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## **CENTROPE Regional Development Report 2011**

**Long Run Growth and Demographic  
Challenges**

**Executive Summary**

**Karol Frank (EU-SAV, Co-ordinator),  
Peter Huber (WIFO),  
Roman Römisch (WIIW)**

**June 2012**

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#### **Abstract**

Macroeconomic forecasts for Europe and the CENTROPE countries currently suggest that the recovery of the years 2010 and 2011 was only a short-lived interlude both in the CENTROPE countries as well as most other EU countries. The world-wide slowdown in growth will affect the CENTROPE countries and it can be expected that Europe and thus also the CENTROPE regions are currently entering a period of protracted slow growth. The long-run growth prospects of CENTROPE are, however, intact. GVA and in particular productivity growth in the CENTROPE was substantially higher than in other cross-border metropolitan regions and much of the improved growth performance in CENTROPE in the last years was due to a rapid improvement of regional competitiveness. According to an analysis of demographic developments demographic decline seems to be a smaller problem in the CENTROPE than in many other EU regions. Although this again reflects rather positively on CENTROPE in comparison to the EU, ageing of the population, however, is a serious challenge to the economies of CENTROPE, which will necessitate developing long-term and coherent strategies to maintain living standards and quality of life for citizens in all age groups.

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# CENTROPE Regional Development Report 2011 – Executive Summary

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## 1. Executive Summary

Two major factors impacted on the development of CENTROPE since 2009 the first of these is the impact of the macro-economic crisis and its aftermath and the second are the institutional changes concerning labour mobility in the CENTROPE in 2011. Given that both of these events have been considered with some sorrow by analysts as well as policy makers, this years' CENTROPE Regional Development Report aside from providing an update of the economic development of the individual CENTROPE countries as well as the CENTROPE and its regions, also deals with the long term growth performance and structural change as well as demographic changes in CENTROPE. The two central aims of this report are therefore to first of all assess the economic development of CENTROPE and its individual sub-regions in the aftermath of the economic crisis of 2009 and to second of all analyze some of the more long term challenges that the region is currently facing.

### 1.1 CENTROPE Countries are operating in an increasingly difficult macro-economic environment

With respect to the first aim of the report, a country level analysis highlights the difficult macro-economic environment in which the CENTROPE countries are currently operating. The economic crisis, culminating in a quite dramatic recession in 2009, left its traces, and the recuperation phase in 2010 and 2011 appears to be of little stability. Thus, after the economic downturn in 2009 in all four countries of CENTROPE the economy started to grow again in 2010, and continued to do so in 2011. Still, economic recovery was quite differentiated between the individual countries. Slovakia tended to grow fastest, at over 4% per year in terms of GDP in 2010, and thus by around 1.5 to 2 percentage points ahead of the Czech Republic and Austria and by almost 3 percentage points faster than Hungary. For 2011 estimates are that recovery continued, though a bit slower than the year before in the Czech Republic and Slovakia (by around 1 percentage point in each country), while in Austria and Hungary economic growth in 2011 was, if in the latter case only slightly, higher than in 2010.

As a matter of fact, growth prospects in the last quarter of 2011 already started to deteriorate, due to a softening of global demand, widespread fiscal consolidation measures as a more or less rational reaction to the sovereign debt crisis, a tightening of credit conditions and a generally low level of consumer and business confidence. As a consequence current forecasts suggest that economic growth in the CENTROPE countries will be anaemic in 2012. Again, Slovakia will be the fastest growing country,

but still GDP is expected to grow only by around 1.5%. Austria and the Czech Republic will see some positive economic growth, at around 0.5% on a year by year basis, while the Hungarian economy is bound to decline by 1%.

**Table 1: Growth of GDP in CENTROPE, forecast autumn 2011**

	avg. 2001-2004	avg. 2005-2008	2009	2010	2011	2012	2013
<b>Austria</b>	1.5	2.8	-3.8	2.3	3.1	0.4	1.4
<b>Czech Rep.</b>	3.4	5.6	-4.7	2.7	1.8	0.5	2.5
<b>Hungary</b>	4.2	2.2	-6.8	1.3	1.7	-1.0	2.0
<b>Slovakia</b>	4.5	7.8	-4.9	4.2	3.3	1.5	3.0

Source: AMECO Database, EU Commission DG ECFIN, Autumn 2011; WIFO, wiiw for years 2011-2013.

## 1.2 Forecasts expect instability on financial and global markets to continue until 2013

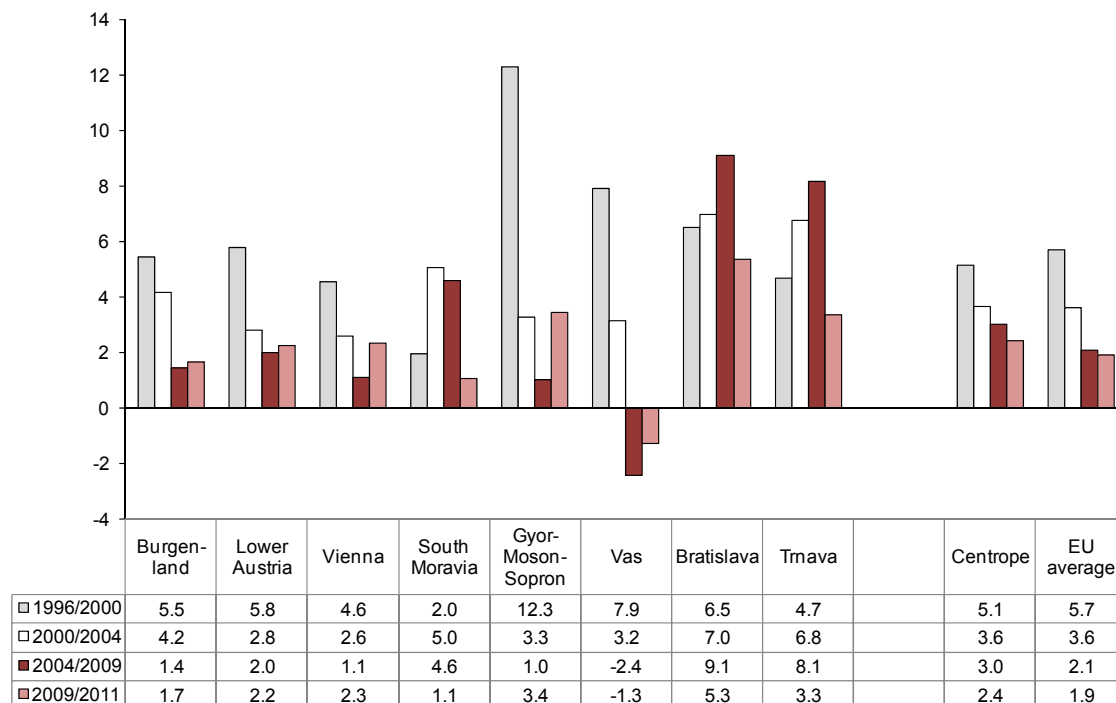
For 2013 more stability in financial as well as global markets is expected, which should have some positive impacts on the confidences levels, leading to higher growth of GDP, fuelled by a rebounding consumption and investment demand as well as by an increase in net exports. Consequently, GDP growth is expected to be around 2% to 3% in the EU 10-CENTROPE countries and around 1.4% in Austria.

One source of the weak growth in 2012 is the low level of internal demand. Consumer and business confidence currently is low (despite some improvements in the latest months), which might depress investment and consumption expenditures. Additionally, employment levels are decreasing – and unemployment levels increasing – leading to a reduction in aggregate wages, which also dampens private consumption. Contrastingly counter-cyclical movements of household savings, as households tend to smooth their consumption over the business cycle, keep demand levels from falling too low. At the same time financing conditions for enterprise investments are much more difficult than before the crisis given the commercial banks' attempts to deleverage. In sum this will result in low growth of both, private consumption and private investment levels in CENTROPE in 2012, whereby in Hungary even a decline is projected.

No economic stimulus is to be expected from the government side, as all CENTROPE countries' governments are running austerity packages, quite independent of the fact of whether the countries have low levels of debt, like Slovakia and the Czech Republic, or whether such a package could be assumed to be more in place, like in Hungary and Austria. In any case the consequence of this is a low growth or even a decline in public consumption and investment in 2012.

**Figure 1: Nominal GDP growth in the CENTROPE by NUTS 3 regions 1996-2011**

Average annual change in %



Source: Eurostat, Cambridge Econometrics, WIFO-calculations, Note figure shows average annual growth of GDP at market prices. Data for 2010 and 2011 based on preliminary estimates.

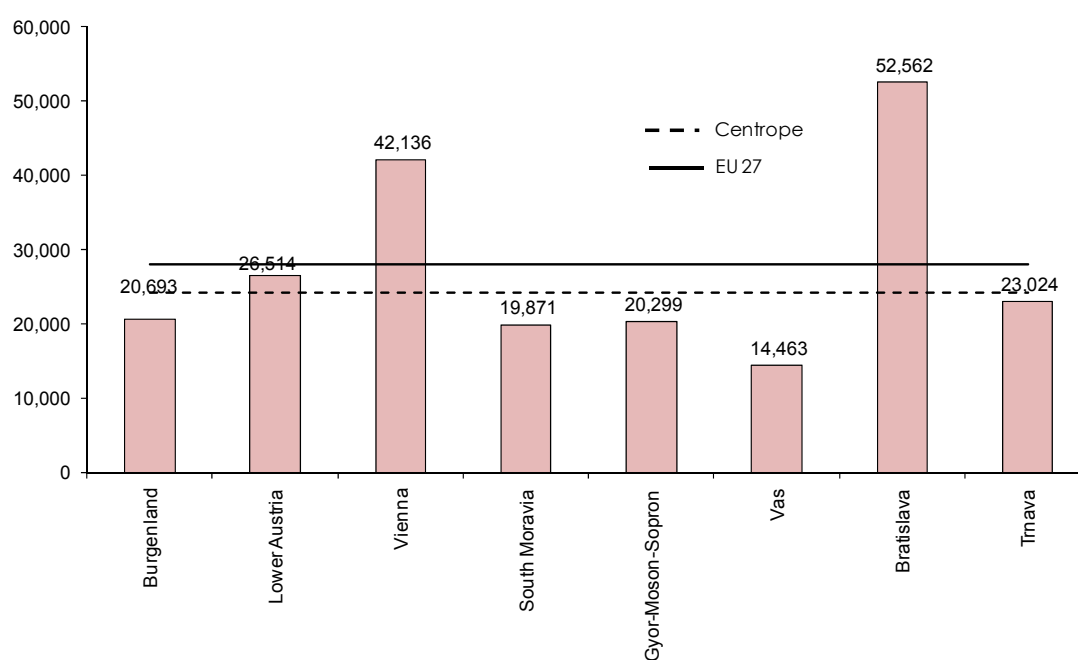
Finally foreign demand is subdued due to a weakening of global markets, so that the contributions from net exports to GDP are in most cases moderate, too. The exception to this is Hungary, where a devaluating currency plus an improvement in unit labour cost (relative to the main competitor countries) is beneficial for the exporting sector, so that as a result net exports will grow strongly in 2012 and are also the only source of economic growth of the Hungarian economy in this year.

### 1.3 The CENTROPE continues to have above average economic growth, with in particular urban regions showing high resilience to the crisis

Despite these bleak outlooks for the next year CENTROPE as a region has proven to be rather resilient to economic crisis (Figure 1). While the CENTROPE countries were harder hit by the crisis than the EU 27, the CENTROPE region was not. The average economic growth in 2009 – 2011 was higher by 0.5 percentage points than in the EU 27 average, so that despite substantially lower growth rates relative to the period 2004 to 2008 the relative growth performance of the region remains favourable. However, the economic development in the individual CENTROPE regions has been

rather different. While the Austrian regions and Gyor-Moson-Sopron experienced even higher average growth rates than before the crisis since 2009, the rest of the regions experienced a substantial decrease in average growth rates (which in the Slovak case, however, remained higher than in the Austrian CENTROPE). The highest GDP per capita at PPS growth was been recorded in the Bratislava region. This also made the region the richest region in the CENTROPE in 2011 according to preliminary estimates (figure 2).

**Figure 2: GDP per capita 2011 at PPS by NUTS 3 regions in the CENTROPE (preliminary estimate)**



Source: Eurostat, Cambridge Econometrics, own calculations.

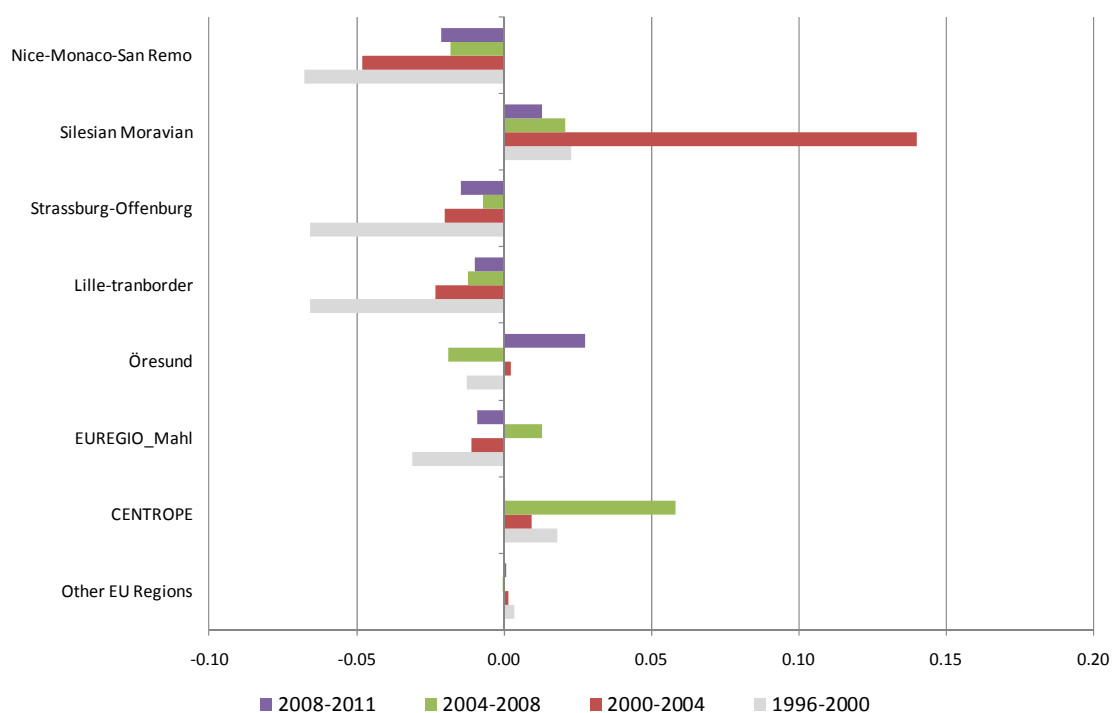
The growth rate in CENTROPE is also expected to be slightly above the EU average in future years. A noticeable exception is the Hungarian region of Vas which is also facing reduced growth in the long-term and is expected to grow by less than 1% annually until 2014. The Austrian CENTROPE regions of Burgenland and Vienna are expected to grow by slightly less than 2%, while all other regions will grow by more than 2% annually, with growth rates in the Slovak CENTROPE exceeding 4% annually.



#### 1.4 The most significant impact of the economic and financial crisis has been a reduction in labour productivity growth

The most significant impact of the economic and financial crisis was therefore a decline in labour productivity growth as measured by GDP at market prices per person employed. In pre-crisis period (2004 to 2008) labour productivity in CENTROPE region grew by 3.5% in average. In the period 2008–2011 labour productivity growth slowed down to 0.5% in average. Thus growth patterns in CENTROPE moved from a more intensive to a more extensive growth since 2008. From a policy perspective this thus raises the issue of how – in the light of the still existing productivity gap to the EU 27 average – a more intensive growth path can be re-established in this region in the future.

**Figure 3: Relative real labour productivity growth rates in CENTROPE and other cross-border metropolitan regions for the periods 1996 to 2008 (difference to EU 27 average in percentage points)**

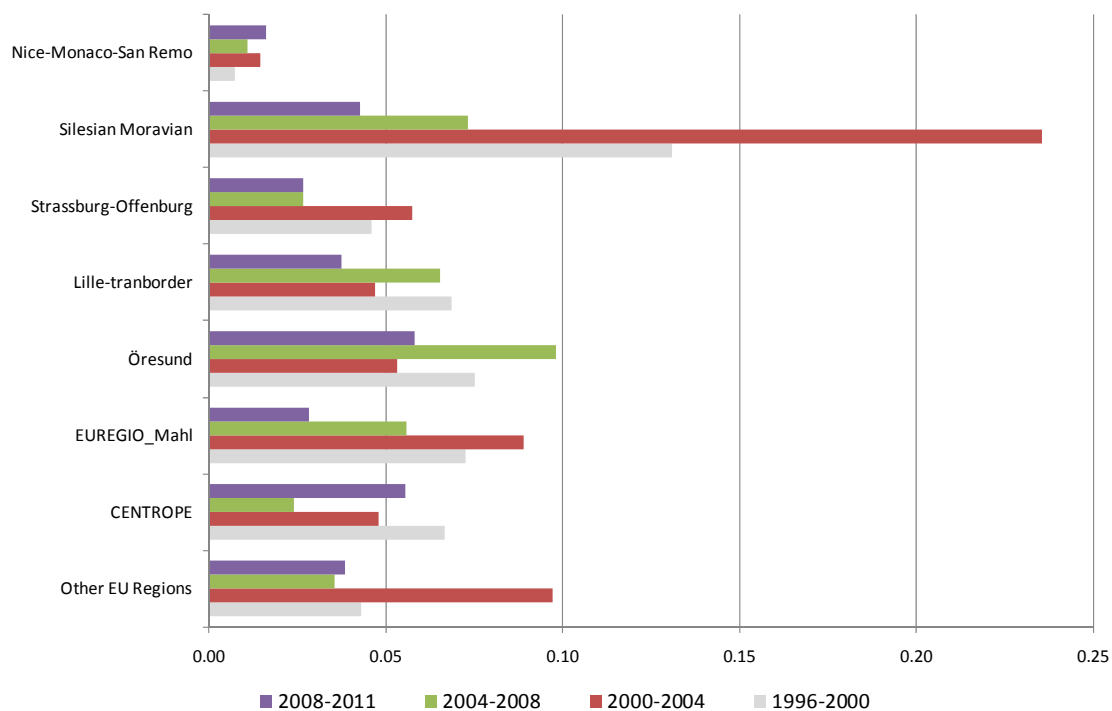


Source: Cambridge Econometrics; Note: table shows the (percentage point) difference between total growth rate of real productivity (=real gross value added at prices of the year 2000 per employee) in the respective region and the EU 27 average).

Again regions differ strongly in their labour productivity growth: Only the Slovak regions experienced convergence to the EU average. Labour productivity in Bratislava region grew by 1.7 percentage points and in Trnava region an increase by a modest 0.5 per-

centage points was registered. By contrast the Austrian regions and Vas were mostly affected by the impact of economic crisis in terms of productivity growth. However, productivity levels are still higher than in EU-average in Lower Austria and Vienna.

**Figure 4: Index of structural change (turbulence index) in CENTROPE and other cross-border metropolitan regions for the period 1996 to 2008**



Source: Cambridge Econometrics; Note: Turbulence index =half the sum of squares of changes in sector shares over a time period. It ranges between 1 and 0, with zero indicating no structural change and 1 indicating complete structural change.

In addition the development of the nominal compensation per employee implies that there are still substantial differences among the individual CENTROPE regions. In nominal terms the Austrian CENTROPE is still well ahead of the rest of CENTROPE. The difference is especially visible in the case of Bratislava region and Vienna. Although there is convergence in terms of GDP and productivity, the convergence process related to nominal compensation per employee has not proceeded to the same extent. However, in nominal terms growth is the strongest in the Slovak CENTROPE, especially in Bratislava region with 9.7% followed by Western Slovakia (with 6.7%) in 2008 – 2011.

### **1.5 Crisis also increased structural change. Patterns of this differ widely among different parts of CENTROPE**

Finally crisis has also been associated with substantial structural change, which, however, has followed rather different patterns in the individual regions of CENTROPE. The development of GVA by sectors shows the following patterns:

- A significant impact of the crisis on agriculture in the Hungarian CENTROPE and Trnava region, construction in the Austrian CENTROPE and manufacturing in Vas, South Moravia and Trnava region.
- Tendencies towards recovery of sector GVA growth in 2011 – 2014, although with different rates in individual regions.
- A strong resilience of financial services and non-market services, which recorded positive GVA growth also during the crisis in all regions except the Hungarian regions and the highest growth rates in Bratislava and Trnava region.
- An adverse effect on personal services (Trade, Hotels & Restaurants, and Transport & Communication) of the economic crisis which should, however, be reversed according to forecasts for 2011 – 2014 especially in Slovak and Czech parts of the CENTROPE.

### **1.6 In most regions unemployment increased substantially but overall the labour market situation is more favourable in CENTROPE than in the EU average.**

The impact of economic crisis also negatively influenced the development on labour markets. Most of the regions experienced rising unemployment rates. The average unemployment rate reported by EUROSTAT in 2010 in CENTROPE reached 6.5% which was 3.1 percentage points below the EU 27 average of 9.6% but also by 1.8 percentage points higher than the record low level of 2008. A more detailed look at the data shows that this privileged position of CENTROPE applies to almost all of its regions. Only 2 regions (Trnava and Vas) recorded an above EU 27 unemployment rate.

The increases in the crisis have, however, also differed substantially among regions. Especially the Bratislava region, with traditionally low unemployment rates experienced an increase of unemployment by 2.8 percentage points between 2008 and 2010. Moreover, the most unfavourable development has been recorded in the Trnava region, where the unemployment rate went up from 5.9% (in 2008) to 9.9% (in 2010). The main reason for this increase in unemployment was the decline of external demand in export oriented industries localised in this region. Similarly high increases of unemployment have been recorded in Vas (by 3.3 percentage points), South Moravia

(by 3.2 percentage points) and Gyor-Moson-Sopron (by 2.8 percentage points). By contrast, the Austrian CENTROPE regions experienced only minor increases by 0.5 percentage points in Vienna, 0.3 percentage points in Burgenland and 0.2 percentage points in Lower Austria. Thus on the labour market the Austrian CENTROPE regions have proven to be substantially more resilient to crisis than the other regions of CENTROPE.

### **1.7 CENTROPE also outperforms other cross-border metropolitan regions in terms of growth**

An analysis of longer term growth processes in CENTROPE region in comparison to other cross-border metropolitan regions suggests that:

- CENTROPE until the economic crisis was not only a high growth region relative to the EU 27 average but also relative to most of the European cross-border metropolitan regions. This applies both to productivity growth and GDP growth. While cross-border metropolitan regions in Europe in general exhibited below average real labour productivity growth rates in the last one and a half decades, CENTROPE's labour productivity growth rate was than the EU average in the last one and a half decades. The only other cross-border metropolitan region that showed similarly high productivity growth rates in this time period was the Silesian-Moravian cross-border metropolitan region, which, however started from much lower productivity levels (figure 3).
- In the period 2008 to 2011 this high productivity growth, however, came to a halt. Despite this CENTROPE still performed better than most cross-border metropolitan regions in terms of productivity growth.
- Similar observations apply to real gross value added (GVA) growth, although here CENTROPE outperformed the other cross-border metropolitan regions only in the last years. In the period from 2004 to 2008 GVA growth rates exceeded the EU 27-average by a startling 6.1 percentage points and faster growth of GVA than in other cross-border metropolitan regions also continued in the 2008 to 2011 period.

### **1.8 Structural change has also led to a long-term increase in competitiveness**

Furthermore, analysing the interaction of structural change and economic growth suggests that the improved growth performance both in terms of GVA and employment, which started with accession to the EU and has continued until 2011, has been primarily associated with a rapid improvement in the regional growth effect. This implies that much of the good growth performance has been due to an improved competitiveness of the region. Although according to preliminary data for 2008 to 2011

some of this improvement in regional competitiveness has been lost during the crises, CENTROPE still had the second highest regional growth effect among all polycentric cross-border metropolitan regions in the EU 27 in that period and may thus be considered as a highly competitive location of production.

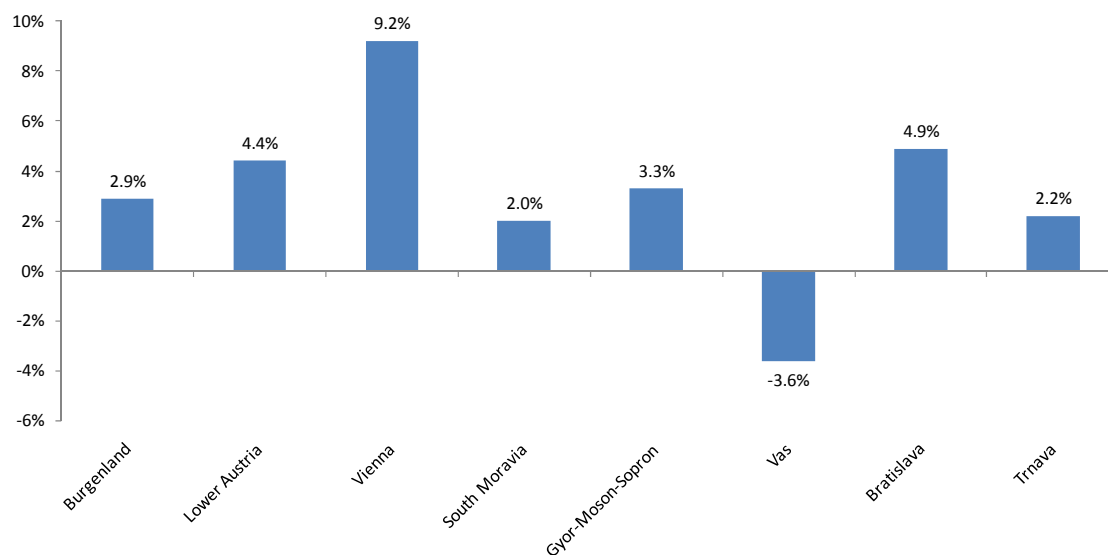
While these factors reflect positively on the competitiveness of CENTROPE among EU and in particular among cross-border metropolitan regions, we also find large regional disparities in the causes of regional growth among the individual CENTROPE NUTS 3 regions. While above EU average productivity growth rates are a feature of almost all CENTROPE NUTS 3 regions there are still sizeable productivity differences between the EU 15 and EU 10-country parts of this region and the in aggregate much improved regional effect on employment and GVA growth in the period 2004 to 2008 as well as the slight reduction in the 2008 to 2011 period seems to be strongly linked to the developments in the Slovak NUTS 3 regions of CENTROPE.

### **1.9 In a European comparison the demographic changes in CENTROPE have been rather modest in the last decade**

While growth experiences of the CENTROPE in the last one and half decades thus suggest a rapid growth and improvement of competitiveness, with, however, productivity growth slowing down somewhat in recent years the demographic trends, which reflect the long run labour supply situation in the region, show rather moderate changes in the last decade in all CENTROPE regions, with a still increasing population in almost all CENTROPE regions with the exception of Vas.

In 2010 the total population of CENTROPE regions reached 6.6 million. From 2001 to 2010 the population increased by 288,219 persons. Compared with 2001, the highest increase of population by 143,087 persons has been recorded in the Austrian region of Vienna. In relative terms the population of Vienna grew by 9.2%. Bratislava region was the second best performing region in terms of population growth with 4.9% followed by Lower Austria with 4.4% and Győr-Moson-Sopron with 3.3%. Thus – in contrast to many other European regions and despite repeated phases of labour shortage – population decline does not seem to have been a limiting factor on economic growth in most CENTROPE regions in this time period.

**Figure 5: Growth of population in CENTROPE regions in 2010 relative to 2001 (in %)**



Source: own calculations, national statistics offices.

However, a closer look at the structure of this population change suggests rather varied demographic developments in individual regions. This reflects the rather different nature of demographic problems in the different parts of CENTROPE. Thus, for instance, the rapid increase in population of Vienna but also the more modest growth in the Slovak and Czech CENTROPE was primarily driven by in-migration, with migration in the EU 10 parts of CENTROPE (in particular Bratislava region) often coming from other parts of the country and Vienna also experiencing substantial inflows of migrants from abroad. This therefore suggests that while the ethnic diversity of the population is rising in almost all CENTROPE regions, the only region which has substantial challenges to face from integrating a large foreign born labour force into the labour markets is Vienna.

By contrast, the old-age-dependency ratio (i.e. the ratio of the number persons older than economically active age (aged 65 and over), relative to the working age population) has grown in almost all of the CENTROPE regions (with exceptions of Vienna and Lower Austria), with particularly strong increases in the EU 10-parts of CENTROPE and in the more peripheral regions of the Austrian CENTROPE (e.g.

Waldviertel). Therefore challenges resulting from the ageing of the population are most likely to arise in these regions.

### 1.10 Population projections suggest that the active aged population will decline by 3% to 4% in CENTROPE in the next two decades

Finally, population projections, suggest a general trend towards ageing in all CENTROPE countries. The share of economically inactive population, especially the elderly people, will rise substantially, while the number of young people will reduce substantially until 2030. This will, however, occur at a regionally rather differentiated pace. The available regional population projections suggest that total population in CENTROPE will continue to increase by somewhere between 1% to 5% depending on the forecast. Active aged population (i.e. population in the age between 15-64) will, however, reduce by somewhere between 3% to 4% in the next two decades, with these declines being most pronounced in the Slovak CENTROPE and a further increase being expected only in Vienna, Lower Austria and potentially Győr-Moson-Sopron.

**Table 2: Regional population forecasts according to EUROSTAT**

	Absolute Number			In % of total Population	
	2010	2030	2030 in % of 2010	2010	2030
Total Population					
<b>Southeast</b>	1,652.0	1,614.0	97.7	100.0	100.0
<b>West-Transdanubia</b>	996.6	965.0	96.8	100.0	100.0
<b>Burgenland</b>	282.7	295.7	104.6	100.0	100.0
<b>Lower Austria</b>	1,613.8	1,774.4	110.0	100.0	100.0
<b>Vienna</b>	1,708.4	1,996.8	116.9	100.0	100.0
<b>Bratislava region</b>	615.2	625.7	101.7	100.0	100.0
<b>Western Slovakia</b>	1,862.1	1,802.2	96.8	100.0	100.0
<b>CENTROPE (NUTS 2 level)</b>	7,244.1	7,621.3	105.2	100.0	100.0
Population aged 0 to 64					
<b>Southeast</b>	1,389.3	1,231.5	88.6	84.1	76.3
<b>West-Transdanubia</b>	830.2	740.1	89.2	83.3	76.7
<b>Burgenland</b>	226.7	213.5	94.2	80.2	72.2
<b>Lower Austria</b>	1,312.1	1,334.4	101.7	81.3	75.2
<b>Vienna</b>	1,423.1	1,619.4	113.8	83.3	81.1
<b>Bratislava region</b>	535.8	491.2	91.7	87.1	78.5
<b>Western Slovakia</b>	1,616.3	1,384.1	85.6	86.8	76.8
<b>CENTROPE (NUTS 2 level)</b>	6,083.2	5,905.9	97.1	84.0	77.5

Source: EUROSTAT (2010).

This therefore naturally leads to the question of whether CENTROPE in the long-run is threatened by general labour shortages. Our calculations suggest that such a shortage can be prevented by an increase of the activity rate by about 3 to 4 percentage points for the CENTROPE in average and an increase of less than 6 percentage points in most regions where demographic decline is expected.

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## **2. Policy Conclusions**

In summary the results of the current CENTROPE Regional Development Report – in addition to the policy areas already discussed in previous reports – highlights two further central policy issues that are likely to be important for future growth in CENTROPE. The first of these is how – in the light of the still existing productivity gap to the EU 27 average – the recent phase of slower productivity growth in CENTROPE can be overcome and a more intensive growth path can be re-established. The second one is how the potential negative impact of population ageing and a declining number of active aged persons as well as potential labour shortages can be avoided.

Clearly with respect to both these policy challenges sound national macro-economic and structural policies (such as labour market, industrial, tax, social security and many others) – which are beyond the scope of cross-border regional policies – are the most important ingredient to addressing these issues. Yet, aside from these policies also cross-border co-operation can contribute to achieving these policy objectives.

### **2.1 Increasing competitiveness by cross-border co-operation in all fields of economic policy**

In particular one of the recurrent results of the CENTROPE Regional Development Report project is that cross-border interactions are still underdeveloped in CENTROPE. This applies to all forms of co-operation and mobility analysed in this project, be it patent and cross-border R&D co-operation, migration and commuting, cross border student mobility or cross-border enterprise networks. In all these fields the region is deeply integrated into the international division of labour as is evidenced by substantial contacts to the EU 27 and rest of the world. Given the vicinity of the regions of CENTROPE to each other national borders (in particular those between Austria and the other countries), however, still remain to be a surprisingly high barrier to exchange in all these areas.

This suggests that increased efforts to improve the exchange of goods, services, capital, people and ideas across borders are needed to better integrate the region and



to secure the productivity growth effects that can be gained from a deepened interregional division of labour. In this respect a number of initiatives focusing on different topics such as furthering cross-border student exchange and collaborative cross-border R&D projects, developing cross-border enterprise co-operation, improving the conditions for cross-border labour mobility are needed and a wide set of instruments (some of which have been discussed in more detail in previous Regional Development Report projects) reaching from general awareness building to concrete financial support should be envisioned. In general the aim in all these policies should be to reduce border barriers in the region.

## **2.2 Developing cross-border knowledge economy networks (in particular in knowledge -intensive service industries)**

One area where such increased cross-border interaction can yield particularly high returns in terms of productivity is that of the knowledge economy. As already pointed out in previous studies the CENTROPE disposes of some important preconditions to be a strong pole of the knowledge economy in Central Europe. It is therefore important to intensify the cooperation in international research programmes within the CENTROPE, increase co-financing opportunities from European sources and increase mobility of graduate and postgraduate students as well as young scientists especially in technical disciplines in the region

Aside from this, however, also many of the more urban regions in CENTROPE have a strong specialisation on more knowledge intensive service industries and in general services have provided an important impetus to both GVA and employment growth in CENTROPE in recent years as well as having proven to be more resilient to macro-economic crisis. Furthermore, some recent studies on individual CENTROPE countries and regions have shown that in international comparisons the export intensity of knowledge intensive service industries is rather low in CENTROPE.

Fostering the co-operation of enterprises in such knowledge intensive services (as e.g. in business consulting, creative industries or also in communication industries) with the joint aim of entering new export markets, could therefore be another aim for cross-border policy

## **2.3 Preventing labour shortages through co-operating in labour market policy to secure high activity rates**

These policies, which are likely to contribute to sustaining growth in CENTROPE, however, will require adequate supply of labour in the region. As shown in the current

report this cannot be assumed automatically, since the active aged is population is expected to decline in CENTROPE in the next two decades. However the current report also shows that this decline in active aged population in CENTROPE can be accommodated without detrimental effects for labour supply if activity rates can be increased sufficiently. In most regions with expected population declines increases of activity rates by less than 6 percentage points are necessary and for the CENTROPE in total an increase of 3 to 4 percentage points is necessary. Such changes can clearly only be achieved if policy is supportive of increasing labour market participation: They are however also not unparalleled in history, since for instance according to EUROSTAT data the Czech Republic increased its activity rate by 4.4 percentage points in the years from 2008 to 2010 and countries like Sweden have seen an increase in excess of 5 percentage points since 2005.

This therefore implies that policy should in particular focus on increasing activity rates among the population. Here previous results suggest that in all CENTROPE regions elderly have very low employment and activity rates, as well as that low skilled workers are often unemployed in CENTROPE. Hence policy could in particular focus on activating older and less skilled persons. For the less skilled this will probably require intensive training measures aiming at providing them with skills that are in demand on labour markets. For the older, by contrast, more integrated strategies that combine elements of retaining the capability to work (i.e. focusing on the health status of the elder through preventive action), retaining employability (e.g. through training and life-long learning) and awareness building among both employers and workers for the needs and capabilities of older workers seem to be most promising.

In addition the current report also finds that long-term unemployment has increased substantially during the crisis in CENTROPE so that the share of long-term unemployed in total employment was higher than the EU 27-average in 2010. This suggests that combating long-term unemployment and thus avoiding the associated risk of de-qualification will be a major shared problem in many parts of the CENTROPE.

#### **2.4 Making CENTROPE more attractive for (high skilled) workers**

Finally, also attracting immigration from abroad as well as avoiding emigration to other countries could be important elements in a strategy to avoid the threat of declining labour supply. As also already stressed in previous analysis this would primarily require an increase in the competitiveness of CENTROPE in the worldwide competition for talent. This would require making the university sector and the innovation system in the

region more attractive for high skilled migrants from abroad, improving the conditions for high skilled mobility wherever possible and providing services geared towards the needs of migrants as well as reducing costs of integration.

### Factsheet 1: The CENTROPE and its regions: Area, Population and GDP

	Austria			Czech Rep.			Hungary			Slovakia			EU 27
	Burgen-land	Lower Austria	Vienna	South Moravia	Győr Sopron Moson	Vas	Bratislava	Trnava	CENTROPE				
<b>Area (km<sup>2</sup>)</b>	3,965.5	19,177.7	414.7	7,196.3	4,208.5	3,336.1	2,052.6	4,147.2	44,499.0	440,3356.7			
<b>Population (2010)</b>	283,965	1,607,976	1,698,822	1,151,708	448,435	259,364	622,706	561,525	6,634,501	501,104,164			
<b>Share Females (%)</b>	51.1	51.0	52.2	51.2	51.7	52.0	52.5	51.2	51.6	51.2			
<b>Share aged 15 or less (%)</b>	13.5	15.0	14.2	13.9	14.5	13.7	13.1	13.9	14.2	15.6			
<b>Share aged 65+ (%)</b>	19.7	18.7	16.9	15.9	15.7	16.9	12.8	12.5	16.4	17.4			
	<b>Population Forecast</b>												
<b>Active aged Population 2030* (2010=100)</b>	94.2	101.7	113.8	88.6	89.2	89.2	85.6	85.6	97.1	96.7			
	<b>GDP, Productivity Compensation per employee</b>												
<b>GDP per capita at PPS (2009)</b>	19,826	24,074	38,028	18,298	16,278	12,389	41,965	19,004	26,703	23,518			
<b>GDP per capita at PPS (2011)**</b>	20,693	26,514	42,136	19,871	20,299	14,463	52,562	23,024	28,041	24,433			
<b>Nominal GDP growth (average annual change 2009/2011)</b>	1.7	2.2	2.3	1.1	3.4	-1.3	5.3	3.3	2.4	1.9			
<b>Productivity growth 2008-2011**</b>	-0.2	-0.0	0.1	-0.0	-0.0	-2.1	2.0	1-1	0.5	0.6			
<b>Compensation per employee (growth 2008- 2011)**</b>	2.1	2.1	2.0	1.5	0.6	0.6	9.7	6.7	2.7	-			
	<b>Forecast GDP and Employment Growth</b>												
<b>GDP Growth 2012-14 (average annual growth rate)</b>	1.5	2.1	1.9	3.9	3.5	0.8	4.2	4.5	2.4	2.3			
<b>Employment growth 2012-2014 (average annual growth rate)</b>	0.4	0.6	0.8	1.0	1.5	1.6	2.4	2.1	1.1	1.1			

Source: Eurostat, Cambridge Econometrics, own calculations \* Data available only available at NUTS2 level, Data for Trnava includes West Slovakia, Data for South Moravia includes Czech Southeast, data for Győr and Vas is data for West Transdanubia. - = data not available

**Factsheet 2: The CENTROPE and its regions: Labour markets, Structure, Education and R&D**

	Austria		Czech Rep.		Hungary			Slovakia			EU 27
	Burgen-land	Lower Austria	Vienna	South Moravia	Győr Sopron Moson	Vas	Bratislava	Tmava	CENTROPE		
Unemployment rate (2010)	3.9	3.6	7.3	7.6	6.3	10.1	6.2	9.1	6.5	9.6	
Unemployment rate male (2010)	3.7	3.8	8.2	7.0	-	-	-	-	-	9.6	
Unemployment rate females (2010)	4.1	3.4	6.4	8.1	-	-	-	-	-	9.6	
Unemployment rate 15-24 year old(2010)*	10.0	7.2	16.4	16.6	24.4	24.4	15.2	30.8	17.5	20.9	
Employment growth (2010)**	0.7	0.6	-0.2	0.4	1.5	0.6	-3.1	-0.1	0.0	-0.6	
	<b>Structure of employment</b>										
Share of agriculture (2010)*	6.5	7.8	0.5	4.3	4.7	4.7	1.2	3.7	4.0	5.2	
Share of Industry (2010)*	24.8	22.7	16.1	38.2	38.9	38.9	20.7	41.1	30.5	25.4	
Share of Services (2010)*	68.7	69.5	83.4	57.5	56.4	56.4	78.0	55.2	65.4	69.5	

Source: Eurostat, Cambridge Econometrics, own calculations \* Data available only available at NUTS2 level, Data for Tmava includes West Slovakia, Data for South Moravia includes Czech Southeast, data for Győr and Vas is data for West Transdanubia. – data not available -<sup>1)</sup> data not available on account of few observations in ELFS (for at least one CENTROPE region).