Ávila and Zamora.
2. To detect emerging areas related in many cases with innovation activities and IT, and use endogenous resources and existing opportunities.
3. To develop a strategy of professional insertion from a specific plan to promote employment in these emerging areas.

### **Diagnosis on the employability of graduates in the fields of Social Sciences, Arts and Humanities of the Public Universities of Castilla y León**

Online report in collaboration with the other Universities of Castilla y León with no regularity. The report gives some recommendations to stakeholders: Public Administrations, students, companies and universities. Specially, some of the recommendations for companies are:

- To facilitate student experiences in their jobs in order to acquire new skills that companies require.
- To give the companies specific information about the skills that the graduates acquire.
- Encourage graduates to become entrepreneurs.

### **Biennial Study of Job Satisfaction and Insertion of graduates of the University of Salamanca (Degree and Master)**

Online report and databases of the surveys which are done every two years.

### **Labour insertion report of the doctors of the University of Salamanca**

Online report about the employability and skills demanded to PhD graduates.

#### **References (website or other references, where possible in English)**

[https://drive.google.com/drive/folders/1F3TOHeT\\_M3awrv2CnES8wfnfH5k0NUqd](https://drive.google.com/drive/folders/1F3TOHeT_M3awrv2CnES8wfnfH5k0NUqd)

<https://drive.google.com/file/d/1QUOdK6pAizbgCLmVH-HIOH531M2Xa7xc/view>

<https://empleo.usal.es/docs/areaseip.pdf>

<https://foroempresacyl.usal.es/sites/default/files/docs/Libro%20Diagnostico%20empleabilidad%20-%20Completo.pdf>

<b>Name of the Observatory</b>
Observatorio de la Calidad y el rendimiento académico.
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
Regional.
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
This observatory provides two types of information: the percentage of students who are working after finishing their degrees (Indicadores de afiliación a la Seguridad Social de los egresados de

titulaciones de la Universidad de Salamanca durante el curso 2013-14), and the percentage of students who were doing internships while they were studying their degrees.
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, etc.)</b>
<p><b>Indicadores de afiliación a la Seguridad Social de los egresados de titulaciones de la Universidad de Salamanca durante el curso 2013-14</b></p> <p>The data come from the SIIU of the Ministerio de Ciencia, Innovación y Universidades.</p> <p><b>Practices of the students</b></p> <p>The data come from the Career Office of the University.</p>
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
<p><b>Indicadores de afiliación a la Seguridad Social de los egresados de titulaciones de la Universidad de Salamanca durante el curso 2013-14</b></p> <p>Databases posted on the web of graduates who are working, classified by degree, faculty and gender.</p> <p><b>Students Internships</b></p> <p>Databases posted on the web of students who were doing internships, divided by gender, school and type of the internship (curricular or extracurricular).</p>
<b>References (website or other references, where possible in English)</b>
<p><a href="https://indicadores.usal.es/portal/resultados/insercion-laboral-de-los-egresados-de-grado/">https://indicadores.usal.es/portal/resultados/insercion-laboral-de-los-egresados-de-grado/</a></p> <p><a href="https://indicadores.usal.es/portal/resultados/practicas-de-los-estudiantes">https://indicadores.usal.es/portal/resultados/practicas-de-los-estudiantes</a></p>

## Labour market observatories in Portugal

In Portugal, dedicated labour market information systems or observatories, outside the main official and public statistical agencies which provide a comprehensive analysis not just of labour markets but also other dimensions of social and economic activity, have not stood the test of time. They tend to be either short-lived experiences – which questions their usefulness as a tool for comparative longitudinal analysis – or just echoing data releases from official sources, without any analysis, which again brings little, if any, value added. An exception is the Instituto de Emprego e Formação Profissional, the national public employment service, whose mission is to promote the creation and quality of employment and to fight unemployment, through the implementation of active employment policies, namely vocational training. In higher detail, its mission is to:

- Promote:
  - the organization of the labour market with a view to direct adjustment between supply and demand for employment
  - the information, the orientation, the qualification and vocational rehabilitation with a view to placement and career development of workers in the labour market
  - the educational and professional qualification of young people and adults, through, respectively, the offer of dual certification training and certified professional training, adjusted to individual paths and relevant to the modernization of the economy
  - carrying out, by itself or in collaboration with other entities, professional training actions appropriate to people's needs and modernization and development of the economic fabric
  - the development of crafts and artisanal micro-enterprises, namely as a source of job creation at the local level
  - the professional rehabilitation of people with disabilities, in conjunction with the National Rehabilitation Institute
- Encourage:
  - the creation and maintenance of jobs, through measures appropriate to the economic context and the characteristics of employers
  - the professional insertion of different audiences through specific measures, in particular for those most at risk of exclusion from the job market

- Secure
  - the development of policies related to the social employment market , as a set of initiatives aimed at the integration or socio-professional reintegration of unemployed people with particular difficulties in relation to the labour market, based on activities aimed at social needs to be met and to which normal functioning of the market does not give a satisfactory answer, in conjunction with the area of social security
- Foment
  - the knowledge and dissemination of employment problems through an integrated use of productive resources on growth and socio-economic development
- Participate
  - in the coordination of technical cooperation activities carried out with national and international organizations and foreign countries in the fields of employment, training and rehabilitation
- Collaborate
  - in the conception, elaboration, definition and evaluation of the employment policy, of which it is the executing body
- Accomplish:
  - follow-up, verification and audit actions to support, financial or technical, granted within the scope of employment and professional training measures

Hence, the majority of labour-market related data and descriptive analysis is done by public institutions such as the Instituto Nacional de Estatística (INE), the Instituto de Emprego e Formação Profissional (IEFP) and the Social Security services. Other institutions, like PORDATA, do a very good job of collecting data from these (and other) sources and providing an internet portal with comparable data for the rest of Europe, allowing the user to put it in perspective.

Note, however, that Portugal holds very good administrative data, collected and maintained by INE, but that it is only available to researchers. It consists of a panel of employer-employee matched data, since 1987 with the

most recent release in 2017, that contains the population of private contracts in the country. It contains data on the firms and workers at the establishment level. This has been a major source of interest by researchers, national and foreign, which has been enormously useful in helping to understand labour market dynamics in Portugal.

<b>Institution</b>
Official Government Institution
<b>Country</b>
Portugal
<b>Name of the Observatory</b>
Instituto Nacional de Estatística (National Institute of Statistics)
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
National
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
The INE is the most comprehensive source of statistical data with respect to Portuguese data. Its data is divided in 8 categories – Population and Society; Territory and Environment; Economics and Finances; International Trade; Agriculture, Forestry and Fishing; Services; and Knowledge and Innovation.
Of particular relevance for labour related issues is the “Inquérito ao Emprego” (Employment Survey) which characterizes the population by participation, employment and unemployment, taking into account age, sex, schooling, sector of activity, main profession, type of labour contract, duration of unemployment, and whether potential workers are looking for a job for the first time
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
The INE is the main source of official labour statistics in the country and they employ a multitude of methods in order to construct their series. Following the previous example of the “Inquérito ao Emprego”, the information is collected directly from each individual who has been sampled and each individual sampled is interviewed once every three months for six consecutive quarters. The first interview is made on-site and the five following ones are made, conditional on the individual’s agreement, by telephone.
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
All of the above.
<b>References (website or other references, where possible in English)</b>
<a href="https://www.ine.pt/xportal/xmain?xpgid=ine_main&amp;xpid=INE&amp;xlang=en">https://www.ine.pt/xportal/xmain?xpgid=ine_main&amp;xpid=INE&amp;xlang=en</a>



<b>Institution</b>
Fundação Francisco Manuel dos Santos
<b>Country</b>
Portugal
<b>Name of the Observatory</b>
PORDATA
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
SupraNational
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
<p>PORDATA collects information among many dimensions (Population; Education; Health; Social Security; Income and Living Conditions; Justice and Safety; Employment and Labour Markets; Firms and Personnel; Macroeconomics; Science, Technology and Information Society; Environment, Energy and Territory; Tourism; and Transportation). It collects data at the Municipality, National and European level.</p> <p>Of particular relevance for labour-related issues, it collects data on Strikes and Labour Conflicts; Active Population; Unemployed Population; Employed Population, Inactive Population and Wages.</p>
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
PORDATA does not construct any data by themselves and sources them all from official institutions.
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
Databases, indicators, Analytic Reports and Meetings.
<b>References (website or other references, where possible in English)</b>
<a href="https://www.pordata.pt/en/Home">https://www.pordata.pt/en/Home</a>

<b>Institution</b>
Official Government Institution
<b>Country</b>
Portugal
<b>Name of the Observatory</b>
Instituto do Emprego e Formação Profissional (Employment and Professional Education Institute) – IEFP
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
National
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
Dedicated to the labour market, it produces monthly statistics on the labor market from the national to the municipality level, on several worker characteristics, from geographic location, schooling, gender, sectoral activity, occupation and job tenure. It also collects data on the number of job offers through this agency and the number of accepted job offers; on job separation by age etc.
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
The data is generated by their services when providing support to unemployed individuals or employed individuals looking for another job. It is the state's employment agency so it only produces data based on people who sign up for their service.
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
Databases, analytical reports, meetings.
<b>References (website or other references, where possible in English)</b>
<a href="https://www.iefp.pt/">https://www.iefp.pt/</a>

<b>Institution</b>
University of Porto
<b>Country</b>
Portugal
<b>Name of the Observatory</b>
Observatório do Emprego e da Trajetória dos Diplomados da Universidade do Porto (Labor and Work Trajectory Observatory of the University of Porto Graduates)
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
Institutional – University
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement)</b>
Focused on the University of Porto graduates, they collect data segmented by subentity, type of terminal degree, grade point average, employment status, matching between degree and occupation, both for their first and current employment, location, working hours, wage, employer type and a number of additional comments regarding alumni's reported determinant factors for current employment relationship and by what they feel their formal education lacked the most.
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
Survey of former graduates.
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
Analytical reports
<b>References (website or other references, where possible in English)</b>
<a href="https://sigarra.up.pt/up/pt/web_base.gera_pagina?p_pagina=observat%20do%20emprego%20e%20da%20trajet%20ria%20dos%20diplomados%20da%20u.porto">https://sigarra.up.pt/up/pt/web_base.gera_pagina?p_pagina=observat%20do%20emprego%20e%20da%20trajet%20ria%20dos%20diplomados%20da%20u.porto</a>

## **Report on the labour market observatories in United Kingdom, Germany, Czech Republic and Luxembourg**

The main observatories on the labour market in the United Kingdom, Germany, Czech Republic and Luxembourg, as in all European countries, are the institutional ones (national, local and ministerial). This means that these observatories are in charge of the collection, management and constant monitoring of administrative (employment) data, monitor the labour market through specific official statistical surveys (replicated over time) and monitor the labour market through both administrative and official statistical data processing.

Generally speaking, these are observatories that carry out mainly quantitative research, with the exception of the observatory in the Czech Republic and especially in Germany, which also carry out qualitative research.

The qualitative research, however, mainly concerns issues related to skills and training, but does not frame and describe the professional figures, as the Observatory of the University of Padua does, which also at European level seems to be the only one to conduct this kind of survey. Moreover, these are organisations which, while collaborating with the main European institutions (as natural for national institutional observatories), work mainly at a national level with the exception of the German Observatory which, instead, seems to have a decidedly more European vision.

In fact, the German Observatory, which is called "European Network for Regional Labour Market Monitoring", brings together international experts with solid experience in theories, methods and application of regional and local labour market monitoring. Among the members of the network are labour market researchers and representatives of regional and local labour market observatories, labour market policy and administration, public employment services, statistical offices and consultancy firms from 32 European countries.

The results of the collaboration with this network of international experts are many projects that aim to develop and disseminate the concepts and tools used in regional labour market monitoring and to disseminate common methods for the study, research and analysis of this issue not only at regional but also at European level.

## The labour market observatories in United Kingdom, Germany, Czech Republic and Luxembourg

Institution
Office for National Statistics
Country
United Kingdom
Name of the Observatory
Employment and Labour Market
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
National
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)
<p>It is the UK's largest independent producer of official statistics and the recognised national statistical institute of the UK.</p> <p>Among the various topics covered, the National Statistical Office also deals with "Employment and Labour Market" (people in and out of work covering employment, unemployment, types of work, earnings, working patterns and workplace disputes).</p> <p>The Employment and Labour Market section is divided into two subsections:</p> <ul style="list-style-type: none"> <li>• People in work</li> <li>• People not in work</li> </ul> <p><b>People in work</b></p> <p>Employment data covering employment rates, hours of work and earnings. In particular:</p> <ul style="list-style-type: none"> <li>• <b>Earnings and working hours;</b> average weekly earnings of people in the UK and information on the gender pay gap and low pay.</li> <li>• <b>Employment and employee types;</b> employment rates show the number of people in paid work as a proportion of the population, broken down by age and sex. Includes information on the number of people in employment and vacancies.</li> <li>• <b>Labour productivity;</b> efficiency of the UK workforce, including output per worker, per job and per hour. Data are available by industry and by region.</li> <li>• <b>Public sector personnel;</b> people employed in central and local government, and public corporations, including second jobs in the public sector. Includes Civil Service employment with regional and diversity analyses.</li> <li>• <b>Workplace disputes and working conditions;</b> work stoppages because of disputes between employers and employees. Includes strikes and lock-outs, number of days lost in the public and private sectors, and number of workers involved.</li> <li>• <b>Workplace pensions;</b> pensions linked to a person's workplace, including defined ambition (DA), defined benefit (DB) and defined contribution (DC) schemes.</li> </ul> <p><b>People not in work</b></p>

Unemployed and economically inactive people in the UK including claimants of out-of-work benefits and the number of redundancies. In particular:

- **Economic inactivity;** People not in employment who have not been seeking work within the last 4 weeks and/or are unable to start work within the next 2 weeks.
- **Out of work benefits;** Claimants of unemployment related benefits including Employment and Support Allowance and other incapacity benefits, and Income Support and Pension Credit.
- **Redundancies;** People who have been made redundant or have taken voluntary redundancy.
- **Unemployment;** UK unemployment figures. Information on the labour market, young people and workless households.

These data come from the following official surveys conducted by the Office for National Statistics:

- The **Labour Force Survey (LFS)** is a study of the employment circumstances of the UK population. It is the largest household study in the UK and provides the official measures of employment and unemployment.
- The **Annual Survey of Hours and Earnings (ASHE)**, carried out in April each year, is the most comprehensive source of information on the structure and distribution of earnings in the UK. ASHE provides information about the levels, distribution and make-up of earnings and paid hours worked for employees in all industries and occupations. The ASHE tables contain estimates of earnings for employees by sex and full-time or part-time status. Further breakdowns include by region, occupation, industry, age group and public or private sector.
- The **Monthly Wages and Salaries Survey (MWSS)** collects monthly information on wages and salaries of businesses in Great Britain. It forms the basis of the Average Weekly Earnings (AWE), which is used to measure the increase of wages over time. Your response contributes to the Index of Labour Costs Per Hour.
- **Vacancy Survey** provides comprehensive estimates of the number of job vacancies across the UK economy. This monthly survey asks employers how many job vacancies they have in total for which they are actively seeking recruits from outside their organisation, for example, by advertising or interviewing. The survey began in April 2001 and the results were designated as National Statistics in June 2003. Analysis is available by industry and by size of enterprise, but no regional analysis is available. The survey covers all industrial sectors except agriculture, forestry and fishing.
- The **Labour Disputes Inquiry** collects information on the number of working days lost and the number of workers involved in strike action in the UK on a monthly basis. The inquiry is different to most of the other business surveys in that it is conducted on a voluntary basis and it covers all known strikes in the period.

**Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)**

The **Labour Force Survey (LFS)**

A sample of households is selected at random from the Royal Mail's Postcode Address File.

Questionnaire data are collected face-to-face using computer-assisted questionnaires or completed over the telephone.

#### The **Annual Survey of Hours and Earnings** (ASHE)

The survey is a sample survey of employee jobs, although information is collected from employers. It is based on a 1% random sample of jobs on the HM Revenue and Customs Pay As You Earn (HMRC PAYE) register. It covers all employee jobs in all industries and occupations across the UK. It has a reference date in April, asking about individuals who are employees at that time. This reference date changes each year depending on when Easter falls.

#### The **Monthly Wages and Salaries Survey** (MWSS)

A sample of business is selected from a directory of UK businesses that are registered for VAT and/or PAYE or with Companies House.

In particular, all businesses with 1,000 or more employees are selected, while those with fewer than 1000 employees are selected for a set period of time and then replaced with other similar-sized businesses from their industry.

The information is collected through an online survey.

#### **Vacancy Survey**

Approximately 6,000 enterprises in Great Britain are surveyed on a specific date each month. Employers are asked to return just one number by telephone data entry using their keypad.

The sample is obtained from the Inter-Departmental Business Register (IDBR), stratified by industry and number of people employed.

A quarter of the sample consists of large businesses or organisations that are included every month. The remaining 4,500 are smaller and are sampled randomly on a quarterly basis. Smaller businesses remain in the survey for five or nine quarters (depending on the size of the business).

#### The **Labour Disputes Inquiry**

Data are not collected for those disputes involving fewer than 10 workers or lasting less than one day. However, data are collected if 100 working days are lost due to a single dispute, regardless the number of workers involved.

### **Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

All data relating to "Employment and labour market" can be consulted and downloaded online.

In particular, with regard to the official surveys:

#### The **Labour Force Survey** (LFS).

The data are presented through periodical publications.

#### The **Annual Survey of Hours and Earnings** (ASHE)

Data are published on an annual basis for the UK, and are also broken down by industry, employment, region, small area, gender and full-time or part-time status.



<b>Vacancy Survey</b> Vacancy statistics are published in the Labour Market statistical bulletin  The <b>Labour Disputes Inquiry</b> Estimates for labour disputes are published each month in the labour market statistical bulletin. An article providing a more in depth look at labour disputes is published annually in late May.
<b>References (website or other references, where possible in English)</b> <a href="https://www.ons.gov.uk/">https://www.ons.gov.uk/</a>

Institution
Suffolk Council
Country
England
Name of the Observatory
Suffolk Observatory
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
SupraNational/European
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)
<p>The Suffolk Observatory contains all Suffolk's vital statistics (Children &amp; Young People, Crime &amp; Community Safety, Deprivation, Economy &amp; Employment, Environment, Health &amp; Social Care, Housing, Population); it is the one-stop-shop for data, statistics and reports all about Suffolk provided by a variety of organisations. Through data, reports and analysis, the Suffolk Observatory provides a comprehensive picture of the County and is a great source for useful facts and figures.</p> <p>In the section "Economy and Employment" the data on the labour market in Suffolk are shown and include measures of overall economic activity and unemployment levels.</p>
Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)
<p>The data shown come from the Office of National Statistics (ONS):</p> <ul style="list-style-type: none"> <li>• <b>Economically active.</b> The Annual Population Survey (APS) is a combined survey of households in Great Britain. Its purpose is to provide information on key social and socioeconomic variables between the 10-yearly censuses, with particular emphasis on providing information relating to sub-regional (local authority) areas.</li> <li>• <b>Business counts.</b> The Inter-Departmental Business Register (IDBR) recording the position of businesses on March 10, 2018.</li> <li>• <b>Gross value added.</b> Gross value added (GVA) is a measure of the increase in the value of the economy due to the production of goods and services.</li> <li>• <b>Apprenticeships.</b> Apprenticeships are paid jobs that incorporate on-and off-the-job training leading to nationally recognised qualifications. Data on the number of apprenticeships successfully completed.</li> <li>• <b>Resident salaries.</b> The Annual Survey of Hours and Earnings (ASHE) is conducted in April each year to obtain information about the levels, distribution and make-up of earnings</li> </ul>

and hours worked for employees. This data set provides information about earnings of employees who are living in an area, who are on adult rates and whose pay for the survey pay-period was not affected by absence. ASHE is based on a sample of employee jobs taken from HM Revenue & Customs PAYE records. Information on earnings and hours is obtained in confidence from employers. ASHE does not cover the self-employed nor does it cover employees not paid during the reference period.

- **Economically inactive.** Data from The Annual Population Survey (APS)
- **Claimant counts.** This section shows claimant counts - the stock of Universal Credit and Job Seekers Allowance claimants - for persons aged 16 and over in Suffolk.

For further information on the surveys carried out by the Office of National Statistics (ONS), please refer to the relative form.

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

The data are disseminated through key documents, but above all they can be consulted on the site both through pre-set forms and through a data navigation system (data explorer) that allows them to be consulted through selection buttons and search boxes. In addition, an app (Customer Area Report) is available on the site that allows you to select the geographical areas for which you want to produce a report

**References (website or other references, where possible in English)**

<https://www.suffolkobservatory.info/>

<b>Institution</b>
IWAK - Institute for Economics, Labour and Culture Centre of Goethe University Frankfurt am Main
<b>Country</b>
Germany
<b>Name of the Observatory</b>
European Network on Regional Labour Market Monitoring (EN RLMM)
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
SupraNational/European
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>
The European Network on Regional Labour Market Monitoring (EN RLMM) was founded in March 2006 at Goethe University Frankfurt, Germany. It seeks to develop further and diffuse the concepts and instruments used in regional labour market monitoring and to diffuse common methods for the study, research and analysis of this issue. In doing so, it brings together scientific expertise as well as experiences of practitioners at regional level. It also provides the framework to support networking between regional and local labour market observatories across Europe. The European Network on Regional Labour Market Monitoring (EN RLMM) offers a platform for exchanging of experiences in the field of labour market monitoring for a large variety of actors from different European regions. Among other activities, mutual learning takes place in common

projects aimed at improving the methods and processes of labour market monitoring with the focus on European regions and localities.

**Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)**

The EN RLMM unites international experts with sound backgrounds in theories, methods and application of regional and local labour market monitoring. Among the Network Members are labour market researchers as well as representatives of regional and local labour market observatories, labour market politics/administration, public employment services, statistical offices and consultancies from 32 European countries.

Some examples of projects involving several members of EN RLMM:

**Strengthening key competencies of low skilled people in vet to cover future replacement positions (REPLAY-VET)**

It is an ERASMUS+ strategic partnership that aims to identify requalification strategies for low-skilled people in order to more adequately cover the future replacement positions.

During the first year of the project, every participating region compiled a regional report focusing on the labour market situation as well as future employment opportunities of low-skilled people in the seven participating regions. The regional reports include a statistical analysis of the labour-market participation of the target group as well as findings concerning replacement needs, trends and changes required in the qualifications of low-skilled people in sectors and occupations critical for low-skilled people in- and outside of the labour market. In interviews with important stakeholders of the regional VET system, possible obstacles and good practices when attracting and training low-skilled people were identified.

In the second year of the project, every participating region has initiated a working group in order to discuss the main challenges regarding the employment and training opportunities of the low-skilled in the specific sectors identified in the first year of the project. In the end, an Occupational Kit will provide VET institutions, employment services and policy makers with how-to-guides and best practice examples responding to needs and challenges in the respective sector.

**Smart information models for adequately adapting vet to the labour market needs (SIMOVET)**

Is a strategic partnership that supports the development, transfer and implementation of smart innovation systems aimed at reducing skill mismatches. The project activities focus on regional and local labour market monitoring instruments.

Through exchange with knowledgeable and experienced actors from different European regions, different ways for improving labour market instrument regarding the skills needs of companies are explored and tested.

At the outset of the project, a database of 25 good practice examples is established. This step is followed by a thorough analysis of the skills formation system and the companies' skilled labour needs in a region or locality in Spain, Germany, the UK and the Czech Republic.

Through interviews and workshops with the important stakeholders in the regional VET system crucial elements of labour market monitoring instruments delivering information on the demand-side of the labour market are to be identified. Based on these insights, a pilot project for

improving an existing regional/local labour market monitoring instrument is implemented in every country involved in the project.

All these activities are carried out in close exchange with the key actors of the local and regional skills formation systems in the participating countries.

### **Aligning the vet system and economic development strategies with the help of effective labour market forecasting (VET-EDS)**

Labour market initiatives are an important part of regional and local development strategies. Since improving the links between the VET system and the world of work constitutes one of the main challenges, VET policy needs to be better aligned with economic development strategies.

The project draws from the knowledge and regional and national expertise of the project partners, which are LMOs and bodies from the Czech Republic, Germany, Italy, the Netherlands, Spain, Sweden and the UK. Through a number of standardised case study (longer, more in-depth studies) and good practice (shorter studies) reports, each partner has presented the most important examples of good practice which highlight a relationship between the forecasting activities of LMOs and economic development in general. These case studies and good practice reports have been carried out at both the regional and national level.

Reports are supported by interviews with forecasters, VET policymakers, economic development officers and LMI users (via the partner steering group).

### **The Skills Panorama - Achieving Regional and Local Impact (ARLI)**

Seeks to improve skills governance and provision of labour market intelligence at European, national, regional and local level, enhancing the involved stakeholders' ability to anticipate skills supply and demand.

To improve transparency for jobseekers, workers, companies and public institutions, the European Commission has established the EU Skills Panorama. It collects data and analyses on current and future skills supply and labour market needs. So far, the EU Skills Panorama has focused upon data and intelligence at national and sectoral level. However, much excellent skills and labour market intelligence already exists at regional and local level within the EU Member States.

ARLI will explore how existing regional and local provision of labour market intelligence can be enhanced for stakeholders through interrelation with the EU Skills Panorama.

ARLI will embrace the Open Method of Co-operation, setting common objectives and agreeing to common indicators for measuring progress. The methodology utilises a number of different methods of intelligence gathering, policy-sharing and mutual learning. Based on a stakeholder interviews in six participating countries, national stakeholder and expert workshops and capturing of good practice examples, series of project reports will inform about how regional and local labour market observatories can interrelate their forecasting policy support with that of the Panorama, and how they can further assist the Panorama in achieving impact with citizens, employers, social partners and policy-makers.

### **Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

In principle, EN\_RLMM disseminates project results through reports, compendia (of good practices, case studies, etc.) and guides drawn up at local, regional, national and European level.

In addition, for some projects databases have been developed to search for specific information (good practices) and Toolkits to facilitate and standardize the activities carried out by labour market observatories.

**References (website or other references, where possible in English)**

<http://regionallabourmarketmonitoring.net/>

<b>Institution</b>
National Training Fund (NTF)
<b>Country</b>
Czech Republic
<b>Name of the Observatory</b>
The National Observatory of Employment and Training (NOZV)
<b>Type of Observatory (SupraNational, National, Regional, Sectoral, ...)</b>
National
<b>Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)</b>
<p>The National Observatory is an analytical section of the National Training Fund (NTF). The National Training Fund is a non-profit organization operating since 1994. Its aim is to promote the development and restructuring of human resources in accordance with the requirements of economic and social reforms in the Czech Republic. Its research work is focused on labour market issues - i.e. employment, human resources development, forecasting skill needs and both initial and, in particular, continuing vocational training.</p> <p>The Observatory provides information about the development of human resources, collects data and analyses trends in education and the labour market against the background of social and economic changes.</p>
<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
<p>As part of the analyses extensive surveys are conducted, the results of which facilitate up-to-date information concerning specific areas that are not covered by regular statistical data.</p> <p><b>Forecasting skill needs.</b> The National Observatory is concerned, over the long term, with the development of a methodology for forecasting labour market skill needs. The objective is to generate and analyse, on a systematic basis, information about future requirements for occupations, qualifications and skills. This information should facilitate the relevant understanding on the part of labour market institutions, educational institutions, potential participants in education and training, employers and public institutions, and assist them in their decision-making. The methodology is being developed in two areas that complement one another: quantitative projections based on a mathematical model and qualitative approaches based on analyses and expert assessments of future development in economic sectors (sector studies).</p> <p><b>Research into human resources.</b> The National Observatory carries out research into the quality of human resources as one of the factors of the competitiveness of a country. The Observatory</p>

team have experience in implementing extensive research projects focusing on inequalities in the chances of acquiring education, on the demands that the knowledge society places on the quality and training of human resources, the links between population ageing and education, and other issues.

**International networks.** The National Observatory is involved in expert networks cooperating at European level (ReferNet, SkillsNet).

**Partnership and cooperation.** The National Observatory carries out expert studies for national ministries (particularly the Ministry of Education, Youth and Sports and the Ministry of Labour and Social Affairs), the European Commission, the OECD, Cedefop, etc. During project implementation it cooperates with foreign partner organisations (e.g. QCA - the UK, BIBB - Germany, CEREQ and OREF - France, ISFOL - Italy, University of Bremen - Germany, ROA - the Netherlands, ESRI - Ireland). In the Czech Republic the Observatory cooperates particularly with research institutions concerned with labour market issues, education and training and social affairs (Institute of Sociology of the Academy of Sciences of the CR, Research Institute for Labour and Social Affairs, National Institute for Technical and Vocational Education, Institute for Information on Education, Centre for Higher Education Studies, CERGE), as well as with employer organisations, trade unions and the Czech Statistical Office.

**Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)**

The outputs of the National Observatory's activities are published in the form of working papers, reports and studies focusing on various areas of education, qualification needs and employment, and also in the form of statistical data concerning selected aspects of education and vocational training and the labour market.

**References (website or other references, where possible in English)**

<http://old.nvf.cz/observatory/enindex.htm>

<http://www.budoucnostprofesi.cz/en/index.html>

Institution
Ministry of Labour, Employment and the Social and Solidarity Economy
Country
Luxembourg
Name of the Observatory
Study network on labour market and employment issues (RETEL)
Type of Observatory (SupraNational, National, Regional, Sectoral, ...)
National/Regional
Information collected (professional figures, employment fallouts, skills and competences, education degrees, employment rate, job placement, ...)
The RETEL constitutes an employment observatory. It organizes and facilitates a networking of producers, analysts and users of labour market and employment studies in Luxembourg and the Greater Region (German, Belgian and French border areas) that contributes to the Luxembourg labour market.



<b>Methodology (face to face and/or telephonic interviews, focus group, data from official sources processing, ...)</b>
<p>There is not much material compared to the methodology adopted.</p> <p>In addition to the provision of existing studies and analyses, the RETEL also conducts own research and studies, evaluates administrative data and surveys with the aim to examine more closely the current and future developments on the Luxembourg labour market.</p> <p>This approach is part of the reform of the Luxembourg Employment Agency (ADEM) fostering a better understanding of the Luxembourg labour market and the impact immigration has on it.</p>
<b>Outputs connected to the Observatory (Databases, Indicators, Catalogues of occupations and qualifications, Analytic Reports, Meetings, ...)</b>
<p>1. RETEL regularly publishes an analysis of the Luxembourg labour market. The quarterly publication aims to analyse the labour flows (recruitments, terminations of employment contracts) in order to better understand the dynamics of the Luxembourg labour market.</p>
<b>References (website or other references, where possible in English)</b>
<a href="https://adem.public.lu/en/marche-emploi-luxembourg/acteurs/retel.html">https://adem.public.lu/en/marche-emploi-luxembourg/acteurs/retel.html</a>



## Concluding Remarks

Throughout this report, we have emphasised the increasing value of Labour Market Observatories in European countries, where the number of observatories has substantially grown during the last decades. This growth has been mainly due to the need for better-grounded forward-looking employment and skills policies and the public pressure for effective youth employability policies at national, regional and sectoral levels. Nowadays no one questions the crucial role that these institutions might play fostering employability and improving matching in the labour market while outcomes and indicators produced by observatories have become a relevant feature in many EU countries and regions. European Union cooperation and funds have played an important role in supporting LMOs and in promoting the development of networks among them. European LMOs are expected to share examples of good practices and determine under which conditions these can be transferred to other countries and regions, such as Vietnam, which is the main goal of the LAB-MOVIE project.

Although observatories are very diverse and reach different objectives depending on their specific contexts, we have identified several factors which lead them to succeed. Indeed, the diverse international experiences can help us to identify several factors that become crucial for the effectiveness of LMOs. LMOs need to fulfil the demands for information of different stakeholders, which conveys having an effective governance structure, well-defined objectives and user needs, data availability, adequate resources, tailored analysis, widespread dissemination, accountability and feedback mechanisms, and the right mix of independence and collaboration.

A labour market observatory should focus on analysing labour market trends and challenges, creating value for different stakeholders, from the general public to education institutions, from firms to policy makers. Through the combination of data visualization and structural analysis, they uncover and explore insights that are novel, original and contribute to the policy debate.

Following the International Labour Organization, the identification of labour market issues critically rests on the availability of data, information and analysis. Labour market information systems (LMIS) provide an essential basis for employment and labour policies, and inform the design, implementation, monitoring and evaluation of policies that are better focused and targeted. LMIS also contribute to a reduction in the transaction costs of labour markets as they help overcome incomplete information of labour market agents.

Most countries are committed to the development of labour market information systems. However, particularly in developing economies, the functioning of LMIS, if such systems have been established at all, is hampered by various constraints, including data limitations. Data limitations affect not only complex issues such as informality and employment protection, but also labour market indicators

that in most developed economies are available on a monthly or quarterly basis, such as employment and unemployment indicators. Data limitations are related in developing economies to constraints such as resource scarcity, limited analytical capacity and structural factors. Furthermore, labour market institutions, including workers' and employers' organizations, are weak in many economies, which hampers the development and use of mechanisms to feed information and analysis into decision-making. Such problems may lead to ill-informed policy formulation and inadequate monitoring, hindering efforts to achieve labour market and development objectives.

Three main functions of Labour Market Information Systems can be distinguished:

- LMIs facilitate labour market analysis
- LMIs provide the basis for monitoring and reporting on employment and labour policies
- LMIs constitute a mechanism to exchange information or coordinate different actors and institutions that produce and utilize labour market information and analysis.

The main purpose of LMIs is the production of information and analysis for policy-makers and other labour market stakeholders. For example, the functions of the European Employment Observatory are stated as follows: "The European Employment Observatory contributes to the development of the European Employment Strategy through the provision of information, comparative research and evaluation on employment policies and labour market trends." It is important to establish institutional arrangements in order to make the information and analysis widely available, and to provide opportunities for labour market stakeholders to influence the agenda of the LMIs.

The LMIs can also be directly involved in monitoring and reporting on employment and labour policies. Both at the international and the national levels, the institutional role of the LMIs can be broadened to include the exchange of information or coordination of the LMIs activities of labour market stakeholders, which include statistical agencies, research agencies and agencies involved in policy formulation and implementation, including and workers' and employers' organizations. This function may range from the dissemination of information on concepts, definitions and standards, to the allocation of resources regarding data collection or specific analytical activities.

Labour market information systems consist of four main components:

- collection and compilation of data and information
- repository of information
- analytical capacity and tools
- institutional arrangements and networks

Regarding the first component, and given that LMIs should provide analyses of labour markets in their economic context, collection or compilation

of data consists not only of data on labour markets, but also on the broader economy. For example, data on trade flows and remittances are indispensable for an analysis of the labour market effects on economic crises.

Labour force surveys can be designed to cover the entire population of a country, all sectors of the economy and all categories of workers, including own-account workers, contributing family workers and persons engaged in casual work or marginal economic activity. For this reason, household-based labour force surveys offer a unique advantage to obtain information on the labour market of a country and its structure. Other sources, such as population censuses, multi-purpose household surveys, establishment surveys, or administrative records (e.g., employment service records), differ in scope, coverage, units of measurement or methods of data collection.

Each source has advantages and limitations in terms of the cost, quality and type of information gained. For example, establishment surveys typically have poor coverage of very small or unregistered businesses but are a more reliable source on wages and earnings. Similarly, administrative records provide a low-cost source of labour market information, but this information is limited by the purpose of the records, which may be different from that of an analyst or policy-maker. Therefore, effective LMIs draw on all sources.

At a minimum, LMIs track a set of indicators, which constitute the basis for the development of more advanced systems. A widely-used set of indicators are the Decent Work Indicators (DWI) which can be found at ILOSTAT, the core statistical information system of the ILO. DWI cover the four dimensions of the Decent Work Agenda, plus indicators of the economic and social context of decent work.

LMOs create value for higher education institutions as they should be able to guide these in terms of anticipating the skills that will be in high and low demand in the near future, helping to design an educational offer that is better adjusted to market needs. This value cannot be understated, as skill mismatches are one of the key drivers of low productivity and job satisfaction and are paramount for the dynamics and competitiveness of the economy.

The expected impacts of well-designed and functioning LMOs should be the following ones:

- Better informed decisions of job seekers and students
- Better coordination between education and training systems and local labour market demands
- Better employment services to fulfil the needs of job seekers and employers
- Better tailored employment policies for labour market needs
- Better cooperation among stakeholders

In brief, Labour Market Observatories are institutions that help guide job seekers and students, intermediaries, policymakers, training institutions, as well as investors and employers with labour market trends and offer guidance to build better careers. LMOs must provide relevant and timely information on labour market trends to allow their users to make informed decisions on skills acquisition and occupations.

Well-functioning LMOs have access to data on labour markets, collaborate with other relevant agencies, and have a sound statistical infrastructure in place. Successful LMOs are responsive to demands of their clients and provide information custom-tailored to their needs; they carry out analysis and monitoring of trends in labour supply and demand to identify mismatches.

Our recommendations for the project and for the development of Labour Market Observatories at the Vietnamese Universities are the following ones:

- a. Create a solid, simple and executable methodology. Make the methodology transparent so that it is not easily discredited.
- b. Dream big but start small. Creating a small (but scalable) observatory is preferable to trying to cover a scope that is unmanageable in practical terms. Very important to deliver a strong result – even if somewhat limited in scope in the beginning, it will prove the potential and encourage continuation and future funding to further develop the project at a later stage.
- c. Involve stakeholders
- d. Ensure that the model constructed is adaptable for growth in regional and sectoral coverage.
- e. Dedicate time to developing a friendly, attractive and dynamic user interface. Make people and entities want to use the tool.