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Mismatch on the Labour Market in the CENTROPE  
Region

Luděk Kouba, Petr Rozmahel

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Research Centre

Faculty of Business and Economics

Mendel University in Brno

Zemědělská 1, 613 00 Brno

Czech Republic

<http://vyzc.pef.mendelu.cz/en>

+420 545 132 605

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## **Abstract**

Luděk Kouba, Petr Rozmahel: **Mismatch on the Labour Market in the CENTROPE Region**

The CENTROPE region covers eight regions in four countries: Austria, the Czech Republic, Hungary and Slovakia. Considering the situation on the labour market in CENTROPE, it is necessary to emphasize a high level of heterogeneity. Theoretically, it provides a potential for cross-border cooperation. In this text, we focus on skill mismatch and regional mismatch that contribute significantly to unemployment within CENTROPE. The main aim of this paper is to determine what proportion of unemployment in selected occupations could be avoided if the unemployed were perfectly mobile across CENTROPE regions. Our analysis is based on a unique dataset, the so-called Labour Market Monitoring Tool in CENTROPE that is a joint project of Mendel University and the CENTROPE Office Czech Republic. As a result, we have identified occupation with a high, medium and low potential for commuting within CENTROPE. The identification of these occupations was executed by two ways of calculation: the Potential percentage of unemployed reduction and the Mismatch index.

## **Key words:**

mismatch unemployment, mismatch index, regional labour market, CENTROPE

**JEL:** J6, J2, R23

## **Contacts**

Luděk Kouba, Department of Economics, Faculty of Business and Economics, Mendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic, e-mail: kouba@mendelu.cz

Petr Rozmahel, Research Centre, Faculty of Business and Economics, Mendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic, e-mail: petr.rozmahel@mendelu.cz

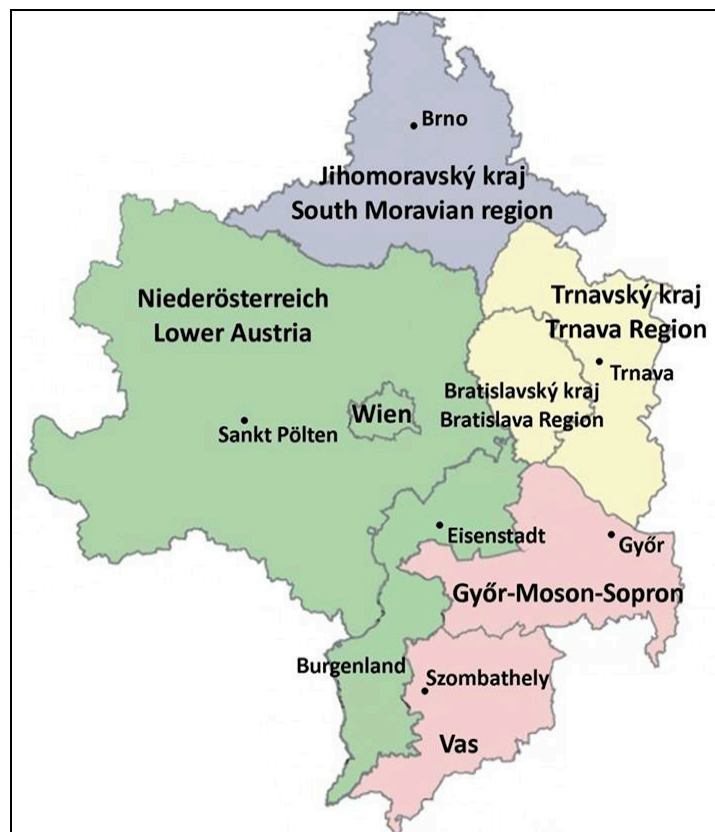
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## Introduction

The CENTROPE region covers eight federal provinces, regions and counties in four countries: Burgenland, Lower Austria and Vienna in Austria, South Moravia in the Czech Republic, the Bratislava region and Trnava region in Slovakia and Győr-Moson-Sopron and Vas in Hungary. In this Central European region with around six and half million people two capitals, Vienna and Bratislava, are located and also two other supra-regional centres, Brno and Győr. Economically, CENTROPE is a dynamic region with a high share of export-oriented industries, globally-networked service hubs and an educated workforce. CENTROPE belongs among the major beneficiaries of EU enlargement, which outperforms the EU average regarding both economic growth and unemployment.

Figure 1: The CENTROPE region



Source: [www.centrope.com](http://www.centrope.com)

Considering the situation on the labour market in CENTROPE, it is necessary to emphasize a high level of heterogeneity. First of all, according to official Eurostat data, the unemployment rate in 2010 varied from 3.6 in Lower Austria to 12.0 % in Western Slovakia. Furthermore, there is long-lasting divergent development among metropolitan and rural areas which is even more obvious on a sub-

regional and local level. Another specific factor that is necessary to take into consideration is the lingering economic difference between Austria and the other three new EU member states.

Theoretically, this heterogeneous development provides a potential for cross-border cooperation. In this text, we focus on skill mismatch (different levels of labour supply and demand by skill groups) and regional mismatch (different levels of labour supply and demand across regions) that contribute significantly to unemployment within CENTROPE. In particular, the regional mismatch signals a lack of cross-border mobility.

The main aim of this paper is to determine what proportion of unemployment in selected occupations could be avoided if the unemployed were perfectly mobile across CENTROPE regions. The second aim is to discuss whether the relationship between vacancies and unemployment changed after the establishment of the freedom of labour movement between Austria and the other CENTROPE countries.

Our analysis is based on a unique dataset, the so-called Labour Market Monitoring Tool in CENTROPE, which is introduced in the following part, Methodology of regional labour statistics. The analysis itself is divided into five steps.

## **1 Methodology of regional labour statistics**

Analyzing regional labour markets, we can use two available datasets: the Eurostat data, based on the Labour Force Survey, and the national statistics, based on registered unemployment rates. However, both of them suffer from serious drawbacks related to the analysis of cross-border effects: either lack of up-to-date data at regional level or incompatibility of the data. We compared the positive and negative features of both sources of regional information in Rozmahel, et al. (2012). The results can be summarized in the following table.

Table 1: Comparison of regional labour statistics methodology between Eurostat and national statistics

	Positives	Negatives
Eurostat	<ul style="list-style-type: none"> <li>stable and comparable methodology</li> </ul>	<ul style="list-style-type: none"> <li>most of regional statistics available only at NUTS II level</li> <li>very low up-to-dateness</li> <li>only on annual basis</li> </ul>
National statistics	<ul style="list-style-type: none"> <li>very detailed data often up to NUTS 5 level</li> <li>high up-to-dateness</li> <li>on monthly basis</li> </ul>	<ul style="list-style-type: none"> <li>different methodology, not comparable</li> <li>often only in local language</li> </ul>

Source: own

Further to these methodological problems, we decided to develop an additional instrument for the analysis of cross-border effects – the Labour market monitoring tool in CENTROPE (LMT in CENTROPE). This tool has been developed as a joint project of Mendel University and the CENTROPE Office Czech Republic within a CENTROPE pilot project “Regional Development Report” (RDR). A detailed analysis of cross-border effects in CENTROPE belongs to the keystones of the RDR project and the regional labour market with a high cross-border potential is one of its key areas. However, as we described, regional labour market statistics suffer from serious problems. Therefore we decided to deal with both Eurostat statistics and national statistics and focussed on that, to try to develop a specific tool to enable monitoring of the labour market directly in the CENTROPE region as well. The Labour market monitoring tool in CENTROPE, thus, provides a unique and up-to-date dataset on selected vacancies and unemployment at NUTS 3 level.

At an early stage of this LMT in CENTROPE project, 10 occupational groups for labour market analysis were chosen. The main criterion for the selection process was their relevance to the labour market in CENTROPE with cross-border effects potential. Therefore the selection process was realized in cooperation with representatives of regional Labour offices in CENTROPE. The chosen occupations are: cook, waiter, butcher, social worker, CNC operator, welder, bricklayer, IT specialist, driver (bus, truck), and logistics worker. The structure of this occupations group goes across the education structure of the economically active population. It is another comparative advantage of this tool because similar instruments dealing with mobility are often focused on groups with high education (university students, managers) who have traditionally a high mobility potential. At the moment of completing this text, we have the data for 8 quarters in 2010 and 2011 with the exceptions of

Q4/2011 in the Czech Republic (not available yet) and Q1/2010 and Q2/2010 in Hungary (because of methodology changes).

The analysis is executed in 5 steps. The first step provides a basic look at unemployment and vacancies in CENTROPE based on our unique dataset. The second step is focused on the unemployment/vacancies ratio across CENTROPE being considered as a key indicator of labour market development. The third and fourth steps offer two alternative ways to how to consider the potential of labour mobility in terms of solution of the unemployment problem in CENTROPE: the Potential percentage of unemployment reduction and the Mismatch index. Finally, the fifth step deals with consequences of labour market liberalization after 1 May 2011.

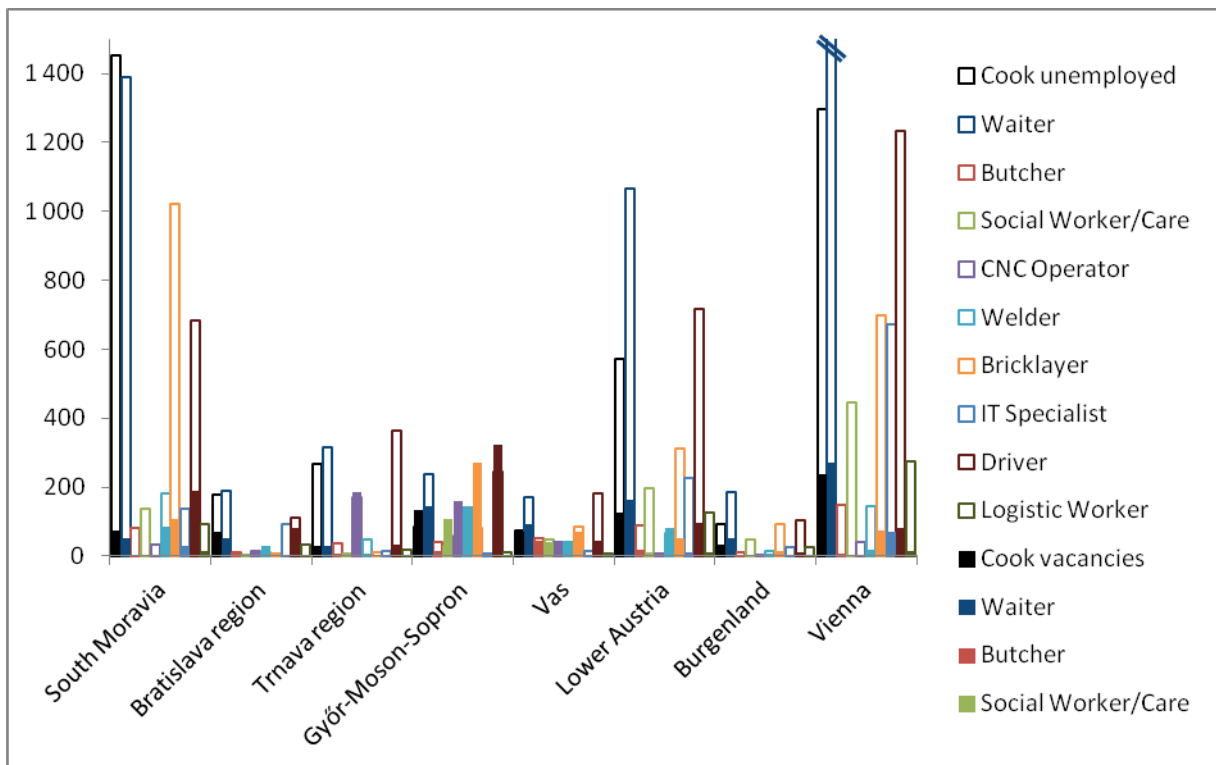
Partial results of the LMT in CENTROPE project were presented at the thematic labour market workshop “Monitoring for Better Managing the Shared Labour Market” in October 2011 that was held by the CENTROPE Office Czech Republic under the attendance of the representatives of the Labour offices across CENTROPE and at the CENTROPE workshop held by Mendel University in Brno in March 2012 under the attendance of the representatives of regions and municipalities, Europaforum Vienna, etc. This chapter thus encompasses attendants’ incentives and comments at both workshops.

## **2 Analysis based on the Labour market monitoring tool in CENTROPE**

### **2.1 Basic look at unemployment and vacancies in CENTROPE**

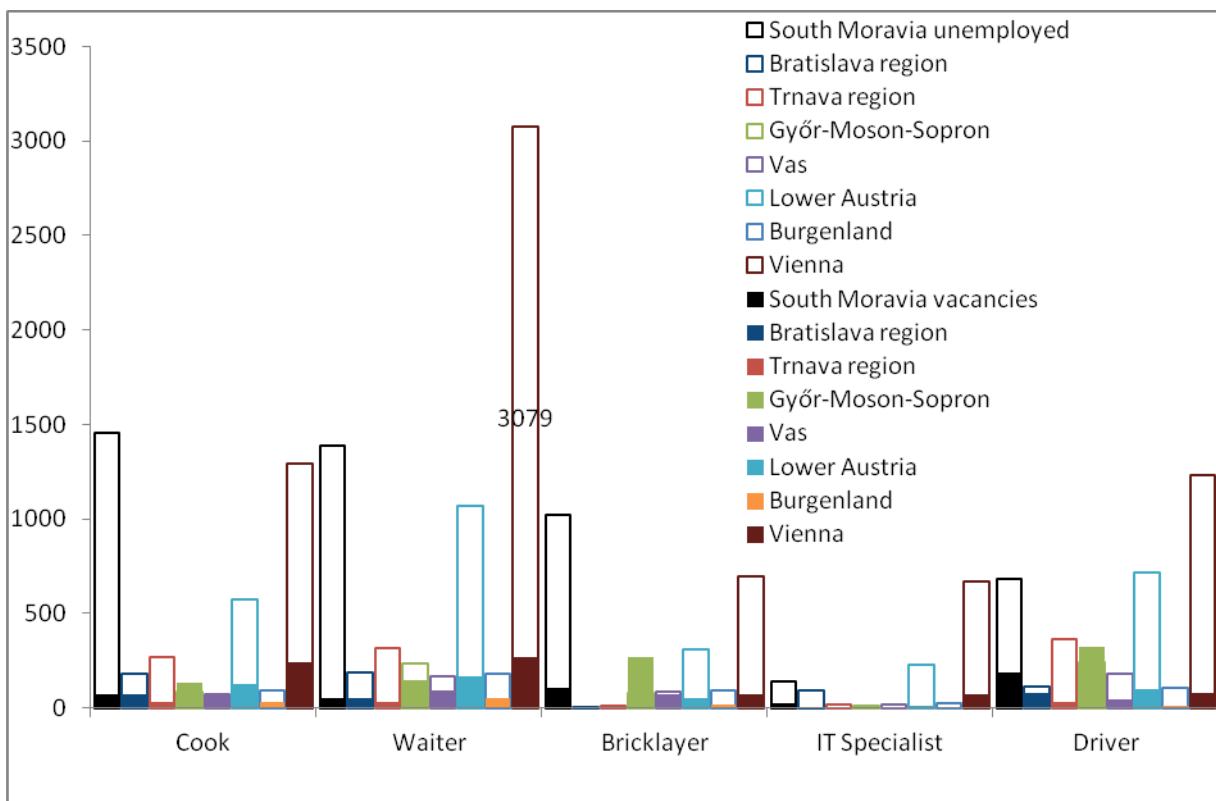
The structure of our unique dataset enables analysis of the CENTROPE labour market in three dimensions – across occupations, regions and time. Figure 2 provides a basic look at the number of unemployed and vacancies across 8 regions in Q3 2011, and figures 3 and 4 at the number of unemployed and vacancies across 10 occupations in Q3 2011. These figures illustrate the importance of monitored occupations across CENTROPE regions, rough relationships between labour supply and labour demand, crucial disparities as well as particularities such as extraordinarily high demand for CNC operators in the Trnava region.

Figure 2: Unemployment and vacancies across regions



Source: CENTROPE Office Czech Republic

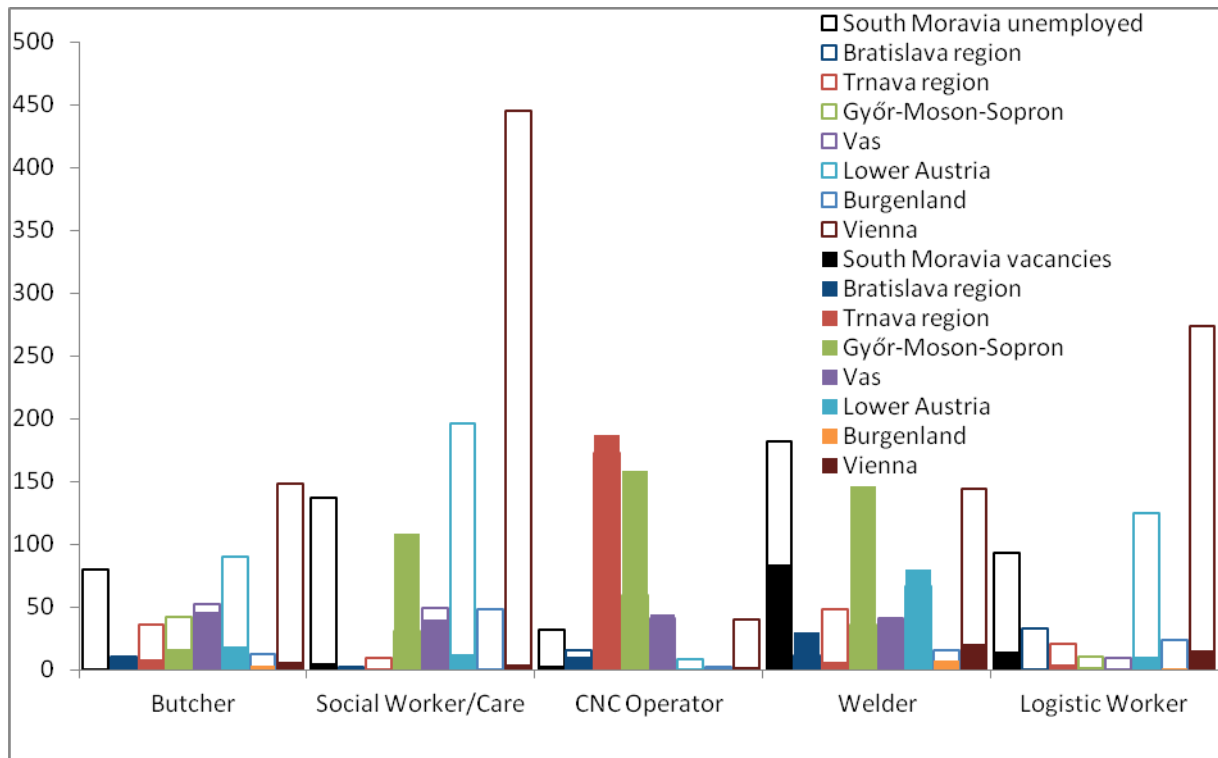
Figure 3: Unemployment and vacancies across occupations (part 1)



Source: The CENTROPE Office Czech Republic



Figure 4: Unemployment and vacancies across occupations (part 2)



Source: The CENTROPE Office Czech Republic

## 2.2 Unemployment/vacancies ratio across CENTROPE

Besides the rough data on the regional labour market, the Labour market monitoring tool in CENTROPE enables the making of a deeper analysis of cross-border trends and potentials in the CENTROPE region. The unemployment/vacancies ratio belongs to the key indicators within labour market statistics. In the following table 2, we offer the average ratio based on quarterly data in 2010 and 2011. The table shows relatively very high heterogeneity regarding the distribution of labour supply and labour demand across CENTROPE. In other words, such large differences indicate a significant regional problem of mismatch between open positions and the unemployed in CENTROPE.

We can also conclude that our data generally confirms the trends described at NUTS 2 level by Eurostat. In 2010, according to Eurostat, the unemployment/vacancy ratios differed from 3.1 unemployed per vacancy in Bratislava to 41.9 vacancies per unemployed in Western Slovakia. It is necessary to remember that only a part of the NUTS 2 region Western Slovakia, Trnava region, is part of CENTROPE (unlike the Nitra region and the Trenčín region). The same problem we have to take into account when comparing both datasets related to the Czech Republic and Hungary. In spite of this, as regards the Czech Republic, our NUTS 3 data regarding South Moravia are in accordance with NUTS 2 data regarding the Southeast. Also, the ratios concerning Austrian regions confirm the

general development at NUTS 2 level: a worse labour market situation in Vienna and considerable disparities among the occupations, in particular, in Burgenland. More important differences between the Eurostat data and our dataset are, thus, visible only in the Hungarian case where the ratios of unemployment/vacancies based on our dataset are relatively low in comparison with the NUTS 2 data. There are a few possible reasons for that – a territorial difference between the NUTS 2 and NUTS 3 region, potential divergence among selected and unselected occupations, and possible methodology differences. We are going to focus on this Hungarian unusualness in future research as well.

Table 2: Average unemployment/vacancies ratio across occupations and regions

	South Moravia	Bratislava region	Trnava region	Győr-Moson-Sopron	Vas	Lower Austria	Burgenland	Vienna
Cook	25.75	2.27	9.05	1.01	1.90	5.83	3.46	5.47
Waiter	23.74	3.18	9.45	2.30	3.75	7.16	4.91	13.43
Butcher	16.88	1.54	5.55	2.62	1.23	7.18	4.05	45.48
Social Worker/Care	18.15	1.50	1.29	4.00	3.34	17.76	16.13	47.83
CNC Operator	21.88	4.68	4.24	0.98	1.25	0.63	0.00	12.96
Welder	3.07	3.92	16.17	0.40	0.94	2.16	4.14	9.90
Bricklayer	24.45	1.18	2.93	1.30	3.22	18.96	32.95	19.45
IT Specialist	3.67	11.40	10.38	3.33	1.14	21.68	14.47	9.80
Driver	11.15	2.42	15.14	0.82	4.99	16.37	15.86	22.27
Logistics Worker	8.10	42.38	45.14	1.94	4.51	16.22	10.38	15.47

Source: The CENTROPE Office Czech Republic, own calculations

This high level of mismatch unemployment in CENTROPE provides a potential for internal migration/commuting as a partial solution of the problems on the labour market in CENTROPE. For this purpose, we will carry out two more exact calculations within the next two steps of this analysis.

### 2.3 Potential percentage of unemployment reduction in CENTROPE in the case of full labour mobility

The next step in our analysis consists of an uncomplicated but rather specific calculation. Its result is very illustrative – a percentage by that the unemployment in a particular occupation could be reduced under assumption of full labour mobility across CENTROPE. The calculation principle is possible to be shown in the following simplified example:

Let's assume there are 10 unemployed cooks and 5 vacancies in South Moravia and 5 unemployed cooks and 10 vacancies in Lower Austria. In the case of the contemporary low level of labour mobility, the labour market will tend to a situation with 5 unemployed cooks in South Moravia. On the contrary, under the assumption of full labour mobility across CENTROPE, people will find their jobs in a neighbouring region and unemployment will disappear. It means that in our example, full labour mobility could decrease unemployment in CENTROPE by 100 %. Assuming only 6 vacancies in Lower Austria, full labour mobility could decrease the unemployment in CENTROPE by 20 %.

In reality, we have counted up excesses of labour supply over labour demand in every single occupation, region and time-period under the assumption of present low labour mobility (immobility). Then we add, under the assumption of full labour mobility, all the differences between unemployment and vacancies in every occupation and time-period; this total must be lower because of excesses of labour demand in some regions. The final percentage is calculated according to the formula:

$$PPUR = 1 - (\text{mobility/immobility}) \times 100.$$

Table 3: Potential percentage of unemployment reduction (PPUR) in CENTROPE in the case of full labour mobility

	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4
Cook	0%	0%	1%	0%	0%	2%	2%	5%
Waiter	0%	0%	0%	0%	0%	0%	1%	1%
Butcher	4%	0%	0%	0%	0%	66%	0%	16%
Social Worker/Care	0%	0%	11%	0%	0%	0%	8%	5%
CNC Operator	0%	0%	34%	36%	100%	51%	100%	3%
Welder	0%	1%	46%	27%	22%	30%	51%	9%
Bricklayer	0%	0%	9%	0%	0%	9%	11%	1%
IT Specialist	0%	0%	0%	0%	1%	0%	0%	0%
Driver	0%	0%	4%	0%	3%	9%	10%	0%
Logistics Worker	0%	0%	0%	0%	2%	0%	0%	0%

Source: The CENTROPE Office Czech Republic, own calculations

The results clearly show the fields of labour market where commuting could be a significant solution to unemployment in CENTROPE. In particular, as regards CNC operator and welder, labour demand and labour supply distribution are very heterogeneous, which provides a high potential for

commuting. CNC operator, particularly because of high labour demand in Trnava region, is a unique case: in Quarter 1/2011 and Quarter 3/2011, 100 % of unemployment could have been avoided if the unemployed had been perfectly mobile across CENTROPE regions. Within this context, nevertheless, we have to remember the limitations of labour mobility in CENTROPE. Besides transport and other transaction costs, there are significant wages differences, in particular, between Austria and other CENTROPE countries.

Based on table 3, it is possible to distinguish two other groups of occupations. As regards bricklayers, drivers and social workers, the migration potential related to unemployment reduction reaches at least occasionally values of around a 10% level (medium commuting potential). On the contrary, the last group of occupations – IT specialist, logistics worker, waiter and also cook – show a very low commuting potential tending to zero. And finally, an extraordinarily uneven development which should be further explored is monitored in the case of butcher.

#### 2.4 Mismatch index

The other possibility of how to consider the migration potential related to the solution of the unemployment problem at regional level is the mismatch index<sup>1</sup>. In this analysis, we follow the subsequent form of the formula:

$$m_{it} = \frac{1}{2} \sum_{r=1}^K \left| \frac{u_{irt}}{u_{it}} - \frac{v_{irt}}{v_{it}} \right|$$

where:

$u_{irt}$  are unemployed in occupation  $i$ , in region  $r$ , at time  $t$

$v_{irt}$  are vacancies in occupation  $i$ , in region  $r$ , at time  $t$

$u_{it}$  are unemployed in occupation  $i$ , in all regions (i.e. CENTROPE), at time  $t$

$v_{it}$  are vacancies in occupation  $i$ , in all regions (i.e. CENTROPE), at time  $t$ .

The mismatch index  $m_{it}$  is then the regional mismatch in occupation  $i$  at time  $t$ , in other words, it is the number of workers that are misallocated in the regions relative to the social optimum.

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<sup>1</sup> Layard, Nickell, Jackman, (1992). See also Sahin, Song, Topa (2012).

It means the index does not show the extent of unemployment but its unequal distribution related to vacancies. The index will be equal to 0 if the number of unemployed is equal to the number of vacancies in every monitored region. The index grows when there are both excesses of labour supply and excesses of labour demand across the regions. Finally, the index is equal to 1 if all unemployed are located in distinct regions and all vacancies in other regions. Thus the higher the index is, the more needed labour mobility is in order to reduce unemployment in the whole region.

As far as the methodology is concerned, we had to deal with a problem of missing quarterly data in cases of Hungary (Q1/2010, Q2/2010) and the Czech Republic (Q4/2011). In these cases, we used a simple regression method (OLS) to estimate the missing data.

Table 4: Mismatch index in CENTROPE

	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	Mean	Std. dev	Varian ce
Cook	0.330	0.306	0.357	0.355	0.337	0.288	0.297	0.274	0.318	0.027	0.001
Waiter	0.253	0.248	0.315	0.294	0.236	0.244	0.320	0.321	0.279	0.034	0.001
Butcher	0.552	0.447	0.506	0.454	0.447	0.704	0.450	0.503	0.508	0.060	0.008
Social Worker/Care	0.335	0.340	0.721	0.330	0.422	0.602	0.773	0.757	0.535	0.178	0.040
CNC Operator	0.572	0.526	0.526	0.461	0.320	0.436	0.368	0.263	0.434	0.088	0.012
Welder	0.443	0.371	0.348	0.422	0.411	0.363	0.392	0.435	0.398	0.030	0.001
Bricklayer	0.361	0.387	0.434	0.387	0.330	0.506	0.506	0.483	0.424	0.058	0.005
IT Specialist	0.166	0.210	0.382	0.325	0.308	0.171	0.157	0.225	0.243	0.071	0.007
Driver	0.637	0.517	0.419	0.499	0.569	0.501	0.413	0.414	0.496	0.061	0.006
Logistics Worker	0.442	0.375	0.281	0.287	0.354	0.192	0.202	0.270	0.300	0.068	0.007
Mean	0.409	0.373	0.429	0.381	0.373	0.401	0.388	0.395	0.394		

Source: The CENTROPE Office Czech Republic, own calculations

This table partially confirms results following from the previous table 3 dealing with the Potential percentage of unemployment reduction. First of all, IT specialist, waiter, logistics worker and cook reach a low index level. This group having a low potential to solve the unemployment problem by migration is identical to the third group in the previous step of this analysis. Similarly we can conclude that CNC operator and welder are within a group with a relatively high index level and belong, thus, to the occupations with a high mobility potential related to the solution of the unemployment problem in CENTROPE. On the contrary, the highest index and thus the highest

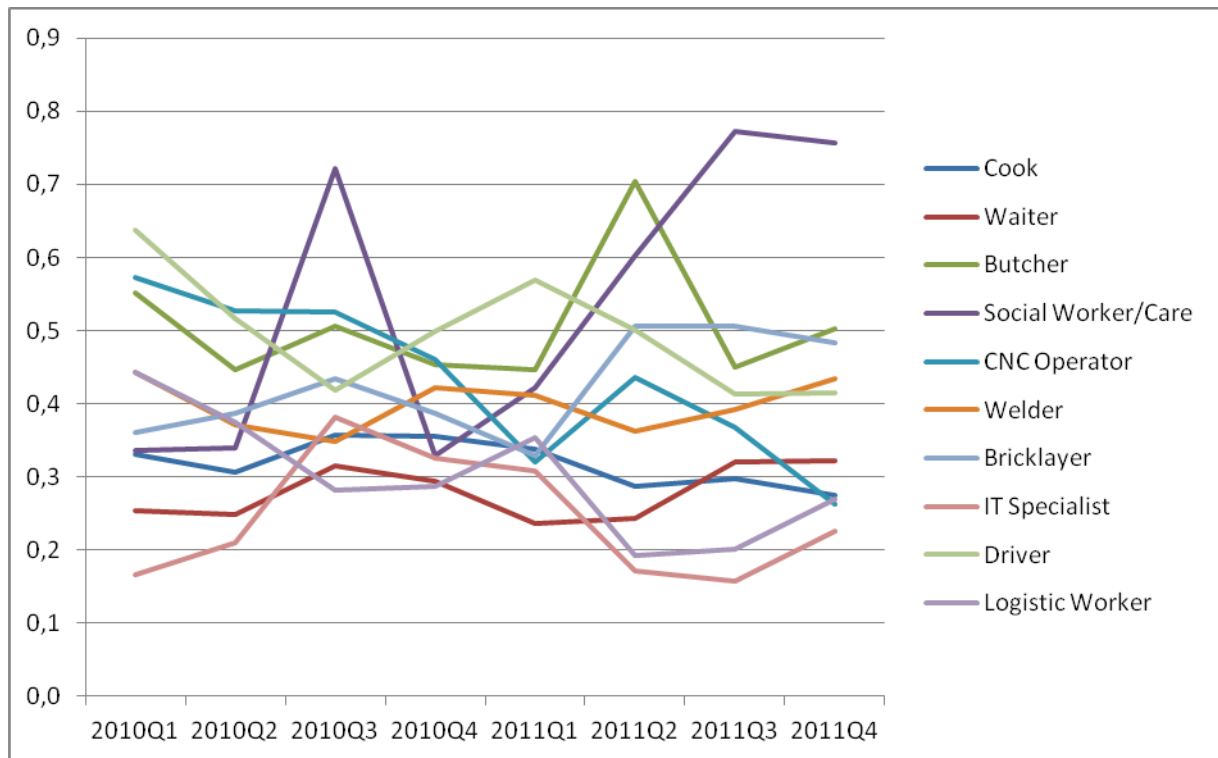
commuting potential we can find in the case of social worker, followed by butcher and driver (see also the Figure 5), which are occupations that were in the previous step classified as occupations with a medium commuting potential.

These differences are naturally caused by different ways of calculation. In comparison with the potential percentage of unemployment reduction in the previous step, the mismatch index is more sensitive to the fluctuations on the labour market. On the other hand, the mismatch index does not take the extent of unemployment into account. We can demonstrate it in a simple example again:

Let's assume that all unemployed are located in region 1 and all vacancies in region 2. Therefore there is a maximal mismatch and the index is equal to 1. However, it does not say what part of unemployment is possible to be solved by labour mobility. Supposing that there are, e.g. 100 unemployed in region 1 and only 1 vacancy in region 2, the mismatch index is still equal to 1 although labour mobility can resolve only 1 % of the unemployment problem.

Thus we can interpret that the mismatch index points out relatively high and especially unequal excesses both of labour supply and of labour demand across the regions. Related to our dataset, hence, it points out the particularity concerning butchers where considerable uneven excesses of labour demand in Hungary and sizeable excesses of labour supply in Austria have been monitored. On the contrary, our original calculation in the previous step, being entitled the Potential percentage of unemployed reduction, provides a look at the unemployment level as well and says to what extent the unemployment in every occupation can be decreased by commuting across CENTROPE.

Figure 5: Mismatch index in CENTROPE



Source: The CENTROPE Office Czech Republic, own calculations

## 2.5 Consequences of labour market liberalization

From 1 May 2011, the institutional regime affecting cross-border mobility within CENTROPE changed dramatically. After the accession of Central and Eastern European countries into the European Union in 2004, Austria and Germany enforced a law to protect their labour markets for 6 years. In May 2011, the temporary period of Austrian labour market protection ended. As a consequence, labour mobility potential in CENTROPE has increased because inhabitants of the Czech Republic, Hungary and Slovakia have been able to work in Austria without any further legal requirements since this moment.

This liberalization had been expected with tension. Nevertheless, the official EU statistics have not provided the data for monitoring the consequences of the labour market liberalization yet (usually only NUTS 2 level, lack of up-to-date data). Therefore the other motivation to establish the Labour market monitoring tool in CENTROPE was to enable an analysis focused on the consequences of this institutional change.

Previous steps of our analysis did not indicate any symptoms of a serious impact of liberalization on the labour market in the Austrian part of CENTROPE. In this last step, we offer a view being focused

on possible consequences of the labour market liberalization. We chose the unemployment/vacancies ratio as a key indicator for the subsequent analysis. Table 5 shows development of this ratio across occupations in Austrian CENTROPE during the period 2010-2011.

Table 5: Development of unemployed/vacancies ratio in Austrian CENTROPE

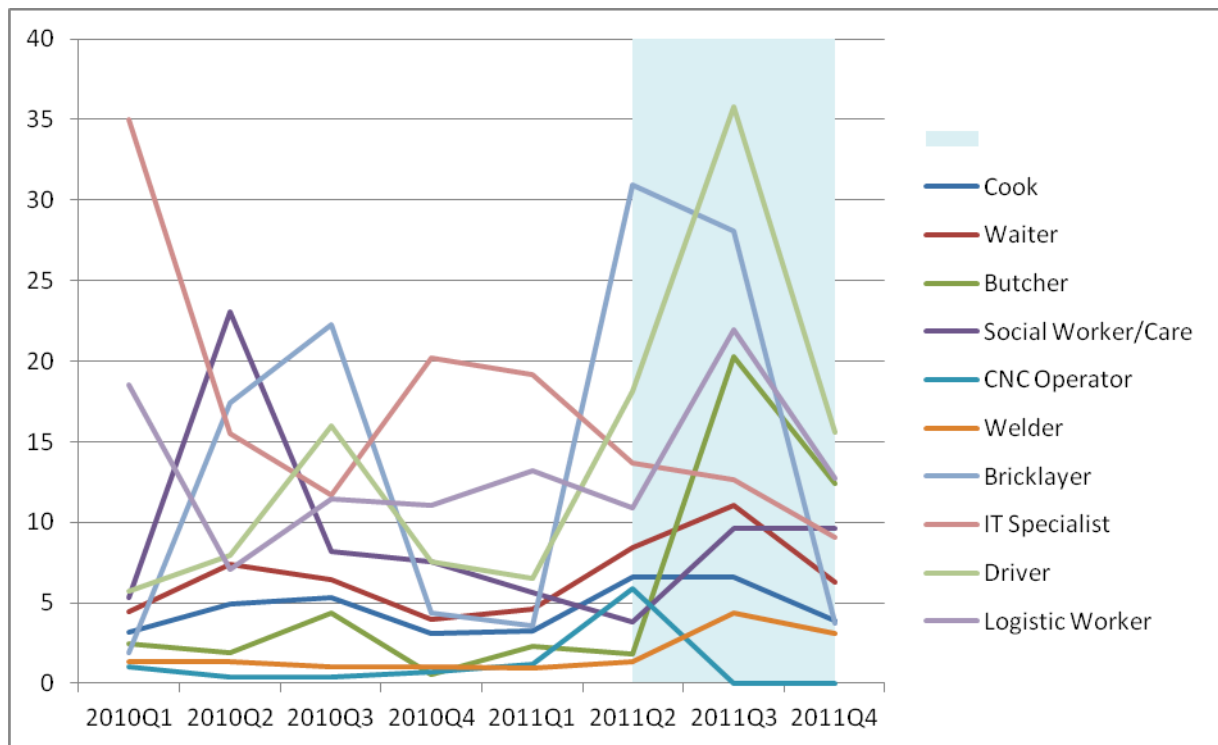
	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4
Cook	3.19	4.96	5.30	3.09	3.24	6.57	6.57	3.85
Waiter	4.47	7.36	6.42	3.97	4.63	8.42	11.06	6.31
Butcher	2.44	1.91	4.34	0.54	2.30	1.82	20.27	12.43
Social Worker/Care	5.29	23.09	8.16	7.52	5.63	3.82	9.62	9.62
CNC Operator	1.07	0.40	0.43	0.72	1.16	5.90	0.00	0.00
Welder	1.34	1.34	1.04	1.00	0.96	1.36	4.34	3.13
Bricklayer	1.87	17.41	22.25	4.39	3.57	30.92	28.07	3.74
IT Specialist	35.00	15.50	11.73	20.17	19.14	13.68	12.65	9.07
Driver	5.71	7.95	16.02	7.57	6.49	18.14	35.79	15.55
Logistics Worker	18.50	7.05	11.46	11.08	13.17	10.86	21.94	12.74

Source: The CENTROPE Office Czech Republic, own calculations

Examining the results, we can conclude that the relationship between vacancies and unemployment in Austrian CENTROPE did not change significantly after the establishment of the freedom of labour movement among Austria and other CENTROPE countries. To consider the impacts of liberalization of the Austrian labour market, it is necessary to take seasonality into consideration. Unfortunately, it is not possible to adjust the data by use of econometric methods because of the very short time series. For this reason, we have introduced also graphic representation, where the signs of seasonality are well visible.



Figure 6: Development of unemployment/vacancies ratio in Austrian CENTROPE



Source: The CENTROPE Office Czech Republic, own calculations

In figure 6, we can see heterogeneous development in terms of particular occupations. As regards drivers and bricklayers, there are obvious features of a seasonal cycle with the highest ratio in third quarters. On the other hand, it is necessary to admit that the ratio was considerably higher, thus the situation on the labour market worse, in Q3/2011. Similarly, a partial deterioration is visible in terms of, e.g. logistics workers or butchers. On the contrary, the situation in terms of IT specialists and social workers became better during Q2/2011 and Q3/2011.

Generally, the results show that aggregate labour demand decreased moderately in the second half of the year, it means after the liberalization process. On the other hand, we have to take the aspects of seasonality (abovementioned) and business cycle into account. Let's mark the coming of economic stagnation during 2011 as another factor of labour market deterioration.

## Conclusions

The Labour market monitoring tool in CENTROPE showed that there is a relatively high heterogeneity in terms of distribution of labour supply and labour demand across CENTROPE. The high level of mismatch in CENTROPE provides a potential for internal migration and commuting, at least in particular occupations. The identification of these occupations was executed by two ways of

calculation: the Potential percentage of unemployed reduction, which is our original calculation, and the Mismatch index. Our original calculation provides a look at the unemployment level as well and says to what extent the unemployment in every occupation can be decreased by commuting across CENTROPE. The mismatch index is more sensitive to the fluctuations on the labour market, however, it does not take the extent of unemployment into account.

We were able to identify the following groups of occupations with various potential for commuting.

Based on the Potential percentage of unemployment reduction:

- High potential: CNC operators, welder
- Medium potential: bricklayers, drivers, social workers
- Low potential: IT specialists, logistics workers, waiters, cooks

Based on the Mismatch index:

- High potential: social workers, butchers, drivers
- Low potential: IT specialists, logistics workers, waiters, cooks

Considering this, apart from the partial differences between both ways of calculation, we can summarize: Particularly in terms of CNC operators and welders but also in terms of social workers, butchers and drivers, there are potentials to reduce the unemployment by commuting or migration across CENTROPE. On the other hand, in terms of IT specialists, waiters, logistics workers and cooks, the potentials are very low.

As regards the labour market liberalization in CENTROPE, a mild deterioration of the labour market in CENTROPE in the second half of 2011 is visible. Nevertheless, it is necessary to take the seasonality and business cycle into consideration. Realizing similar seasonal fluctuation in particular occupations in 2010 and the coming of economic stagnation during 2011, we can infer that the impacts of liberalization on the Austrian labour market were, in accord with expert predictions, only moderate.

Finally, our policy recommendations aim at two areas: labour market monitoring and labour mobility. We suggest establishing a specialized platform for labour market monitoring in CENTROPE in the attendance of representatives from the Labour offices and experts from the regional subdivision of departments of Statistical offices. This platform should deal with the questions - how to make the official statistics system faster, and, how to make the regional data based on national statistics

accessible and utilizable for partners in neighbouring countries in CENTROPE. As regards the later, we suggest translating the parts of the national statistics related to the CENTROPE region into English or possibly German. Furthermore, we recommend giving the Labour market monitoring tool in CENTROPE a more institutionalized character.

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