



# **Mutual Learning Programme**

DG Employment, Social Affairs and Inclusion

**Peer Country Comments Paper - Croatia**

## **What messages would labour market tightness indicator send to the Croatian labour market?**

**Peer Review on "Measuring labour market tightness to improve employment policies and reduce skills mismatches"**

**France, 15-16 October 2018**



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## **1 Introduction**

This paper has been prepared for the Peer Review on "Measuring labour market tightness to improve employment policies and reduce skills mismatches" within the framework of the Mutual Learning Programme. It provides a comparative assessment of the policy example of the host country (France) and the situation in Croatia. For information on the host country example, please refer to the Host Country Discussion Paper.

## **2 Overview of labour market trends**

The analysis conducted by the Croatian National Bank (Jovicic G., 2017) showed that after the global financial crisis, potential growth of the domestic economy and the output gap remained negative for a period of 10 years. According to the analysis, the largest negative contribution to potential growth came from the labour production factor. The latter is a result of the growing unemployment rate and declining participation rate which demonstrates the imbalances in the domestic labour market. These imbalances originate from skills mismatches, structural demographic changes due to a high level of a brain drain, technological progress, and the type of employment contracts (a number of contracts for a definite period of time is increasing).

The labour force demand, expressed as the number of job vacancies by the Croatian Employment Service (CES), is increasing since 2010 (CES, 2017). For example, in 2017 the number of job vacancies was 7.7% higher than in 2016. The increase was recorded in most areas of economic activity and in the large number of counties. Activities with the highest recorded unemployment rate were the accommodation and hospitality, manufacturing/processing industry, retail and wholesale trade, construction and public services (education, public administration and defence, and human health and social work activities). Meanwhile, the greatest increase in employment was registered in agriculture, forestry and fishing, administrative and support service activities, manufacturing, public administration and defence, transportation and storage, and accommodation and food service activities (EURES, 2018; CES, 2017). The registered employment (monitored as the number of persons from the CES Unemployment Register who found employment during the year) decreased by 10.1% in 2017 compared to 2016 and by 5.9% in 2016 compared to 2015.

At a policy level, the imbalances in the labour market are very often described as inadequate educational system outcomes which are insufficiently aligned with the labour market needs. PES is addressing these imbalances by analysing available statistical data and preparing a document titled "Recommendations for educational policy and scholarship policies" which will be described further in detail in the following section of this report. To address this disparity, the Croatian Government adopted the Education, Science and Technology Strategy in 2014 (MSES, 2014) with a focus on lifelong learning from the early years that should respond to the labour market needs in terms of human resources. In addition to this, the Croatian Qualification Framework, established in 2013, supports an active engagement of employers in the development of qualification standards and occupational standards. These are the tools aimed at enabling better skills match and directing an educational offer to the labour market needs, in particular in the economic sectors that demonstrate higher levels of shortage for specific occupations.

## **3 Assessment of the measurement of labour market tightness**

In Croatia, there is no definition of labour market tightness. However, both indicators (a number of job vacancies and a number of unemployed) from the ratio that defines labour market tightness in the literature, as described in the Host Country Report, are individually measured by the CES. The CES Unemployment Register (Register) tracks

the record of unemployed based on their occupations. The intention of the CES is to improve the Register's records with more detailed information about skills, employment experience, etc. that would allow better matching between the supply and demand in the labour market.

In addition, potential for better skills assessment could be increased, but CES counsellors would need to be trained in new tools and methodologies for skills assessment. The number of job vacancies, which can also be described as labour force demand, is expressed as the number of job vacancies reported to the CES by employers (CES, 2017). The job vacancies published on the websites of private recruitment companies are not included in the number of job vacancies published by the CES. Currently there is no system or methodology that could combine different sources of job vacancies postings and create a common database. However, the CES job vacancies are published on some sites of private recruitment companies which means that potential linkages between different databases could result in a duplication of a significant number of job vacancies, in quantitative terms.

Similarly to some of the different data sources mentioned in the Host Country Paper, the following data sources are also available in Croatia:

- Employer's Survey (CES),
- data from the CES,
- labour force survey (National Statistics Office),
- social welfare (the Croatian Pension Insurance Institute), and
- information on wages (Financial Agency).

However, these different data sources have not yet been linked and therefore the data analysis still solely remains on the level of the institution collecting the particular datasets. To solve this problem, the Croatian Government has made significant efforts to create a multiply database by developing a legal foundation for the establishment of the Shared Service Centre (Centar dijeljenih usluga) to offer services for the bodies of the public sector. The Centre will be operational within the Information Systems and Information Technologies Support Agency (APIS) which is focused on unifying the IT infrastructure of the state, as well as on the development and maintenance of the crucial information systems of the Republic of Croatia and the city of Zagreb (APIS, 2018). This infrastructure will enable links between different databases, from e.g. CES, Ministry of Science and Education, Ministry of Labour and Pension System, National Finance Agency, and other stakeholders which collect citizen data. However, to what extent the Shared Service Centre will contribute to the advanced measuring of labour market tightness, or in general in improving labour market policies is not yet fully known because the Centre is only in its establishment phase and therefore it is not yet clear what information from the existing databases is available.

At the same time, the Strategy for Lifelong Career Guidance in the Republic of Croatia 2016-2020 (CES, 2015) includes the Action Plan with numerous measures aimed at setting up a framework for a career guidance for better alignment with the labour market needs. The Action Plan foresees the measures on ensuring the availability of information on the labour market needs and projections of the future labour market needs, i.e. projections of employment by business activities within the Croatian economy and on the impact of increase/decrease of the future employment on demand for occupations that are a part of 25 sectors defined by the Croatian Qualifications Framework Act (CES, 2015). One of the aims of implementing the Croatian Qualifications Framework (CROQF) is to tackle structural unemployment in the long-term. Namely, the development of occupational standards, qualification standards, sectoral profiles and other tools and methods will contribute to the -establishment of long-term skills forecasting approaches and methods in the near future.

Currently, the CES is implementing a short-term forecasting with a primary focus on recognising occupations and skills which are in a high demand in the labour market in order to provide information to the education system on required education programmes. The analysis is carried out on the basis of relevant statistical data and indicators on the employment of unemployed persons according to the education program, data from the Employers' Survey and taking into account the strategies and plans of economic development at regional and local levels (CES, 2018). The outcome of the analysis is the annually prepared document titled "Recommendations for educational policy and scholarship policies". The analysis has primarily the qualitative character because it results in recommendations whether to increase or decrease the number of enrolled students and students with scholarships, as well as students in certain educational programmes. They are designed at regional and local labour market levels with the aim to reduce the structural mismatch between labour supply and demand (CES, 2018).

In 2016, the Institute of Economics (Tkalec M. et al., 2016) performed the first national study on the projections of the future labour market trends in 25 sectors. It is interesting to note that the authors used three different data sources. Firstly, different groups of economic data, such as monthly data on the trends of the labour market of the Croatian Bureau of Statistics at NCEA 2007 level (National Classification of Occupations from 2007). Secondly, detailed job market status information available from the portal on sectoral analysis of the Croatian Qualification Framework (MLPS, 2018) at the level of CROQF sector and the professions; and thirdly, the projections on economic activities per sector for the period until 2020 published by CEDEFOP. With the results obtained, the influence of projections of employment by activities at the level of the NCEA 2007 on the structure of the number of employed in 25 CROQF sectors was calculated for the period 2015-2020. The study reported on the problems encountered in relation to data credibility, which are also relevant for the context of the potential measurement of labour market tightness. Namely, the study states that Croatia has partially developed statistical databases, e.g. the one containing data on the number of employed per NCEA and per CROQF sectors is currently in development. The authors also recommend that the ministries responsible for regulating supply and demand in the labour market should develop their own models, if necessary in cooperation with the academic community.

Furthermore, another measure within the Strategy for Lifelong Career Guidance foresees the development of the System of Human Resources Record which would present informatisation of data exchange among government institutions and thus connect the key registers describing position and career path of an individual in the world of education and work. A special attention will be given to three basic statuses of the citizens, namely the employment, unemployment and inactivity. The APIS Agency mentioned above could support the development of the System of Human Resources Record and, in that way, enable more credible and reliable datasets that could be used for the needs of the analysis on labour market tightness and mismatch in skills demand and supply, per occupation, educational level, etc.

## **4 Assessment of public policy implications and success factors**

### **4.1 Differences and similarities between the Croatian and French approach**

Even though Croatia has no definition or methodology for the measurement of labour market tightness as France, it has a significant mismatch in supply and demand of skills and knowledge that is described as one of the largest issues of the Croatian labour market. To tackle this issue, Croatia is developing and gradually implementing several tools and mechanisms, of which some have been described in the previous section of the report. The Ministry of Labour and Pension System (MLPS) in cooperation with other institutions has developed tools for monitoring, analysing and forecasting labour market



needs which will be further presented in this section of the report. It is important to mention that all mechanisms and tools are based on national strategies and legal acts, which means that they are aligned with the national policies in labour market, education, pension system, etc. The overall aim is to achieve better alignment of education system with the labour market needs.

For that purpose, data used for labour market forecasting is the Register of unemployed that is managed by CES (one of the tools). The Register tracks the entry and exit from unemployment by recording also the characteristics of unemployed, such as age, gender, completed education programme, residence, and the reasons for leaving the unemployment. According to MLPS, these data enable calculation of the rate of employment by an educational program or profession. Data on reported job vacancies by employers provide information on jobs, occupations and qualifications required in the labour market. The second tool, Statistics on-line (CES\_b, 2018) enables public access to data on registered unemployment and employment and consists of four basic data categories: registered unemployment; entries in the CES Register; exits from the CES Register; and job vacancies reported by employers. The search options are enabled according to years and months, or based on different characteristics, such as age, gender, educational level, economic activity, occupational groups, etc.

The third tool is the Employers' Survey (conducted annually by CES) provides a variety of information on employers' needs and issues on the labour market (e.g. information on the type of employment; plans for future employments; difficulties when employing). The methodology was developed in cooperation with the Croatian Chamber of Commerce, the Croatian Chamber of Trades and Crafts and the Croatian Employers' Association. The results of the survey are used by CES with the aim to match the demand and supply of the labour force; to better align and create active labour market measures; improve career counselling services; analyse trends in the needs of the labour market in relation to different profiles of employees; and improve better planning of retraining offer for unemployed to better match the needs of the labour market.

The fourth tool is the Occupational Standards Survey (developed for the purpose of CROQF) provides information on competences required to perform specific occupations and other relevant information on occupations. The overall aim is to align formal educational programmes with the needs of employers. The results of the survey represent an analytical foundation for the development of the occupational standards.

The CROQF Portal (MLPS, 2018) presents a software tool with profiles of 25 CROQF profiles. The database is continuously updated with the latest data collected from the CES (monthly unemployment reports by occupation, gender, and county); the Croatian Pension Insurance Institute (a monthly employment report by occupation, gender, county, and business activities); the Croatian Bureau of Statistics (annual business activity reports); the Ministry of Science and Education (an annual secondary and tertiary education enrolment, by educational programmes). The added value of the portal is that it merges and graphically displays available data for each of 25 sectors: an occupation corresponding with CROQF levels, a total number of employed and unemployed, gender and age structure of unemployed and employed; monthly changes in unemployment and employment rate; educational programmes and enrolment; country and regional information; business activities. The export function enables export of data that can be used for further analysis.

To summarise, the key tools used by MLPS and CES are the following:

- Statistic on-line (developed and managed by CES);
- Employers' Survey (developed, conducted and published by CES);
- Occupational Standards Survey (Developed by MLPS and CES – conducted by CES); and
- CROQF portal (developed and managed by MLPS).

Even though Croatia is not monitoring its labour market tightness with a labour market tightness indicator, it has many available data and databases from which the needed data could be extracted and used for the indicator calculation. However, due to the discrepancies in how the data is collected and coded in different databases, it might be a challenge to combine different values and obtain credible and reliable quantitative numbers.

#### **4.2 Success factors behind the approach**

The challenge of data credibility and reliability is also recognised by DARES (France). For example, the challenge of taking into account all job vacancies published in the country instead of solely those published by PES would also be a challenge for Croatia because there is no methodology in place covering wider labour market needs. Another limitation identified by DARES relates to difficulties for firms to anticipate the future recruitment needs which is also very often encountered during the implementation of the Employers' Survey in Croatia.

The DARES' approach to using alternative data sources and potential indicators that are relevant for assessing different aspects of labour market tightness could be of interest for Croatia. In addition, DARES has found solutions to overcome the limitations encountered on both the demand and supply side. The acknowledgment that individual data sources cannot on their own measure all the determinants of labour market tightness is a message for Croatia that the current intention to link the existing databases is a good approach. It will enable data comparison, analysis and even a potential introduction of new national indicators that could be used as a basis for new policy development.

### **5 Questions**

- What is the added value of the labour market tightness indicator compared to other indicators measures/monitored by PES?
- What existing labour market measures could be modified/improved and/or new ones developed based on the values obtained for the labour market tightness indicator per occupation?
- Is DARES supported by external experts and academic community in the development of the methodology for labour market tightness indicator?

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## **Annex 1 Summary table**

The main points covered by the paper are summarised below.

### **Overview of labour market trends**

- Potential growth of the domestic economy and the output gap remained negative for a period of 10 years.
- In 2017 the number of job vacancies was 7.7% higher than in 2016.
- The registered employment (monitored as the number of persons from the CES Unemployment Register who found employment during the year) decreased by 10.1% in 2017 compared to 2016 and by 5.9% in 2016 compared to 2015.

### **Assessment of the measurement of labour market tightness**

- In Croatia, there is no definition of labour market tightness.
- A number of job vacancies and a number of unemployed per occupation are individually measured by CES.
- The key tools used by MLPS and the CES are the following: Statistic on-line (developed and managed by CES); Employers' Survey (developed, conducted and published by CES); Occupational Standards Survey (Developed by MLPS and CES – conducted by CES); CROQF portal (developed and managed by MLPS).
- The State's intention to link existing databases of different national institutions.

### **Assessment of public policy implications and success factors**

- Croatia has limited approaches and methodologies in relation to the assessment of implementation of public policies.
- There is a challenge of available data credibility and reliability.

### **Questions**

- What is the added value of the labour market tightness indicator compared to other indicators measures/monitored by PES?
- What existing labour market measures could be modified/improved and/or new ones developed based on the values obtained for the labour market tightness indicator per occupation?
- Is DARES supported by external experts and academic community in the development of the methodology for labour market tightness indicator?

## Annex 2 Example of relevant practice

Name of the practice:	CROQF Portal (HKO Portal)
Year of implementation:	2015
Coordinating authority:	Ministry of Labour and Pension System
Objectives:	Continuous update of the Labour Market Development
Main activities:	<p>The portal is continuously updated with the latest data collected from the CES (monthly unemployment reports by occupation, gender, and county); the Croatian Pension Insurance Institute (a monthly employment report by occupation, gender, county, and business activities); the Croatian Bureau of Statistics (annual business activity reports); the Ministry of Science and Education (an annual secondary and tertiary education enrolment by educational programmes).</p> <p>Merging and graphical display of available data for each of the CROQF 25 sectors: occupation corresponding with CROQF levels, total number of employed and unemployed, gender and age structure of unemployed and employed; monthly changes in unemployment and employment rate; educational programmes and enrolment; country and regional information; business activities.</p>
Results so far:	<p>Public visibility of changes on the labour market in terms of supply and demand.</p> <p>The export function enables the export of data that can be used for further analysis.</p> <p>Data can be used by academic institutions, employers, researchers, analysts, public and private institutions and organisations.</p>



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