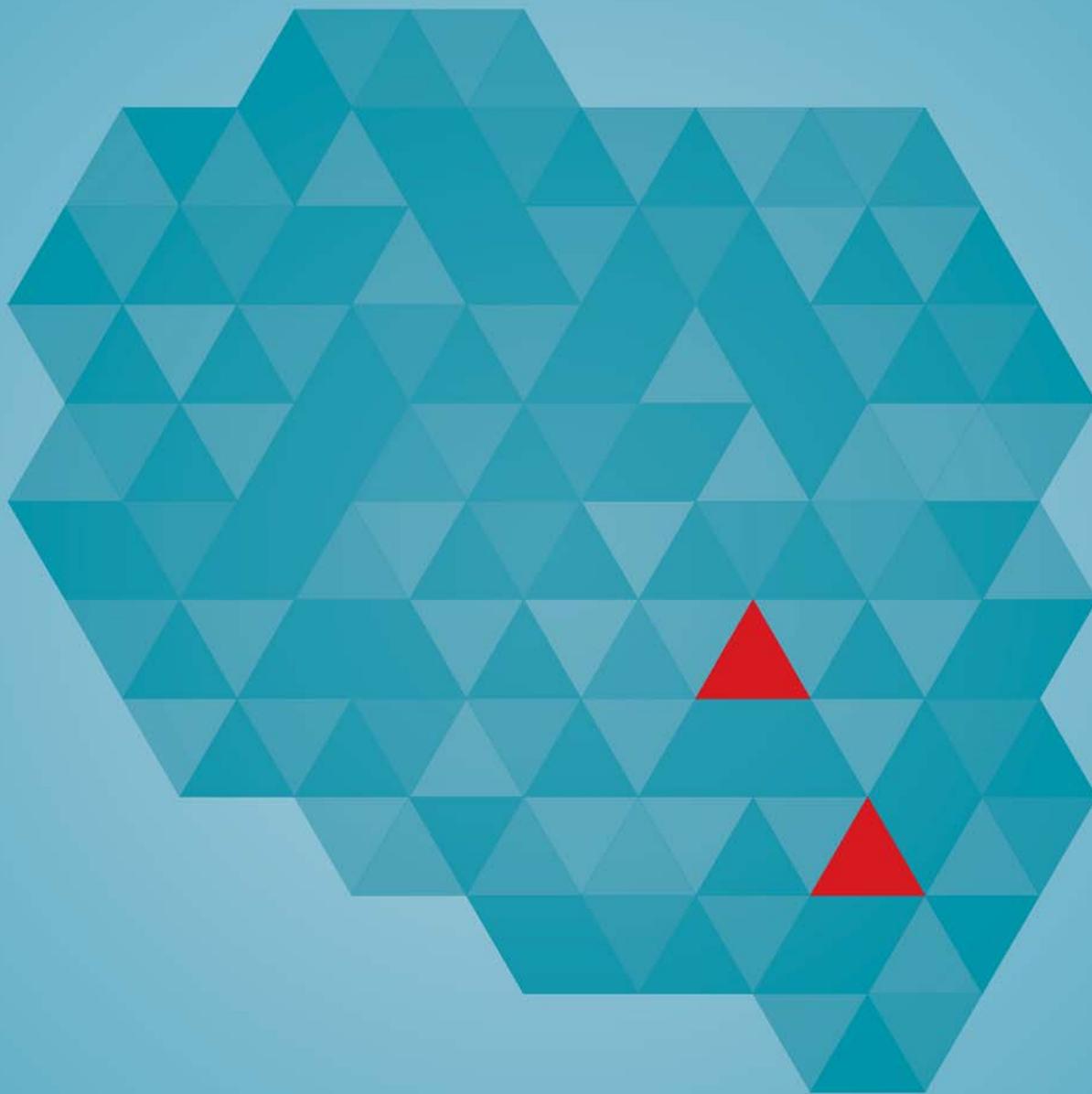


# POLAND CATCHING-UP REGIONS

KEY REGIONAL DEVELOPMENT DYNAMICS



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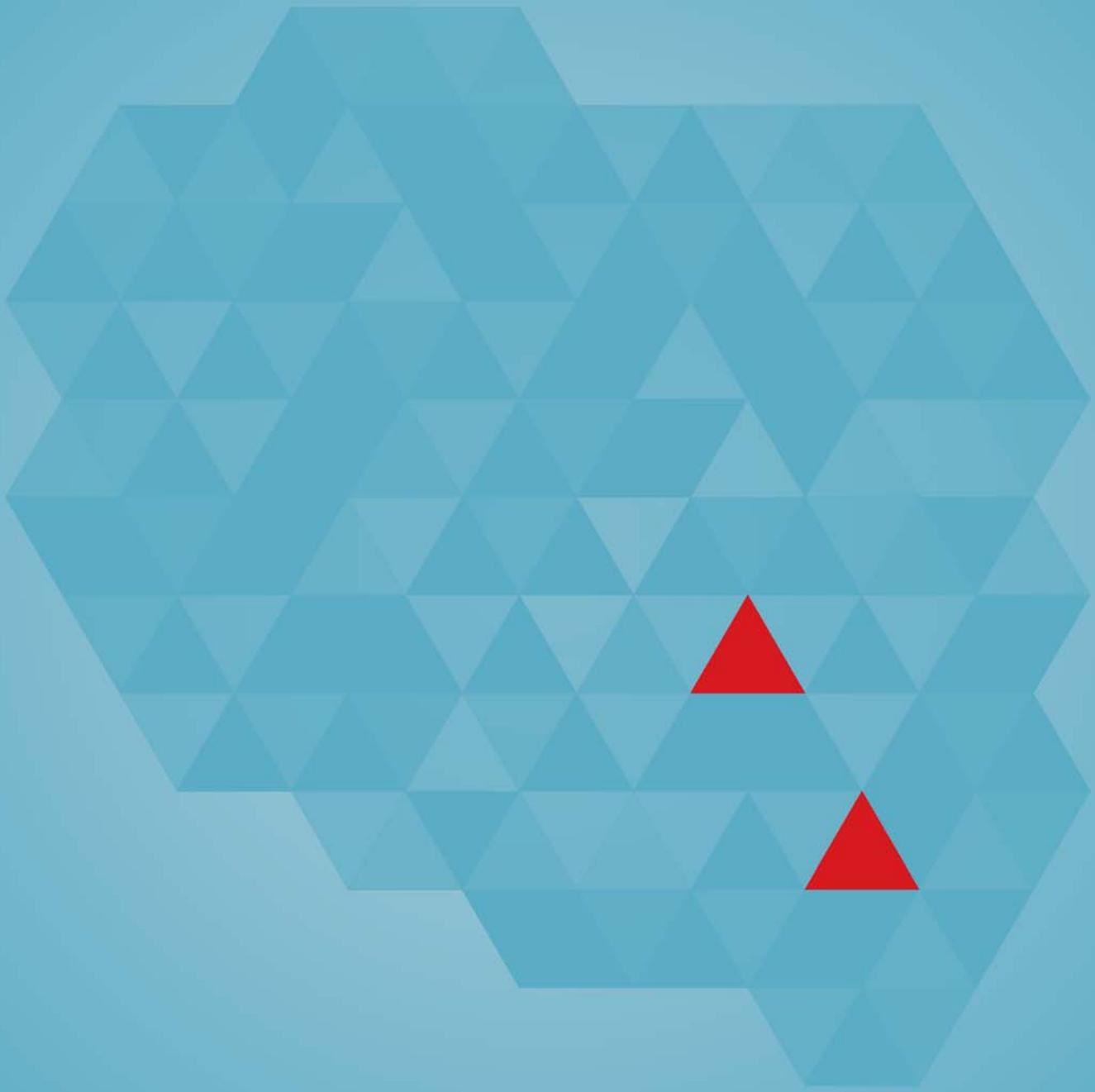
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# Executive Summary

**The EU has rightfully been dubbed the convergence machine.<sup>1</sup>** From Spain to Greece, and from Slovakia to Poland, it has helped 12 countries overcome the middle-income trap to transition to high-income – a feat without precedent in human history. Virtually every New Member Country has managed to converge to the EU mean after joining.

**Nonetheless, progress has not been uniform and not all countries and regions have experienced these advancements.** Moreover, within countries, disparities between leading and lagging regions have grown wider; it's a dynamic that is normal according to empirical evidence,<sup>2</sup> but a reality that is nonetheless troublesome to policy makers. In all of the New Member Countries, national capitals and several major cities have the highest concentration of economic activity and wealth, while some of the peripheral regions are falling further behind national leaders.

**The EU is determined to improve its approach to addressing the challenges faced by less developed and lagging regions.** Less developed regions (defined as regions achieving less than 75% of EU average GDP per capita (PPS)) have been the major beneficiaries of EU cohesion policies in recent decades. For the 2007–2013 Programming Period, lagging regions accounted for 82% of funding allocated through EU structural funds. The DG Region launched the Lagging Regions Initiative to offer targeted assistance to regions that fall in two categories: 1) have a GDP per capita (PPS) that is less than 50% of the EU average (low-income regions); 2) have not converged to the EU mean in the past decade (low-growth regions).

**This pilot initiative focuses on Podkarpackie and Świętokrzyskie, which are representative of less developed regions that, despite achieving steady and high economic growth, have not been able to close in on the country's leading regions.** Both regions, located in southeastern Poland, represent "lagging regions", according to the DG Region's definition. They have achieved GDP growth of over 6% p.a. in 2003–2014, yet failed to keep pace with the national economy. Today, compared with national averages, their GDP per capita in both regions is below 75%, incomes are lower, and higher shares of the population is living in poverty (over 10% in extreme poverty).

**Global evidence indicates that Podkarpackie and Świętokrzyskie are typical cases rather than outliers.** Development does not happen equally across areas, and economic activity tends to concentrate in the most productive places. The experiences of countries that went through phases of rapid growth (like Poland in recent decades) shows that spatial disparity of development and emergence of lagging regions are a common side effect. Arguably, growing disparities between leading and lagging regions can be interpreted as a natural result of rapid development. Those lagging regions, just like Podkarpackie and Świętokrzyskie, are typically located in peripheral areas, have poorer access to markets and infrastructure, and weaker institutions.

**The relatively weak economic performance of Podkarpackie and Świętokrzyskie can largely be explained by the lack of a critical mass of competitive firms.** Both economies are described by low-export intensity, shortage of foreign direct investments,

<sup>1</sup> World Bank. 2012. *Golden Growth: Restoring the luster of the European economic model*.

<sup>2</sup> See for example: World Bank. 2009. *World Development Report: Reshaping Economic Geography*.

reliance on public sector employment, weak entrepreneurship, and low labor productivity relative to the national average across all industrial sectors. The economy of Podkarpackie is performing somewhat stronger than Świętokrzyskie, largely due to the presence of a vibrant manufacturing cluster in the northwest part of the region.

**Cities are the economic epicenters and the growth engines of Podkarpackie and Świętokrzyskie.** Despite differences in economic geography, stark developmental divides between major urbanized areas and rural peripheries characterize both regions. Cities and their suburbs attract young workers and investors, and create most of the jobs. On the other hand, agriculture in rural areas of both regions contributes relatively little to the economy but is important for the livelihoods of residents, who often have limited access to other economic opportunities.

**Both regions can sustain and strengthen economic growth by focusing on improving enabling conditions.** In part, the lack of competitiveness in both regions can be explained by peripheral locations and historical legacies. However, some existing institutional inefficiencies create additional barriers to local economic growth. While there could be multiple policy approaches that can be taken to strengthen regional economies, the pilot focused on identifying gaps that can be addressed quickly and can lead to improvements in private sector competitiveness – the “low hanging fruit”. Such measures may include improving the business climate through streamlining business and property registration procedures, providing business services that address the demands of firms, and bridging skill gaps by establishing closer links between educational institutions and firms.

**Both regions were major recipients of EU funding and their experiences can inform adjustments to the EU Cohesion Policy.** Between 2007–2015, Podkarpackie received more EU support per capita than any other region in Poland, while Świętokrzyskie was ranked

sixth. Main areas of investment in both regions included transport, innovation, and entrepreneurship. It is hard to accurately evaluate the effect of these investments, however some lessons on how to support lagging regions can be drawn and applied to Cohesion Policy.

**In Poland, the focus of public investments priorities should shift focus from hard, national infrastructure to soft interventions and basic services like education, innovation, and local transport.** Examples in Podkarpackie and Świętokrzyskie show that with the help of EU funding the regions basic services have improved (e.g. water supply and sewerage). Similarly, major inter-regional transport projects have increased the accessibility of the regions. Now that both regional capitals are no more than four hours away from all major urban centers in Poland and water and sanitation services are available even in most remote areas, further investments in these sectors are likely to lead to diminishing economic gains, and should be subject to thorough prioritization based on their cost effectiveness. The urban areas Podkarpackie and Świętokrzyskie have achieved a level of development where further productivity growth would require not just a transfer of technologies from abroad (e.g. through foreign direct investments), but also an increased ability to innovate. This requires a focus on education, human capital, and other conditions that create an innovative environment. Connecting rural areas to cities is important to provide additional opportunities to the poorest residents of the regions. These principles have been included in the EU Multiannual Financial Framework for 2014–2020.

**The place-based private sector development policies should be taken with caution and start with engaging local leaders to build their capacity.** Global evidence of targeted place-based support programs is not conclusive. Overall, such efforts rarely pay off, but there are examples of cities and regions that manage to turn themselves around. Such success stories are usually charac-

terized by the presence of strong multi-actor coalitions and capable governments that drive the policy effort. This suggests that EU support for places-based policies should start from local capacity and coalition building, and involve multiple local actors, which has been the case in the ongoing pilot in Podkarpackie and Świętokrzyskie.

**Finally, it is important to accept that achieving full convergence and uniformity of development in Poland, or elsewhere, is highly unlikely, and**

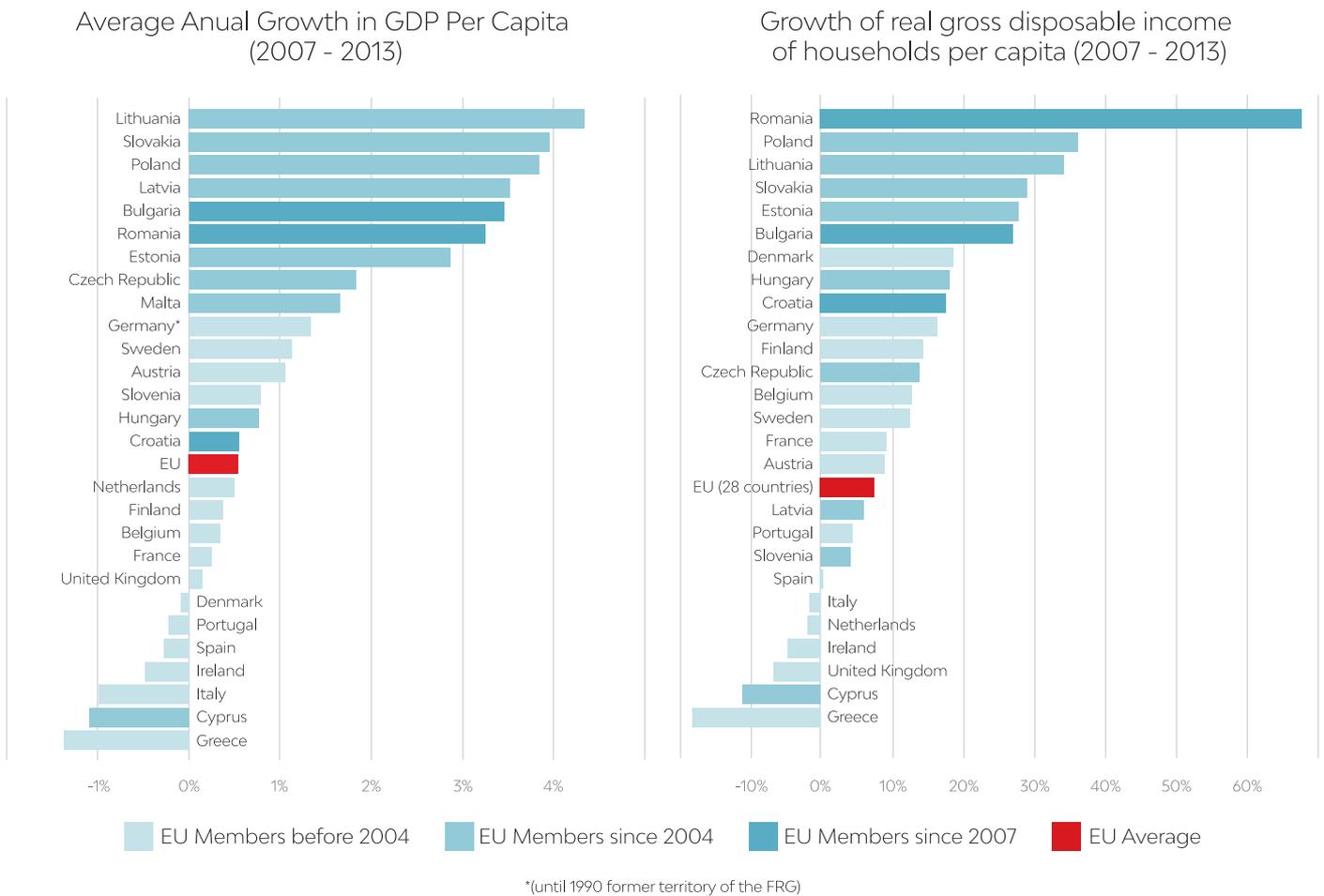
**it should be reflected in EU policy targets and priorities.** Since within country convergence of regional economic outputs is unheard of in global practice, the success of lagging regions' investments should not be judged by their ability to spark economic growth that outpaces the rest of the country. Rather, focus should be shifted to making the most of local circumstances and providing more opportunities to residents of lagging areas, including focusing on improved quality of life, not only on economic outcomes.

## Introduction: why focus on lagging regions

**Spatial disparities in development are a major challenge for the EU, and the expansion countries specifically.** While it is mostly inevitable that development is a process that is not evenly distributed in space, it is still important to understand how policy makers can and should respond to this trend. This report offers an overview of evidence and policy thinking that has been developed in the course of the design and implementation of the EU Lagging Regions Initiative pilot in Poland. It uses global evidence and best practices, and discusses their application to the case of two lagging regions in eastern Poland: Świętokrzyskie and Podkarpackie.

**Across the EU significant progress has been made in addressing challenges of spatial inequality in economic development and social welfare.** The countries that joined the EU in 2004 have consistently been achieving faster economic growth than the EU, on average. Except Cyprus, all of the ten countries that joined the EU in 2004 grew faster than the rest of the Union, achieving higher average rates of GDP per capita growth. In fact, nine out of the ten fastest growing countries in the EU between 2007–2013 all joined in 2004 or 2007. Similarly, expansion countries make up eight out of ten countries, with the fastest growing disposable income per capita between 2007–2013. (Figure 1)

**Figure 1.** Annual Average Growth in GDP per capita in EU member countries (2007–2013)



Source: Eurostat

**But disparities remain significant, particularly at the sub-national level.**

In 2014, GDP per capita of 78 out of 276 EU NUTS level 2 regions was below 75% level of EU average. In 21 regions, GDP per capita is below the 50% of the EU average. With the exception of French overseas territories, all of these poorest regions are in Poland, Hungary, Bulgaria and Romania. The gap in average household income between the richest region – London West, and the poorest region – Severozapaden in Bulgaria, was 10.6 to one. In 2014 in 36 regions, the average disposable income of households was below 10,000 ppcs,<sup>3</sup> while the EU average was at 22,500 ppcs.<sup>4</sup>

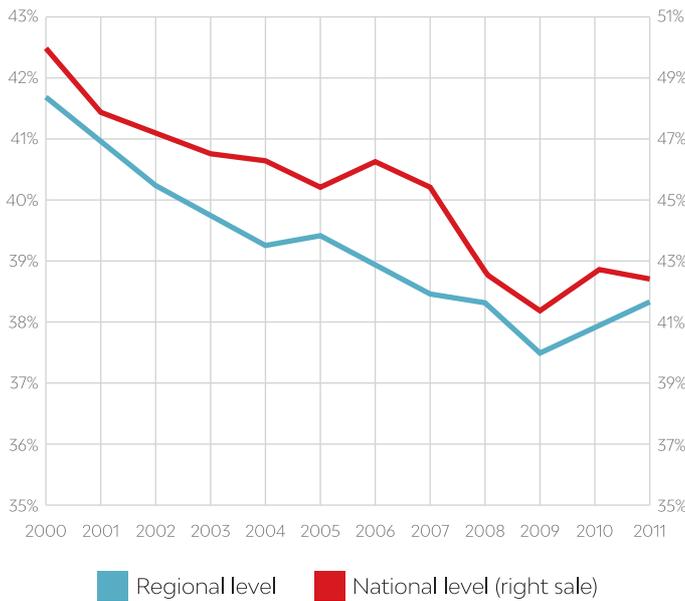
**At the regional level, substantial EU wide convergence has been achieved over the last 15 years, but progress stopped after the 2008 financial crisis.**

For most of the 2000s both EU states and EU regions have been converging in terms of GDP per capita, but this progress reversed after the 2008 financial crisis. (Figure 2) The crisis itself hit the leading regions harder than the laggards, resulting in a fast rate of convergence in 2008. But, most economically developed parts of the EU experienced a much faster recovery than the lagging regions in the post-crisis years, which reversed the convergence trend. The convergence of employment rates was much more modest between 2000–2008. And while leading regions

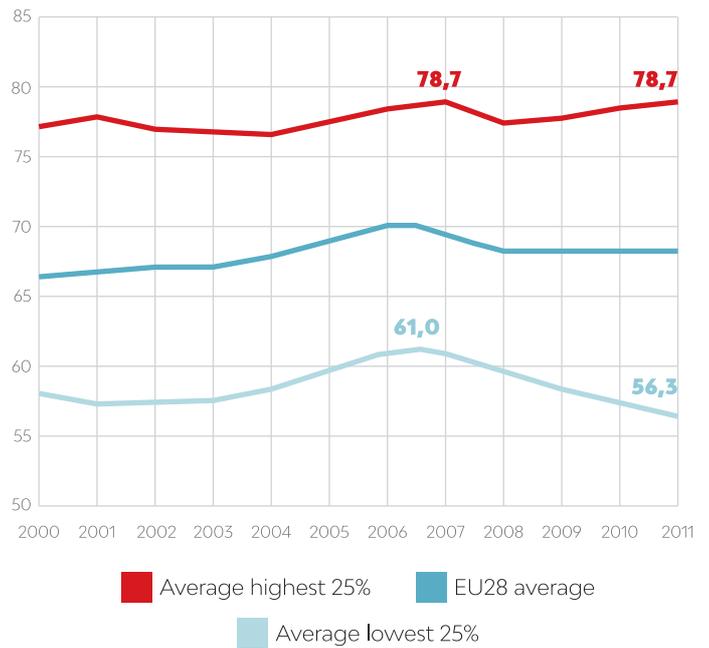
<sup>3</sup> Purchasing power consumption standards (PPCS) – an artificial currency unit obtained by the conversion of the income parameters of private households with specific purchasing power standards (PPS) for final consumption expenditure, resulting in purchasing power consumption standards which are comparable.

<sup>4</sup> Eurostat (2016) GDP at regional level <[http://ec.europa.eu/eurostat/statistics-explained/index.php/GDP\\_at\\_regional\\_level#Regional\\_GDP\\_per\\_capita](http://ec.europa.eu/eurostat/statistics-explained/index.php/GDP_at_regional_level#Regional_GDP_per_capita)>

**Figure 2.** Coefficient of variation for GDP per inhabitant in PPSS



**Figure 3.** Regional employment rates (% of population aged 20–64)



Eurostat Source: Postoiu, N., Buşega, I., (2015) Inter-regional disparities in the European Union, Romanian review of regional studies, Volume xi, Number 1

Source: Postoiu, N., Buşega, I., (2015) Inter-regional disparities in the European Union, Romanian review of regional studies, Volume xi, Number 1

returned to pre-2008 employment level in five years, lagging regions have experienced a persistent decline in employment rates. As a result, the gap in levels of employment between leading and lagging regions in 2013 was wider than in the early 2000s. (Figure 3)

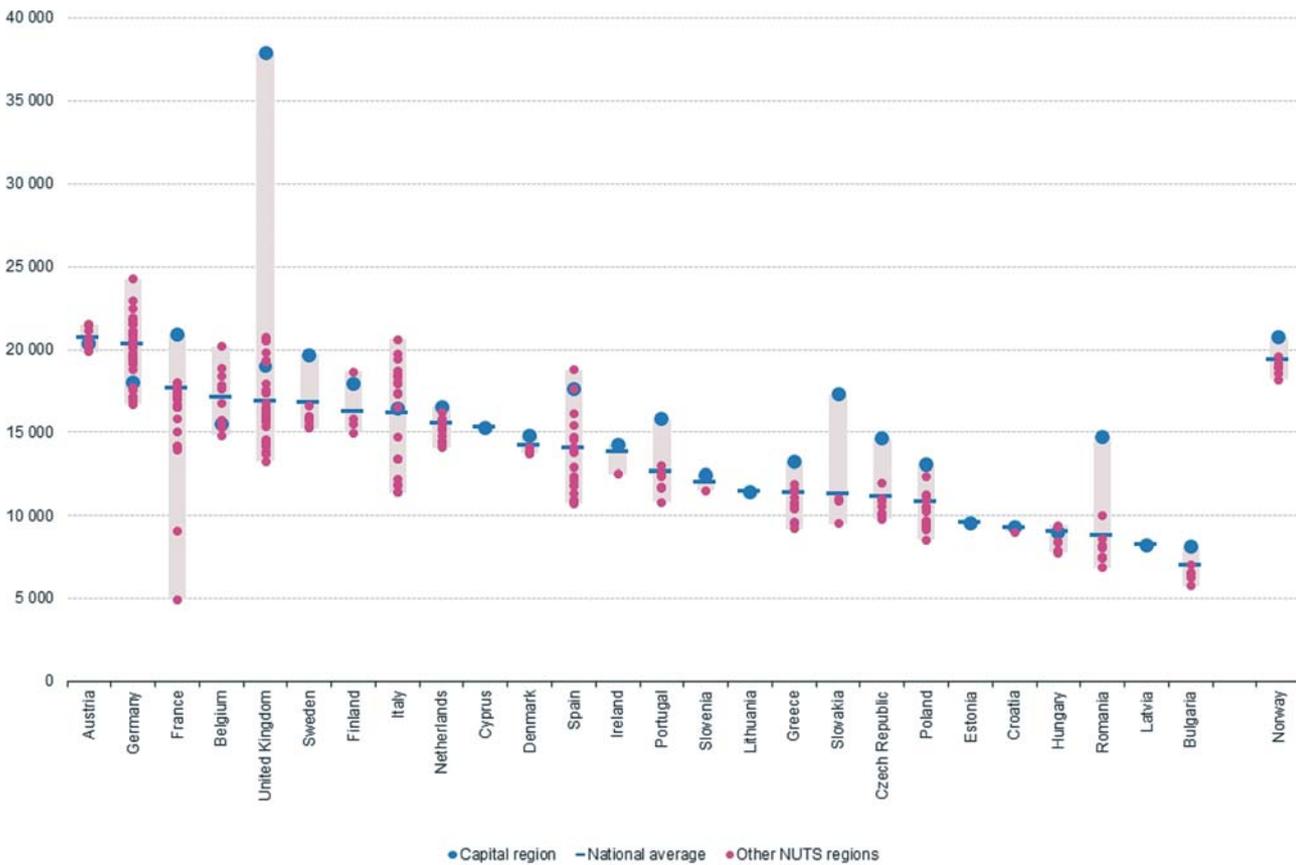
**As predicted by theory, EU-wide regional convergence happened at the same time as disparities between regions within countries grew larger.** The trend for growing within regional divergence has persisted in the

EU member countries since early 80s.<sup>5</sup> Today, spatial inequality of development can be observed in the new member countries. In all of the expansion countries with multiple regions (Slovakia, Czech Republic, Poland, Romania, Bulgaria), the capital regions have much higher average disposable incomes than the other regions. (Figure 4) This is consistent with theoretical prediction, according to which development concentrates in major urbanized areas, before spilling over into secondary and tertiary cities and rural areas.<sup>6</sup>

<sup>5</sup> PUGA, D. (1999), "The rise and fall of regional inequalities", in: European Economic Review 43(2), February 1999, pp. 303–334.

<sup>6</sup> World Bank (2008) World Development Report 2009: Reshaping Economic Geography.

**Figure 4.** Disposable income inequalities within countries across the EU



(\* The light lilac shaded area shows the range of the highest to lowest region for each country. The blue bar shows the national average. The blue circle shows the capital city region. The lilac circles show the other regions. Luxembourg, Malta, Iceland, Liechtenstein, Switzerland, Montenegro, the former Yugoslav Republic of Macedonia, Albania, Serbia and Turkey: not available.

Source: Eurostat (2016) GDP at regional level <[http://ec.europa.eu/eurostat/statistics-explained/index.php/GDP\\_at\\_regional\\_level#Regional\\_GDP\\_per\\_capita](http://ec.europa.eu/eurostat/statistics-explained/index.php/GDP_at_regional_level#Regional_GDP_per_capita)>

**Disparities between regions remain large, despite the majority of EU funding being allocated to lagging regions.** Of the total €347 billion of EU spending on development programs between 2007–2013, 82% was allocated to ‘Co Objective’ [formerly ‘Objective 1’] regions – whose GDP per capita is 75% below the EU average.<sup>7</sup>

**The impact of EU investments in lagging regions is broadly perceived as mixed.** The available evidence suggests that while the EU support has led to faster economic growth in target regions, it hasn’t led to significant growth of permanent employment. Most of the measurable effects were associated with short run economic activity spikes produced by infrastructure investments.

This suggests that European regional development policies have worked more as income redistribution policies, than as policies building foundation for long-term sustainable development. Evidence also shows that in 36% of the recipient regions, the transfer intensity exceeds the aggregate efficiency maximizing level, and in 18% of the regions a reduction of transfers would not even reduce their growth.<sup>8</sup> This findings have been taken on board and reflected in the funding framework for the 2014–2020 EU programming period.

**There are multiple explanations for the perceived lack of visible success of cohesion policies.** Some of the studies suggest that connective infrastructure investments (that make up a signifi-

<sup>7</sup> European Commission (2016) Ex post evaluation of the ERDF and Cohesion Fund 2007–2013.

<sup>8</sup> Becker, Egger & von Ehrlich, (2010) Going NUTS: The effect of EU Structural Funds on regional performance, Journal of Public Economics, Volume 94, Issues 9–10.

cant part of EU- funded expenditures) do not lead to economic convergence, and often lead to redistribution of economic activity to more centralized developed areas, away from laggards. Other evidence suggests that business support programs that are often backed by the EU are generally not effective in improving economic outcomes, while investments focusing on human capital don't get a high enough priority in EU-funds allocation.<sup>9</sup> However, it is also possible that since economic development is a slow process, it is too early to evaluate the effectiveness of cohesion policy investments.

**In order to address the persisting challenge of lagging regions, the EU has launched the Lagging Regions Initiative.** The aim of the Initiative is to identify what holds back growth in less developed regions, and to provide targeted support to unlock their growth potential. Thus, these lagging regions will be assisted to involve a broad range of stake-

holders (regional and local administrations, education institutions, business support institutions, SMEs, entrepreneurs, investors, NGOs, IFIs) to help respond to their concrete needs and to maximize the impact of regional investments.

**This report presents the conceptual thinking and the evidence that informed the pilot Lagging Regions Initiative in Poland.** The pilot focused on two regions in eastern Poland: Świętokrzyskie and Podkarpackie. This report presents evidence of economic performance of these regions, analyses of the factors holding them back. The policy thinking presented here is backed by global evidence on patterns of regional development, which provides a conceptual framework for the proposed policy approach.

*This report was prepared by the World Bank team that is leading the implementation of the Poland pilot of the Lagging Regions Initiative.*

## State of Polish Lagging Regions: Podkarpackie and Świętokrzyskie

**The cases of Podkarpackie and Świętokrzyskie are representative of lagging regions of eastern Poland<sup>10</sup>.** Podkarpackie and Świętokrzyskie are two of the five least developed (or lagging) regions in eastern Poland. GDP per capita in all five of these regions is between 70 and 73% of the national average, which makes them the least developed regions in the country. The wide gaps between Podkarpackie and Świętokrzyskie and the leading regions like Mazowieckie or Dolnośląskie, are broadly representative of

the ever-growing spatial inequality of economic and social outcomes in Poland and other EU accession countries. Table 1 shows that between 2000 and 2013, 10 least developed regions in Poland fell further behind the national average GDP per capita, which is consistent with the EU-wide trend of within country divergence in regional economic performance. Podkarpackie and Świętokrzyskie are also among the regions failing to achieve 50% of EU average GDP per capita (48% and 49%, respectively).

<sup>9</sup> Andrés Rodríguez-Pose, Ugo Fratesi (2004) Between development and social policies: the impact of European Structural Funds in Objective 1 regions.

<sup>10</sup> In this eastern Poland refers to four regions: Podkarpackie, Świętokrzyskie, Lubelskie, Podkarpackie. This should not be confused with Eastern Poland - the officially defined macro-regions, that also includes Warmińsko-Mazurskie Voivodship.

**Table 1.** Polish regions GDP per capita (Poland = 100)

Region	GDP per capita POLAND = 100	
	2000	2013
Mazowieckie	152.8	160.5
Dolnośląskie	102.9	111.9
Wielkopolskie	106.8	107.2
Śląskie	106.2	104
Pomorskie	98.9	96.3
Łódzkie	88.6	93.3
Małopolskie	89.7	88.7
Zachodniopomorskie	99	83.3
Lubuskie	89.4	83.1
Kujawsko-Pomorskie	89.6	82
Opolskie	83.4	80.5
<b>Świętokrzyskie</b>	<b>77.9</b>	<b>73</b>
Podlaskie	73.4	72.9
Warmińsko-Mazurskie	77.5	71.5
<b>Podkarpackie</b>	<b>72.7</b>	<b>71.1</b>
Lubelskie	71.4	70.7

Source: GUS data

**The gap between Podkarpackie and Świętokrzyskie and leading regions of Poland is multidimensional.**

Both regions are far behind the national average in incomes. Average wages in Podkarpackie are 15% below the national average and in Świętokrzyskie they are just marginally higher.<sup>11</sup>

In 2015, the registered unemployment rate in Podkarpackie (13.2%) and Świętokrzyskie (12.5%) was at least five percentage points higher than nationwide. Poverty rates in both regions also substantially exceeded the national average. (Table 2)

**Table 2.** Poverty rates in Polish Podkarpackie and Świętokrzyskie<sup>12</sup>

	Poland		Podkarpackie		Świętokrzyskie	
	2014 %	Change in 2006-2014 p.p.	2014 %	Change in 2006-2014 p.p.	2014 %	Change in 2006-2014 p.p.
Extreme poverty	7.4	-0.4	8.7	-1.7	12.2	0.0
Relative poverty	16.2	-1.5	21.1	-0.8	22.6	-2.4
Statutory poverty	12.2	-2.9	15.3	-4.6	17.2	-4.6

Source: GUS

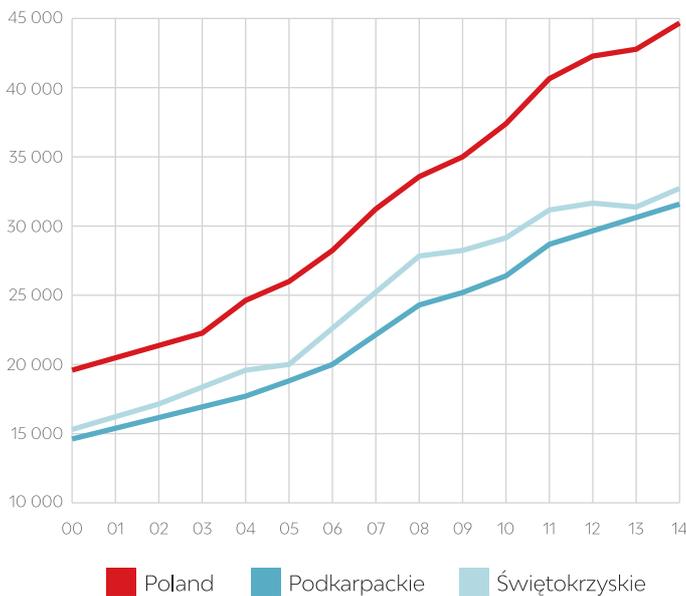
<sup>11</sup> Central statistical office of Poland.

<sup>12</sup> Extreme poverty threshold (subsistence minimum) means the level of need satisfaction beyond which life, and mental and physical development of an individual are threatened; relative poverty threshold indicated by an amount that is equivalent to 50% of average monthly household expenditures; statutory poverty threshold means the amount of income which, under the applicable law on social welfare, makes an individual eligible for receiving a cash benefit.

**Despite gradual convergence to the EU average level of economic development, Polish lagging regions never managed to close in on the national average.** In post accession years (2004–2007), economies of Podkarpackie and Świętokrzyskie grew faster than the EU economy at-large. However, both regions were hit hard by the aftermath of the 2008 crisis, and for both the convergence stalled in 2009–2013.

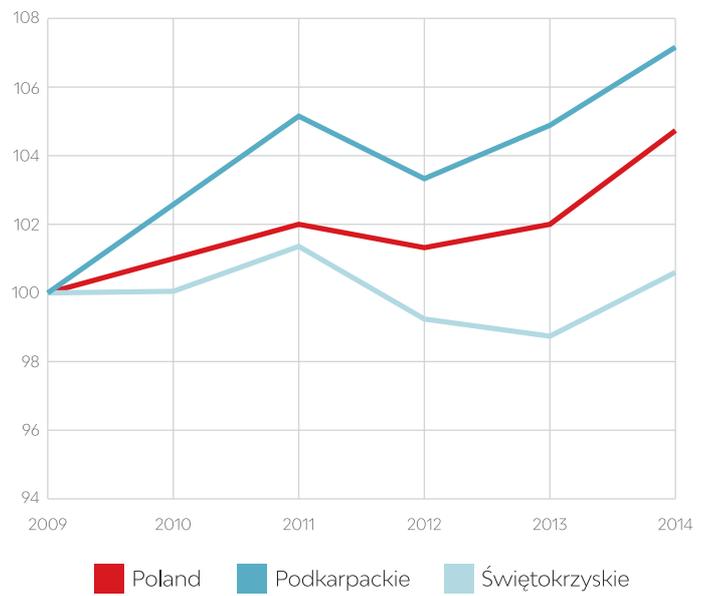
Simultaneously, at no point between 2004 and 2014 have Podkarpackie and Świętokrzyskie been able to achieve substantial convergence to the national average. (Figure 5) Before the crisis, Świętokrzyskie was growing slightly faster than Podkarpackie, but in the post-crisis recovery period Podkarpackie managed to keep pace with the national economic growth, while Świętokrzyskie started slowing down. (Figure 6)

**Figure 5.** Dynamics of convergence to the Poland average for Podkarpackie and Świętokrzyskie (GDP per capita, PLN, '000)



Source: GUS

**Figure 6.** Employment creation dynamic in Świętokrzyskie and Podkarpackie in the post-crisis period



Source: GUS

**There is no evidence that wages in the two lagging regions are converging to the national average.** Economic theory suggests that while spatial equalization of total output or regional economies is unlikely, equalization of wages can happen as people migrate to places with higher wages, thus redistributing the labor supply across regions to facilitate a spatial equilibrium. However, this has not been observed in the case of Podkarpackie and Świętokrzyskie. In nominal terms, wages in both regions grew by more than 70% between 2004 and 2015. However, the growth rate was similar to the national average.<sup>13</sup>

**Economic activity within Podkarpackie and Świętokrzyskie is not distributed equally.** Both Świętokrzyskie and Podkarpackie have low levels of urbanization with 45% and 42% of population, respectively, residing in urban areas, which is far below the national urbanization rate of 62%. However, data clearly shows that urban areas are the drivers of growth, entrepreneurship and job creation.

**Intra-regional spatial divergence of development is growing wider in Podkarpackie.** The Rzeszów subregion (the urbanized area around the regional capital of Podkarpackie) was among the fastest developing subregions in Poland. In 2010–2013, the sub-

<sup>13</sup> Based on GUS data.

region improved its GDP per capita vis-à-vis the country's average by 4.5 percentage points, reaching a level of 87.9% of the national average. In contrast, the Krośnieński, Przemyski and Tarnobrzesci subregions were among the weakest in Poland and fell further behind

the national average over the period in consideration, all failing to reach 75% of national average GDP per capita in 2013. As a result, the disparities between urban and rural parts of Podkarpackie have grown considerably wider. (Table 3)

**Table 3.** Dynamics of economic development of Podkarpackie subregions in 2000–2013

	GDP per capita related to the national average					Change in GDP per capita relative to the national average			
	2000	2004	2008	2010*	2013	2000–2004	2004–2008	2008–2010	2010–2013
Krośnieński	69.6	65.2	63.6	60.5	60.3	-4.4	-1.6	*	-0.2
Przemyski	64.9	62.4	59.6	55.0	53.6	-2.5	-2.8	*	-1.4
Rzeszowski	79.2	80.3	81.7	83.4	87.9	1.1	1.4	*	4.5
Tarnobrzesci	74.0	78.7	75.9	73.2	73.7	4.7	-2.8	*	0.5

\* Changes in the methodology of ESA 2010 accounts (lack of comparability).

**Both subregions of Świętokrzyskie are struggling to keep up with the national economy.**

The capital of Świętokrzyskie, Kielce, is the most developed area of the region, but it is not as dynamic as Rzeszów, the capital of Podkarpackie. The economy of the Kielecki subregion was growing faster than the national economy in the period leading up to the EU accession. However, the subregion eco-

nomy struggled to recover from the recession in 2010, after which its GDP per capita fell below 80% of the country's average. The decline is likely due to the difficulties experienced by the struggling industrial regions at the northern boundary of the Kielecki subregion. The Sandomierski-Jędrzejowski subregion followed a similar trajectory but fell even further behind the national averages. (Table 4)

**Table 4.** Dynamics of economic development by subregion of Świętokrzyskie in the years 2000–2013

	GDP per capita related to the national average					Change in GDP per capita relative to the national average			
	2000	2004	2008	2010*	2013	2000–2004	2004–2008	2008–2010	2010–2013
Kielecki	83.3	85.4	85.8	85.0	79.8	2.1	0.4	*	-5.2
Sandomiersko-Jędrzejowski	69.7	69.4	69.8	68.3	62.1	-0.3	0.4	*	-6.2

\* Changes in the methodology of ESA 2010 accounts (lack of comparability).

Source: own elaboration based on GUS data

**There are substantial differences in the economic geography of the two regions.**

Świętokrzyskie has one clearly defined economic pole around its capital Kielce. Most of the rest of the region is agricultural, with an exception of the northern part of the province along the river Kamienna that is a part of the historic Poland Industrial District. Podkarpackie is characterized by a more polycentric urban system, and higher le-

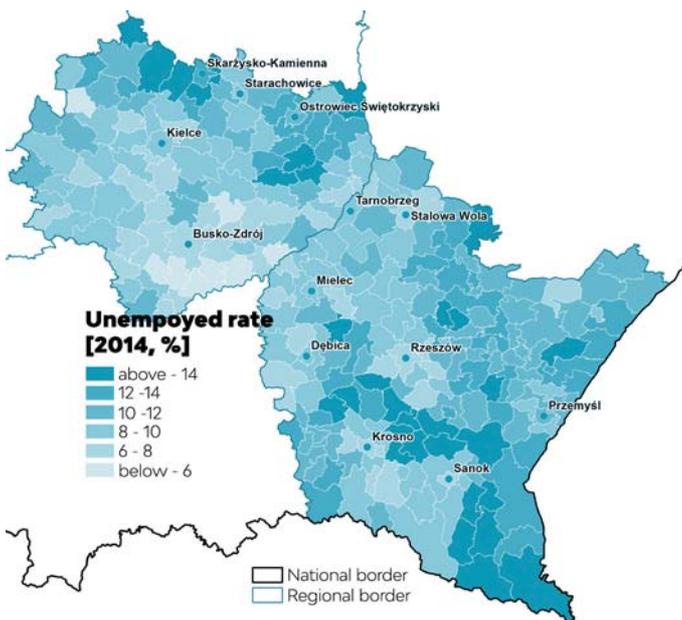
vel of spatial dispersion of employment and population. The towns of Mielec, Krosno, Dębica and Stalowa Wola are important employment centers specializing in manufacturing. These cities are located in the northwestern part of Podkarpackie, while the eastern and southern parts of the region are rural and mostly agricultural. The only exceptions are the southern area of the Bieszczady Mountains that specializes in tou-

rism, and the area along the Ukrainian border where cross-border trade activities are prominent.

**Urban areas of Podkarpackie and Świętokrzyskie have more dynamic private sectors and labor markets than the rest of the regions.** Urban areas of both regions have by far larger number of businesses per capita than

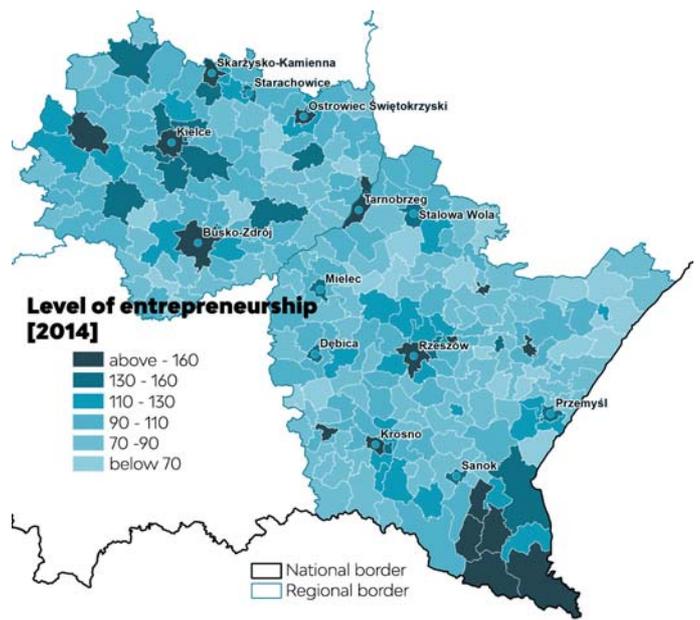
rural areas with the only major exception being the tourist area of the Bieszczady Mountains. (Figure 8). Urban areas overall also enjoy lower levels of unemployment, with the exception of the urbanized region in the northern part of Świętokrzyskie, which has been struggling to overcome the challenges of post-industrial transition for a while. (Figure 7)

**Figure 7.** Spatial distribution of unemployment in Podkarpackie and Świętokrzyskie



Source: GUS

**Figure 8.** Spatial distribution of entrepreneurship in Podkarpackie and Świętokrzyskie



Source: GUS

## Competitiveness of Podkarpackie and Świętokrzyskie economies

### How competitive are the lagging regions?

**Competitiveness of the region is defined by the presence of dynamic, tradable industries.** A competitive region creates conditions for the private sector to generate economic growth, jobs, and raise the incomes of the population. Competitiveness can be enhanced as a result of local entrepreneur-

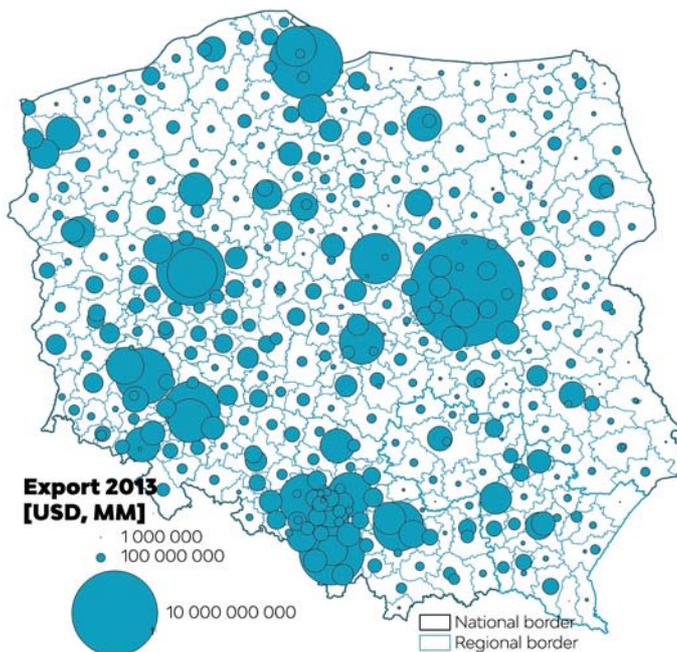
ship and growth of local companies, or as a result of attracting external investors. However, not all businesses are equally beneficial for local economies. Global evidence shows that most competitive places rely on businesses in tradable sectors as drivers of growth. In 10% of the most competitive cities in the world (cities that outperformed their countries the most in terms of economic growth), tradable industries

grow 2.5% points faster per year than in other cities.<sup>14</sup> Tradable sectors are distinguished from the rest of the economy by their ability to sell their products or services over long distances. Unlike local shops or hairdressers (non-tradable firms), manufacturing producers or software developers (tradable firms) can sell their products globally. This means that they can grow and reach a broader market, achieving economies of scale. By selling their products elsewhere, tradable firms also bring money into the region, which is then redistributed throughout the economy, creating additional jobs in the local service sector. Finally, tradable firms face competition from firms in other areas, which pushes them to be more innovative and productive and invest more in skills, equipment and research, thus creating positive spillovers in areas where they are located. Exporting firms are the most visible and measurable subset of trading firms, and economic literature has vast evidence showing that exporting firms tend to be more productive, grow faster and increase wages.<sup>15</sup>

**Small export volumes from the Podkarpackie and Świętokrzyskie economies signal a lack of competitiveness.** Figure 9 shows that most of Poland's exports originate from the national capital region, or from urban centers in the western part of the country. Germany is the main trade partner of Poland, accounting for 27% of total exports (a share almost five times larger than Great Britain, which is second), which benefits cities and areas located close to German border. Counties in southeastern Poland, including those in Świętokrzyskie and Podkarpackie, make a relatively small contribution to the total volume of exports. However, the results can only partially be explained by the remote location and poor connectivity of these regions. It is also an indication of the overall lack of competitiveness.

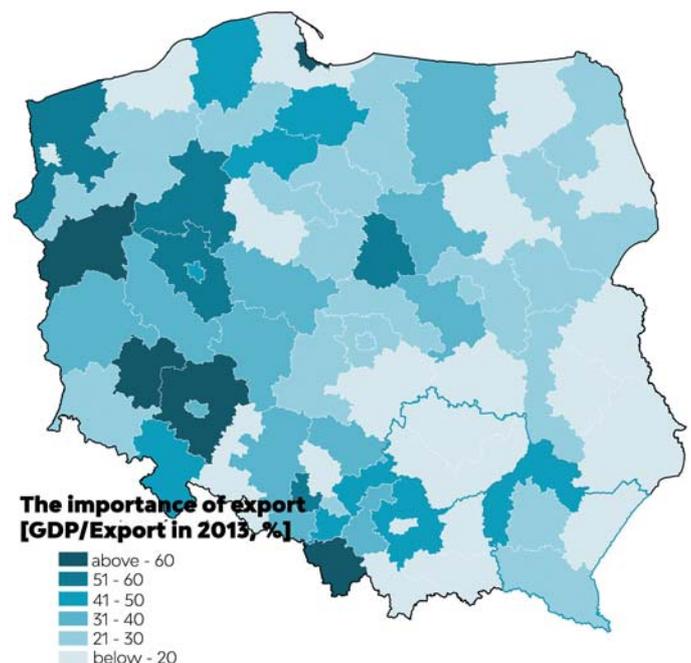
**The Podkarpackie economy is more export-oriented than the economy of Świętokrzyskie.** Figure 9 and Figure 10 clearly show the concentration of exporting firms in the western and

**Figure 9.** Total volume of exports by county



Source: Ministry of Foreign Affairs of Poland

**Figure 10.** Share of exports in total output by subregion



Source: Ministry of Foreign Affairs of Poland

<sup>14</sup> World Bank (2015) Competitive Cities for Jobs and Growth: What? Who? and How?

<sup>15</sup> Bernard, A.B., Wagner J. (1997) Exports and Success in German Manufacturing; Review of World Economics.

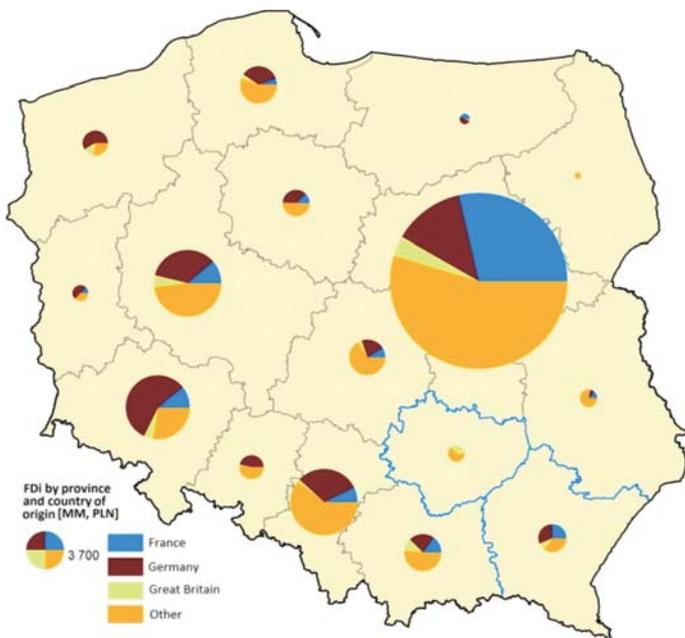
northern parts of Podkarpackie. This applies in particular to the subregion of Tarnobrzeg, where the largest of special economic zones in the region, Euro Park Mielec, is located. The subregions of Krosno and Rzeszów also show significant export orientation, largely due to the presence of the aerospace cluster. Świętokrzyskie, on the other hand, is among the least export-oriented regions in Poland (export makes up less than 20% of its GDP).<sup>16</sup>

**Lack of foreign investment into local economies indicates perceived limited competitiveness and potential of both regions.** The process of decision-making by investors is complicated but mostly driven by three considerations – search for a market, cheap resources, and efficiency.<sup>17, 18</sup> Given that regions of eastern Poland can't boast favorable market access and do not have vast resource endowments, the FDI coming into these regions should look for higher efficiency. However, the flow of FDI into Podkarpackie and Świętokrzyskie

is small, compared to other regions, particularly in Central and Western Poland. The highest FDI concentration (in Poland) is in Mazowieckie (the capital region), and can largely be attributed to the international companies that registered their headquarters in Warsaw, although they may have branches and work sites all over the country. Other regions that attract large volumes of FDI are concentrated in western and southwestern Poland, where German investment is prominent. (Figure 11)

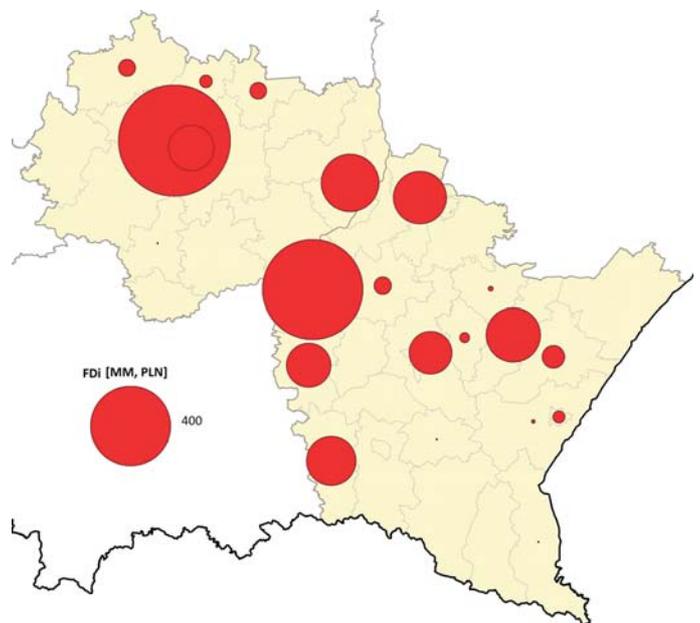
**FDI data points at relatively higher dynamism of the Podkarpackie economy.** Podkarpackie is the unquestioned leader in FDI attraction among regions of eastern Poland. On the other hand, Świętokrzyskie similar to Podlaskie, was among the regions that have attracted the least foreign investment. A closer look at locations of projects funded by foreign investment clearly reveals that the only significant attraction for investors in Świętokrzyskie is its regional capital, Podkarpackie on the other hand of-

**Figure 11.** FDI attraction by region



Source: GUS

**Figure 12.** FDI attraction by county (powiat) in Podkarpackie and Świętokrzyskie



Source: GUS

<sup>16</sup> Data from Ministry of Foreign Affairs of Poland and Central Statistics Office of Poland.

<sup>17</sup> Efficiency in this context means ability to increase productivity: e.g. by accessing pull of qualified labor, or locating close to suppliers and service providers, or on an important transport corridor.

<sup>18</sup> T. Juni Zhu, Yago Aranda Larrey, Valerie-Joy Santos (2015) What do Multilateral Firms Want from Cities?, World Bank.

fers many attractive locations. Urban areas such as Rzeszów, Debica and Stalowa Wola receive a significant amount of foreign investment, but the most enticing place for FDI in Podkarpackie is the special economic zone of Mielec. (Figure 12)

**Industrial structure of regional economies also points to a lack of competitiveness.**

High share of public services in both regions, even though they do not have seats in the national government, highlights the overall weakness of the private sector. This is true for Świętokrzyskie, where tradable industries con-

tribute 6.5% less to output than in Poland on average. Again, Podkarpackie appears to be in a stronger position due to the industry sector that contributes more (in percentage terms) to the output of the region than nationwide. (Table 5) Both regions have weaker advanced service industries than the national average, which suggests that urban areas in both regions mostly fulfill the role of production centers and local service centers typical for secondary cities, while most of the business service industry tends to concentrate in the major metro areas of Warsaw, Wrocław, and Krakow.

**Table 5.** The sectoral structure of the economy (gross value added, GVA, in %) and its changes in 2013<sup>19</sup>

Sector*	Poland	Podkarpackie	Świętokrzyskie
Agriculture	3.1	1.9	4.4
Industry	26.0	29.3	25.2
Construction	7.6	7.6	9.1
Simple services	29.5	28.1	28.0
Advanced services	16.5	12.1	12.3
Public services	17.4	21.0	21.0

Source: GUS

**Labor productivity in Świętokrzyskie and Podkarpackie is below the national average, across all industrial sectors.**

Labor productivity is a factor that defines the ability of local businesses to compete in external markets. It is striking that labor productivity in all industrial

sectors in Świętokrzyskie and Podkarpackie is lower than the national average, and in most cases by at least six per cent. Additionally, in most sectors productivity has been growing slower than nationwide. (Table 6)

<sup>19</sup> \* 'Agriculture' (NACE section A: Agriculture, forestry and fishing); 'Industry' (NACE section B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam and air-conditioning supply; E: Water supply; sewerage, waste management and remediation activities); 'Construction' (NACE section F); 'Simple services' (NACE section G: Wholesale and retail trade; repair of motor vehicles and motorcycles; H: Transport and storage; I: Accommodation and food service activities; J: Information and communication); 'Advanced' services (NACE section K: Financial and insurance activities; L: Real estate activities; M: Professional, scientific and technical activities; N: Administrative and support service activities); 'Public' services (NACE section O: Public administration and defense; compulsory social security; P: Education; Q: Human health and social work activities; R: Arts, entertainment and recreation; S, T, U - the remaining activities).

**Table 6.** Labor productivity by industrial sector in Podkarpackie and Świętokrzyskie regions

Sector*	Podkarpackie		Świętokrzyskie	
	Productivity as national average = 100	Change in productivity relative to the national average 2009–2013 (percentage points, <0 indicate that productivity growth was below national average)	Productivity as national average = 100	Change in productivity relative to the national average 2009–2013 (percentage points, <0 indicate that productivity growth was below national average)
Agriculture	21.7	0.4	53.9	-1.6**
Industry	82.1	1.8	87.2	-17.1
Construction	84.2	-6.7	96.6	-5.0
Simple services	91.2	-1.8	92.3	-0.5
Business services	91.5	-9.4	99.5	-1.8
Public services	91.3	-1.1	93.2	-1.1

Source: GUS

**Dynamics of the “industry” sector illustrates the difference in the economic potential of the two regions and explains observed spatial patterns of development.**

Statistically, “industry” (including manufacturing, mining, and utilities) is the sector of specialization for both regions, as it contributes a larger share of GDP than on average across the country. At the same time, the dynamics of these sectors are very different in each region. In Podkarpackie, the industry sector has achieved the highest rate of labor productivity growth exceeding the national average, while in Świętokrzyskie the industry sector has dropped to 13% below the national average labor productivity, despite being ahead before – the phenomenon that deserves further investigation. One possible explanation is that these contrast in trajectories of manufacturing in two industries captures the difference between the declining manufacturing cluster in the north of Świętokrzyskie and the up and coming manufacturing cluster in the northwest of Podkarpackie.

**The state of agriculture explains the vast rural-urban disparities in for both regions.**

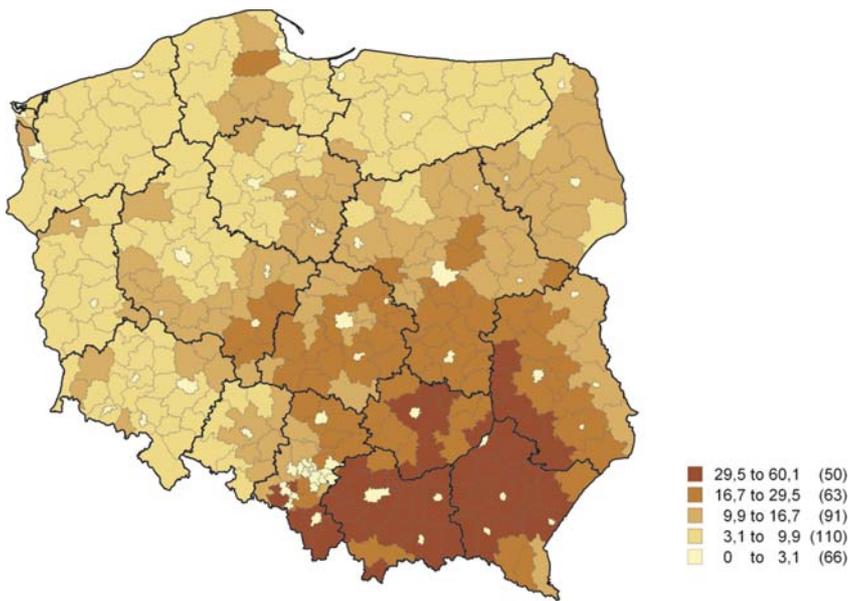
Seemingly, agriculture should be the dominant industry in both regions. Both Podkarpackie and Świętokrzyskie are less than 50% urbanized,

and according to official data 28% and 33% of total employment in regions, respectively, is in agriculture. Despite this, in both regions agriculture makes a relatively small contribution to the total output (particularly in Podkarpackie, see Table 5). In both regions agricultural productivity is low (in Podkarpackie it is 1/5 of the national average). This largely represents the fact that farming in both regions is characterized by small acreages of farms (a mere 3.9 hectares in Świętokrzyskie), dispersion of plots and in most parts of the regions relatively infertile soils. Local experts suggest that level of commercialization of agriculture in both regions is low, even though commercial farming is more common in Świętokrzyskie than in Podkarpackie.

**Small-scale farming by a significant portion of the population is symptomatic of the lack of access to economic opportunities.**

The large number of people registered as employed in agriculture in both regions indicates presence of hidden unemployment, indicating their difficulty in accessing economic opportunities outside low productivity small scale farming. It is confirmed by the region’s data about the average number of people employed in agriculture per 1 ha of farmland. Large numbers of workers per ha signals low labor

**Figure 13.** Hidden unemployment in agriculture (number of employed in agriculture per 100 ha of farmland) in 2013



Source: GUS

productivity and potential hidden unemployment. Of the 50 Polish counties with the highest number of agricultural workers per ha of land, as many as 17 are in Podkarpackie Voivodship. Only four counties in Podkarpackie – those where state farms were established following the forced resettlement of the Ukrainian population after World War II, i.e. Lubaczowski, Bieszczadzki, Leski and Sanocki – have a lower worker per ha ration. In Świętokrzyskie most counties also fall into one of the bottom two quintiles of Polish counties for the number of agricultural workers per ha.

### How history shaped economies of lagging regions

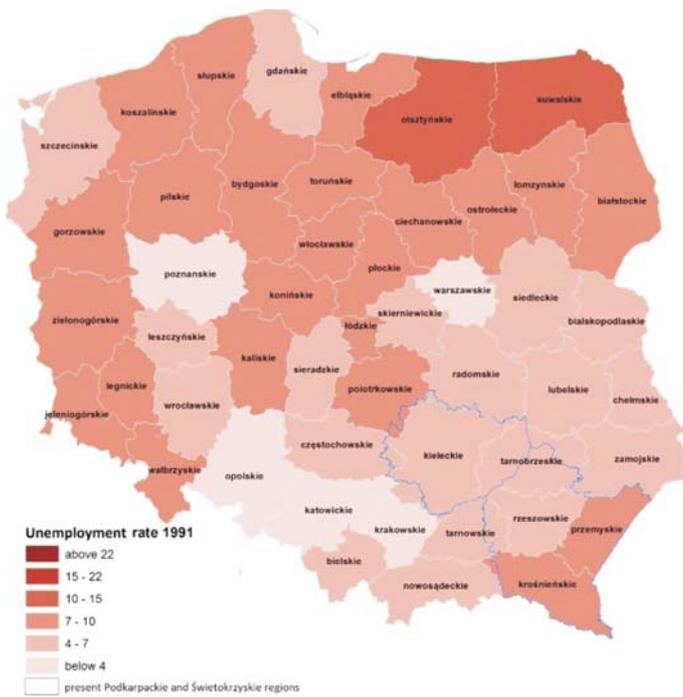
**To fully understand the competitiveness trends that characterize the economies of Podkarpackie and Świętokrzyskie today, it is important to account for the recent history of these regions.** Economic development trends in Poland in the last 20 years were largely defined by the transition from a planned to market economy. While rebuilding

basic economic institutions was the core premise of this transition, the process also had significant spatial implications, and contributed to a divergence between regions in Poland. Three key factors had strong spatial implications: a) collective farms and some manufacturing sectors failed to adjust to the new economic reality; b) economic development continued to be concentrated in urban areas; and c) the opening of the Western borders created new business opportunities.

### Withdrawal of government support and opening to broader competition had disproportional negative effects on selected sectors and areas where they were concentrated.

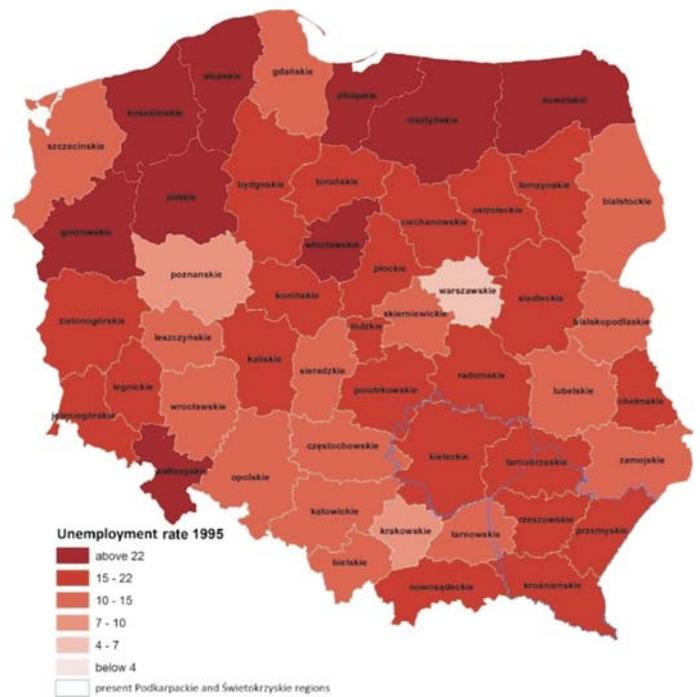
Agricultural areas in northern Poland were affected by the breaking up of collective farms, which created concentrated areas of deprivation. Similar outcomes were faced by the cities and towns that depended on manufacturing industries and failed to adjust to the new competitive environment. The breakdown of Eastern Bloc supply chains, economic decline across the primary market of Eastern Europe, and enhanced competition from products imported from the West, led to a decline of many manufacturing enterprises. This created concentrated areas of unemployment. Despite the fluctuation in the national rate of unemployment over the past 20 years, even today the highest unemployment rates are observed in the regions of Pomerania, Warmia, and Masuria (areas, where the state farms dominated until 1989), and in some of the industrial zones that did not succeed in modernizing their economies (e.g. the area along the border of the provinces of Mazowieckie and Świętokrzyskie, including the city of Radom and the Old Polish Industrial District). Figure 14 and Figure 15 show that, along with regions in the northwest and northeast of Poland, the territories of modern Podkarpackie and Świętokrzyskie were amongst the areas hardest hit by the spike in unemployment.

**Figure 14.** Unemployment in Polish regions in 1991 (using all administrative divisions)



Source: GUS

**Figure 15.** Unemployment in Polish regions in 1995 (using all administrative divisions)



Source: GUS

**Market forces that were unleashed after the transitional reforms led to a growing concentration of economic activity in major cities.**

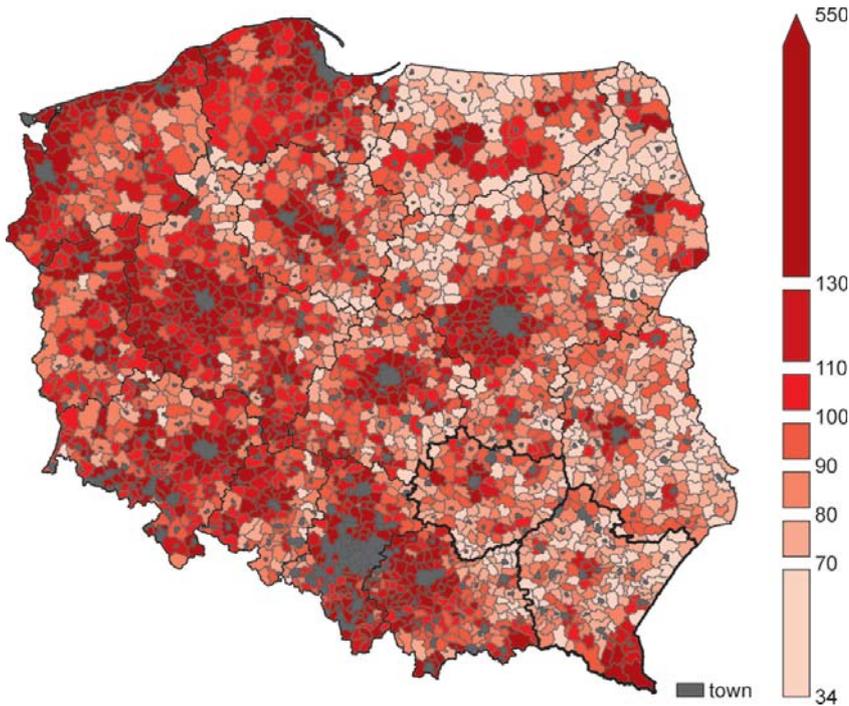
Market liberalization has led to a fast structural transformation driven by a decline in manufacturing industries, often located in small single industry towns selected by central planners, and the rapid expansion of the service industry that favors larger cities. The first high concentration of private enterprises emerged in Warsaw, which made it the main business center of the country. International corporations and investors that arrived in the country at that time established themselves in Warsaw. This led to a rapid expansion of the business services' sector and office space in Warsaw. Later on, similar processes began in other large cities including Poznan and Wrocław and only later shifted to secondary cities. Smaller regional centers and towns, including Rzeszow and Kielce, were left behind. However, overall economic dominance of urban areas became a country-wide phenomenon. Today, the 17 largest cities in Poland amass 20% of the national population, but generate 60% of the GDP, and have attracted

over 62% of all internal migrants in the country.

**Finally, the opening of the western border led to a reconfiguration of economic geography of the country.**

The early period of economic transformation was characterized by the rapid formation of private enterprises. The spatial pattern of this process shows that the economic opportunities created in these areas, proximate to large western markets, clearly outweighed those in the eastern part of the country. While small business growth was evident across the country, it was most pronounced in the vicinity of the large agglomerations, as well as in the border regions (driven by small scale cross border trade), and in tourist regions. Economic activity was distinctly lower in predominantly rural areas, particularly the areas where former state farms were operating before 1989. The provinces of Podkarpackie and Świętokrzyskie were not among the leaders in terms of development of small business. The only visible exceptions were the capitals of the provinces, some other urban centers (like Przemyśl, located close to the bor-

**Figure 16.** Number of registered enterprises per 1000 people by powiat (2014)



Source: GUS

der with Ukraine), and the area of Bieszczady Mountains, where the majority of employees of the struggling forestry sector became self-employed. Figure 16 shows that these geographical patterns of entrepreneurship are persisting today.

### What determines competitiveness of the regions today?

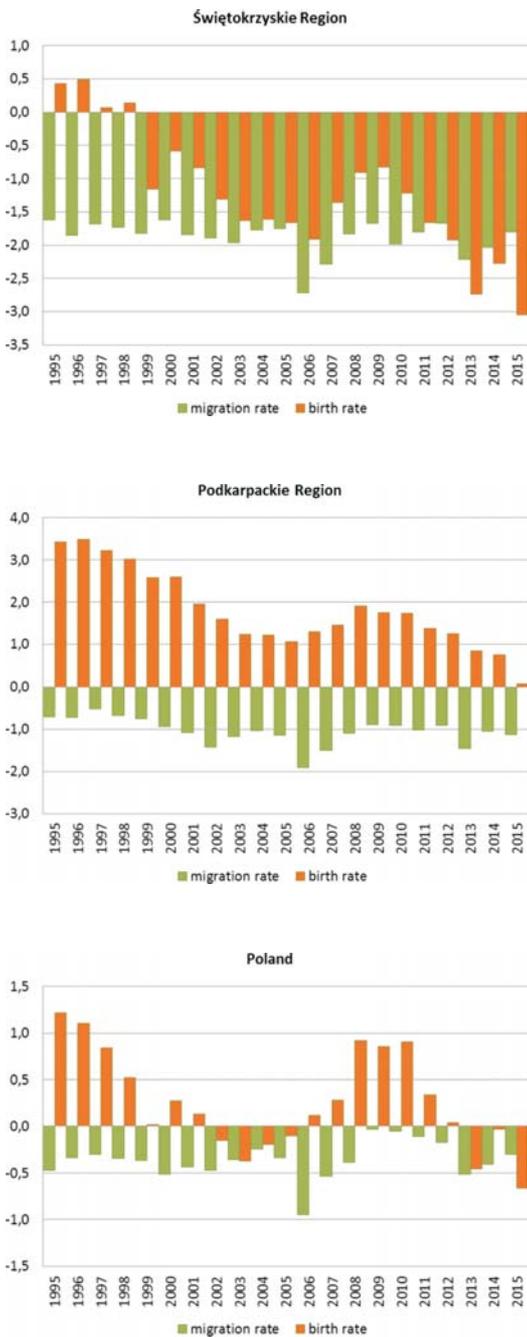
**While the historical process played an important role in shaping the economic landscape of the lagging regions, competitiveness of the regions today is largely defined by existing enabling conditions.** Conditions that may affect the productivity and competitiveness of local firms can vary

from technical skills of the labor force, to reliability of public bus systems, to quality of public spaces. While all of these are next to impossible to capture, it is important to paint an overall picture of enabling conditions by grouping them into several categories: demographics and human capital, innovation and entrepreneurship, access to markets, basic infrastructure and services, business support, regulatory environment, capacity of local government. All of these factors have strong, empirically-proven links to levels of productivity and economic development. This chapter will offer a short assessment of these conditions in Świętokrzyskie and Podkarpackie.

### Demographics and human capital

**Podkarpackie and Świętokrzyskie are experiencing contrasting demographic trends.** Podkarpackie’s demographic situation is characterized by high rates of natural population growth (births minus deaths) and negative migration balance (1‰ per year between 2004–2014) with lots of people leaving the region to seek better economic opportunities in large Polish cities or abroad. In Świętokrzyskie, the migration balance is similar to Podkarpackie, but the overall population decline is more rapid due to lower birthrates and thus an inability to achieve natural reproduction. (for more details, see Figure 17) Because the natural growth in Podkarpackie partially compensates the outmigration, it is expected that the region will match the Poland-wide trend of gradual population decline in the foreseeable future, maintaining total population at 88% of its current level in 2050. The population of Świętokrzyskie is expected to decline much more sharply and reach 77% of its current level by 2050.

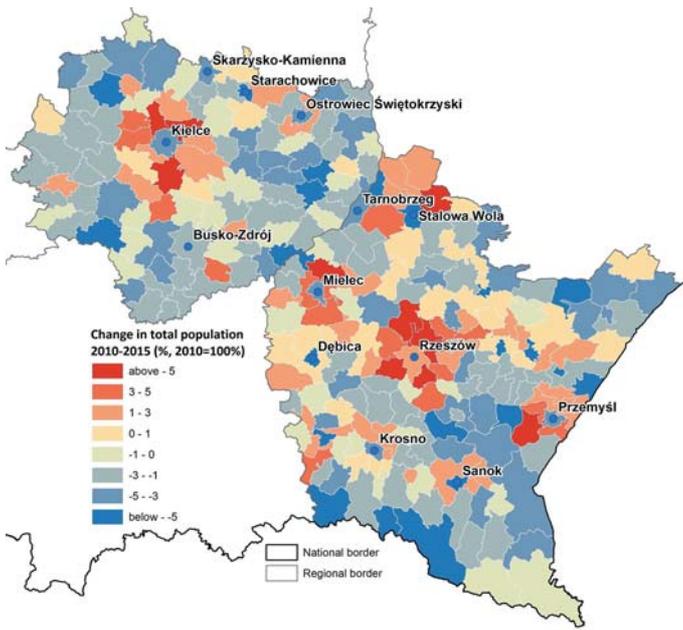
**Figure 17.** Difference of demographic dynamics of Świętokrzyskie, Podkarpackie and Poland as a whole



Source: GUS

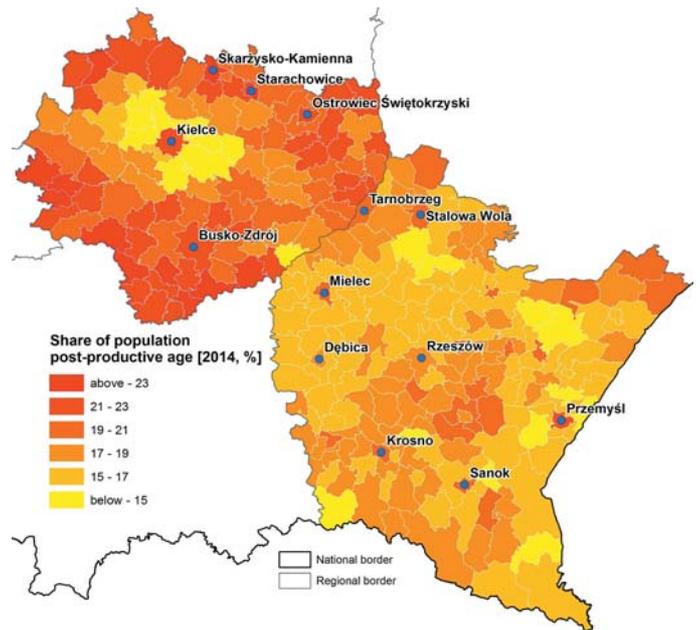
**The spatial patterns of population growth in both regions are described by suburbanization and depopulation of rural areas.** In Świętokrzyskie, the overall population decline and a large share of retirees are typical for most of the municipalities, with a notable exception of the suburban ring around Kielce. This reflects the lack of economic opportunities in the peripheral parts of the region where natural population decline is combined with rapid outmigration towards the regional center or further afield. It also shows that the growth of Kielce is largely driven by suburbanization. As young families are choosing to live in suburbs, the municipalities around Kielce have become the only ones with population growth and a relatively low share of the elderly population in Świętokrzyskie. In Podkarpackie, the spatial pattern of demographic changes confirms the presence of a much more polycentric urban system. However, key trends are similar to those observed in Świętokrzyskie: the highest population growth is seen in suburban areas, and the highest decline driven by outmigration is typical for the peripheral and rural parts of the region. Suburbanization has led to higher concentration of the elderly population in urban centers of both regions, which poses important challenges with respect to the future planning of public infrastructure in cities. This may also indicate possible problems with the low quality of urban amenities or structural issues of the housing market in cities, which makes suburban life more attractive to young people. (Figure 18, Figure 19) The rapid suburbanization might be aided by rather relaxed land use planning system in Poland. Currently only 20% of the land in the country is covered by land use plans. This means that a large share of development decisions are made on a discretionary basis, particularly outside of major urban areas.

**Figure 18.** Spatial patterns of population changes in Podkarpackie and Świętokrzyskie



Source: GUS

**Figure 19.** Share of population in post-productive age in Podkarpackie and Świętokrzyskie

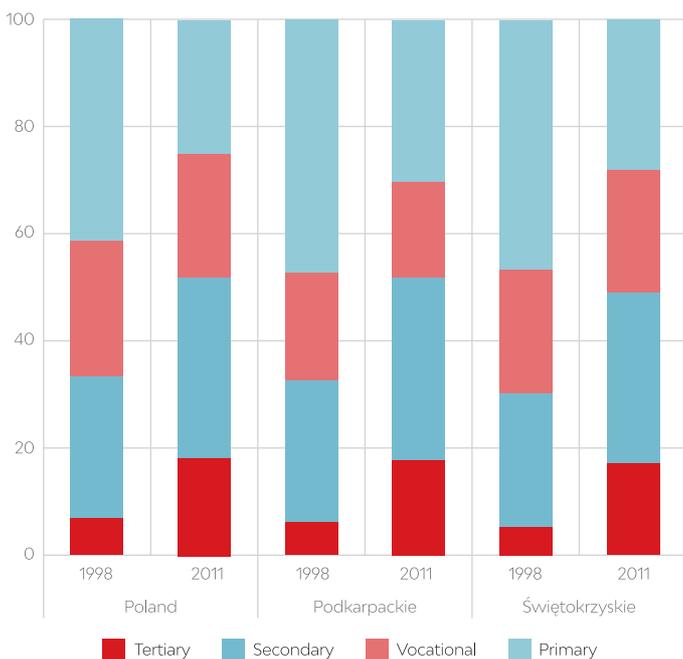


Source: GUS

**Education profiles of Podkarpackie and Świętokrzyskie are similar to the rest of Poland.** As with the rest of Poland, fewer than 20% of the populations of both regions hold university degrees, and just over 20% have completed only primary education. Data also proves that dramatic improvement of the education

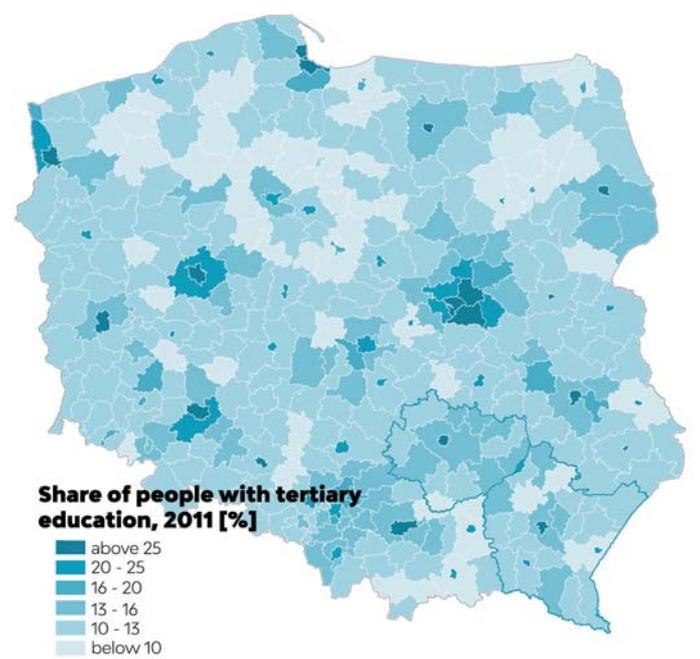
profile of the populations was typical for the focus regions as well as for the country as a whole. (Figure 20) Geography of skills predictably show that the largest shares of educated people are found in cities. Rzeszów and Kielce stand out as the most educated places in their regions. (Figure 21)

**Figure 20.** Structure of population by highest level of education in 1998 and in 2011



Source: GUS

**Figure 21.** Share of population with tertiary education by county/powiat in 2011



Source: GUS

**Structural skills gaps might persist despite improving the educational profile of the population.**

Despite high educational levels of the population in both regions, businesses often can't find the skilled workers that they require for current market conditions. This is the case in areas that have struggled from rapid industrial decline, or where the population is struggling to transition out of agricultural activities. The issue is exasperated by the failure of the educational institutions to address them. For instance, while the VET system in both regions is well established it is characterized by relatively low-quality training. This is partially because over the course of a four-year program, students spend less than four weeks in a work-based training that is poorly implemented due to lack of capacity both of training schools and firms. This challenge has been one of the focal areas of the Lagging Regions Initiative pilot.

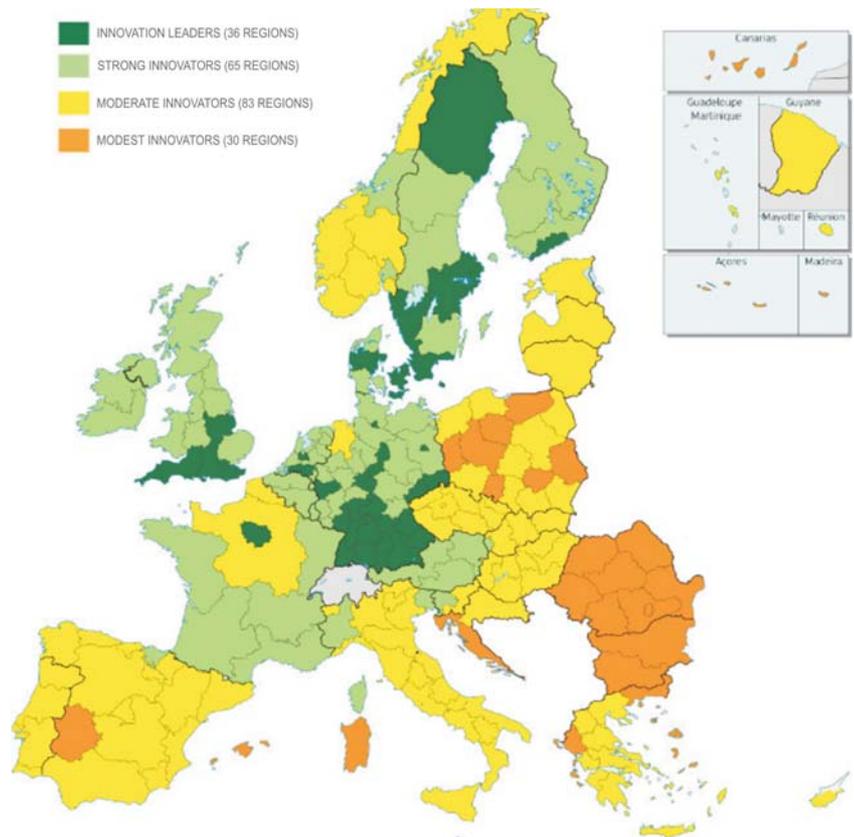
amounts of high-tech export and good tertiary education attainment, declining R&D investments holds its innovation potential back. In both regions, a lack of innovative entrepreneurs is a constraint to competitiveness.<sup>21</sup> The number of SMEs with organizational, product and process innovations has been declining in both regions and is below EU average on per capita basis. This is important because entrepreneurs are an essential part of the innovation systems that take ideas and inventions originating in research institutions or large companies, and bring them to market. Thus, without entrepreneurship innovation is unlikely to become a driver of regional economic performance. One of the components of our work focused on development of mechanisms for commercializing innovations.

**Innovation and entrepreneurship**

**Innovation potential is higher in Podkarpackie, but a limited level of entrepreneurship is holding both regions back.**

According to the Regional Innovation Scorecard,<sup>20</sup> developed by the European Commission, Podkarpackie is defined as a moderate innovator (second lowest out of four categories), while Świętokrzyskie falls into a category of modest innovators (the lowest category). (Figure 22) Podkarpackie was in the group of European regions that have seen one of the largest increases in the value of this indicator between 2004 and 2010, and after a decline in 2010-12 it has continued improving its innovation performance in the last four years. The main strength of the Podkarpackie regional innovation system is large volumes of medium and high-tech exports, growing business R&D, and non-R&D innovation expenditure. While Świętokrzyskie also has significant

**Figure 22.** Regional Innovation Scoreboard 2016



Source: European Commission

<sup>20</sup> The Regional Innovation Scoreboard is a regional extension of the European Innovation Scoreboard, assessing the innovation performance of European regions on a limited number of indicators including R&D expenditure, SME innovation, patent applications, and product and process innovation by businesses and others.

<sup>21</sup> European Commission (2016) Regional innovation Scoreboard: Regional Profiles – Poland.

## Connectivity and access to markets

### The regions of eastern Poland have been disadvantaged due to poor access to markets.

The opening of western borders challenged Podkarpackie and Świętokrzyskie because they are a significant distance from the large market of neighboring Germany. Additionally, relatively poor road and rail infrastructure made travel to major urban centers within Poland slow, while significant trade links with proximate neighbors, Ukraine and Slovakia, never developed.

### Despite improvements in recent years, access to markets remains relatively weak for Podkarpackie and Świętokrzyskie.

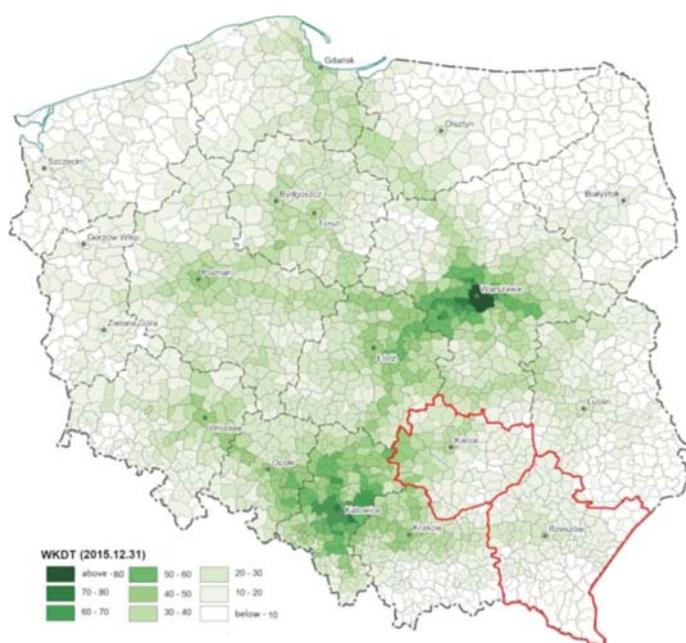
In recent years, major road and rail investment projects have substantially improved connectivity of the regions.<sup>22</sup> Podkarpackie has significantly benefited from construction of the national motorway A4 that established a much better east-west connection to the major urban centers of Krakow and Katowice, and from the modernized railway line E-30 from Cracow

to Lviv. Likewise, there is a significant improvement in connectivity that resulted from the construction of the new bridge over Vistula, linking Podkarpackie and Świętokrzyskie, in Połaniec. These projects benefited from EU funding. However, even after these improvements, Podkarpackie and Świętokrzyskie still can't match other regions of Poland in terms of access to large internal markets or the most important foreign market (Germany) due to their geographic location. (Figure 23 – Figure 26)

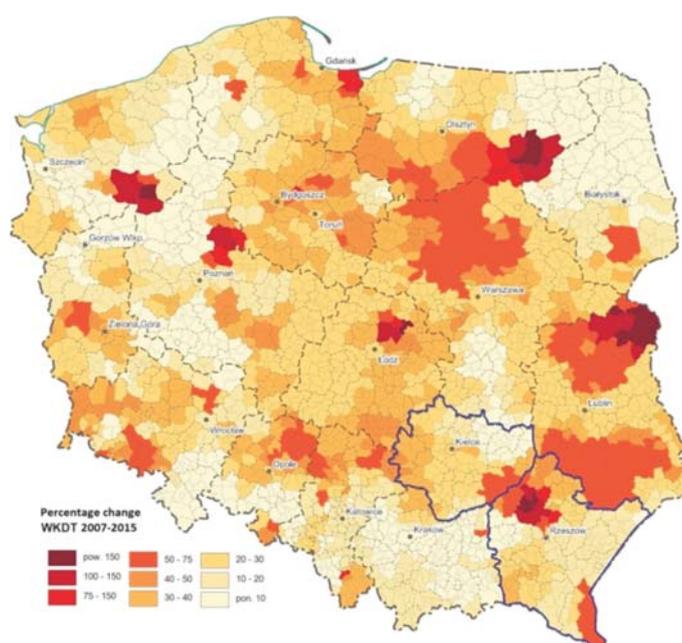
### However, major funding to improve regions' connectivity should be prioritized, as evidenced by their significant impact.

Thanks to large scale investment program of recent years supported by the EU, Poland's transportation system is rather advanced. Today it takes two hours to drive from Rzeszów to Krakow, four hours to get to Warsaw or Wrocław, seven hours to Berlin and around 10 to Hanover and Hamburg. Further investments are likely to deliver only marginal reductions in travel time, and at a high cost. It is also unclear whether such improvements will improve the competitive potential

**Figure 23.** Municipality accessibility by rail

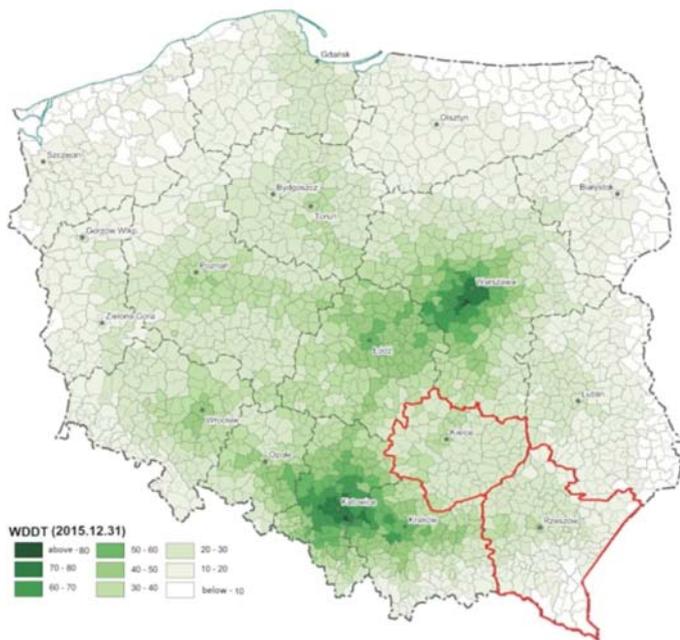


**Figure 24.** Change in municipality accessibility by rail (2007–2015)



<sup>22</sup> The connectivity is evaluated using the accessibility indicator widely applied in academic literature. The index for each of areas is calculated like a sum of populations of all other areas in the country divided by travel time to those areas. For details of the methodology please see Komornicki T., Rosik P., Stępiak (2014).

**Figure 25.** Municipality accessibility by road



Source: Komornicki T., Rosik P., Stępnia, 2015

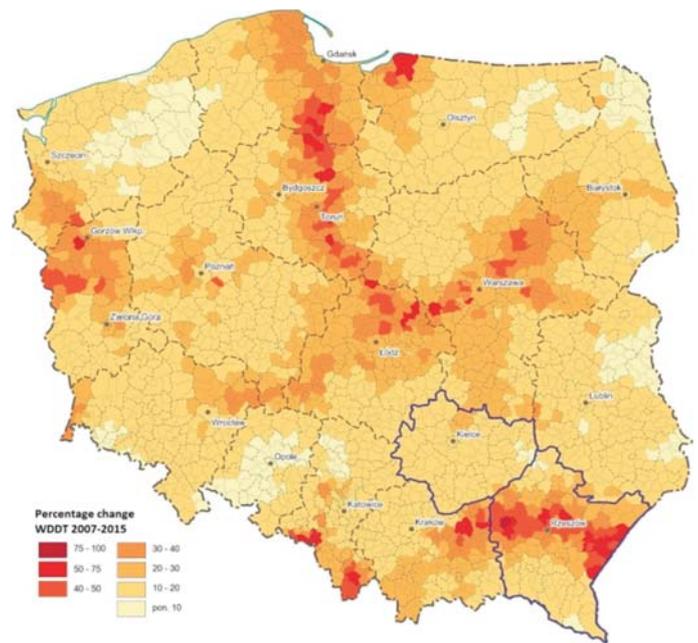
of businesses in lagging regions. While some further investments might be required, particularly those related to connections between Rzeszow and Warsaw, they should only be considered if they will significantly reduce travel time.

**Basic infrastructure**

**Basic infrastructure investments and maintenance remain important, but are not a constraint to growth.** Investment in basic infrastructure is a crucial foundation of economic development and competitiveness, and shouldn't be overlooked. In fact, providing access to basic infrastructure is one of the key policies to drive spatial convergence of welfare in developed countries. However, evidence suggests that even in lagging regions of Poland, the basic infrastructure coverage has reached levels where it can no longer be seen as a substantial constraint for economic development.

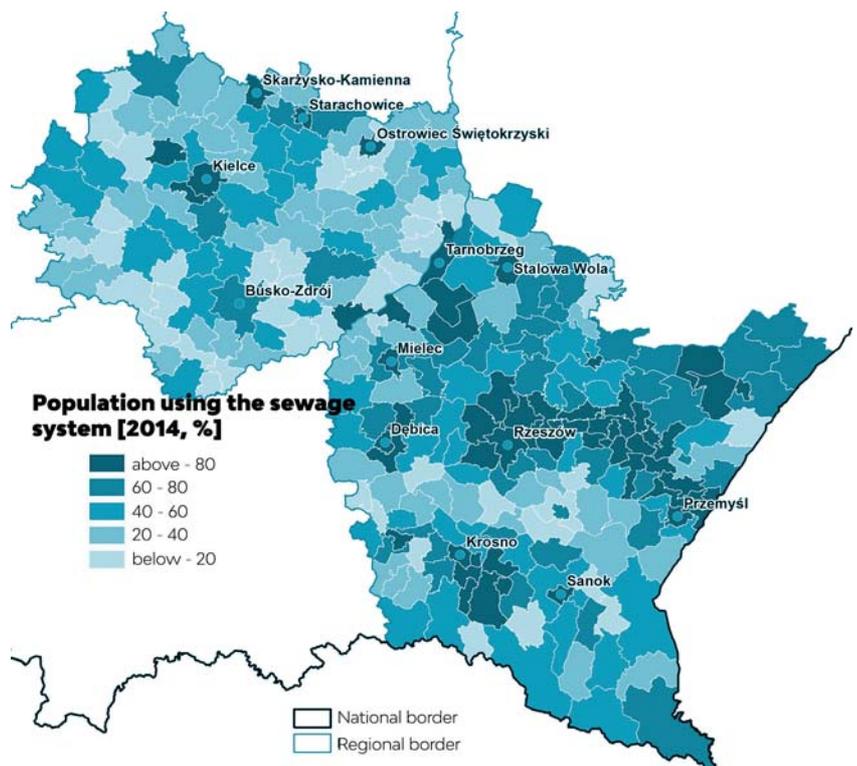
**The weakness of water supply and sewerage systems in Świętokrzyskie and Podkarpackie has largely been resolved, and only targeted investment are still needed.** In the 1990s, the shortage of water supplied and the

**Figure 26.** Change in municipality accessibility by road (2007–2015)



sewage treatment was one of the most important issues in rural areas. That is why over the last 10–15 years investment in the technical infrastructure, particularly water and sanitation, was seen as a major priority. Over the last decade,

**Figure 27.** Share of population with access to sewerage system



Source: own elaboration based on GUS data

the improvements in the sector were rapid, as shown by growing share of population serviced by sewerage. Naturally, the coverage of the system remains higher in urban areas, and achieving high coverage in some remote areas remains difficult due to complicated terrain. (Figure 27) Overall after the recent improvements basic infrastructure and services can't be seen as a constraint to economic growth at a national or regional scale, even if improvements are still required in selected localities largely to improve the living conditions of the population.

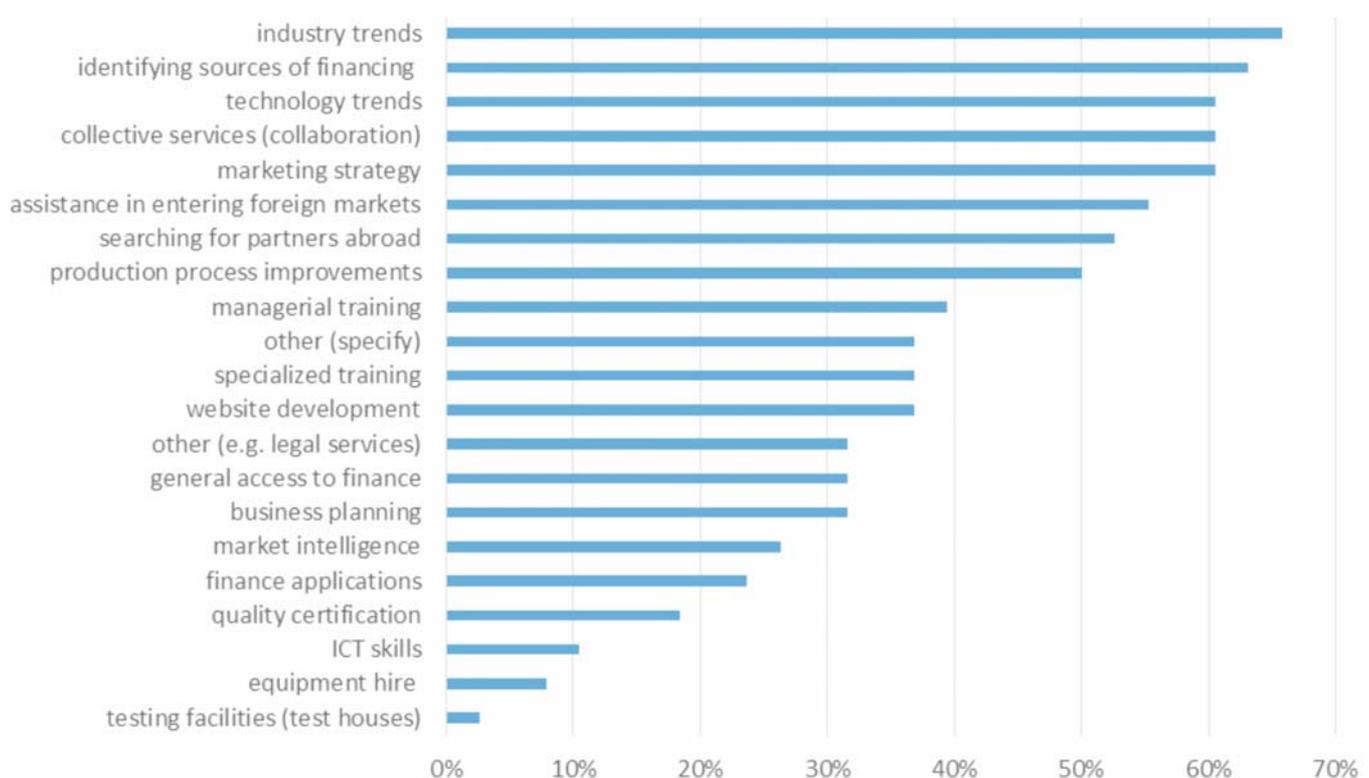
### Business support

**While business support is not necessarily required to improve business performance, it can help overcome specific local constraints.** Not all businesses require business support. Yet, practice shows that running a business is a difficult skill, and inexperienced businessmen often repeat the same mis-

takes or spend a lot of time and effort overcoming similar challenges. Business support services can help overcome these issues and increase the overall competitiveness of local enterprises.

**Results of business interviews in Świętokrzyskie and Podkarpackie suggest that traditional business support is not addressing the needs of businesses.** Thirty-eight interviews conducted in the regions of the study identified that the constraints impacting the capacity of businesses to grow often stem from an inability to distinguish their product or identify a unique market niche or quality that can help them get ahead of competition. Thus, the gaps in knowledge and skills that business owners want to address through business support require predominantly strategic services rather than traditional operational services, which are most easily accessible to businesses today. The strategic services should include helping firms change their business mo-

**Figure 28.** Percentage of firms identifying need for different types of business services<sup>23</sup>



Source: business interviews (the sample is not representative)

<sup>23</sup> This survey is not representative of the entire business population of the regions and the results should be verified.

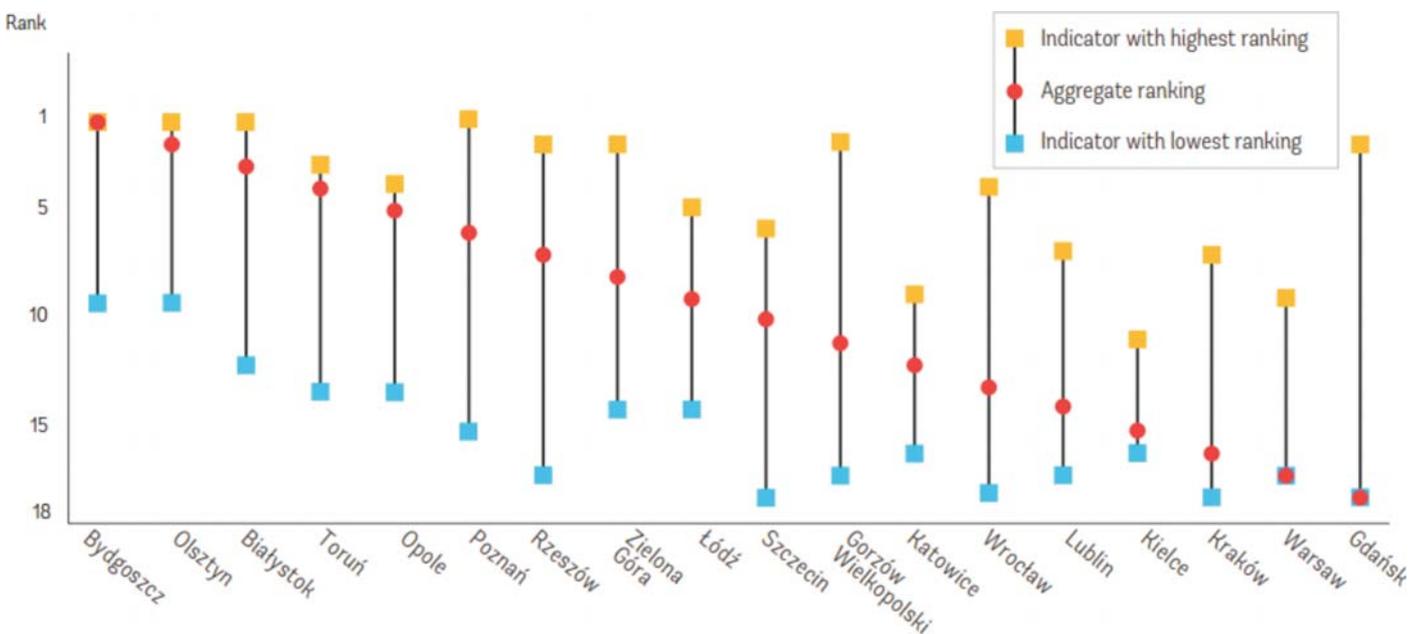
dels, develop new products, and reach new markets. The Lagging Regions initiative pilot has proposed a new business service delivery model, which should help regions address this challenge.

### Regulatory environment

**The “Doing Business” study of the World Bank identifies that both Podkarpackie and Świętokrzyskie can improve their regulatory environments.** Kielce (the capital of Świętokrzyskie) is ranked 15 out of the 18 largest

cities in Poland on ease of doing business. It is particularly bad in terms of difficulty of starting a business (ranked 16) and registering property (ranked 15). While Rzeszów is ranked seventh overall, it also has specific issues with regard to business permitting process (ranked 17). (Figure 29) In both cases, these challenges are largely related to institutional inefficiencies that can be addressed through better use of technologies, and better management and coordination, which has been attempted as a part of the Lagging Regions Initiative pilot.

**Figure 29.** Variation in ranks of major Polish cities on different measures of ease of Doing Business.



Source: World Bank 2015

### Local Government Capacity

**Local governments can play an important role in promoting economic development in Poland, but utilizing their power requires capacity.** The law on territorial self-government, passed in 1990, granted additional powers to municipalities, gave them an independent legal status, as well as economic sovereignty through the right to own municipal assets and generate their own revenues that are complemented with transfers from the state budget.

Today, local administrations are obliged to carry out a number of activities, both of operational character and related to capital investment, strengthening the economic potential of the respective

areas and improving the living conditions of its inhabitants. However, not all municipalities have the capacity to make the most of the powers offered to them.

**Urban municipalities are much better resourced and more self-sufficient, which suggests higher capacity.**

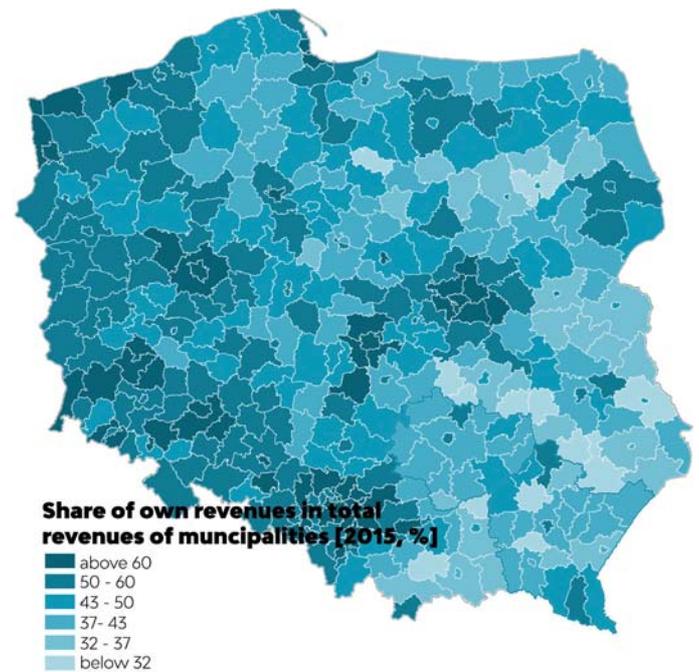
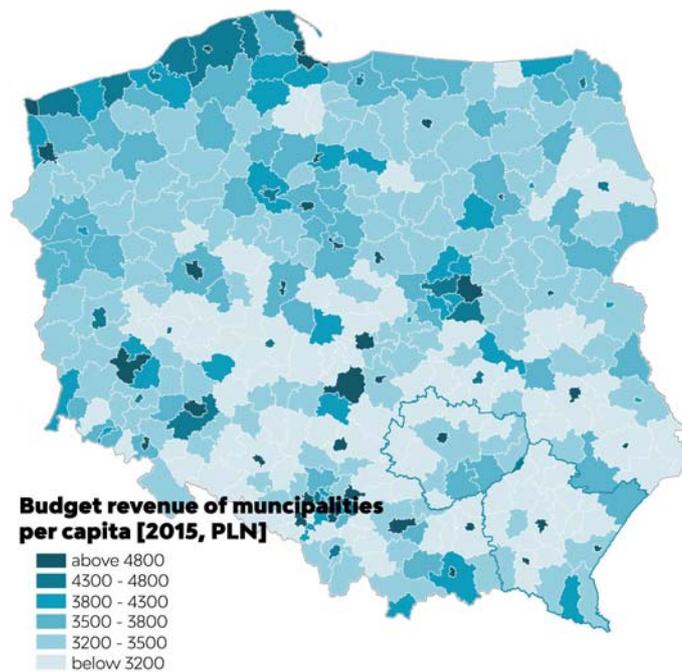
In the main urban centers of the selected regions, Rzeszów and Kielce, the revenues of local budgets reach 5 000 PLN per capita, which places them amongst the richest municipalities in the country. The remaining municipalities, on average, have budgets of around 3 000 PLN per capita, which puts them at the other end of the scale – among the poorest in the nation. (Figure 30) Another aspect of

the urban-rural fiscal capacity gap is the difference in dependence of national transfers. While major urban centers of both regions raise more than 50% of their total revenues, most of the rural areas get at least 60% of total revenue from transfers. (Figure 31) Greater finan-

cial self-sufficiency and larger budgets of urban municipalities will allow them to retain more qualified staff, design better policies, and implement them at a larger scale and with higher quality, all of which can be critical conditions for economic development.

**Figure 30.** Budget revenue of municipalities per capita

**Figure 31.** Share of own revenues in total revenues of municipalities



Source: GUS data

**The analysis of the competitiveness of Podkarpackie and Świętokrzyskie lead to the following key conclusions.**

- **In recent years, the development pathways of the two regions diverged.** Podkarpackie has managed to keep up with the national growth rates and built on its competitive advantages to drive growth in the manufacturing cluster in Mielec and the aerospace industry across the northwestern part of the region. At the same time, Świętokrzyskie's economy never fully recovered from the aftermath of the 2008 crisis which may be reflective of its reliance on sectors of the economy that were hit particularly hard (e.g. traditional manufacturing), however this requires further investigation. And while the old industrial heartland of the region continues to decline (which is shown

by the drop in labor productivity), no new growth drivers are emerging. This divergence is underpinned by a difference in a number of underlying conditions: attractiveness to foreign investors, demographic trends, and innovation capacity.

- **While spatial organization of regions is different, cities are their economic epicenters.** Both regions have urban cores that drive economic growth: Kielce in Świętokrzyskie, and Rzeszów and other secondary cities in the northwestern part of Podkarpackie. But the rural areas of both regions are lagging with high levels of hidden unemployment in rural areas, mostly due to the relatively small contribution of agriculture to the regional economy and lack of access to other economic opportunities. While the growth potential of these areas is unlikely to change, more can be

done to provide the rural population with better access to economic opportunities like those in urban areas, and increase access to urban markets for farmers that will incentivize farmers to commercialize and improve productivity.

- **Addressing specific gaps in enabling conditions may improve economic outcomes for both regions while requiring relatively little effort and funding.** Weakness of entrepreneurship in both regions limits growth potential and creates obstacles for innovation, as well as adoption and commercialization of technology, which restricts productivity growth. While fundamental underlying factors, like culture and demographics, cannot be shifted, a number of enabling conditions can be improved, which became the prio-

riority of the Lagging Regions Initiative pilot:

- Unnecessary regulatory barriers to business and property registration (often related to the inefficient procedure for processing requests or limited use of technology) can be removed.
- Business support services can be tailored to the needs of entrepreneurs. For instance, generic business skills' development can be replaced with support in identifying specific market trends relevant to the business' strategy and decision-making.
- Specific skills gaps can be addressed through better coordination between business and education institutions.

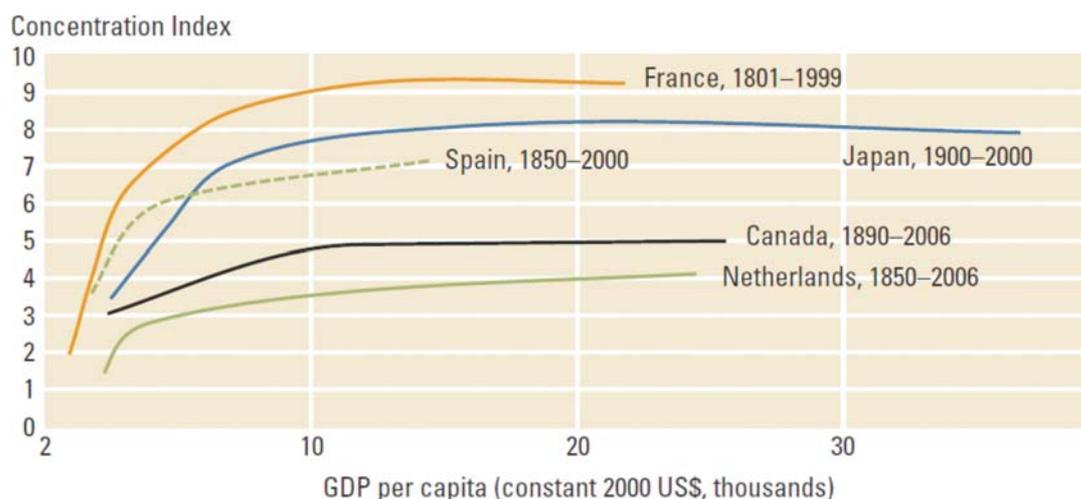
## What does global experience tell us about lagging regions?

**Economic activity is spread unevenly and development leads to concentration of production in cities and leading regions of countries.** Urbanization has a most notable effect at a local level, where it is manifested by rapid divergence between rural and urban areas. The process of urbanization is mostly complete by the time countries reach middle-income status. When countries reach the level of 3,000 EUR per capita, cities account for a majority of consumption, after which further divergence between urban and rural areas slows down. At national level, econo-

mic activity also tends to concentrate in "leading regions" that achieve higher levels of economic density. This process happens fast at early stages of development, but after countries reach GDP per capita of 8,500–13,000 EUR the disparities between the leading and lagging regions remain stable as development proceeds. Importantly, the global evidence suggests that there is no reason to expect spatial equalization of economic development at local or national levels, even as countries become rich.<sup>24</sup> (Figure 32)

<sup>24</sup> World Bank (2008) World Development Report 2009: Reshaping Economic Geography.

**Figure 32.** Global trend of regional concentration of economic output (historical evolution)



Source: World Bank, 2008

**Convergence in living standards and welfare of population is possible, but it might take a long time.**

Local gaps in consumption and access to services between urban and rural areas shrink substantially by the time most countries reach high-income status. Regional gaps in incomes are also reversible, but this process takes much longer. Overall, regional inequality of welfare within countries tends to follow a reverse U-shaped pattern, growing rapidly at early stages of development, particularly when countries go through fast growth phases, like China and other East Asian countries. But, as countries grow richer, regional inequality in welfare tends to decrease gradually. (Figure 33)

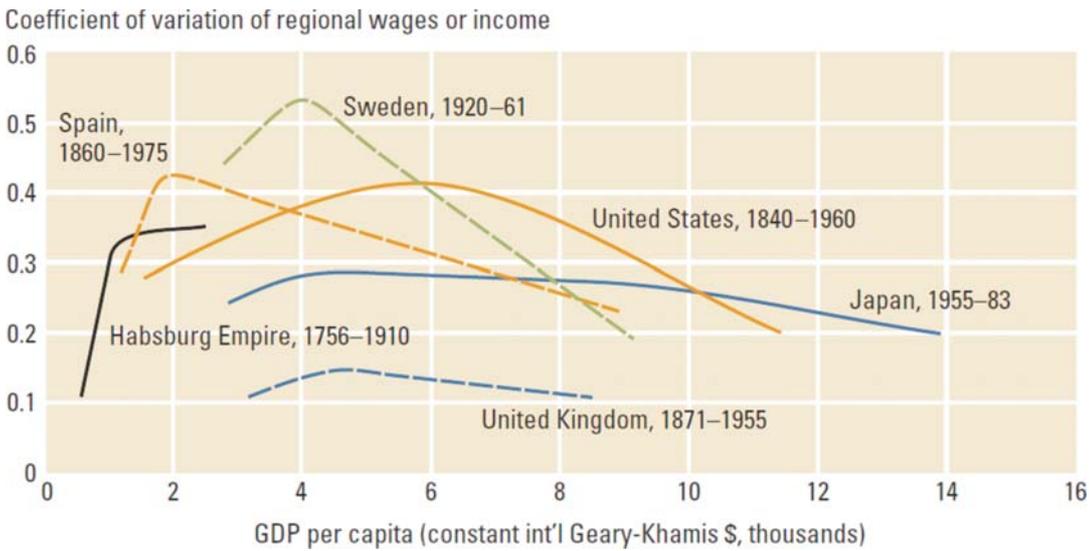
**Social welfare convergence at national and local levels should be driven by a combination of market forces and policy interventions.**

The growing concentration of population and economic activities in major urban areas gradually leads to growing congestion costs that can only partially be offset through planning and infrastructure investment.

These increasing costs gradually force certain types of economic activity to other major cities (until they too reach a saturation point in congestion costs), and then to second tier cities. Over time, spatial reallocation of resources (migration) results in a gradual move towards a spatial equilibrium on labor markets where real incomes of workers are equalized both between different cities and urban and rural areas. The experience of countries where welfare convergence between regions and rural and urban areas was achieved still points at the important role of public policy in this process. Urban rural convergence is achieved largely through the equalization of access to basic services, which most countries achieve at the upper-middle income level of development. At a regional level, welfare convergence policies may include redistribution of resources focused on providing good social services in lagging regions in order to make populations more mobile and thus facilitate equalization of income and welfare outcomes through migration, as occurred in Japan.<sup>25</sup>

<sup>25</sup> World Bank (2008) World Development Report 2009: Reshaping Economic Geography.

**Figure 33.** Reverse U-shaped curves of divergence in regional welfare in the process of economic development



Source: World Bank, 2008

**Divergence between leading and lagging regions, as occurred in Poland, is typical for countries experiencing rapid growth.**

Rapidly growing countries of East Asia and Eastern Europe have experienced a similar divergence between regions as Poland has in recent decades. Economic activity in a number of these countries is still concentrated in a small number of favored leading areas, with agglomeration economies increasing their productivity, wages, and income per capita. Additionally, while Polish regions are still diverging in terms of economic output, overall disparities in wages and incomes have grown smaller over the last decade (even though it is not true for Podkarpackie and Świętokrzyskie), suggesting that Poland might have passed the peak of the inverse U-curve.<sup>26</sup> It is also important to remember that overall the last 20 years have been a “race to the top” for Polish regions. While according to some measures “leading areas” outperformed the laggards, residents of all regions benefited from growing economic opportunities and increasing incomes.

**Polish lagging regions are not a unique case.** Development processes in most countries left some areas behind. It is typical for such lagging regions to be

remote and have poor access to economic density which implies poor integration into economies of leading areas, their markets for labor, capital, goods, services, and ideas. As a result, it is typical for lagging regions to experience lower growth and productivity, and higher unemployment and poverty rates. From this perspective, the cases of Podkarpackie and Świętokrzyskie should be seen as normal instances of countries’ development experiences.

**This however doesn’t mean that individual lagging regions are doomed to stagnation.**

While spatial inequality is inevitable, particularly during stretches of rapid growth, this should not be seen as a death sentence for regions that have found themselves behind. Global experience shows that individual remote areas, and specifically cities, can achieve significant growth despite adversity: location, climatic factors and historic legacies. Examples include cities like Changsha in China, and Gaziantep in Turkey, that, despite unfavorable circumstances, have become leaders of economic growth in their countries, and even globally. Both cities are in remote locations in their countries. Gaziantep is located in southeastern Turkey, in the Anatolia region known for centuries as a less industrialized and less-

<sup>26</sup> Based on analysis of GUS wage data for Polish regions in 2004–2014.

-developed part of the country. Similarly, Changsha is a capital of an inland Chinese province that didn't enjoy the benefits of access to foreign markets that drove the development of coastal areas. However, through a combination of national and local policies, both cities managed to integrate into a broader economic context, address local growth barriers, and work on making the most

of local economic potential. (see Annex 1) Of course, not every remote city can repeat this achievement, and expectations should be set low. However, it is clear that through removing local growth constraints and tapping into local opportunities, most cities can improve economic outcomes for their residents and residents of surrounding areas.

## Conceptualizing a policy approach to lagging regions

### **Regional development policy shouldn't aim to achieve equal distribution of economic activity across space.**

Global evidence shows that achieving spatial economic uniformity is an unrealistic target. Policymakers should accept that economic growth and economic activity will concentrate in more productive places. This means that policy targets for investments into lagging regions shouldn't be formulated in terms of convergence to the leaders. Instead, development and growth achieved by every area should be appreciated on its own merit and targets should be set on the basis of economic trends and potential of individual regions. On the other hand, in upper-middle income countries it is achievable and important for public policy to aim for spatial convergence in welfare outcomes such as income and access to services.

### **Ensuring access to basic services and infrastructure everywhere should be a policy priority for all governments.**

This includes human capital investments that are proven to benefit the lagging regions, but most importantly benefit the people by expanding their economic opportunities. In Brazil, the educational system accounts for a large proportion of disparities in individual outcomes

as well as in regional economic development.<sup>27</sup> Investing in basic infrastructure and services in remote areas is also critical as it improves quality of life and creates basic conditions for human development. Local governments in lagging regions are often underfinanced, which means that providing access to infrastructure and services in lagging areas often requires transfers from higher levels of government.

### **Improving institutional environments in lagging regions is critical to ensure that the regions are not facing additional barriers to economic growth, which can reinforce divergence.**

Such institutional handicaps may include inefficient land markets that make it difficult for businesses to maximize their productivity through location selection and restrict agglomeration effects. Another example is household registration systems (like hukou in China), that restrict migration of people from less productive (mostly rural) to more productive (usually urban) areas, thus impeding progress of individuals and the economy at large.<sup>28</sup> Finally, cumbersome business or property registration systems reduce the productivity of local businesses that are already in a disadvantaged position due to their location.

<sup>27</sup> World Bank (2008) World Development Report 2009: Reshaping Economic Geography.

<sup>28</sup> World Bank (2008) World Development Report 2009: Reshaping Economic Geography.

**Improving connectivity is critical for integrating remote areas into the national economy.**

Improved connectivity provides better access to markets for businesses in the lagging regions, while simultaneously exposing them to greater competition from businesses in leading areas, which may be beneficial for some businesses in the lagging region, but threatening for others. Activities that respond better to improved infrastructure are those that benefit less from agglomeration economies: agriculture, agro-processing, and labor-intensive manufacturing. While governments should be aware of possible negative effects of improved connectivity for some of the local firms, they should encourage this policy because it creates incentives for capital and R&D investments for local businesses as they face tougher competition and gives local residents access to cheaper and better products and services.

**Cities in the lagging regions are where the opportunity for enhanced growth is concentrated.**

Examples of Gaziantep and Changsha (See Annex 1) show that even in lagging regions, cities can utilize local endowments and agglomeration economies to create growth opportunities. This observation doesn't mean that place-based policies should be given priority, particularly at the national level. Rather, they should be taken with caution, as many of them have misfired in the past. The work of What Works Center for Local Economic Development<sup>29</sup> in the UK and of Newmark and Simpson<sup>30</sup> shows that few locations-based initiatives lead to measurable positive job creation outcomes. But, if space specific interventions are considered, they should focus on cities, and local governments and other local actors should be granted greater authority to lead economic development, as long as they have sufficient capacity and resources.

**A broad diversity of policies can lead to positive outcomes at a city level, but cities should keep in mind the main principles of the what, who and how of city competitiveness.**

Since the contexts of individual cities are extremely diverse, there is no "one size fits all" scenario for promoting local competitiveness. However, the findings of the recent World Bank flagship report "Competitive Cities for Jobs and Growth: What? Who? And How?"<sup>31</sup> show that there are similarities in the characteristics of most successful cities. These cities combine policies addressing economy-wide enabling conditions with policies targeting specific sectors. If cities choose to target sectors, they give priority to tradable industries and identify sectors that are rooted in their economy, rather than aim to build new "Silicon Valleys" or "bio-tech clusters". To overcome the limits of their mandates and capacities, governments of successful cities involve broad coalitions, including the private sector in policymaking and implementation. They also leverage partnerships with national authorities and neighboring cities and regions. Finally, successful cities focus on effective implementation of policies, by setting development priorities and reflecting them in the budget allocation and building coordination mechanisms that allow teams in the government to focus on solving problems, rather than reporting achievements, and helping them collaborate across the silos of government departments. A number of these ideas were incorporated into the EU supported Research and Innovation Strategies for Smart Specialization that were rolled out across Europe, but further integration of these principles into funding allocation is required. For instance this approach should be used in the implementation of Integrated Territorial Investments, that were introduced in the 2014-2020 EU programming period.

<sup>29</sup> <http://www.whatworksgrowth.org/policy-reviews/>

<sup>30</sup> Newmark, D., & Simpson, H. (2014). Place-based policies; Said School of Business, University of Oxford.

<sup>31</sup> World Bank (2015) Competitive Cities for Jobs and Growth: What? Who? And How?

# EU investment in Podkarpackie and Świętokrzyskie

## Absorption of EU funds

### Both Podkarpackie and Świętokrzyskie were major recipients of EU cohesion policy support in recent years.

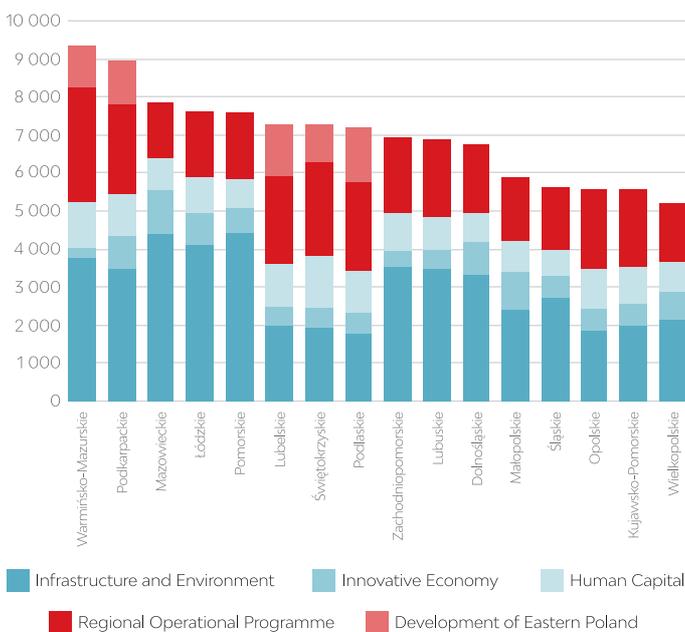
Within their Regional Operational Programs (ROP) (which doesn't include national and macro regional programs) between 2007–2015, Podkarpackie received €1.2 billion in EU funds, while Świętokrzyskie received €0.8 billion. Additionally a €2.4 billion Operational Program "Development of Eastern Poland" (PORPW) covered Podkarpackie and Świętokrzyskie, along with three other regions in Eastern Poland<sup>32</sup>. On a per capita basis, Podkarpackie received the second largest amount of EU support among Polish regions between 2007–2015, while Świętokrzyskie was ranked seventh out of 16, receiving almost 2,000 PLN per capita less. (Figure 34) However, both regions re-

ceived a larger proportion of total EU funding allocation to Poland than their share of population or GDP.

### Spatial allocation of funding within the regions was not even.

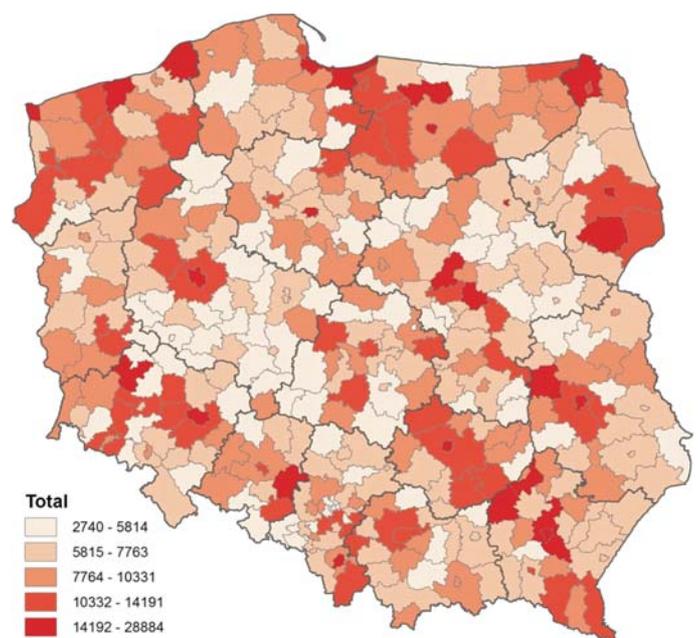
The more urbanized and developed municipalities and counties received a larger share of EU funds than the rest. The provincial capitals and their functional areas absorbed an especially large share of funds. Amongst all of the Polish regions, the biggest funding gap between a capital and the rest of its territory was observed in Podkarpackie. (Figure 35) The agglomeration of Rzeszów received 1 753 PLN more funding per capita than the rest of the province. Świętokrzyskie was fourth among the regions in terms of the size of this gap (the difference between the capital and the rest reached 1 410 PLN per capita).

**Figure 34.** Distribution of EU funding per capita in 2007–2013 funding period



Source: GUS

**Figure 35.** EU Cohesion policy funds 2007–2013 per capita (PLN), NUTS<sup>33</sup>



Source: GUS

<sup>32</sup> Here Eastern Poland refers to the macro region that includes 5 voivodships.

<sup>33</sup> These maps do not account for 100% of EU funding as a large proportion of it cannot be disaggregated spatially, for instance large transport infrastructure projects.

## The focus of EU support is best reviewed by individual program.

- In the Podkarpackie ROP, the largest share of funds was assigned to the priority axis II (technical infrastructure) – 1.6 billion PLN, closely followed by priority axis I (innovative economy) – 1.3 billion PLN. The largest projects included in the ROP were transport-related projects: modernization of the provincial road Zagórz – Komańcza (162 million PLN, of which 129 million PLN were contributed by the EU), and modernization of the railroad Rzeszów – Jasło. In fact, nine out of 10 of the largest EU supported projects in the region were in the transport sector. (See Annex 2, Table 7) The University of Rzeszów was a beneficiary of several other large projects (University Centre of Innovation and Technical and Naturalist Knowledge Transfer and Bio-Medical Sciences Centre of Innovative Research).
- In Świętokrzyskie ROP, the biggest chunk of funding was designated to the priority axis III – transport – close to €200 million, followed by the axes I (development of entrepreneurship) and axis II (support for innovation) – roughly €125 million. Transport accounted for seven out of 10 largest EU funded projects. (see Annex 2, Table 8) Transport investment largely went into improving connectivity of peripheral areas of the region to the capital, this included upgrades to regional highways, secondary roads and enhancing the capacity of the railways. The list of other large projects includes the recapitalization of the Loan Fund of the province, revitalization of the historical downtown of Kielce, as well as upgrading the IT infrastructure of the local governments.
- In the macro-regional program “Development of Eastern Poland” (PORPW), close to half of the projects and more

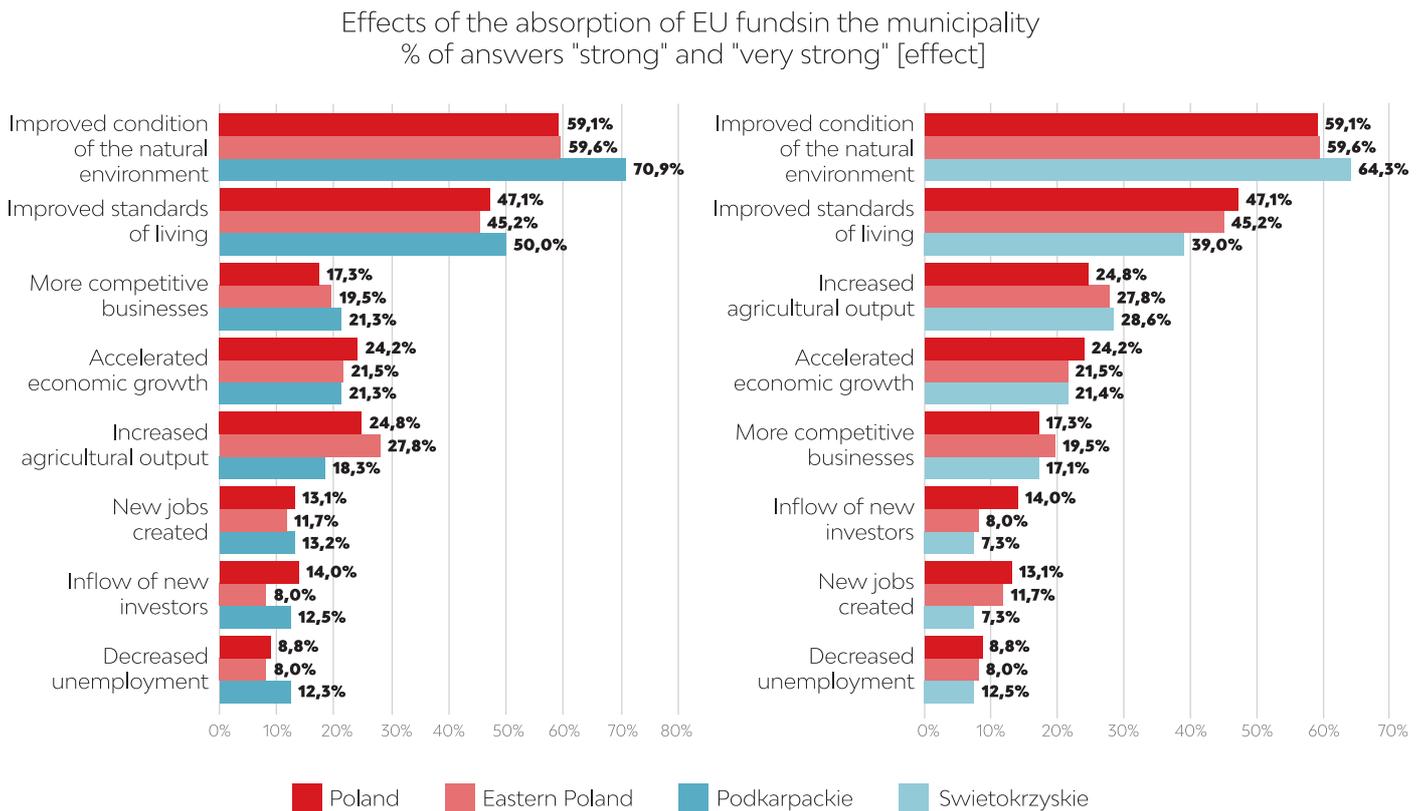
than one third of the funds were devoted to the “modern economy” axis that focuses on providing innovation support services and expanding university infrastructure. The information society infrastructure axis included one large project, the broadband web network, spanning all of eastern Poland. Additionally, significant funding was devoted to transport-related investments as a part of axis III (public transport in the capitals of the provinces) and axis IV (road projects). The projects from the sustainable tourism axis primarily focused on the development of biking routes.

## Results of cohesion policy in Podkarpackie and Świętokrzyskie

**There is hardly a robust way to evaluate the impact of cohesion policies on Podkarpackie and Świętokrzyskie.** Lack of economic convergence might be interpreted as a failure of the cohesion policies. But, as mentioned earlier, according to global evidence this is hardly a fair way to judge the policy. In reality, it is next to impossible to separate the effects of EU investors from other factors at a regional level. Thus, only evaluations of individual interventions or of perceptions of overall effects are available.

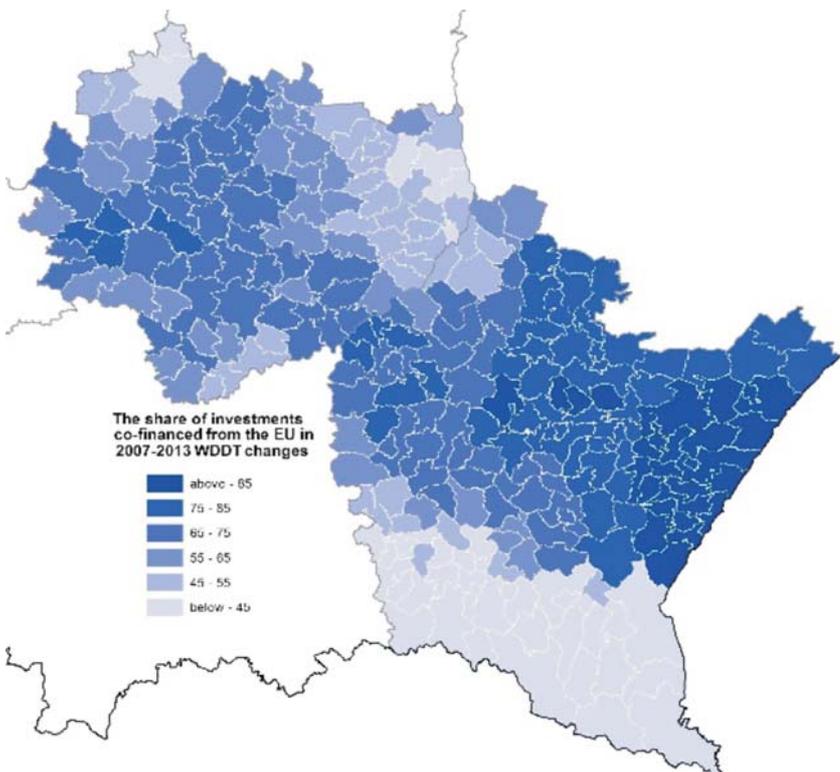
**Survey of municipalities reveals that, according to local governments, EU investments have had limited impacts on the local economies.** In both Świętokrzyskie and Podkarpackie, only a fifth of the municipalities have reported a strong impact of EU funds on economic growth. A similar share of municipalities reported improved business competitiveness, even though this share was higher in Podkarpackie. Finally, only around one in 10 municipalities thought that EU support helped to attract investors or create jobs. (Figure 36)

**Figure 36.** Municipal government perception of impacts of EU funds



Source: EUROREG (2013) municipality's survey

**Figure 37.** Changes in accessibility as a result of EU support (2007–2015)



Source: Oszacowanie... 2015

**In terms of individual interventions, EU investments can be credited with improving accessibility of lagging regions, but its potential effect on economic performance is unknown.**

The connectivity improvements are most visible in northern and central parts of Podkarpackie along the A4 motorway, and in the majority of the area of Świętokrzyskie along the expressway S7. The most significant improvement has been on the eastern edges of Podkarpackie, where economic performance remained rather weak. (Figure 37) Again, this emphasizes that the connectivity improvements might not have significant impacts on local economic outcomes, either because they lead to displacement of local business from markets through greater competition, or simply because in Polish scale the achieved gains in access to markets are too modest to lead to major economic shifts.

# Conclusion and consideration for EU approach to lagging regions

**Investment effectiveness evaluation and fund allocation shouldn't be driven by economic convergence targets.** For now, the significance of the effects of EU investment on the long-term economic potential of the regions is unclear. However, it is clear that the target of achieving long-term convergence in terms of GDP per capita is misconstrued. Instead of comparing economic growth rates, the evaluation of cohesion investments should focus on absolute growth targets that reflect conditions of individual regions. Additionally greater emphasis should be given to the role of cohesion policy in improving quality of life in lagging regions. This will encourage more investments in urban upgrading, protection of natural habitat and environmental sustainability projects.

**The focus on investment in urban areas and improving access to urban services and markets for rural areas should be officially recognized by the EU.** Though not official, the current allocation of funds heavily prioritizes urban areas. This is largely a result of greater absorptive capacity of the urban governments. But, according to theory, global evidence, and patterns of economic growth in lagging regions of Poland, investments in urban areas are more likely to lead to growth and improved outcomes for beneficiaries.

**Interregional connectivity investments have been beneficial for Poland in the past, but local connectivity and transport sustainability should be prioritized in the future.** The fact that the largest EU supported projects of recent years focused on connectivity is consistent with the conclusions from theory and global evidence. However, at a regional level the additional effect of these projects in Poland

is likely to be limited going forward, because de facto travel time gains are going to be marginal. Instead, greater attention should be given to investments focusing on improving connectivity within regions, and offering residents of rural areas better access to urban markets and employment opportunities through multimodal transport options. This is of particular importance to Podkarpackie and Świętokrzyskie, where hidden unemployment in agriculture are prominent. Additionally, better links between rural areas and urban markets may support further commercialization of agriculture. Local transport investments are likely to be much cheaper than major national corridors and are likely to have a more direct effect on economic outcomes of people and communities.

**Focus of investments in lagging areas should shift from basic infrastructure to education and health.** International development experiences show that basic infrastructure and services (along with basic institutional conditions) have the most significant impact at low-levels of development, while at latter stages of development, human capital plays a critical role. Recent World Bank analysis of growth patterns in 750 of the world's largest cities showed that human capital and innovation are important determinants of growth for cities of upper-middle and high-income, but not at low-income level.<sup>34</sup> This is especially true for countries and regions aiming to transition from a middle-income economic model, which achieves productivity growth through technology adoption, to a high-income economic model, where innovation is the source of productivity gains. In Polish lagging regions, access to basic services and infrastructure is already at a sufficient level largely due to EU investments of the

<sup>34</sup> World Bank (2015) Competitive Cities for Jobs and Growth: What? Who? And How?

last decade. Additionally, at current levels of development of lagging regions, further growth and transition to high income status will require innovation. Thus, greater attention should be given to investments into education, health-care, and other forms of human capital development and innovation infrastructure, rather than basic service provisions.

**Place-based private sector development policies should start with engaging local actors and building their capacity.**

Generally, place-based policies do not work, though there are cases when they do. Cities that have managed to turn themselves around, despite adversity, were characterized by an inclusive and well-informed approach to policy making at a local level. They often had broad based coalitions of actors, and rather sophisticated and capable

governments.<sup>35</sup> This suggests that to potentially succeed, place-based policies should be driven by local actors and implemented through coordination of multiple actors and joint prioritization of investments. But first, the investments should focus on building capacity of local actors for designing and implementing economic development initiatives in an inclusive manner. This may include supporting development of formal public private dialog structures, technical trainings, improving planning and budgeting practices, increasing transparency and accountability of governing bodies and optimizing organizational structures to promote focus on implementation. Integrated Territorial Investments introduced in the 2014–2020 programming period of the EU Cohesion Policy creates a great opportunity for this approach to be implemented.

<sup>35</sup> Doner, R. F., & Schneider, B. R. (2016). The Middle-Income Trap. World Politics.

# Annex 1.

## Competitive Cities in Lagging Regions

### Gaziantep, Turkey

30 years ago, Gaziantep was a medium-sized city in a lagging region of Turkey. It was poorly integrated into the growing economy of the coastal west, and didn't have natural resources or arable lands to kick start its economy. Migration to the coast was seen as the biggest life goal by most of the residents of the city.

Today, Gaziantep is one of the fastest growing metropolitan economies in the world. It is a city that has exported its way to prosperity. Its economic success story is dominated by indigenous light manufacturing firms, which now sell their products in some 175 countries around the globe. Some top-level numbers are impressive: Gaziantep's population has grown from 600,000 as recently as 1990, to about 2 million inhabitants today; merchandise exports increased tenfold in just 11 years, from \$620 million in 2002 to \$6.2 billion in 2013. Prosperity is evident in the city's streets, and Gaziantep remains a magnet for tens of thousands of newcomers each year. This once quiet corner of Turkey has emerged as an international manufacturing hub, and increasingly a tourist destination.

The road to prosperity for Gaziantep wasn't straight-forward and its success story has flaws. The city benefited from a positive national policy context, particularly trade liberalization, and from national government investments in infrastructure. The light manufacturing export driven growth model also wouldn't have been possible without the city's favorable geographic location on established trade routes. However, the key actors in the city played a major role in making the most of these encouraging conditions.

Local leaders have prioritized ensuring a business environment conducive to company growth, which includes a diverse package of initiatives. In addition to lobbying the central government for national investment in climate improvements, successive mayors have worked together to streamline bureaucracy, reduce the administrative burden on companies, and provide adequate infrastructure for production and market access. Being in southeastern Anatolia, Gaziantep also benefits from comparatively low business costs, including land and labor.

Gaziantep's Organized Industrial Zones (OIZs) have been an important, and likely vital, ingredient in the metropolitan economy's export-driven success. Located 15 kilometers northwest of the city, the OIZs host more than a thousand companies employing over 100,000 workers. Bringing together businesses previously scattered geographically, the OIZs offer: quality infrastructure (energy, wastewater treatment); expedited permitting/one-stop service centers; the clustering of similar firms; and an efficient, less bureaucratic private-sector regime. Four OIZs are currently in operation, one is under construction, and a sixth one (larger in size than the previous five combined) is planned for a location southwest of the city, and thus closer to Mediterranean ports. Based on a national law, OIZs exist all over Turkey, but have been much more successful in Gaziantep than the government-run ones in Adana or Mersin, primarily because of their private-sector characteristics: they were initiated by the Chamber of Industry (GSO), forming a new legal entity which acquires land, allocates it to firms, and can withdraw it again if land is not used productively. Firms contributed to the OIZs' construction, and later become shareholders. The OIZs

are run by five-member management boards. While some of Gaziantep firms' growth might have happened anyway without the OIZs, it is clear that by providing critical infrastructure and a conducive regulatory regime not available elsewhere in the city, the OIZs have played a key role in helping Gaziantep companies to expand, export, collaborate with similar adjacent businesses, and benefit from other effects usually associated with geographic agglomeration (knowledge spillovers, the development of a specialized labor pool, etc.).

But most impressively, Gaziantep provides a stellar example of effective stakeholder engagement (or public-private dialogue – PPD) and collective action for economic development. The city's private sector is well developed, with significant institutional capacity and funding, but also a keen interest in shaping the city's development. Since at least the late 1980s, Gaziantep's business leaders have had the ear of the city government, and particularly the Mayor of the Metropolitan Area, who instituted a series of pro-business initiatives and greatly enhanced the city's functionality and livability during his 15 years in office. Although informal relationships remain important, the institutional framework for this engagement is provided by the City Council, a sort of metropolitan parliament in which government and stakeholders come together to discuss issues and formulate recommendations, including on economic development. Its greatest accomplishment is facilitating dialogue between business leaders, universities and communities, which otherwise might not happen. On the whole, local government in Gaziantep has been a valuable partner to business, without seeking to dominate economic development, nor does it directly benefit from business growth through increased fiscal receipts, for example. Collectively, Gaziantep's business and elected leaders have also been able to leverage their political influence in Ankara, acting as champions for the city and securing central government support for such economic development priorities as transport, OIZs, technology develop-

ment, and capital access and export assistance for SMEs. In fact, in Turkey, Gaziantep is known as a city that regularly punches above its weight politically.

## Changsha, China

Changsha is a mid-size (for China), secondary city that has grown its economy by nurturing and diversifying its core industries, and systematically building human capital. Changsha lacked the advantages of other Chinese cities in the coastal provinces, whose promotion of higher value-added manufacturing benefited from strong transportation linkages and external connectivity, as well as high levels of human capital. However Changsha has managed to expand its manufacturing base, both attracting and fostering the growth of firms that have become globally competitive. Outside manufacturing, the city is home to one of China's most dynamic media companies, albeit largely as a result of provincial actions. The city's success is partly due to endowments and national and provincial factors. Yet, the city's own government has been an important catalyst for growth, effectively addressing perennial problems such as inter-agency cooperation, government support for local businesses, and improvements to human capital levels.

Above all, the municipal government strategically intervened to capitalize on these national trends and location advantages. The municipal government made deliberate investments to improve the city's competitiveness, prioritizing the growth of existing firms as well as the attraction of new firms. Changsha is an example of a city that simultaneously utilized all of the key levers that cities can use to promote economic development as defined by the World Bank flagship report "Competitive Cities for Jobs and Growth: What? Who? And How?". They are: improvement of regulatory environment, development of skills and fostering innovation, focusing on providing infrastructure and access to land and providing support to businesses and entrepreneurs.)

The municipal government actively supported the growth of primary industries, and in particular, the construction machinery industry. The most unique government initiatives were intended to promote firms that could be globally competitive by providing market information to firms, promoting sourcing from top global input suppliers in lieu of local procurement requirements, and support for R&D and attraction of top talent to the city. Through promoting individual firms' competitiveness, the government has consciously and unconsciously cultivated a fierce competition between local firms. The construction machinery industry in Changsha has accounted for over 100,000 direct jobs, generated worker training programs and contributed significantly to municipal tax revenues and increased incomes that have improved welfare as well as competitiveness.

The city placed a high and sustained priority on human capital and developed a two-pronged approach to improve upon existing levels of human capital in the city. First, the city attracted high-level talent both domestically and abroad: leveraged national talent attraction programs; and initiated municipal programs of their own to effectively target, recruit and compensate new talent willing to relocate to the city. Simultaneously, the city addressed existing pools of talent through the regulation

and promotion of vocational degree programs and increased employment through the development of specialized "in-demand" skill sets. Both strategies have been successful, with vocational schools teaching applicable skills and talent programs attracting thousands of high-level "talents" to the city.

These initiatives were successful largely due to Changsha's extremely effective governance model. The government utilized effective inter-agency coordination mechanisms, called "Leading Groups" to coordinate investment attraction and investor aftercare across various departments and levels of government. Many cities find investment attraction hard to execute in practice, with investments frequently getting stuck due to government departments working in silos. However, the Leading Groups helped the city to avoid these silos by providing a framework with clear roles, and reporting requirements and accountability mechanisms. For instance, one of the key rules of Leading Groups is that only unresolved problems are elevated to the next level, not reporting of achievements, and employees are encouraged to resolve issues at the lowest level possible. At the same time, the city was disciplined in letting go of industries that were not competitive, or competitive only in the presence of permanent subsidies.

## Annex 2. Largest EU-supported projects in Podkarpackie and Świętokrzyskie

**Table 7.** Biggest EU supported projects – Podkarpackie region

No	Project	Value in PLN		Sector
		Total project	EU support	
1	Construction of the motorway A-4 sections Tarnów – Rzeszów, Krzyż – Rzeszów Wschód, and the section of the expressway S-19 Rzeszów Zachód – Świlcza.	5 295 490 060	2 969 050 618	transport
2	Construction of the motorway A4 Rzeszów – Korczowa	4 754 825 500	2 890 243 729	transport
3	Modernization of the rail line E30/C-E30, section Kraków – Rzeszów	3 440 923 905	2 054 842 573	transport
4	Improvement of the rail traffic safety, construction of the new, high standard rail interchanges	582 924 050	445 362 086	transport
5	Modernization of the national road No 4, section Machowa – Łańcut	590 494 386	439 068 566	transport
6	Organization of the integrated public transport in Rzeszów and vicinity	333 110 069	250 555 783	transport
7	Modernization of the rolling stock PKP Intercity S.A. for the rail line Przemyśl – Szczecin – Etap II	421 530 697	239 447 059	transport
8	Broadband Internet network for eastern Poland – Podkarpackie voivodeship	322 011 631	222 845 377	Telecommunication and e-services
9	Construction of the expressway S19, section Stobierna – Rzeszów	259 552 913	201 224 582	transport
10	New rail rolling stock for the connection between voivodeships, operated by regions Małopolskie, Podkarpackie, Śląskie i Świętokrzyskie	273 957 691	188 977 859	transport

**Table 8.** Biggest EU supported projects – Świętokrzyskie County

No	Project	Value in PLN		Sector
		Total project	EU support	
1	New rolling stock for PKP Intercity S.A. passenger rail transport – 20 electric trains	1 156 610 820	658 050 400	transport
2	Construction of the expressway S7 Radom Jedlinsk – Jędrzejów, including Kielce ring road	837 326 440	629 254 375	transport
3	Construction of the expressway S7 sections Radom Jedlinsk – Jędrzejów and Skarżysko-Kamienna – Występa	719 147 927	504 927 129	transport
4	Improvement of the rail traffic safety, upgrading of railway crossings	582 924 050	445 362 086	transport
5	Construction of the expressway S12/S74, section Kielce – Cedzyna	354 652 501	266 618 634	transport
6	Public transport development in Kielce Metropolitan Area	341 568 102	227 753 837	transport
7	New rail rolling stock for the connection between regions Małopolskie, Podkarpackie, Śląskie and Świętokrzyskie	273 957 691	188 977 859	transport
8	Construction of the waste utilization plant in Kielce	306 003 585	165 076 182	Environmental protection
9	Broadband Internet network development	200 728 909	139 420 589	Telecommunication and e-services
10	Development of the infrastructure of Jan Kochanowski Kielce University – of the University Campus construction	161 737 852	135 506 669	Science and education





