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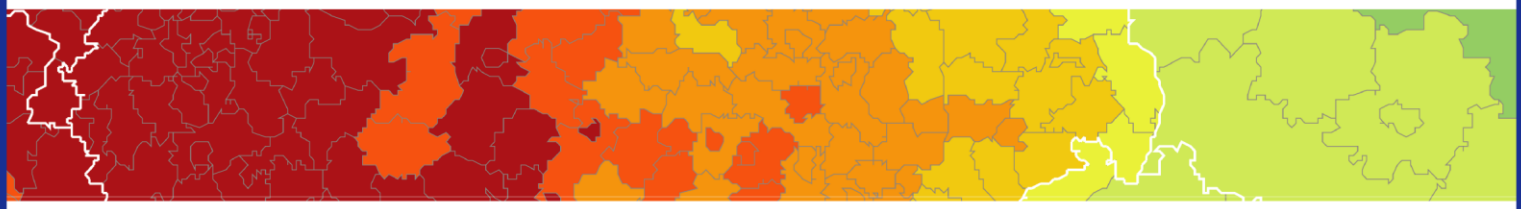

BusDEV - Business Development Opportunities at External EU Borders

Targeted Analysis

Annex II
Stakeholder territory report
Utena+2, Lithuania

15/02/2021

This targeted analysis is conducted within the framework of the ESPON 2020 Cooperation Programme.

The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States, the United Kingdom and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.

This delivery does not necessarily reflect the opinion of the members of the ESPON 2020 Monitoring Committee.

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Acknowledgements
Authors of this report would like to thank Inga Šidlauksienė from the Euroregion “Country of Lakes” office in Lithuania.

ESPON EGTC: Zintis Hermansons (Project expert) and Johannes Kiersch (Financial expert)

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Contact: info@espon.eu

ISBN: 978-2-919795-81-9

BusDEV - Business Development Opportunities at External EU Borders

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Abbreviations

CAP	Common Agriculture Policy
CF	Cohesion Fund
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EMFF	European Maritime and Fishing Fund
EGTC	European Grouping of Territorial Cooperation
ENP	European Neighbourhood Policy
ESF	European Social Fund
ESIF	European Structural and Investment Funds
ESIF OP	European Structural and Investment Fund investments as delineated in Lithuania's Operational programme for the European Union funds' investments in 2014-2020
ESPON	European Territorial Observatory Network
EQI	European Quality of Government Index
ERDF	European Regional Development Fund
ETC	European Territorial Cooperation
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GVA	Gross value added
ITI	Integrated Teritorial Investment
LAU	Local Administrative Unit
NACE	Nomenclature of Economic Activities
NUTS	Nomenclature of Territorial Units for Statistics
OP	Operational Programme
ROP	Regional Operational Programme
SEZ	Special Economic Zone
SME	Small and medium-sized enterprise

Introduction

This report presents findings of the targeted ESPON Targeted Analysis activity "Business Development Opportunities at External EU Borders" in one of its three stakeholder territories – Euroregion "County of Lakes" or Utena+2, Lithuania. To be more precise, the report presents findings on the existing business environment as well as effectiveness and territorial effects of the existing business support mechanisms in the stakeholder territory.

Historically, the presence of monotowns[1] define Utena+2's business environment. This made the regional economy dependent on the performance of a few strategic industries, namely textile and food industries and nuclear energy production. To remain competitive, the region's textile and food industries modernised their production and marketing processes in the early 2000s. At the same time, the region's economy advanced since the early 2000s.

On the contrary, modernisation led to large reduction in jobs in Utena+2. The closure of a nuclear power plant in Ignalina in 2009 led to similar job losses. These developments as well as the lack of entrepreneurship amongst Utena+2 population led to increased unemployment. The latter encouraged migration and created a vicious circle of increasing depopulation and worsening socio-economic conditions over the last 10 years.

Against this background, this report provides a contextualised picture of the current socio-economic conditions in Utena+2 and presents how the aforementioned industrial changes affect location endowments of Utena+2. Findings illustrate socio-economic features in which Utena+2 lags behind and highlight strengths and potential for future development.

Chapter 0 presents Utena+2's potential and existing "entrepreneurship ecosystem". Following task 1 of this study, this is done by analysing "location" (sub-chapter 1.1) and "beyond location" aspects (sub-chapter 1.2).

The "location" analysis provides a snapshot of the current socio-economic situation of Utena+2 by defining locational endowments, namely human capital (sub-chapter 1.1.1), locational (sub-chapter 1.1.2) and physical endowments (sub-chapter 1.1.3). Performance indicators per endowment are used to benchmark Utena+2 against the national average and in some cases other regions of Lithuania. Sub-chapter 1.1.4 sheds light on border effect on current and future development of Utena+2 via a border reality assessment.

The "beyond location" analysis provides an overview of existing institutions for businesses in Utena+2, divided into 5 areas:, namely partnership and networks in place (sub-chapter 1.2.1), existing clusters (sub chapter 1.2.2), innovation (sub-chapter 1.2.3), governance (sub-chapter 1.2.4) and access to finance (sub-chapter 1.2.5).

[1] Monotown is a city or town dominated by a single industry or company.

Sub-chapter 1.3 assesses the development of endowments in the region in the past 5 years. Sub-chapter 1.4 summarises the finding and presents Utena+2's potential and existing "entrepreneurship ecosystem".

Chapter 0 discusses business support policies and measures available in the region in the present programming period of 2014-2020. The chapter starts with a structured overview of the business support system in sub-chapter 2.1. Sub-chapter 2.2 details main business policies at EU, national and regional levels. Sub-chapter 2.3 elaborates on the analytical findings with regards to the effectiveness of a number of selected business support measures.

A Territorial Capital Matrix brings together findings from the entrepreneurial ecosystem and available business policies and support by highlighting territorial capital relevant for business development. Chapter 0 presents a territorial capital matrix for Utena+2.

Finally, chapter 4 presents eight recommendations for the border region to further enhance its business development environment and make most use of available business development policies and measures.

1 Regional potential and the "entrepreneurship ecosystem"

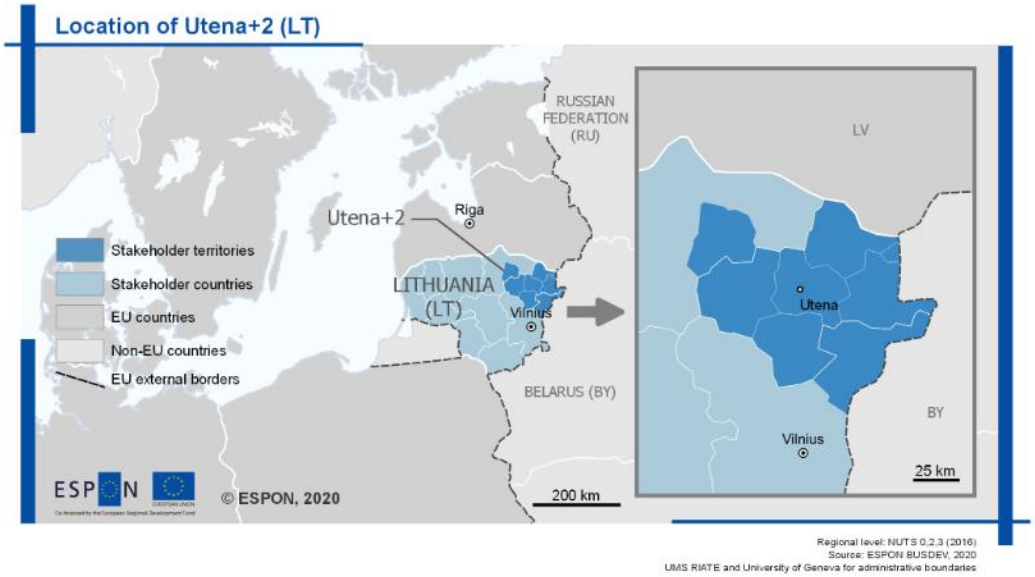
1.1 Analysis of the "location" aspect

Utena+2 is located in the north eastern part of Lithuania and borders the Republic of Latvia and the Republic of Belarus. Utena+2 has around 320 km of EU terrestrial external border with Belarus, and around 80 km of EU internal border with Latvia.

Utena+2 accounts for roughly 15% of Lithuania's total area, namely 9 962 km^2. Utena+2 consists of of one NUTS3 territory, Utena county (LT029), and two LAU territories – Kupiškis (LT57) and Švenčionys district municipalities (LT86). Utena county comprises 6 LAU territories: Anykščiai (LT34), Utena (LT82), Molėtai (LT62), Ignalina (LT45), Visaginas (LT30) and Zarasai (LT43) district municipalities. Švenčionys district municipality has the largest surface (1691 km^2), while Visaginas district municipality is the smallest (58 km^2).

Utena is the largest town of the region and is situated approximately 100 km from the capital, Vilnius, and around 70 km from the border with Belarus.

Map 1.1 Stakeholder territory in Lithuania



Source: Consortium

1.1.1 Human capital

Population

In 2019, Utena+2 had a **population** of 167 177, roughly 6% of the total population of Lithuania. Utena+2's population has been declining since 1992 and is Lithuanian's region with highest population decline. that has been declining most. Between 2009 and 2019, Utena+2's population declined with 24%[2] which is twice as high as the national average in the same period

[2] In terms of absolute numbers, the population of Utena+2 declined from 215 832 inhabitants in 2009 to 167 177 inhabitants in 2019.

(12%)[3]. At LAU level, population decline in Utena+2 ranged from 20% in Utena district municipality to 29% in Visaginas district municipality, which was the second worst performing municipality in Lithuania in the aforementioned period[4].

The move of young population from the suburban regions such as Utena+2 to the capital region of Vilnius was a main driver for negative population development. Whereas these migration flows counterbalance outmigration from Vilnius to elsewhere, it creates a negative loop of ageing population, low birth rates and thus higher than average level of depopulation in Utena+2.

Negative migratory tendencies can be illustrated by the average annual net migration rate per 1 000 inhabitants which was -9.4 in the whole country, -1.36 in Vilnius country and ranged from the lowest -26.98 in Visaginas to the highest -10.19 in Švenčionys district municipalities from 2009 to 2018.

Declining population naturally leads to lower population density. At the beginning of 2019, Utena+2 had a population density of 17 people per km^2. All district municipalities but Visaginas had density below the national average of 42.8 people per km^2. The least densely populated municipality was Ignalina with roughly 11 people per km^2.

There is no observable pattern between population density in municipalities and their proximity to borders. Population density in most municipalities varied from 10.3 to 15.5 people per km^2 in 2019. Higher population densities were observed in Utena district municipality – 30.4 people per km^2, and significantly higher in Visaginas municipality – 317.5 people per km^2.

High level of population density in Visaginas municipality is a direct result of municipality being primarily urban. 99% of the population in Visaginas municipality lived in urban areas. This number exceeded the national average – 67% – by around 32 percentage points in 2019. Utena district municipality also had an urban-rural population ratio higher than the national average at 68% in 2019.

Other municipalities had lower average urban-rural population ratios than the national average, ranging from 62% in Švenčionys district municipality to 32% in Molėtai district municipality. The overall urban-rural population ratio of Utena+2 region was below the national average and stood at around 55% in 2019.

Despite the grim demographic outlook of Utena+2 region, the dependency ratio[5] in most municipalities remained relatively stable and even saw small declines from 2009 to 2019. Yet, dependency rations remained above the national average of 53 in 2019.

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[3] In terms of absolute numbers, the population of Lithuania declined from 3 183 356 inhabitants in 2009 to 2 794 184 inhabitants in 2019.

[4] In terms of absolute numbers, the population of Visaginas district municipality declined from 24 644 inhabitants in 2009 to 18 414 inhabitants in 2019.

[5] The dependency ratio is an age-population ratio of those typically not in the labour force (the dependent part ages 0 to 15 and 65+) and those typically in the labour force (the productive part ages 15 to 64).

The dependency ratio remained the same from 2009 to 2019 in Kupiškis (59) and Zarasai (60) district municipalities. In the same period, the dependency ratio declined between 3% to 7% in 4 municipalities – Švenčionys, Anykščiai, Ignalina and Molėtai. These municipalities had a ratio ranging from 54 in Švenčionys district municipality to 63 in Ignalina district municipality in 2019. The dependency ratio increased in Utena and Visaginas district municipalities from 49 to 54 (10% increase) in the former and from 27 to 53 (almost 100%) in the latter between 2009 and 2019. Increased dependency on the working-age population in Visaginas district municipality can be mainly explained by the closure of Ignalina Nuclear Power Plant which led to a huge exodus of power plant workers.

Education

Over the last 10 years, educational attainment levels in the 25-64 age group improved greatly in Lithuania. For instance, there was a substantial 12.25 percentage point increase in the share of people with a high level of education[6] from 30.8% in 2009 to 43.5% in 2019[7]. The latter allows Lithuania to boast one of the highest shares of people with a high level of education in the EU (EU average – 32.8% in 2019).

At the same time, the number of people with a low level of education[8] has declined from 8.8% to 5.03%, while the number of people with a medium level of education[9] has also declined from 60.4% to 51.82%[10].

Upward mobility of educational attainment can be partially explained by the previously mentioned migratory tendencies (see sub-chapter 1.1.1). It is likely that more people with lower rather than high level of education emigrated from the region due to economic reasons. The most recent study by the International Organization on Migration (2014) suggests that more than 80% of Lithuanian migrants were unemployed for more than six months before their migration, while the rate of unemployment within group of people with lower levels of education has always been relatively high. For instance, unemployment rate decreased from 39.3% in 2010 to 17.5% in 2018 among individuals with low levels of education; it also fell from 21.8% in 2010 to 8% in 2018 among individuals with medium level of education.

In contradistinction, unemployment rates for individuals with a high level of education never exceeded double digits and ranged from the highest of 7.6% in 2010 to the lowest of 2.8% in 2018. As such, it is likely, that high unemployment within the low and medium levels of education spurred emigration and consequentially lowered the shares of these education groups. In addition to this, high unemployment within the low and medium levels of education

[6] High level of education refers to people with tertiary level of education (ISCED levels 5-8).

[7] In terms of absolute numbers, there were 517 700 people with high level of education in 2009 and 658 500 people in 2019.

[8] Low level of education refers to people with at most a lower secondary qualification (ISCED levels 0-2).

[9] Medium level of education refers to people with post-secondary not tertiary education (ISCED level 3-4).

[10] In terms of absolute numbers there were 148 000 people with low level of education in 2009 and 76 000 people in 2019. As for people with medium level of education, there were 1 015 600 people in 2009 and 790 800 in 2019.

may have also boosted requalification process of individuals towards a higher level of education orientation.

Despite Lithuania being amongst Europe's leaders in terms of the high level of education rates, the high level of education is relatively unequally distributed at the national level. In 2019, the highest shares of population with a high level of education were concentrated in Vilnius and Kaunas counties – two regions with most universities and relatively good economic performance. Whereas shares of Vilnius and Kaunas counties were 56% and 48% in 2019, respectively, the share of Utena county was 34% in 2019 and stood well below the national average of 43%. A relatively low ratio of population with a high level of education in Utena+2 can be explained by the fact that there are no universities in the region, only 1 college and 6 vocational training institutions[11]. The lack of higher education in Utena+2 accelerates the previously mentioned migratory tendencies[12].

The only college in the region has two faculties: faculty of Business and Technologies, and Medicine, and is oriented towards the provision of specialists that correspond to the primary needs of the region's labour market[13]. Over the last 10 years, in line with declining population trends, the number of newly admitted college students dropped by 59% from 1076 in 2008 to 437 in 2018. This decline is higher than elsewhere in Lithuania where the number or newcomers decrease by 49% over the same period. Higher decline of newcomers in Utena+2 may be partially explained by relatively poor quality of education compared to other colleges outside the region.

Utena+2 hosts 6 vocational training institutions one in each municipality but Ignalina and Anykščiai. All vocational education institutions offer educational services which primarily correspond to the needs of the local labour market, and especially the manufacturing industry. Over the last 10 years, the number of newly admitted vocational education students dropped by 20% from 1 441 in 2008 to 1 146 in 2018. The latter is in line with declining population trends and less newcomers to vocational education institutions nationwide.

There is hope that the trend of declining newcomers to vocational education institutions will reverse in the future. The most recent national vocational training system reform has raised entry requirements and increased the scrutiny over the quality of educational services provided. These measures are expected to increase the quality of vocational training education and consequently raise the prestige of it. Data from 2020 illustrates positive results. The number of newcomers to vocational training institutions increased from around 14 700 in 2019 to around 19 000 in 2020 – more than 30% increase.

[11] Up to 2019-2020, there were 7 vocational training institutions in the region. However, one vocation training institution was closed in Anykščiai district municipality in 2019.

[12] Young population seeks better education and consequently employment opportunities outside Utena+2. As a result, it migrates into Vilnius and Kaunas regions.

[13] More information available at https://www.utenos-kolegija.lt/en.

Even though data for individual vocational training institutions is publicly unavailable, such a tendency is especially welcome for Utena+2, which has 6 vocational training institutions. One of the 6 institutions – Visaginas vocational education centre – has a potential to benefit from the reform especially. This is mainly because the centre has a long history of academic excellence[14]. Hence, the reform will likely raise the quality of education further leading to higher number of newcomers.

Labour market

Declining population consequently led to fewer people in working-age (15-64 years old) in Utena+2. Working-age population declined by around 22% from 127 295 in 2009 to 99 841 (around 60% of the region's population) in 2019. The decline is 8 percentage points higher than the national average of 13% over the same period[15].

Declining working-age population in conjunction with the previously described lower than the national average high educational attainment shapes the labour market structure of the region. Less-knowledge intensive and domestic demand-oriented sectors play a more important role in the economy of Utena+2 compared to other regions of analysis (Table 1.1).

Around 12% out of the 53 800 employed people in Utena+2 were working in the agriculture, forestry and fishing sector (A) in 2017. This is significantly higher compared to the national average of 8.52% and 2.43% in Vilnius country. Industry (B_TO_E) is also a significant employer in Utena+2 with 24.35% share of employment. This is significantly higher compared to the national average and Vilnius county. The remaining 55.54% of employed people were working in the service sector (G_TO_U). This is significantly lower compared to the national average of 66.54% and 76.82% in Vilnius county.

Table 1.1: Employment distribution in Lithuania, Utena+2 and Vilnius county in 2017[16]

NACE classification	NACE branches	Republic of Lithuania	Utena+2	Vilnius county
A	**Agriculture, forestry and fishing**	**8.52%**	**11.68%**	**2.43%**
B_TO_E	**Industry**	**17.61%**	**24.35%**	**13.59%**
C	Manufacturing	15.38%	18.15%	11.88%
F	Construction	7.34%	8.52%	7.17%
G_TO_U	**Services**	**66.54%**	**55.54%**	**76.82%**
G_H_I	Wholesale and retail trade, transport, accommodation and food service activities	27.44%	22.38%	28.86%
J	Information and communication	1.99%	1.17%	4.07%
K	Financial and insurance activities	1.44%	1.04%	2.56%
L	Real estate activities	1.08%	1.14%	1.23%

[14] Situation of Visaginas vocational education centre is elaborated further in the next section.

[15] In terms of absolute values, Lithuanian working age population declined from 1 990 803 in 2009 to 1 721 700 (or around 62% of the country's population) in 2019.

[16] Since employment distribution as per NACE classification is unavailable at the LAU level, values for Utena county were used as a proxy for employment distribution in Utena+2.

NACE classification	NACE branches	Republic of Lithuania	Utena+2	Vilnius county
M_N	Professional, scientific and technical activities; administrative and support service activities	7.35%	4.39%	11.38%
O_P_Q	Public administration, defence, education, human health and social work activities	23.04%	22.23%	24.29%
R_TO_U	Arts, entertainment and recreation, repair of household goods and other services	4.20%	3.19%	4.45%

Source: Consortium based on data of Statistics Lithuania, 2020

Unemployment in all municipalities of Utena+2 was higher than the national average and Vilnius county in 2019. Whereas unemployment in Lithuania and Vilnius county amounted to 8.4% and 7.3%, respectively, the rates in Utena+2 ranged from 8.7% in Švenčionys district municipality to 14.4% in Zarasai district municipality in 2019.

In terms of the share of long-term unemployment amongst unemployed people, Utena+2 was also lagging behind. Whereas the national average and Vilnius county share of long-term unemployed people amongst unemployed was 22.58% and 18.67%, respectively, the share varied from 23.35% in Švenčionys district municipality to 44.18% in Zarasai district municipality.

High levels of unemployment and, especially, long-term unemployment in Utena+2 can be mostly attributed to the mismatch of skills, low wages and insufficient aggregate demand. Representatives of public institutions and of businesses argue that despite the increasing number of open vacancies in the region, a large number of them remains unfilled because labour skills of unemployed people do not meet the market needs. This problem is especially prominent among long-term unemployed people who, as it was suggested by representatives of public institutions, have low motivation to reintegrate into the labour market and are generally older. The latter implies that it is highly unlikely that they will successfully reintegrate into the labour market in the future.

Low wages [17] also contribute to high unemployment figures by demotivating skilled workers and reducing labour supply in the region. The relationship between insufficient aggregate demand and unemployment is elaborated in the next sub-section.

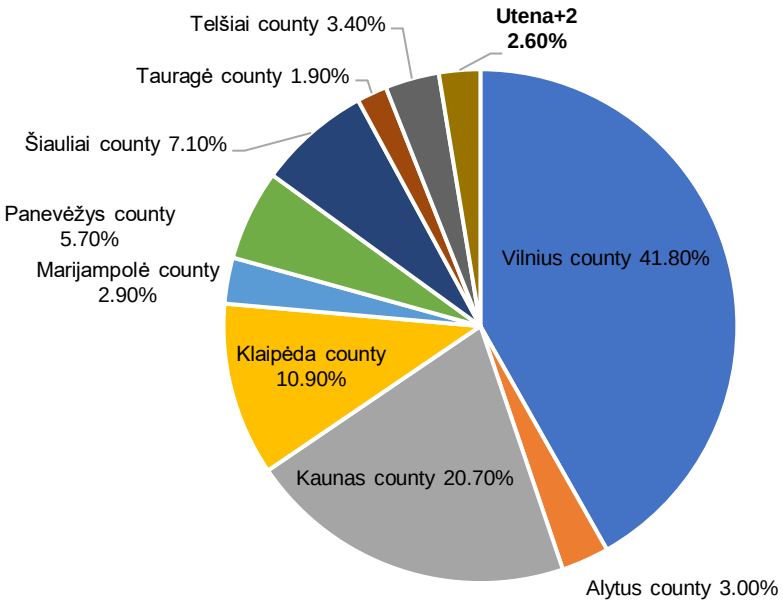
Economy

The share of Utena+2 in national GDP was 2.60%[18] in 2018. As it is seen in the figure below, the stakeholder territory had the second lowest contribution to Lithuania's GDP in 2018.

[17] Wages are further discussed in sub-chapter 1.3.7.

[18] Since data for GDP is unavailable at LAU level, values for Utena county were used as a proxy to reflect Utena+2 contribution to Lithuania's GDP.

Figure 1.1*: County contributions to Lithuania's GDP, 2018*



Source: Consortium based on data of Statistics Lithuania, 2020

Table 1.2 presents GDP per capita figures across Lithuania in 2018.

Table 1.2: Recent developments of GDP per capita in Lithuania, 2018[19]

Region of analysis	GDP per capita in 2018 (€)	GDP per capita compared to the national average in 2018	GDP per capita compared to the EU's average in 2018
Republic of Lithuania	16 200	100%	52%
Vilnius county	23 400	145%	75%
Alytus county	9 800	60%	32%
Kaunas county	16 700	103%	54%
Klaipėda county	15 600	96%	50%
Marijampolė county	9 400	59%	30%
Panevėžys county	11 800	73%	38%
Šiauliai county	12 200	76%	39%
Tauragė county	9 100	56%	29%
Telšiai county	11 600	72%	37%
Utena+2	9 300	57%	30%

Source: Consortium based on data of Statistics Lithuania and Eurostat, 2020

As it is evident from the table above, GDP per capita in Utena+2 is one of the lowest amongst all Lithuanian counties. In 2018, GDP per capita in Utena+2 was € 9 300 and constituted only 57% of the national average. Only Vilnius and Kaunas counties exceeded the national average, while other counties were lagging behind. High regional divergence can, to a large extent, be explained by the previously described factors. Utena+2 and other lagging regions are in a loop of negative socio-economic development, where migration and ageing of population lead to declining domestic demand. The latter puts a drag on investment as firms facing declining

[19] Since data for GDP per capita is unavailable at LAU level, values for Utena county were used as a proxy to reflect GDP per capita in Utena+2.

demand are uncertain about future profitability and thus are discouraged to create additional jobs and enhance productive capacity through capital and technology investments. Migration has another negative aspect – even if firms want to create additional jobs and expand it is hard to attract sufficient qualified candidates.

Declining demand also leads to smaller economies of scale – prices increase with every incremental decline in quantity of goods or services demanded. This is especially important in the utilities industry where companies face high fixed costs. It has been observed that the costs of utilities were significantly higher in more remote and less populous counties (e.g. Utena county) compared to more populous counties (e.g. Vilnius county).

Low investments and low employment prospects in conjunction with increasing living prices lead to declining living standards and encourages migration from more remote and less prosperous counties to more prosperous counties, this way creating negative feedback to the loop.

The structural composition of Utena+2 economy, expressed in gross value added (GVA), reflects the above-described socio-economic development. In general, the comparison of structural compositions between Lithuanian averages and Utena+2 indicates that the region is more export-oriented. Particularly, export-oriented sectors such as industry (B_TO_E) and agriculture, forestry and fishing (A) are relatively more important in the economy of Utena+2 compared to the national average (Table 1.3). This is mainly because the region tries to utilise lower labour costs and abundance of natural resources (i.e. timber). The share of GVA of the public sector (O_P_Q) is also higher in Utena+2 than on average in Lithuania, which corresponds to the grim demographic outlook and increased spending on social services in the region.

Table 1.3: Structure of the economy in Lithuania, Utena+2 and Vilnius county[20] in 2017

NACE classification	NACE branches	Republic of Lithuania	Utena+2	Vilnius county
A	**Agriculture, forestry and fishing**	**3.90%**	**6.21%**	**1.02%**
B_TO_E	**Industry**	**22.12%**	**35.01%**	**16.02%**
C	Manufacturing	18.89%	21.40%	13.38%
F	Construction	6.69%	5.85%	6.01%
G_TO_U	**Services**	**67.28%**	**52.90%**	**76.96%**
G_H_I	Wholesale and retail trade, transport, accommodation and food service activities	31.61%	18.77%	32.00%
J	Information and communication	3.64%	2.33%	5.94%
K	Financial and insurance activities	2.04%	0.59%	3.85%
L	Real estate activities	6.67%	9.01%	6.52%
M_N	Professional, scientific and technical activities;	6.96%	2.69%	10.77%

[20] Structure of the economy in Lithuania and Utena+2 county is calculated by dividing each NACE branches' GVA by the total GVA. In addition to this, since GVA values are unavailable at LAU level, GVA in Utena county was used as a proxy to represent GVA in Utena+2.

NACE classification	NACE branches	Republic of Lithuania	Utena+2	Vilnius county
	administrative and support service activities			
O_P_Q	Public administration, defence, education, human health and social work activities	14.08%	17.69%	15.37%
R_TO_U	Arts, entertainment and recreation, repair of household goods and other services	2.28%	1.82%	2.51%

Source: Consortium based on data of Statistics Lithuania, 2020

A comparison between Utena+2 and Vilnius county further illustrates different development paths. A significantly higher importance of demand-oriented service sectors (i.e. G_H_I, J and K) in Vilnius county is a direct result of the positive demographic outlook of the region. Influx of migrants from Lithuanian counties and other countries (e.g. Belarus, Ukraine, etc.) lead to increased demand and induced investments. As a result, companies expanded their capacity and created more jobs because increased demand is associated with increased profitability.

Another positive outcome from migration is the abundance of skilled and motivated labour in Vilnius county. This allows to partially offset labour market pressures onto labour costs and ensures good regional competitiveness. Competitiveness is also maintained because of economies of scale and agglomeration.

In general, different economic development paths, which are primarily based on demographics in Vilnius county and Utena+2, lead to different socio-economic outcomes. On the one hand, there are counties such as Vilnius, Kaunas or Klaipėda which exhibits a positive demographic outlook in which influx of skilled and motivated individuals positively contributes to their socio-economic well-being. In turn, socio-economic well-being reinforces the positive demographic outlook and contributes to further socio-economic improvements in these regions.

On the other hand, there are counties like Utena which experience a grim demographic outlook due to population ageing and migration of young individuals. This leads to worsening socio-economic situation which in turn negatively contributes to counties' demographic tendencies.

Stakeholder productivity exhibits similar tendencies. Table 1.4 presents a summary of gross value added (GVA) per person employed developments situation in Lithuania in 2017.

Table 1.4: GVA per person employed in Lithuania, Utena+2 and Vilnius county in 2017[21]

NACE classification	NACE branches	Republic of Lithuania (€)	Utena+2 (€)	Vilnius county (€)
TOTAL	**All NACE branches**	27 883.77	19 715.61	35 776.98
A	**Agriculture, forestry and fishing**	14 095.06	10 803.28	14 272.73
B_TO_E	**Industry**	34 728.40	26 528.57	41 044.78
G_TO_U	**Services**	27 942.59	19 348.28	35 637.89

Source: Consortium based on data of Statistics Lithuania, 2020

Utena+2 had lower productivity in all three main economic sectors compared to the national average and Vilnius county in 2017. Main reasons of lower productivity in Utena+2 are related to demographics. A grim demographic outlook discourages productivity enhancing investments. Even if investments are undertaken with the prospect of increased exports, high skilled labour is very expensive in Utena+2 due to its scarcity. The latter puts a drag on the region's competitiveness.

In terms of LAU level analysis of productivity within Utena+2, a table below (Table 1.5) presents gross value added at factor cost (per person employed) in 2018[22].

Table 1.5: Recent developments of GVA at factor cost (per person employed) in Lithuania, Utena+2, Vilnius county and LAUs of Utena+2, 2018

Region of analysis	All NACE branches (€)	Forestry and fishing (A02_A03) (€)	Industry (B_TO_E) (€)	Services (G_TO_U) (€)
Republic of Lithuania	20 418.33	20 639.334	24 212.36	19 739
Vilnius county	23 853.64	22 049.904	29 349.65	23 308.65
Utena+2	13 956.08	19 209.54	17 762.82	11 323.08
Švenčionys d. mun.	13 861.7	13 861.7	20 954.02	15 191.42
Kupiškis d. mun.	13 163.19	13 436.21	14 987.76	11 405.25
Anykščiai d. mun.	13 482.31	17 800.781	16 244.54	11 671.94
Ignalina d. mun.	11 718.46	19 500	15 379.06	10 130.89
Molėtai d. mun.	12 366.42	11 477.48	14 310.08	10 916.90
Utena d. mun.	15 611.60	21 572.09	20 831.76	12 040.18
Visaginas mun.[23]	14 488.70		20 076.37	11 834.22
Zarasai d. mun.	11 276.39	11 696.99	16 430.95	8 723.30

Source: Consortium based on data of Statistics Lithuania, 2020

Municipalities of Utena+2 averaged € 13 956 value added at factor cost (per person employed)[24] in 2018, which constituted only 68.4% of the national average of € 20 418.33, and only 58.51% of Vilnius county.

[21] Since GVA values are unavailable at LAU level, GVA in Utena county was used as a proxy to represent GVA in Utena+2. To be consistent, Utena county values for persons employed were also used in calculation for GVA per person employed.

[22] Indicator gross value added at factor costs (per person employed) were used to reveal labour productivity development tendencies at LAU level. Although this indicator excludes value added of financial institutions and companies, it can still be used to illustrate regional productivity differences in the real economy.

[23] Since Visaginas municipality is almost exclusively urban, value added of agriculture, forestry and fishing (A) sector and forestry and fishing (A02_A03) sub-sector are negligible.

[24] This indicator, although available at LAU level, reflects only part of economic agents. For example, the public bodies included are only those which cover more than half of their operating costs with the revenue earned; in terms of

Utena district municipality has the highest value added per person (76.5% of the national average), followed by Visaginas municipality (71.0% of the national average). Utena district municipality has historically a strong industry sector (B-E) which partly explains high value added per person. Examples of productive industry in Utena include UAB ENGEL DALI (textile, 353 employees), UAB Utenos mėsa (food and timber processing, 785 employees), UAB Rokiškio pieno gamyba (food and timber processing, 285 employees), UAB Švyturys - Utenos alus" (beer and wine production, 340 employees), UAB Nosted Mechanika (power engineering, 218 employees). In addition, Utena profits from high levels of direct investment in manufacturing.

Visaginas's high value added per person results from the presence of the Ignalina Nuclear Power Plant. In Soviet times, it attracted many workers from other countries of the Soviet Union. As a result, Visaginas is now the only town in Lithuania with the majority of Russian speakers. The main problem in Visaginas is that the process of decommissioning the Nuclear Power Plant involves further reduction in jobs needed to serve this object. This leads to an increase in unemployment, emigration, population aging, and subsequent declines in productivity.

Fortunately, some positive signs are observed. An international medical device manufacturer "Intersurgical" decided to establish a factory in Visaginas, which promises to create up to 1 500 jobs by 2030. This decision may partially be explained by the existence of a strong vocational education centre in Visaginas. An interview with representatives of Visaginas municipality has suggested that "Intersurgical" has been in cooperation with the local education vocation centre. From 2016 the centre has been preparing qualified specialists on an apprenticeship basis for the company. In general, the centre is known for its quality of education. The centre provides education in two languages: Lithuanian and Russian. The centre has a long history, dating back to 1989, with the primary purpose of preparing professionals in the sectors of energy and manufacturing, which is helpful in attracting additional foreign investments. The town has also recently started exploiting nuclear tourism and has optimistic expectations related to this activity.

Business activity

The number of enterprises per 1 000 inhabitants in all size categories was lower in Utena+2 than the national average and Vilnius county in 2018 (Table 1.6). This can mostly be explained by target areas being relatively peripheral, and a historical legacy of a lack of entrepreneurial spirit. The latter stems from the fact that the region was historically comprised of monotowns. This created a problematic situation where the entire region's economy was dependent on the performance of a few strategic companies and industries, which were the sole employers of the region. This in turn meant that the majority of working-age population simply did not have a proper environment or upbringing to develop an entrepreneurial spirit as they were working for

economic activities according to NACE, agriculture, financial intermediation, and public administration and defence, are not covered.

the same industry throughout generations. Even though tendencies are changing, the persistence effect from the past is still strong.

Table 1.6: Number of enterprises per 1 000 inhabitants in Lithuania, Utena+2 and target municipalities in 2018

Number of enterprises by number of employees	Region of analysis	Number of enterprises per 1 000 inhabitants in 2018	Ratio between region of analysis and national average
Total by employees	Republic of Lithuania	29.71	100%
	Vilnius county	43.57	147%
	Utena+2	15.24	51%
	Švenčionys d. mun.	11.81	40%
	Kupiškis d. mun.	13.75	46%
	Anykščiai d. mun.	16.40	55%
	Ignalina d. mun.	11.97	40%
	Molėtai d. mun.	18.26	61%
	Utena d. mun.	18.46	62%
	Visaginas mun.	15.73	53%
	Zarasai d. mun.	11.68	39%
0-49 employees	Republic of Lithuania	28.69	100%
	Vilnius county	42.29	147%
	Utena+2	14.63	51%
	Švenčionys d. mun.	11.35	40%
	Kupiškis d. mun.	13.10	46%
	Anykščiai d. mun.	15.78	55%
	Ignalina d. mun.	11.58	40%
	Molėtai d. mun.	17.81	62%
	Utena d. mun.	17.59	61%
	Visaginas mun.	15.04	52%
	Zarasai d. mun.	11.23	39%
50 and more	Republic of Lithuania	1.01	100%
	Vilnius county	1.28	126%
	Utena+2	0.61	60%
	Švenčionys d. mun.	0.46	46%
	Kupiškis d. mun.	0.64	64%
	Anykščiai d. mun.	0.62	61%
	Ignalina d. mun.	0.39	39%
	Molėtai d. mun.	0.45	44%
	Utena d. mun.	0.87	86%
	Visaginas mun.	0.70	69%
	Zarasai d. mun.	0.45	44%

Source: Consortium based on data of Statistics Lithuania, 2020

In terms of composition of enterprises, it can be observed that the economies of Utena+2, Lithuania and Vilnius county are dominated by small enterprises (0-49 employees). Nevertheless, the number of small enterprises in Utena+2 amounted to only 51% of the national average. The same holds for medium-sized and larger companies, which amounted to 60% of the national average in 2018.

Even after taking into account the unit divisions of enterprises per 1 000 inhabitants, it is still apparent that that the level of entrepreneurship in Utena+2 is lower than the national average. As it can be seen in the table below (Table 1.7), the number of local units per 1 000 inhabitants in Utena+2 did not exceed 70% of the national average in 2018. The lowest number of local units per 1 000 inhabitants was in Švenčionys district municipality and did not exceed 52% of

the national average. The highest number was in Utena district municipality and reached around 78% of the national average.

Table 1.7: Number of local units per 1 000 inhabitants in Lithuania and target municipalities in 2018

Region of analysis	Local units per 1 000 inhabitants in 2018	Ratio of local units per 1 000 inhabitants between region of analysis and national average	Share of companies in agriculture, forestry and fishing (A)	Share of companies in industry (B_TO_E)	Share of companies in services (G_TO_U)
Lithuania	45.80	100.00%	2.41%	9.50%	81.47%
Vilnius county	59.42	129.73%	1.18%	7.71%	84.27%
Utena+2	31.14	67.99%	5.53%	10.05%	78.37%
Švenčionys d. mun.	23.70	51.75%	9.89%	12.54%	71.91%
Kupiškis d. mun.	30.82	67.30%	7.59%	9.87%	76.85%
Anykščiai d. mun.	33.87	73.95%	7.95%	11.61%	76.04%
Ignalina d. mun.	28.31	61.81%	5.06%	10.57%	79.77%
Molėtai d. mun.	33.32	72.75%	6.05%	10.25%	74.79%
Utena d. mun.	35.87	78.32%	3.75%	8.82%	81.62%
Visaginas mun.[25]	30.77	67.18%		8.17%	82.26%
Zarasai d. mun.	27.89	60.89%	5.49%	9.61%	81.24%

Source: Consortium based on data of Statistics Lithuania, 2020

As it can also be seen from the table above, significantly higher share of local units of Utena+2 and its municipalities are operating in agriculture, forestry and fishing (A) and industry sectors (B_TO_E) compared to the national average and to Vilnius county. This reaffirms the observation of the previous sub-chapter that the importance of the two sectors is relatively high in Utena+2.

The number of self-employed people per 1 000 inhabitants is also lower in Utena+2 compared to the national average, as it is seen in the table below (Table 1.8). Notwithstanding this, Utena district municipality is performing better than national average. This, as it was suggested by various interviewees from public institutions, is most likely because of increased number of migrants coming back to the municipality. According to interviewees, returnees are more likely to establish various small-scale retail shops.

Another reason for a higher number of self-employed in Utena district municipality is an increasing level of entrepreneurial spirit in the municipality. As it was suggested by interviewees of public institutions, industrial modernisation induced increases unemployment and spurred increases in the level of entrepreneurial spirit of locals. Out of material necessity and not

[25] Since Visaginas municipality is almost exclusively urban, number of local units operating in agriculture, forestry and fishing (A) sector and foresty and fishing (A02_A03) sub-sector is negligible.

wanting to migrate, locals decided to retail shops or become individual dealers of various industrial goods. A significant number of people decided to establish small-scale farms and undertake agriculture activities.

Although it is still not reflected in statistics, the Covid-19 crisis may also positively contribute to the number of self-employed in the region in the future. With an increased necessity for and popularity of remote work, interviewees from public institutions indicated that there is an increasing number of freelancers and self-employed coming back to work in the region.

Table 1.8: Number of self-employed people per 1 000 inhabitants in Lithuania and target municipalities in 2018[26]

Region of analysis	Self-employed people per 1 000 inhabitants in 2018	Ratio between region of analysis and national average	Share of self-employed in agriculture, forestry and fishing (A)	Share of self-employed in industry (B_TO_E)	Share of self-employed in services (G_TO_U)
Lithuania	66.17	100%	34%	8%	47%
Vilnius county	75.98	115%	8%	9%	72%
Utena+2	53.47	81%	39%	13%	28%
Švenčionys d. mun.	41.54	63%			
Kupiškis d. mun.	51.06	77%			
Anykščiai d. mun.	51.1	77%			
Ignalina d. mun.	46.53	70%			
Molėtai d. mun.	64.8	98%			
Utena d. mun.	67.89	103%			
Visaginas mun.	44.58	67%			
Zarasai d. mun.	47.55	72%			

Source: Consortium based on data of Statistics Lithuania, 2020

As table above also shows, significantly higher share of self-employed are operating in agriculture, forestry and fishing (A) and industry (B_TO_E) sectors in Utena+2 and its municipalities compared to the national average and to Vilnius county. This reaffirms the previous observation that agriculture, forestry and fishing (A) is an important economic sector and employer in the region.

1.1.2 Locational endowments

Market access and size

The local market of the stakeholder region is limited by its shrinking population and remoteness. These effects are partially offset by a relatively well-developed road and railway connections to the capital city of Vilnius and foreign countries. Despite its proximity to the Belarus border, the

[26] Since self-employment distribution as per NACE classification is unavailable at the LAU level, values for Utena county were used as a proxy for self-employment distribution in Utena+2. It is also important to note that although self-employment figures for Utena county were available for the year 2018, distribution of employment as per NACE classification was unavailable for 2017. As such, employment shares as per NACE classification were calculated by taking sectorial share averages from 2010 to 2017.

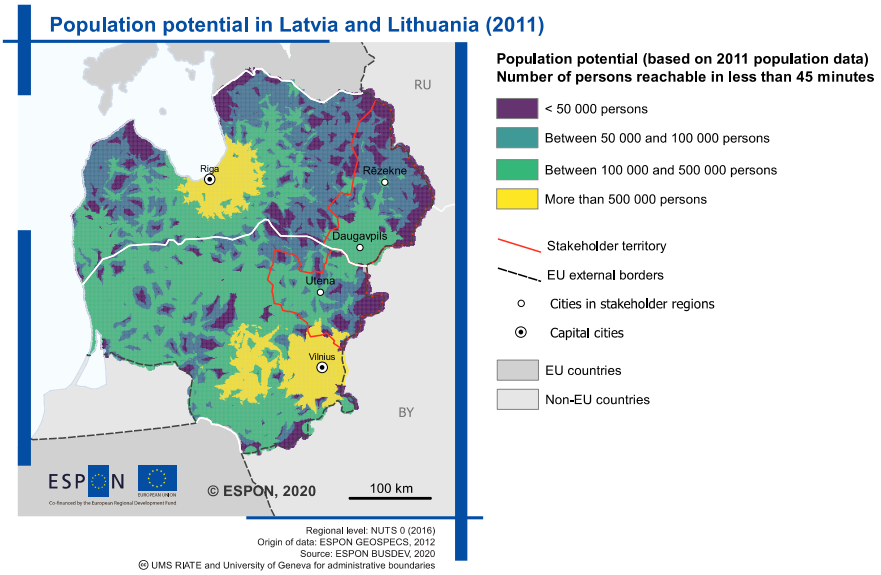
main export market for the stakeholder's production[27] is the EU where 71.5% of production was destined in 2019. The main export destinations for Utena county are Germany, Sweden and Denmark. Stakeholder's proximity to Belarus is not utilised mainly because of political reasons, which are elaborated in sub-chapter 1.1.4.

In terms of the stakeholder's share of exports in Lithuania, the export of goods from Utena+2 accounted for only 2% of the total exports of Lithuanian goods with the nominal value of € 385 Million in 2018. Over the last 10 years, a sharp decline in exports of Utena county occurred mainly because of the closure of Ignalina nuclear power plant. As such, both the quantity and value of electricity exported (which was an important contributor to the region's exports) significantly declined.

Furniture is the most important product sold abroad and accounted for 29.70% of county exports in 2018. As for the shares of other products, the most important products were clothing (9.5%), milk and milk products (8.7%) and articles of plastics (7.7%).

In general, given the shrinking size of the local population and the remoteness of Utena+2, most of the region's businesses rely on local markets and exports into the EU for their scale and development. The map below provides an overview on the population potential reachable in less than 45 minutes.

Map 1.2 Population potential reachable in less than 45 minutes, 2011



Source: Consortium based

There are three international airports that are easily reachable from the region: Vilnius International Airport and Kaunas International Airport are 104 and 121 kilometres away, respectively, while Riga International Airport is approximately 215 kilometres away. The region

[27] Since export data is unavailable at LAU level, Utena county information is used as a proxy for Utena+2 exports.

has a road connection with the international highway Via Baltica, which connects Eastern Europe with Western Europe and Scandinavia.

Klaipėda Seaport (cargo handled in 2018: 46.6 million tons) is situated 325 kilometres away from the region, while Riga (cargo handled in 2018: 36.4 million tons) is approximately 208 kilometres away.

Services of General Interest

In terms of the services of general interest, National Labour Exchange has offices in each municipality of Utena+2. The same applies for National Revenue Service.

As for other services of general interest, such as healthcare, despite the ongoing reform of Lithuania's healthcare system, aimed at decreasing hospitalisation rates and increasing volumes of outpatient services, Lithuania remains amongst the countries with the most hospital beds per 10 000 population[28].

As a result of the consolidation of healthcare facilities and services, the stakeholder region experienced the largest growth in volumes of outpatient services in the country in the period of 2015-2017[29]. In 2018, the number of hospital beds per 10 000 people (excluding nursing beds) exceeded the national average only in two out of eight municipalities in Utena+2. In the majority of municipalities, the numbers of hospital beds per 10 000 people were two to six times lower than the national average. In 2018, the number of hospital beds per 10 000 population in Utena county was significantly below the national average (Utena county - 45.58, Lithuania - 63.9). Based on this indicator, Utena county ranked fifth among ten counties of Lithuania.

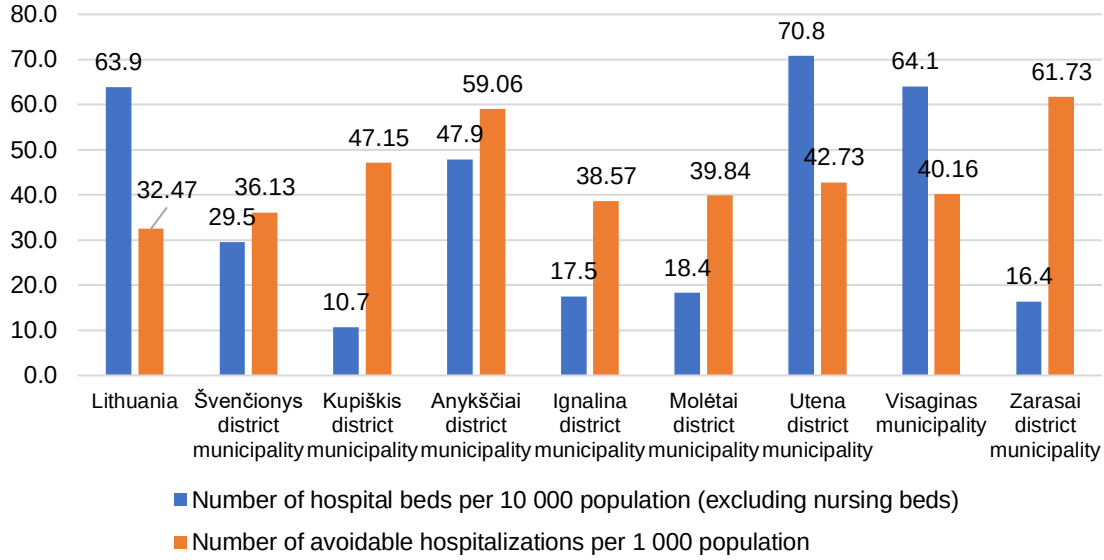
However, despite the relatively fast development of outpatient services in the target area, the availability and quality of primary care is still not sufficient. In 2018, the numbers of avoidable hospitalisations per 1 000 people, reflecting hospitalisations that would have been largely prevented if outpatient care was provided in a timely and effective manner, exceeded the national average in all municipalities of the stakeholder territory. In Anykščiai district and Zarasai district municipalities, the numbers of avoidable hospitalisations per 1 000 people exceeded the national average by nearly two times (Anykščiai district - 59.06, Zarasai district - 61.73, Lithuania - 32.47). Based on this indicator, Utena county ranked first among the ten counties of Lithuania in 2018. The latter indicates a relatively limited availability and quality of primary healthcare services in the stakeholder territory[30].

[28] OECD Reviews of Health Systems: Lithuania 2018.

[29] National audit office of Lithuania, *Availability of Personal Healthcare Services and Orientation towards Patient*. State audit report No. VA-2018-P-10-1-10, 16 November 2018.

[30] Based on the data provided by the Institute of Hygiene as of January 2020.

Figure 1.2: Access to healthcare



Source: Consortium based on data of Statistics Lithuania, 2020

In terms of the provision of primary and secondary education services, as a result of the ongoing restructuring of the school network in Lithuania, the number of schools in the country decreased from 1 200 to 1 151 in the period of 2014-2016 (National Audit Office of Lithuania, 2017). According to the ranking of municipalities based on the efficiency of their school networks, Visaginas and Švenčionys district municipalities scored high (24 and 21 points out of 25, respectively), Utena district municipality received an average score (16 points out of 25), while the other municipalities ranked relatively low (8-10 points out of 25) (Smart Continent, 2018). In 2018-2019, there were 1 076 schools in Lithuania, 71 of which were located in Utena+2. The highest number of schools (14) was in Utena district municipality, the lowest (5) - in Visaginas municipality. In the rest of the Utena+2 region, the distribution of schools was similar (7-10 schools per municipality).

In Utena+2, there were 28 basic (pre-secondary) schools[31] (usually 1-3 schools per municipality, except for Molėtai district, Anykščiai district and Kupiškis district municipalities having 4-7 basic schools per municipality), 24 gymnasiums[32] (2-4 schools per municipality), 13 pre-gymnasiums[33] (usually 1-2 schools per municipality, except for Utena district municipality having 4 pre-gymnasiums) and 6 primary schools[34] (operating in only half of the stakeholder territory, 1-3 schools per municipality).

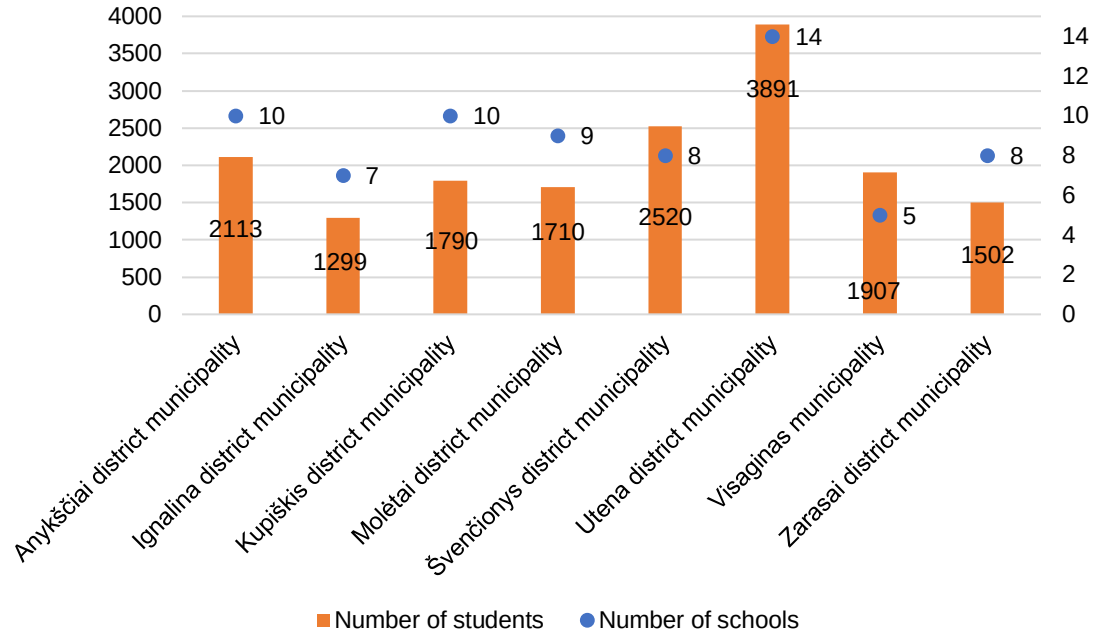
[31] 1-10 or 5-10 grades

[32] 9-12 grades

[33] 1-8 or 5-8 grades

[34] 1-4 grades

Figure 1.3: School network, 2018-2019



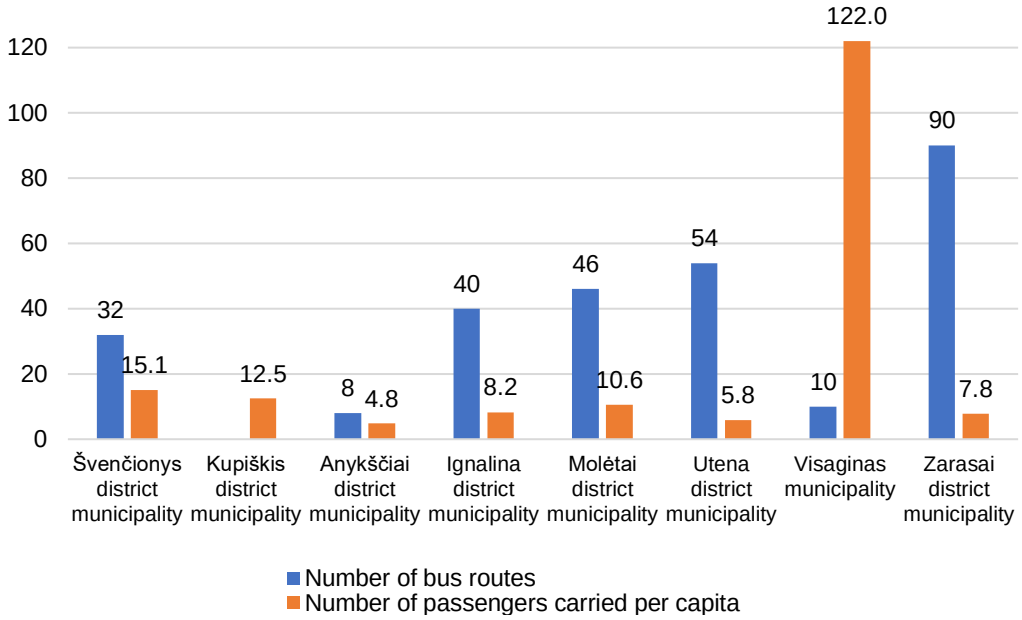
Source: Consortium based on data of Statistics Lithuania, 2020

In 2018-2019, there were almost 335 000 students in all educational programmes (pre-primary, primary, basic and secondary) in Lithuania with 16 700 students in Utena+2. Utena district municipality had the most (3 900) students, while Ignalina district municipality - the least (1 300). In the rest of the stakeholder territory the number of students in all education programmes varied between 1 500 and 2 500 per municipality. In the stakeholder territory there were 8 400 students in basic (pre-secondary) education, 5 300 students in primary education, 2 500 students in secondary education and 600 children in pre-secondary education. Based on the numbers of both schools and students in all education programmes, Utena County ranked second to last amongst all ten counties of Lithuania[35].

As for public transport, there were 3 067 bus routes in Lithuania, of which 280 bus routes were located in Utena+2. Zarasai district municipality can be distinguished by the largest number of bus routes (90), far exceeding those of other municipalities in the stakeholder territory. In comparison, Švenčionys district, Ignalina district, Molėtai and Utena district municipalities had 30-60 bus routes. The smallest numbers of bus routes (up to 10) were observed in Anykščiai and Visaginas district municipalities. The latter municipalities experienced a quite significant decrease in the number of bus routes in 2017-2018 (from 46 to 8 and from 19 to 10, respectively). In the period of 2014-2018, the numbers of bus routes in other Utena+2 municipalities were more or less stable. Based on this indicator, Utena county ranked sixth among ten counties of Lithuania in 2018.

[35] Data of academic year 2018-2019 provided in the Education Management Information System.

Figure 1.4: Access to public transport, 2018-2019



Source: Consortium based on data of Statistics Lithuania, 2020

In 2018, the number of bus passengers carried per capita in Lithuania was equal to 126.6. Despite the relatively small number of bus routes, the number of passengers carried per capita in Visaginas municipality (122) massively exceeded those of other municipalities in Utena+2 (varying between 5 and 15). The latter is mostly explained by Visaginas being predominantly urban. In the period of 2014-2018, the number of passengers carried per capita significantly increased in Visaginas municipality (from 1 to 122) and Švenčionys district municipality (from 4.8 to 15.1). A slight increase (from 6.2 to 7.8) was also observed in Zarasai district municipality, while the number of passengers carried per capita has somewhat decreased in other municipalities of Utena+2. Based on the average number of trips by bus per capita, Utena county ranked sixth among the ten counties of Lithuania in 2018[36].

Tourism and culture

Tourism is important for regional development in Utena+2, as the majority of its municipalities (Zarasai district, Ignalina district, Utena district, Anykščiai district and Molėtai district municipalities) constitute one of the priority regions for tourism development in Lithuania (East Aukštaitija region) (Lithuania Tourism Development Programme, 2016).

In 2018, there were 104 museums and 158 cultural centres in Lithuania. In Utena+2, there were 11 museums (1-2 museums per municipality, except for Ignalina district municipality having 3 museums and Visaginas municipality having no museums) and 11 cultural centres (1 cultural centre per municipality, except for Švenčionys and Zarasai district municipalities, which had 3 and 2 cultural centres, respectively). In 2018, the most visited museums of the stakeholder territory were in Anykščiai district and Molėtai district municipalities. In these municipalities, the

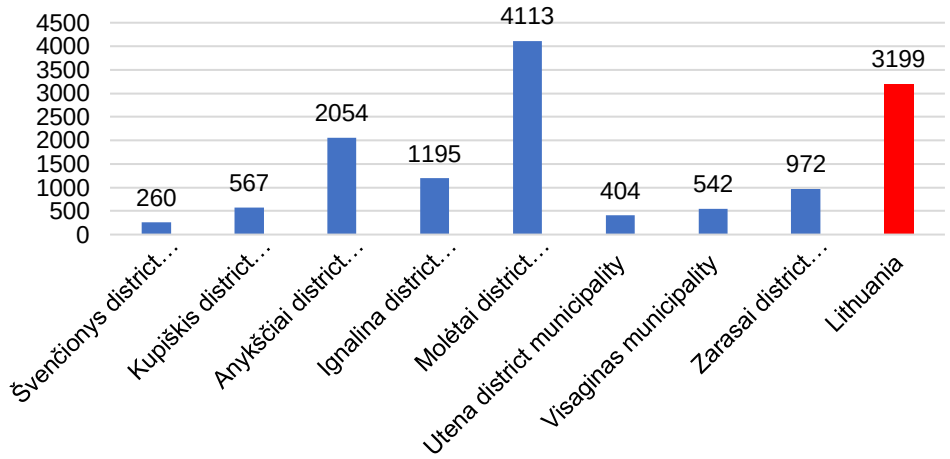
[36] Data of Statistics Lithuania.

number of museum visits at the end of the year (90 600 and 60 700, respectively) exceeded those of other municipalities of Utena+2 significantly (varying between 7 200-23 400 museum visits)[37].

However, the most valuable tourism resources in the stakeholder territory are natural resources. The stakeholder area is extremely rich in natural resources, such as forests, clean rivers and lakes. In addition, protected areas (Aukštaitija National Park, Gražutė, Labanoras, Anykščiai, Sartai and Asveja Regional Parks) make up a large part of the region. The widest network of national water tourism routes in the country, as well as a picturesque landscape provide the basis for ecotourism in Utena+2. Furthermore, 3 towns in Utena+2 (Anykščiai, Zarasai and Ignalina) have been granted the status of resort area. They have abundant national resources, and well-developed infrastructure of leisure and recreational services, providing the basis for health tourism

In 2019, the number of overnight stays in various accommodation establishments (hotels and similar accommodation, holiday and other short-stay accommodation, camping grounds, recreational vehicle parks and trailer parks) per 1 000 inhabitants in Molėtai district municipality significantly exceeded the national average (Molėtai district municipality - 4113, Lithuania - 3199), as it can be seen in the figure below (Figure 1.5). A relatively large number of overnight stays was also registered in Anykščiai and Ignalina district municipalities (2054 and 1195, respectively). In the rest of the stakeholder territory, the numbers of overnight stays were below 1 000 per 1 000 inhabitants. In the period of 2014-2019, Molėtai district and Anykščiai district municipalities experienced a steady growth in the number of overnight stays per 1 000 inhabitants. In other municipalities of the stakeholder territory, the values of this indicator were rather stable.

Figure 1.5: Number of overnight stays per 1 000 inhabitants, 2019



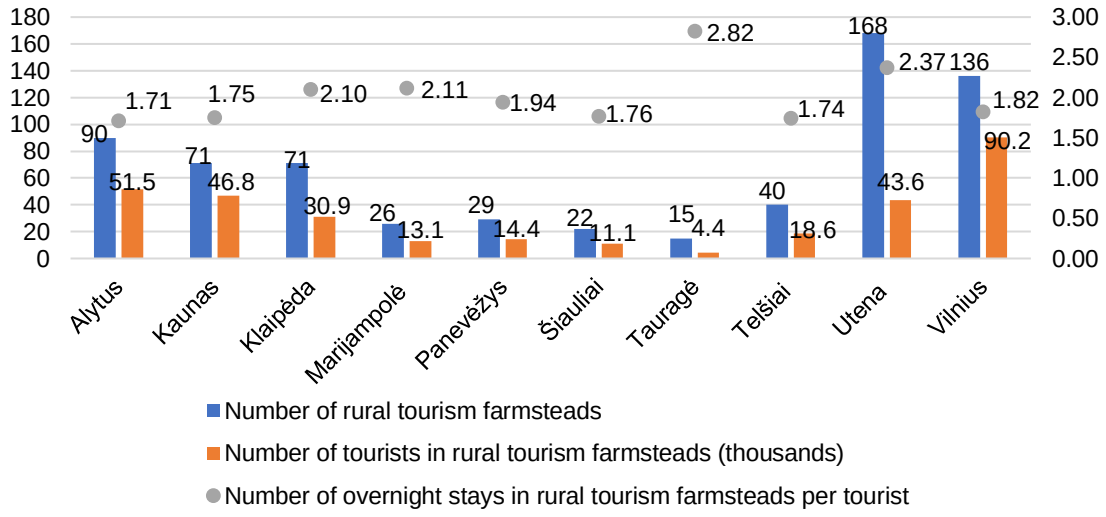
Source: Consortium based on data of Statistics Lithuania, 2020

[37] Data of the Lithuanian Art Museum, Association of Lithuanian Museums and Lithuanian National Culture Centre.

In 2019, Anykščiai district municipality had the highest room occupancy (in hotels and similar accommodation) rate in the stakeholder area - very close to the national average (Anykščiai district municipality - 55.4%, Lithuania - 55.9%). A high room occupancy rate in the municipality is mainly because of successfully finished major public infrastructure projects related to tourism development between 2015-2018. For instance, the Treetop Walking path is the first path in the Baltic States and Eastern Europe that provides an opportunity to take a walk high above the ground at the level of treetops. The Treetop Walking Path is 300 meters long and gradually rises to 21 meters above the ground. The watchtower at the end of the path is 34 meters high and enables visitors to observe the praised Anykščiai Pinewood, admire the winding Šventoji River, and see the towers of St. Matthew Church, which is the tallest church in Lithuania. According to representatives of Anykščiai district municipality, the Treetop Walking Path opening led to increasing number of tourists, promoted development of tourism-related services (i.e. accommodation and food services) and increased FDI.

A relatively high room occupancy was also observed in Molėtai district municipality (40.2%). In the other municipalities of Utena+2, room occupancy usually did not exceed 40% during the whole period of 2014-2019. In recent years, Ignalina district municipality has experienced a steady growth in the room occupancy rate. Identical situation is the bed occupancy rates. In 2019, bed occupancy in Anykščiai district municipality exceeded the national average (Anykščiai district municipality - 46.4%, Lithuania - 44%). Bed occupancy rates in the rest of the stakeholder territory lagged behind from 1.5 to 6.5 times compared to Anykščiai district municipality. As in the case of room occupancy rate, bed occupancy rate in Ignalina district municipality has been steadily growing in the period of 2014-2019.

Figure 1.6: Rural tourism farmsteads in regions, 2017



Source: Consortium based on data of Statistics Lithuania, 2020

Due to the abundance and natural resources, Utena+2 has the widest network of rural tourism farmsteads in the country. In 2017, Utena county had the highest number of farmsteads in the country (168), exceeding that of Vilnius region (136). Based on the number of tourists staying

in rural tourism farmsteads, Utena county ranked fourth amongst ten counties of Lithuania. On the basis of the number of overnight stays in rural tourism farmsteads per tourist, Utena county ranked second among all regions of Lithuania.

1.1.3 Physical and sectoral endowments

Natural resources

Utena+2 has around 11% of agricultural land in Lithuania. Approximately 61% of the agricultural land in Utena+2 consists of meadows and pastures.

In general, arable land makes up 34%, while forests make up around 38% of the total area of Utena county. Forest coverage in Utena county is the fourth largest coverage amongst all counties of Lithuania. Out of the entire forest area in Utena county, 42 300 ha is privately owned, which includes the second biggest parcel of private forests in Lithuania.

Since forest resources cover more than a third of the area of Utena county, many state-protected natural heritage sites – botanical, geological, hydrogeological, hydrographic and hydrological – are located in the county. In total, around a quarter (or 2 491 km^2) of the county's territory is made up of state protected areas. The largest areas in the region are occupied by state parks: Aukštaitija National Park, Gražutė, Labanoras, Anykščiai, Sartai, Asveja Regional Parks.

There are 1 327 lakes in Utena+2, which cover around 6% (or around 598 km^2) of the total area of the region – the largest lake coverage in the whole country. In general, Utena+2 has 35% of all Lithuanian lakes larger than 0.5 ha and 66% of all Lithuanian lakes larger than 500 ha. An abundance of lakes and accessibility by roads to these lakes are important factors for lake tourism.

The stakeholder territory could be considered as not particularly rich in natural underground resources as clay, sand, sandstones, gravel and gypsum are the main minerals found in stakeholders' territory (Bukantis et al., 2013)**.** However, because these minerals are not extensively extracted for commercial purposes, there is no information on the exact extraction volumes.

As for the renewable energy potential, the country has more than enough renewable energy reserves to not only fulfil its obligations to the EU, but to also to increase its share of renewable energy from final energy consumption from 15% in 2005 to 23% in 2020 (National Audit Office of Lithuania, 2010). The forecasts were exceeded as the share of renewable energy from final energy consumption in 2017 was already 26%.

In terms of renewable energy development in municipalities and particularly municipalities of Utena+2, only Anykščiai and Zarasai district municipalities have prepared action plans for renewable energy development or studies on renewable energy development (Lithuanian Energy Agency, 2019). Utena district municipality has prepared an action plan for sustainable energy which also foresees development of renewables (Utena district municipality, 2011). The other 5 municipalities do not have any approved action plan or strategic documents which

delineate the development of renewables. Nevertheless, the new national energy and climate plan for 2021-2030 for Lithuania foresees a measure which will help municipalities to prepare action plans for development of renewables. Action plans will set municipal targets for reduction of air pollution and development of renewables, as well as measures for the achievement of the mentioned targets.

As of today, the region has developed a quite substantial hydropower production infrastructure. Out of all the network of small hydro plants[38] within Lithuania, around 18% (or 4.73 MWs out of 26.44 MWs) of electric power generating capacity is located in Utena+2. In fact, two out of the three largest small hydro plants (in terms of electricity generating power) are located in Utena+2. One is located in Zarasai district municipality (Antalieptės hydro power plant) and has a capacity to generate 2.6 MW of power (Lithuanian association for hydro energy producers, 2017). Another one is located in Anykščiai district municipality (Kavarsko hydro power plant) and has a capacity to generate 1.5 MW of power (Lithuanian association for hydro energy producers, 2007).

As for the development of other renewables, the region is also increasing its capacity to use biofuels. National energy regulator council suggests that the optimal level of installed power capacity of biofuels should satisfy around 65-75% of the maximum heating power demand. In terms of the achievement of the set optimal bounds, Lithuanian Energy Agency conducted an evaluation to assess and grade municipalities in terms of their achievement of the set bound. Municipalities, which fell within this boundary, were graded as 13 and municipalities which either exceeded or did not reach the bound were given proportionally lower grades. The evaluation suggested that none of municipalities of Utena+2 fell within the set bound and thus had either an excess or lacked capacity of biofuel usage (Lithuanian Energy Agency, 2019). Kupiškis, Ignalina, Zarasai and Utena district municipalities exceeded the optimal bound, while the rest of municipalities did not reach it (Table 1.6). Insufficient capacity of certain municipalities can be most likely explained by underinvestment or the fact that municipalities can satisfy their heating demand from other sources. The table also indicates the deviations of Utena+2 municipalities from the best and worst performers within Lithuania.

Table 1.9: Installed capacity of biofuel usage

Municipality	Ratio between installed biofuel capacity and heating power demand (%)	Grade
Biržai d.m	66.71	13
Kaunas d.m.	67.51	13
Trakai d.m.	72.66	13
Švenčionys d.m.	60.3	11
Molėtai d.m.	54.08	10
Anykščiai d.m.	42.91	9
Utena d.m.	85.4	9
Visaginas d.m.	20.26	7

[38] Definition of small hydro plants varies. However, the most common definition of the term refers to plants that can generate 10 MW or less of power.

Municipality	Ratio between installed biofuel capacity and heating power demand (%)	Grade
Zarasai d.m.	97.7	7
Ignalina d.m.	104.65	5
Kupiškis d.m.	143.25	5
Ukmergės d.m.	6.28	1
Vilnius c.m.	7.71	1

Source: Consortium based on data of National energy regulatory council, 2020

As for the production of electricity from renewables[39], the table below (Table 1.10) grades the municipalities of Utena+2 and other Lithuanian municipalities with regards to the installed power capacity of electricity producing consumers per 1 000 people. The best municipalities were given a grade 6, while worse municipalities were given proportionally lower grades. Molėtai district municipality is one of the top performing municipalities. Whilst the majority of municipalities had somewhat average scores, Utena and Švečionys district municipalities had significantly lower grades.

Table 1.10: Normalised installed capacity of electricity production from renewables

Municipality	Installed power (kW) capacity of electricity producing consumers per 1 000 people	Grade
Mažeikių d.m.	22.97	6
Klaipėdos d.m.	21.07	6
Molėtai d.m.	18.83	5.5
Anykščiai d.m.	11.9	3.5
Kupiškis d.m.	10.7	3.5
Ignalina d.m.	8.83	3
Zarasai d.m.	6.21	2.5
Utena d.m.	3.75	1.5
Švenčionys d.m.	3.44	1.5
Visaginas d.m.	0.01	1
Rietavas d.m.	0	0

Source: Consortium based on data of National energy regulatory council, 2020

In general, development of renewables in Utena+2 is on-going and should intensify from 2021, when the national energy and climate action plan of Lithuania will commence its implementation. The plan foresees increased investments into infrastructure of heating systems. The latter will lead to reduced energy consumption due to reduced transmission losses, as well as increased usage of biofuels. Electricity production from wind and solar power will also be prioritised and, subsequently, the volumes are due to increase.

Infrastructure and logistics

The length of all roads in the stakeholder region declined from 8 955 km in 2014 to 8 696 km in 2018. The latter should not be overstated, as one of the reasons for the decline was that the length of local roads has been revised by the Municipal Councils in 2017 and the length remained unchanged. Despite that, it is important to mention that in the last two years the total length of roads has grown, while the amount of gravel roads has decreased. These numbers

[39] In this instance, renewables refer to wind, solar and biomass energy sources.

reflect the goal of municipalities of Utena county to increase conditions of regions roads specified in the regional development plan of Utena county (2014-2020).

As for railway transportation, there is one non-electrified railway line crossing the target region - Vilnius-Daugavpils. Railway Vilnius-Daugavpils connect the region with one of the key rail distribution hubs in the Baltic States: Vilnius. A rail connection with Vilnius provides access to rail cargo freights such as the SUN TRAIN (connecting Europe and China; Delivery time – 10 days whereas the delivery time by sea is approximately 40 days) and VIKING TRAIN (connecting Baltic and Black seas, as well as offering up to 46% reduction on logistics costs compared to other modes of transportation).

Broadband

Lithuania has 98% fixed broadband coverage. And though it is still below the EU average, internet subscriptions to fast broadband are increasing. The demand for these services is almost twice the EU average and is continuously growing. The country has one of the greatest 4G coverages and is well above the EU average. There is no data available on the target territory, although it can be presumed that the situation is similar to the rest of the country (European Commission, 2017).

Energy

Utena+2 is part of the common Baltic energy supply system, which imports electricity from Estonia, Latvia, Russia and Belarus. The Baltic grids are still a part of the post-Soviet BRELL ring, which also includes Russia and Belarus, and remains dependent on a control centre in Moscow, as well as the Russian electricity system (Litgrid, 2015). The Baltic energy market interconnection plan (BEMIP)[40] is aimed at an open and integrated regional electricity and gas market between EU countries in the Baltic Sea region, ending energy isolation. The key electricity infrastructure projects, connecting the three Baltic States with Finland, Sweden and Poland (respectively) have significantly improved the Baltic countries' integration into the EU energy market, as well as the security of electricity supply. Nevertheless, the three Baltic States' electricity grid still operates synchronously with the Russian and Belarusian systems. The synchronisation of the electricity grid with the continental European network is envisaged by 2025.

In 2014, Lithuania opened Klaipėda liquefied natural gas floating storage and regasification unit terminal. After the opening, Lithuania became the fifth country in the world to use floating storage and regasification unit terminals in the world. The terminal's name "Independence" reflects its importance to Lithuania's gas market and national security. The terminal allowed the country to reduce its reliance on Russia, which had monopoly over gas supply till 2014; Russia could thus leverage this market power for political purposes, diversify its imports and as such ensure stable supply of gas and competitive prices for consumers.

[40] https://ec.europa.eu/energy/topics/infrastructure/high-level-groups/baltic-energy-market-interconnection-plan_en

Functional areas

Given the governance structure of Utena+2, there are seven major urban functional areas of the region, each corresponding to municipal centres of Utena+2: Utena, Visaginas, Anykščiai, Kupiškis, Zarasai, Molėtai, Ignalina and Švenčionys. In 2019, approximately 47% of Utena+2 population (which corresponds to approximately 79 157 inhabitants) was living in these urban areas. Each town has its own vocational training centre (or its branch), which covers the needs of labour requalification and education in each municipality. In addition to that, each city has its own local business and tourism centres, which provide legal and financial consultations regarding taxation, accessibility of finance, establishment procedures and costs for local entrepreneurs or potential investors.

1.1.4 Border reality - border effects with relevance for the regional potential

Political dimension

The Belarus–Lithuania international border is almost 679 km in length and also serves as an outer border of the European Union. Almost 320 km of the border is along Utena+2 district municipalities (territories of Ignalina, Švenčionys, Visaginas and Zarasai municipalities).

The border agreement between Lithuania and Belarus was signed on 6 February 1995 and was not amended ever since then. Since 2004 the border has served as the external border of the European Union and, since 2007, the Schengen Area. These developments brought increased border controls and stricter visa requirements for crossing between the two countries. An agreement signed in 2010 aims to implement simplified traveling for people living within 50 km of the border. As an external border of EU, the border with Belarus has seen the most illegal attempts to cross the border in Lithuania, compared to other borders in Lithuania.

Currently, there are five international Lithuania-Belarus border crossings which serve passengers and cargo transport 24/7 - 4 for cargo and passengers and 1 for only passengers. The capacity of each checkpoint in one direction per day for passenger cars is 600-650 whilst for lorries it is 300-350, except for the checkpoint in Medininkai, which has the capacity to administrate 1 000 passenger cars and 1 000 lorries per day. Although for now there are no international checkpoints in Utena+2, there are two border crossing checkpoints which are exclusively for pedestrian and passenger crossing: one border crossing is in Tverečius and the other one is in Adutiškis. Whereas the latter border crossing checkpoint is exclusively oriented towards pedestrians and is open from Monday to Thursday, the former border crossing checkpoint is open 24/7 and is expected to upgrade its status to international, meaning it will be open for cargo transport crossing.

4 agreements are signed between Lithuania and Belarus on trade and economic cooperation, 1) to avoid double taxation, 2) prevent tax evasion, 3) promote and protect investments, 4) to cooperate on science and technology. In general, relations between Lithuania and Belarus in various fields are regulated by 27 bilateral agreements. The relationship between Lithuania and Belarus was always distant due to Belarus' ties to Russia. In recent years the political tensions

between two countries increased substantially, mainly due to the construction of the Astrava nuclear power plant (NPP) in Belarus. Lithuania considers this to be unsafe. In June 2017, the Lithuanian Parliament passed a declaration that the Astrava NPP is a threat to national security, environment, and public health. The government later approved an action plan for blocking electricity imports from the plant. Also, the Lithuanian government approached the European Commission over what it says is Belarus' irresponsible approach to nuclear safety and violation of international commitments regarding it. Although Belarus authorities disagree, Lithuania's authorities and civil society insist to acknowledge that the Astrava NPP fails to meet international safety standards.

Given raising political tensions and the fact that there is no international cross-border checkpoint between the two countries in Utena+2, the region's external EU border with Belarus can be considered as a physical obstacle for cross-border cooperation. Whereas there might be some private initiatives for deeper and more extensive cooperation between the two countries, all these initiatives face the aforementioned obstacles of limited physical mobility and different political outlooks, which inevitably retards or even prevents the development of any meaningful cooperation.

Physical dimension

Utena+2 borders Grondo, Minsk and Vitebsk regions. Even though Utena+2 has a border with the former two, the border with Vitebsk oblast is the largest one, with which Utena+2 has two direct cross-border checking points. Thus, in the remainder of this sub-chapter, the analysis will focus solely on the Vitebsk oblast.

As a result of bordering three countries (Lithuania, Latvia and Russia), Vitebsk oblast has a relatively well-developed infrastructure network. Several major international motorways run through the region. There are more than 1 200 km of railway tracks in the Vitebsk oblast, with major rail terminals in Vitebsk, Orsha and Polotsk. International railway lines between Russia and Ukraine, Russia and Poland, and Russia and Lithuania cross the region. Also, there is an airport in Vitebsk city, however there are no direct flights to Lithuania. Despite Vitebsk oblast's connectivity with the bordering countries, connectivity with Utena+2 is relatively poor as there are no major road or railway routes, connecting the two regions. All major roads and railway routes in Vitebsk oblast are connected to Lithuania through Vilnius county and hence bypasses Utena+2.

The territory of Utena+2 region is 9 863 km², which is almost four times smaller than Vitebsk oblast (40 049.99 km^2) and both regions are rich in natural resources. As the situation for Utena+2 has already been described in sub-chapter 1.1.3, only Vitebsk oblast situation will be delineated here. Vitebsk oblast has more national parks, nature reserves, and wildlife preserves of national importance than any other region of Belarus. Braslav Lakes and Naroch National Parks and Berezinski Biosphere Reserve comprise 3.4% of the region's territory, and 22 wildlife preserves of national importance make up 4.1% of the region.

As for the population, Vitebsk oblast has 1.13 million inhabitants with the lowest population density in Belarus at 30.6 people per km². Notably, the region's population is slowly decreasing at around 7 000 people each year. In 2017, the region had negative net migration rates for both international and domestic flows, with a vast majority of domestic migrants going to Minsk or the Minsk region. Ethnic Belarusians constitute approximately 85% of the total population of Vitebsk oblast, with Russians being the second next largest ethnic group, representing 10% of the total population, followed by Poles and Ukrainians.

The population of Utena+2 region was estimated to be 147 000 people and has the lowest population density among Lithuania's regions. Due to migration outflows witnessed throughout Lithuania, the population in the Utena+2 region is decreasing by about 4 000 people each year. Ethnic Lithuanians constitute approximately 80% of the total population of Utena+2 region, with Russians being the second largest ethnic group and representing 11% of the population, followed by Poles, Belarusians and Ukrainians.

The natural aspect of physical dimension (i.e. topography, shared natural assets) is quite conductive for cross-border cooperation. However, the previously mentioned negative effects of the political tension does not allow for the development of supplementary and supporting physical infrastructure (i.e. roads, rails, etc.), which inevitably leads to the development and presence of unfavourable settlement structure for cross-border cooperation.

Economic dimension

GDP of Utena+2[41] accounted for 2.60% of total Lithuanian GDP in 2018, while GDP per capita amounted to € 9 300, which made up 57.3 % of the national average.

The GDP in Vitebsk oblast accounted for 7.4% of the country's total GDP in 2018 (Sergi, 2019). According to socioeconomic indicators, the region's industrial output and volume of foreign direct investment were one of the highest in Belarus.

Labour force participation rate stood at 74.8% in Utena+2[42], while in Vitebsk oblast – 71.3% in 2017. The unemployment rate in Vitebsk oblast is 1.2%, while in Utena+2 region municipalities it stands at 9%. Significant differences are possible due to the fact that Vitebsk oblast is one of the major industrial areas of Belarus, with 23% of the workforce employed by industrial companies.

Utena+2 region has strong historical competencies and viable companies in textiles, food and drinks manufacturing and metal processing. The largest share of gross value added was generated in industry (34.1%) and in wholesale and retail trade, transport and storage,

[41]As previously mentioned, since GDP is not available at LAU level, Utena county values were used as a proxy for Utena+2.

[42] Since labour force participation values are not available at LAU level, Utena county were used as a proxy for Utena+2.

accommodation and food services (19.6%). In 2018, the exports of goods of Lithuanian origin to Belarus amounted to € 324.7 Million.

Differently, the main industry in the Vitebsk oblast is the petrochemical industry. One of the largest oil refineries in Belarus and the main producer of polymers, as well as many producers of oil additives are located in this region. The largest power plant (Lukoml power plant) in Belarus is also in Vitebsk oblasts. The agricultural lands occupy 1.6 million ha and the most significant industries in the Vitebsk region include milk, pork meat, poultry, flax, grain, vegetables and fishing. The share of the food industry in regional industrial production is estimated at less than 20%, while the share of textile, clothing and shoe factories, as well as electrical and machinery plants, is estimated at less than 10%. There is a free economic zone in Vitebsk.

Official currency of Belarus is the Belarusian rouble, which is freely convertible to EUR.

Even though differences in the level of income and unemployment rates should induce cooperation as per convergence theory, the existing political impediments prevent it.

Socio-cultural dimension

As mentioned before, like many other Eastern European countries, Belarus, as well as Lithuania, has a slow or negative population growth rate and a negative natural growth rate. The main difference is that international migration increased Belarusian population whilst it led to an outflow in Lithuanian population. The ethnic composition in both countries remains relatively homogenous and less than 10% of population is composed of ethnic minorities, such as Russians, Poles, Ukrainians. This ethnic homogeneity is vivid in Utena+2 region as well.

Belarus has two official languages, Russian and Belarusian. Russian is the most common used language (i.e. Russian is used by 70% of the population), while Belarusian, the official first language, is spoken by 23% of the population. Belarusian, although not as widely used as Russian, is the mother tongue of 53.2% of the population, whereas Russian is the mother tongue of only 41.5%. In Lithuania, as well as in the Utena+2 region, official language is Lithuanian. Other languages, such as Polish, Russian, Belarusian and Ukrainian, are spoken in larger towns in Utena district municipality and in several municipalities, such as Visaginas district municipality.

Regarding the minorities, in Lithuania, as well as in Utena+2 region, about 300 non-governmental organisations of national minorities are active. NGOs have been established by Belarusian, Karaite, Polish, Roma, Russian, Tatar, Ukrainian and other ethnic minorities. These are cultural, educational, professional and other organisations, whose educational and cultural projects are supported from the Lithuanian budget.

According to the laws of the Republic of Lithuania, national minorities living in the country are guaranteed the right to have state or state-supported pre-school institutions, general education schools and receive teaching in their mother tongue. In Utena+2 region, there are 5 pre-school education institutions and 6 general education schools for minorities (Poles and Ukrainians).

Schools for ethnic minorities are located in areas where ethnic minorities live in large numbers. In Utena region, the periodicals and magazines in Russian, Polish and Yiddish are published. Lithuanian National Radio and Television broadcasts informative programmes for ethnic minorities in Russian, Belarusian, Polish, Yiddish and Ukrainian.

As for the historical legacy, both of the countries were part of the Grand Duchy of Lithuania (later merged into the Polish-Lithuanian Commonwealth), the Russian Empire and ultimately, the Soviet Union. The countries established diplomatic relations on 24 October 1991, shortly after the dissolution of the Soviet Union.

Socio-cultural effects of cross-border cooperation are neither negative nor positive. Some factors, such as historical legacy and knowledge of at least one intermediary language (i.e. Russian) are conductive for cooperation. However, different political outlooks and orientations suggest that there are differences in views about the role of the state in business, as well as the business culture in general.

1.2 Analysis of the "beyond location" aspect - existing entrepreneurial eco-system

1.2.1 Partnerships and networks in place

Interviews with municipalities have indicated that partnerships and networks in Utena+2 are relatively well developed. Each municipality has a local action group, an association that unites representatives of local businesses, rural communities and the public sector. In total, there are 8 local action groups. Local action groups actively participate in the preparation and implementation of the Rural Development Programme 2014-2020, collectively discuss issues on how to improve each municipality's socio-economic outlook, as well as organise various initiatives on the promotion of entrepreneurship, education and investments in each municipality.

Besides these partnerships, some municipalities have indicated that there are also other associations, which are exclusively organised to promote community interests. A Directors' Club Association exists in Anykščiai district municipality, which unites local businesses and seeks promotion of investments and improvement of business support systems in the municipality. Likewise, Ignalina district municipality has the Association of Directors of Ignalina, which has similar aspirations.

Representatives of Ignalina district municipality have suggested that the leader of the association should be the board member of the Council of Business Support for Small and Medium Enterprises in Ignalina. The goal of the Council is to discuss issues and propose legislative changes on the improvement of business environment in the municipality. Businesses representatives also take part in the proceedings of the Council of Business in Molėtai district municipality.

As for other municipalities, businesses in Visaginas have recently established their own business association. Even though the cooperation between Visaginas business association

and public sector on social and economic issues of the region was strong in the beginning, there are less and less interactions between the parties currently, as it was suggested during the interview with the representatives of Visaginas district municipality.

Utena district municipality, in turn, has recently established cooperation with the Chambers of Commerce, Industry and Crafts of Panevėžys. As of May 2018, both parties agreed to pursue common understanding and beneficial outcomes to both parties in matters of economic development, attraction of investment and creation of business-friendly environment within Utena district municipality. Utena district municipality also cooperates with the Employer's Association of Utena district municipality.

1.2.2 Existing clusters

Clusters are another important component of the "entrepreneurial ecosystem". According to the Study of Clustering, Ignalina district municipality and Anykščiai district municipality are the leaders in terms of clustering processes (MITA, 2019). Based on 2018 data, 20 business units were members of clusters in Anykščiai district municipality and 13 business units in Ignalina district municipality. Taking into account municipalities' population, Ignalina district municipality is slightly more active in clustering activities, as demonstrated in the table below. The aforementioned clustering activity is related to the establishment of tourism clusters in both municipalities. Ignalina district municipality is well known for its lakes, woody areas, well-developed tourism infrastructure (Ignalina District has almost 200 lakes, many rivers and ponds). Similarly, Anykščiai district municipality is well known for its tourist attractions, museums and natural heritage sites. Thus, as confirmed by statistical data, a noticeable share of businesses and working force in both municipalities are involved in accommodation and food service activities, and here tourism clusters can serve as means for fostering growth of tourism businesses.

Table 1.11: Number of clusters and of their members in the target territories and other counties

NUTS3 / LAU	OBJECT	Number of clusters' members in 2017	Number of clusters in 2017	Number of clusters' members in 2018	Number of clusters in 2018	Number of clusters' members in 2018 per 1 000 population
Vilniaus county	NUTS3	413	53	398	47	0.49
Švenčionys district municipality	LAU	1	1	1	1	0.04
Alytus county	NUTS3	14	7	21	7	0.15
Kaunas county	NUTS3	149	42	126	35	0.22
Klaipėda county	NUTS3	52	14	56	16	0.18
Marijampolė county	NUTS3	5	4	4	3	0.03
Panevėžys county	NUTS0	40	12	36	11	0.17
Kupiškis district municipality	LAU	0	0	0	0	0.00
Šiauliai county	NUTS3	50	17	30	13	0.11
Tauragė county	NUTS3	7	2	7	2	0.07
Telšiai county	NUTS3	20	9	16	7	0.12
Utenos county	NUTS3	47	9	38	8	0.30
Anykščiai district municipality	LAU	24	3	20	3	0.84

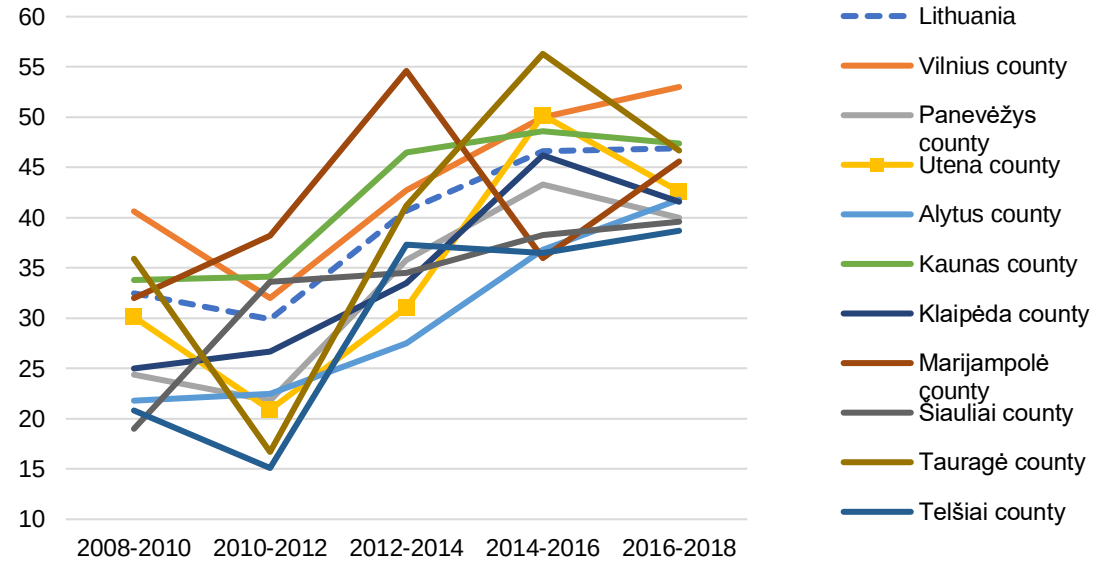
NUTS3 / LAU	OBJECT	Number of clusters' members in 2017	Number of clusters in 2017	Number of clusters' members in 2018	Number of clusters in 2018	Number of clusters' members in 2018 per 1 000 population
Ignalina district municipality	LAU	15	1	13	1	0.86
Molėtai district municipality	LAU	1	1	1	1	0.06
Utenos district municipality	LAU	3	3	1	1	0.03
Visaginas municipality	LAU	2	2	1	1	0.05
Zarasai district municipality	LAU	2	2	1	1	0.06

Source: Consortium based on data of Study of clustering (MITA, 2019)

1.2.3 Innovation

A table provided below (Figure 1.7) demonstrates that the percentage of innovative enterprises amongst all companies in Utena county surpassed the national average (50.2% and 46.6%, respectively) in 2014-2016. However, in the last reporting period of 2016-2018 the percentage of innovative businesses in Utena county shrunk and went back below the national average (42.6% and 46.9%, respectively). Such dynamics of innovation activity in Utena county can be explained by the dynamics of foreign direct investment.

Figure 1.7: Dynamics of percentage of innovative enterprises, compared to all companies



Source: Consortium based on data of Statistics Lithuania, 2020

As for the share of innovative companies in the total number of enterprises in Utena county, the table below (Table 1.12) shows the dynamics over the past 5 periods.

Table 1.12: Number of innovative companies in Utena+2

	2008-2010	2010-2012	2012-2014	2014-2016	2016-2018
Number of innovative enterprises	135	87	136	222	168
Utena+2 share of the total national number of innovative enterprises	2.84%	1.98%	2.17%	3.02%	2.29%

Source: Consortium based on data of Statistics Lithuania, 2020

1.2.4 Governance

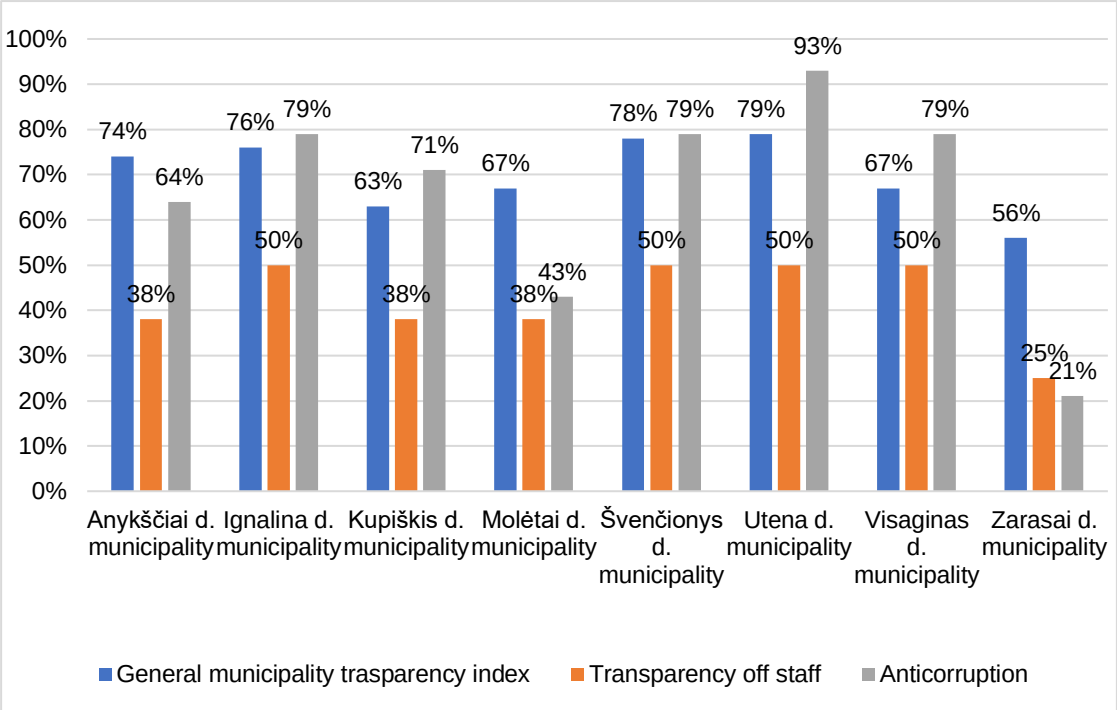
Lithuania is comprised of 10 counties, which serve as territorial and statistical units that are divided in 60 municipalities. On July 7 of 2010, Seimas (Lithuania's National Parliament) cancelled the Law "On the Implementation of County Governance in the Republic of Lithuania" (number I-801). With this cancellation, all government bodies at the county level were abolished and their powers and responsibilities were delegated to either the national government or municipal governments. As such, municipalities are the only self-governing authorities. Municipal councils, together with mayors, are elected for four-year terms.

To evaluate institutional quality in Lithuania, the European Quality of Government Index (EQI) is used. The index aims at capturing average citizens' perceptions and experiences with corruption, and the extent to which they rate their public services as impartial and of good quality in their region of residence. The index contains three pillars: a quality pillar assesses the quality of education, health care and law enforcement; a corruption pillar assesses the perceptions and experiences of corruption; an impartiality pillar assesses the impartiality of judicial system. Amongst 202 countries, Lithuania ranked 114 and scored 44 points (EU average is 49) in 2017. Lithuania's position was close to EU's average and scored 56 on the quality pillar (EU average: 57), 51 on the impartiality pillar (EU average: 56), and 41 on the corruption pillar (EU average: 51). Lithuania stood out as the only country of the former socialist block to make impressive gains in the index from 37 in 2013 to 44 points in 2017, leading to a subsequently higher ranking.

Due to Lithuania's small size, EQI index score covers all regions of Lithuania and thus regional values of EQI index are unavailable. As such, Lithuanian municipality transparency index is one of the tools to evaluate transparency and anticorruption actions of Utena+2 municipalities. Amongst Utena+2 municipalities, the lowest general index values are vivid in the Zarasai district municipality. The index values suggest that authorities in Zarasai district municipality undertook very few anticorruption and transparency actions. The highest index values are in Utena district

municipality. These values allowed the municipality to be the 5th best ranking municipality out of all 60 municipalities in Lithuania[43].

Figure 1.8: Lithuanian municipality transparency index in 2018



Source: Consortium based on Lithuania municipality transparency index of 2018

1.2.5 Access to finance

Access to finance in Lithuania most commonly includes access to the following sources: traditional loans of commercial banks, alternative finance providers (like peer-to-peer lending platforms), financial instruments (like loans, guarantees, risk capital, usually co-funded by ESIF funds), municipal business support programmes, ESIF subsidies, tax reliefs (usually for firms located in special economic zones).

Latest statistics on the distribution of balances of loans by counties is available only for 2013 (Association of Lithuanian Banks, 2013). In terms of balances of loans issued to legal entities (per capita), Utena county was second to last amongst Lithuanian counties. This may mean not only lower entrepreneurial activity in Utena county, but also higher risk of operating business in this county. However, in addition to traditional financing provided by commercial banks, there are also several credit unions operating in the stakeholder territory. Some of the credit unions are currently channelling their financial instruments towards their clients, namely, loans from the Entrepreneurship Promotion Fund 2014-2020 (including guarantees, partial interest compensation, compensation of labour costs) and the Agricultural Credit Guarantee Fund.

[43] The best ranking municipality was Joniškis district municipality with its index value of 94% in 2018. See more at https://jurgiokepure.lt/tyrimas/2018/joniskio-rajono.

Similar to the companies for the rest of Lithuania, other financial instruments are also available for firms located in the target territories.

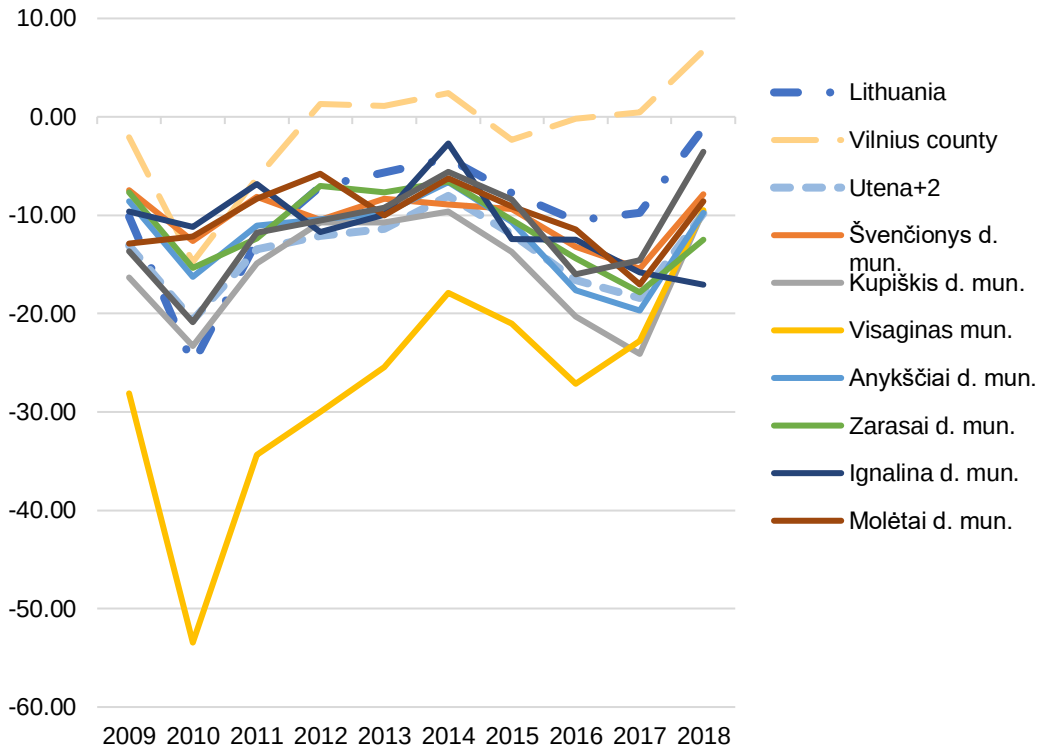
Finally, tax reliefs in some terms may be treated as a financing source. There are no special economic zones (for which tax reliefs are usually applied) in the target territories, however, each municipality in Lithuania has a power to reduce a property tax levied on real estate used by a particular firm.

1.3 Territorial developments

1.3.1 Settlement structure and population development

One of the main reasons for negative population trends in Utena+2, as well as the rest of the country, is emigration. As it can be seen from the figure below (Figure 1.9), emigratory tendencies in the country and Utena+2 municipalities seem to follow the same pattern – a sharp increase in emigration in the midst of the recent economic crisis in 2009-2010 and a rocky upward recovery in the aftermath.

Figure 1.9: Dynamics of net migration rate from 2009 to 2019



Source: Consortium based on data of Statistics Lithuania, 2020

In terms of values, however, emigration rates in municipalities of Utena+2 were larger than the national average from 2014 onwards. For instance, Zarasai and Ignalina district municipalities had double digit figures at -12.47 and -17.07, respectively, in 2018 – more than 9 times higher than the national average of -1.18 for the same period. Other municipalities had values ranging from -3.56 in Utena district municipality up to -9.76 in Anykščiai district municipality in 2018. Higher than average net migration rates could be mainly explained by unequal economic growth

– more prosperous Lithuanian regions (i.e. Vilnius county) are attractors of internal migrants from Utena+2.

Migratory tendencies of Visaginas municipality could be explained by the aforementioned closure of Ignalina Nuclear Power Plant. The latter perpetuated the economic downturn and consequently led to an enormous migration rates from Visaginas district municipality, as it can be seen in the figure above. Although the closure effect has persisted in terms of emigration, the migratory tendencies have converged into domestic outflows nationally from 2011 onwards.

The share of urban population in Utena+2 has remained relatively stable from 2009 to 2019 and increased only by 1 percentage point up to 56% in 2019. At the LAU level, Utena+2 had 4 out 8 municipalities with the share of urban population exceeding 50%. The ratio has remained the same from 2009 to 2019.

In terms of the dynamics of urban population shares, they remained relatively stable with only Kupiškis and Ignalina district municipalities experiencing approximate 5% increases in urban population shares from 2009 to 2019. Urban share has increased from 39% to 42% and from 36% to 38% in Kupiškis and Ignalina district municipalities, respectively. Changes for other municipalities were minor and are represented in the table below (Table 1.13).

Table 1.13: Population and its changes in municipalities of Utena+2

Municipality	2009		2019		Total population change
	Total population	Share of urban population	Total population	Share of urban population	
Švenčionys d. mun.	29 218	60%	23 392	62%	-20%
Kupiškis d. mun.	21 596	39%	16 756	42%	-17%
Anykščiai d. mun.	30 285	40%	23 602	40%	-23%
Ignalina d. mun.	19 415	36%	14 868	38%	-16%
Molėtai d. mun.	21 751	30%	17 436	32%	-15%
Utena d. mun.	45 558	67%	37 435	68%	-28%
Visaginas mun.	24 644	99%	18 414	99%	-21%
Zarasai d. mun.	19 409	43%	15 274	44%	-14%

Source: Consortium based on data of Statistics Lithuania, 2020

Since urban population ratio has increased in Utena+2 even with a substantial negative change in total population, it can be reservedly concluded that rural areas are depopulating at a faster rate than urban areas in all municipalities.

However, a rural-urban distinction is quite arbitrary and vague in Utena+2 region and does not necessarily imply that socio-economic conditions are substantially worse in rural areas, compared to the urban ones. There were only two towns in Utena+2 with a population of 10 000 inhabitants and more in 2019 - Utena had a population of 25 494 inhabitants, while Visaginas had 18 205 inhabitants. In these towns, as well as other major towns and municipal centres of Utena+2, there was a sharp decline in population over the past 10 years. As it can be seen in the table below, the biggest losers were Visaginas, Anykščiai and Ignalina with negative population changes exceeding 25% from 2009 to 2019.

Table 1.14: Population and its changes in municipal centres of Utena+2

Municipal centre	2009	2019	Percentage change in population
Utena d. mun.	306 61	25 495	-20%
Visaginas mun.	243 95	18 205	-34%
Anykščiai d. mun.	10 988	8 642	-27%
Kupiškis d. mun.	7 413	6 061	-22%
Zarasai d. mun.	7 501	6 142	-22%
Molėtai d. mun.	6 633	5 540	-20%
Ignalina d. mun.	6 165	4 933	-25%
Švenčionys d. mun.	5 144	4 139	-24%

Source: Consortium based on data of Statistics Lithuania, 2020

Given that towns of Utena+2 region are relatively small in their population sizes and the percentage of total population change and urbanisation rates in Utena+2 are somewhat similar, it can be argued that population declines are following the same process in urban and rural areas with the main culprit being emigration. It is also worth noting that since total population changes from 2009 to 2019 are somewhat similar across municipalities of Utena+2, border proximity plays no role in explaining emigration tendencies. It is most likely that people are migrating to the national centres of commerce – cities of Vilnius, Kaunas and Panevėžys - for better living standards and employment opportunities.

1.3.2 Labour market development

The number of employed people declined by 5.94% from 57 200 in 2010 to 53 800 in 2017 (Table 1.5) The decline was partly caused by declining number of workers in the two largest economic sectors by employment in 2017 – wholesale and retail trade, transport, accommodation and food service activities sector (G_H_I) and public administration, defence, education, human health and social work activities (O_P_Q). Whereas the former sector experienced 10.9% decline in employed workers from 13 700 in 2010 to 12 200 in 2017, the latter experienced 6.9% decline in employed workers from 11 600 to 10 800 over the same years.

Table 1.15. Employment developments in Utena+2 from 2010 to 2017[44]

NACE classification	NACE branches	Sectorial share	Percentage point increase in respective sectorial share from 2010 to 2017	Number of employees in respective sector	Percentage change in employees from 2010 to 2017
A	**Agriculture, forestry and fishing**	**6.21%**	**1.37**	**6 100**	**7%**
B_TO_E	**Industry**	**35.01%**	**1.02**	**14 000**	**-2%**
C	Manufacturing	21.40%	0.79	10 300	-2%
F	Construction	5.85%	-0.01	4 700	-6%
G_TO_U	**Services**	**52.90%**	**-2.57**	**29 000**	**-10%**
G_H_I	Wholesale and retail trade, transport,	18.77%	-1.27	12 200	-11%

[44] Since sectorial employment distributions are not available at the LAU level, values of Utena county were used as a proxy for sectorial employment distribution of Utena+2.

NACE classification	NACE branches	Sectorial share	Percentage point increase in respective sectorial share from 2010 to 2017	Number of employees in respective sector	Percentage change in employees from 2010 to 2017
	accommodation and food service activities				
J	Information and communication	2.33%	-1.21	100	-88%
K	Financial and insurance activities	0.59%	-1.72	300	-77%
L	Real estate activities	9.01%	0.23	500	25%
M_N	Professional, scientific and technical activities; administrative and support service activities	2.69%	0.13	2 800	-3%
O_P_Q	Public administration, defence, education, human health and social work activities	17.69%	-0.21	10 800	-7%
R_TO_U	Arts, entertainment and recreation, repair of household goods and other services	1.82%	1.48	2 300	44%

Source: Consortium based on data of Statistics Lithuania, 2020

Another two important sectors for employment were manufacturing (C) and agriculture, forestry and fishing (A). Although the former sector experienced 1.9% decline in the number of employed workers from 10 500 in 2010 to 10 300 in 2017, the latter sector experienced an impressive 7% increase from 5 700 to 6 100 over the same years. Impressive growth of agriculture, forestry and fishing (A) sector growth increased its employment share by 1.37 percentage points from 9.97% in 2010 to 11.34% in 2017. In addition to this, agricultural, forestry and fishing (A) sector was the only sector out of the described sectors which increased its share of employment. The latter suggest that the sector's importance for region's labour market is growing.

Although sectorial distribution of employed persons is unavailable at the LAU level, total level of employed persons is available for more recent years. As it is shown in the table below (Table 1.16), the number of employed persons in Utena+2 significantly declined from 2010 to 2019 compared to the national average and Vilnius county.

Table 1.16. Development of employed persons in Lithuania, Vilnius county, Utena+2 and its municipalities from 2010 to 2019[45]

Region of analysis	Number of employed persons in 2010	Number of employed persons in 2019	Percentage change from 2010 to 2019
Republic of Lithuania	1 247 700	1 378 400	10%
Vilnius county	366 900	442 600	21%
Utena+2	75 400	686 00	-9%
Švenčionys d. mun.	10 300	8 400	-18%
Kupiškis d. mun.	7 900	6 900	-13%
Anykščiai d. mun.	9 800	9 700	-1%
Ignalina d. mun.	4 700	4 200	-11%
Molėtai d. mun.	6 700	7 500	12%
Utena d. mun.	19 500	17 000	-13%
Visaginas mun.	10 800	8 400	-22%
Zarasai d. mun.	5 700	6 500	14%

Source: Consortium based on data of Statistics Lithuania, 2020

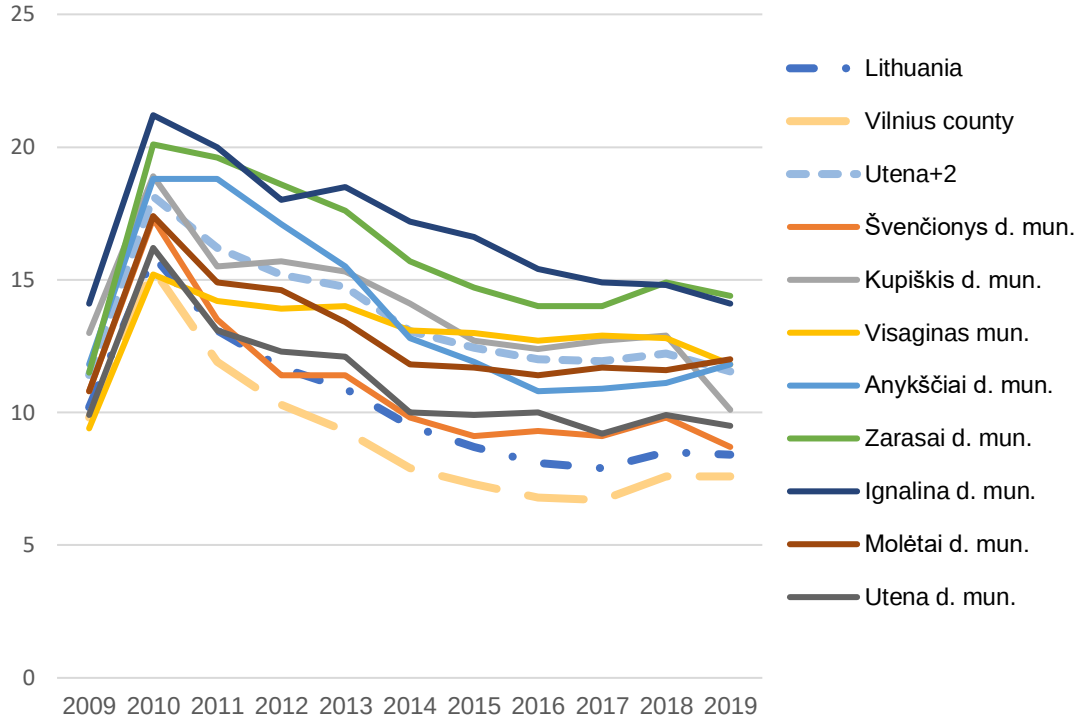
Despite an overall decline in the number of employed persons in Utena+2, certain municipalities fared relatively well. For instance, employment increases in Zarasai district municipality exceed the national average. This can be most likely attributed to successful implementation of Zarasai district municipality programmes for employment increases from 2018 to 2020. The programme provided subsidies, covering 100% labour costs, for all employers in order to boost employment. The latter in conjunction with tourism sector and its related sub-sector developments managed to increase the number of employed persons in 2010–2019 period.

Higher than national average employed person increases can also be observed in Molėtai district municipality. Impressive increases can be attributed to the increased level of entrepreneurial spirit of the municipality and associated increases in the number of self-employed people in the tourism sector (see more in sub-chapter 1.3.4). A similar story can be told about Anykščiai district municipality where only a minor decline in the number of employed persons was observed. Rapid increase in the number of self-employed people in tourism sector (see more in sub-chapter 1.3.4) allowed to partially offset the negative decline of employed people in other sectors.

As for unemployment development over the last 10 years, Utena+2 underperformed compared to the national average and Vilnius county. As it can be seen in the figure below (Figure 1.10), even though unemployment rate development patterns are somewhat similar across the analysed regions, unemployment rates were on average higher municipalities of Utena+2 compared to the national average and Vilnius county from 2009 to 2019.

[45] It is important to note that the number of employed persons for Utena+2 in reported in Table 1.16 is not the same as in Table 1.15 and its descriptive text. This is because of two main reasons. Firstly, information in Table 1.15 reported values for Utena county only, thus excluding values for Švenčionys and Kupiškis district municiplaities. Secondly, employment figures reported in Table 1.16 includes part-time employed persons, while employment figures reported in Table 1.15 do not.

Figure 1.10: Dynamics of unemployment rate in municipalities of Utena+2



Source: Consortium based on data of Statistics Lithuania, 2020

As it can be seen from the graph, only Švenčionys, Kupiškis and Anykščiai district municipalities had lower unemployment levels in 2019 compared to those in 2009, albeit declines were minor and ranged from 0.1 percentage point in Kupiškis district municipality (from 13% to 12.9%) up to 1 percentage point in Švenčionys district municipality (from 10.8% to 9.8%).

On the other hand, the other 5 municipalities had higher unemployment rates in 2019 compared to 2009. The biggest percentage increase was in Zarasai and Visaginas district municipalities – the rate increased by 3.4 percentage points from 9.4 in 2009 to 12.8 in 2019 and 11.5 in 2009 to 14.9 in 2019, respectively. In other municipalities, increases did not exceed 1 percentage point, while the rate itself ranged from 12.9% to 14.8% in 2019. Unemployment increases in these regions could be attributed to both post-recessionary hysteresis effect and emigration of high-skilled individuals to more prosperous parts of the country. Hysteresis, on the one hand, suggests that unemployment peaked in 2010 and it led to the depreciation of skills of unemployed rendering them less employable in the future. Emigration of the high skilled, on the other hand, implies that the structural level of unemployment has increased with firms being unable to find qualified labour. The latter is in line with the fact that the share of population with a high level of education in Utena county was below country's average and remained almost stagnant over the last 10 years. From this follows that labour force is not necessary a regional asset – an unemployment rate above the national average suggests that there is a skills mismatch in the market.

It is important to note that although there is a skills mismatch in the market currently, this may well change in the future. Vocational education system reform (sub-chapter 1.1.1) should lead

to better education outcomes and an increased supply of skilled, highly-demanded by the market labour.

1.3.3 Accessibility

Market size has been shaped by demographics in the last 10 years. Given that in recent years the population has been shrinking, the local market has also shrunk accordingly.

As for market access, in most recent years one of the major hindrances for it was an unreconstructed road between Utena and Vilnius. The problem with the road is that it is outdated and it is made out of concrete blocks – material that was intended for landing of jets during the USSR period, albeit is of worse quality than traditional asphalt road which is much more reliable for cars and lorries. Even though the road is set to be reconstructed by 2030, the poor quality puts a drag on interconnectivity between regions – increases repairment costs, travel times as well as disallows for a faster movement of goods and services.

Although the quality of the main road between Utena and Vilnius is seen as an obstacle for business development, interviews with public institutions and private businesses suggested that it is not the top priority for the next 10 years. According to them, economic agents are already adjusted to poor infrastructure situation and it is more urgent to acquire investments into human capital.

In addition to this, public institutions and private businesses suggested that transport infrastructure amongst municipalities is constantly upgraded and of relatively good quality. This led them to conclude that road infrastructure does not pose major obstacles for business development.

1.3.4 Entrepreneurial capacity

As it can be seen from the table below (Table 1.17), there was a significant increase in the share of local units operating in agriculture, forestry and fishing sector in Utena+2 and its municipalities compared to the national average and Vilnius county from 2009 to 2018.

Table 1.17. Sectorial distribution of local units from 2009 to 2018 in Lithuania, Vilnius county, Utena+2 and its municipalities

Region of analysis	Local units in agriculture, forestry and fishing (A)		Local units in industry (B_TO_E)		Local units in services (G_TO_U)	
	Share in 2018	Percentage point increase from 2009 to 2018	Share in 2018	Percentage point increase from 2009 to 2018	Share in 2018	Percentage point increase from 2009 to 2018
Lithuania	2.41%	0.50	9.50%	0.16	81.47%	-0.37
Vilnius county	1.18%	0.21	7.71%	-0.38	84.27%	1.64
Utena+2	5.53%	1.50	10.05%	-0.13	78.37%	-1.83
Švenčionys d. mun.	9.89%	0.08	12.54%	-2.64	71.91%	-0.31
Kupiškis d. mun.	7.59%	3.54	9.87%	-2.10	76.85%	-2.49
Anykščiai d. mun.	7.95%	2.26	11.61%	0.66	76.04%	-2.74
Ignalina d. mun.	5.06%	-0.44	10.57%	1.72	79.77%	-3.01
Molėtai d. mun.	6.05%	1.86	10.25%	2.24	74.79%	-4.81
Utena d. mun.	3.75%	2.03	8.82%	-0.86	81.62%	-0.73

Region of analysis	Local units in agriculture, forestry and fishing (A)		Local units in industry (B_TO_E)		Local units in services (G_TO_U)	
	Share in 2018	Percentage point increase from 2009 to 2018	Share in 2018	Percentage point increase from 2009 to 2018	Share in 2018	Percentage point increase from 2009 to 2018
Visaginas mun.[46]			8.17%	1.13	82.26%	-0.41
Zarasai d. mun.	5.49%	1.02	9.61%	-0.46	81.24%	-1.09

Source: Consortium based on data of Statistics Lithuania, 2020

The share of the other two sectors, on the other hand, declined. Although the decline of local units operating in the service sector was higher than the national average and Vilnius county, decline of local units in industry was smaller only compared to the national average. The same applies for development of local units in service sector.

Divergent sectorial distribution development tendencies of Utena+2 correspond mostly to socio-economic characteristics of the region and general tendencies observed in the country. Utena+2 status of being more rural than the national average and Vilnius county meant that the overall tendencies of increasing share of local busines units in agriculture, forestry and fishing sector in the whole country more pronounced in Utena+2. The same applies for development of local units in service sector.

As for development of local units in industry sector, although Utena+2 is more industrial than the national average and Vilnius county, the previously described closure of Ignalina nuclear power plant and ended modernisation of major industries in the 2000s resulted in declining number of industrial companies.

In terms of the growth tendencies of the overall number of local units in Utena+2, the region fared worse compared to the national average and Vilnius county. As it can be seen in the table below (Table 1.18), the number of local units per 1 000 inhabitants increased by 31% in the target territories between 2009-2018. Since the growth rate was lower than the national average of 39%, the gap between Utena+2 and the majority its municipalities and national average has also increased. The gap has increased even further between Utena+2 and the majority of its municipalities and Vilnius county.

Table 1.18. Development number of local units per 1 000 inhabitants from 2010 to 2018

Region of analysis	Local units per 1 000 inhabitants in 2009	Ratio between region of analysis and national average in 2009 (%)	Growth of local units per 1 000 inhabitants (2009-2018)	Local units per 1 000 inhabitants in 2018	Ratio between region of analysis and national average in 2018 (%)
Lithuania	32.91	100%	39%	45.80	100%
Vilnius county	41.85	127%	42%	59.42	130%
Utena+2	23.73	72%	31%	31.14	68%

[46] Since Visaginas municipality is comprised mostly of urban areas, agriculture, forestry and fishing sector is negligible.

Region of analysis	Local units per 1 000 inhabitants in 2009	Ratio between region of analysis and national average in 2009 (%)	Growth of local units per 1 000 inhabitants (2009-2018)	Local units per 1 000 inhabitants in 2018	Ratio between region of analysis and national average in 2018 (%)
Švenčionys d. mun.	18.48	56%	28%	23.70	52%
Kupiškis d. mun.	23.99	73%	28%	30.82	67%
Anykščiai d. mun.	23.81	72%	42%	33.87	74%
Ignalina d. mun.	21.53	65%	31%	28.31	62%
Molėtai d. mun.	25.24	77%	32%	33.32	73%
Utena d. mun.	28.10	85%	28%	35.87	78%
Visaginas mun.	22.48	68%	37%	30.77	67%
Zarasai d. mun.	23.03	70%	21%	27.89	61%

Source: Consortium based on data of Statistics Lithuania, 2020

Only Anykščiai district municipality managed to reduce the gap between the national average with impressive growth of 42% from 2009 to 2018. Impressive growth, which is the same as in Vilnius county, can be explained by a rapid development of tourism and recreational sectors in the municipality, as it was mentioned previously (see sub-chapter 1.1.2, tourism and culture sub-section). According to representatives of public institutions of Anykščiai district municipality, period from 2015 to 2018 was especially successful for tourism development. Major investments were made into tourism infrastructure. The latter not only increased FDI into the region but ultimately led to an establishment of new, accommodation and food service sector companies.

Lower level of entrepreneurial activity in Utena+2 compared to the national average and Vilnius county is also indicated by the recent development of self-employed persons. As it can be seen in the table below (Table 1.19), Utena+2 experienced impressive growth rate of 142% from 2010 to 2018. Although the growth was impressive, the gap between Utena+2 and the national average and Vilnius county still increased as the growth in the country was still higher over the same period.

Table 1.19. Dynamics of self-employed persons per 1 000 inhabitants from 2010 to 2018

Region of analysis	Self-employed people per 1 000 inhabitants in 2010	Ratio between region of analysis and national average in 2010 (%)	Growth 2010-2018	Self-employed people per 1 000 inhabitants in 2018	Ratio between region of analysis and national average in 2018 (%)
Lithuania	26.93	100%	146%	66.17	100%
Vilnius county	28.73	107%	164%	75.98	115%
Utena+2	22.13	82%	142%	53.47	81%
Švenčionys d. mun.	19.34	72%	115%	41.54	63%
Kupiškis d. mun.	21.70	81%	135%	51.06	77%
Anykščiai d. mun.	19.54	73%	162%	51.10	77%
Ignalina d. mun.	17.88	66%	160%	46.53	70%

Region of analysis	Self-employed people per 1 000 inhabitants in 2010	Ratio between region of analysis and national average in 2010 (%)	Growth 2010-2018	Self-employed people per 1 000 inhabitants in 2018	Ratio between region of analysis and national average in 2018 (%)
Molėtai d. mun.	23.68	88%	174%	64.80	98%
Utena d. mun.	29.08	108%	133%	67.89	103%
Visaginas mun.	20.09	75%	122%	44.58	67%
Zarasai d. mun.	19.62	73%	142%	47.55	72%

Source: Consortium based on data of Statistics Lithuania, 2020

Although the gap between the region and the national average has increased, Anykščiai, Ignalina and Molėtai district municipalities have managed to reduce the gap with higher growth rates. Anykščiai district municipality managed to reduce the gap due to rapid tourism sector development. The same applies for Molėtai and Ignalina district municipalities. Municipalities were successful in utilizing their natural endowments (i.e. lakes, unique landscape, etc) for commercial purposes. As a result, there was a surge in sectors of recreational and rural tourism.

To assess the overall entrepreneurial potential within Utena+2, a combined analysis of three dimensions / six indicators at LAU level were further analysed. These indicators can be seen as proxies for business development environment in Utena+2. The table below (Table 1.20) delineates assessed indicators and explain the rationale behind their use.

Table 1.20 Business proxies analysed in Utena+2

Dimension	Indicator	Interpretation
Business vitality	Evolution of the number of local units and self-employed persons	Strong and stable economic base
	Average annual creation of SMEs per 1 000 inhabitants	New businesses / entrepreneurship
Attractivity	Average annual investments in fixed assets per capita	Continuous investment effort in local assets
	Average annual FDI per capita	Attractiveness to foreign investors
Local resources	Active population	Availability of human capital
	Average municipal tax revenue	Availability of public funding for business development

Source: Consortium, 2020

For each LAU and each indicator, a relative position has been identified differentiating between above average (green), average (yellow) and below average (red) positioning of the LAU. Table below (

Table 1.21) provides an overview of the entrepreneurial potential in each of the 8 local authorities of Utena+2. Each municipality's position is assessed relative to the average of Utena+2. The potential that has been captured is not a static one, instead it captures the dynamic change averages of each indicator over the past five years, i.e., 2014-2018.

Table 1.21 Change in business proxies between 2014-2020

Municipality	Business vitality		Attractiveness		Local assets		Result
	Economic base	New businesses	Fixed assets	FDI	Active population	Municipal revenue	
Švenčionys d. mun.							
Kupiškis d. mun.							
Anykščiai d. mun.							
Ignalina d. mun.							
Molėtai d. mun.							
Utena d. mun.							
Visaginas mun.							
Zarasai d. mun.							

Source: Consortium, 2020

As a last step the local authorities have been categorised ("result" column) and mapped according to their identified entrepreneurship potential profiles. Hence, from the entrepreneurial perspective the highest business potential is evidenced in Švenčionys, Molėtai, Utena and Visaginas district municipalities (in this order). Zarasai, Ignalna, Kupiškis and Anykščiai district municipalities, on the other hand, show low and very low potential. A relevant map captures spread of the entrepreneurial potential within Latgale can been found in the concluding part of Chapter 0 where it is related and compared to the ESIF uptake.

1.3.5 Investments and financing

The Investment level in target territories is substantially smaller compared to the national average and Vilnius county, as it is depicted in the table below (Table 1.22). This can be explained by target areas being relatively peripheral, and thus having weaker economy. Visaginas municipality district is in some terms an exception due to huge investments into decommissioning of Nuclear Power Plant. The latter, however, does not create conditions for private business development as most investment goes into public companies which conduct decommissioning process of the power plant.

Table 1.22: Investment in tangible fixed assets per capita in Lithuania and target municipalities

Region of analysis	Investment in tangible fixed assets per capita in 2008 (€)	Ratio between national average and region of analysis in 2008	Growth 2008-2018	Investment in tangible fixed assets per capita in 2018 (€)	Ratio between national average and region of analysis in 2018
Lithuania	2 604	100%	9%	2 844	100%
Vilnius county	4 235	163%	2%	4 331	152%
Utena+2	1 256	48%	3%	1 300	46%
Švenčionys d. mun.	822	32%	133%	1 912	67%
Kupiškis d. mun.	998	38%	6%	1 055	37%
Anykščiai d. mun.	805	31%	17%	941	33%
Ignalina d. mun.	732	28%	-2%	714	25%
Molėtai d. mun.	1 467	56%	-27%	1 064	37%
Utena d. mun.	1 886	72%	-20%	1 518	53%
Visaginas mun.	1 913	73%	8%	2 071	73%
Zarasai d. mun.	885	34%	-34%	580	20%

Source: Consortium based on data of Statistics Lithuania, 2020

A relatively high level of investment can be observed in Utena district municipality. This partially can be explained by attracted foreign direct investment, namely, in such firms as “Švyturys - Utenos alus” (340 employees), “ENGEL DALI” (353 employees) or “Nosted Mechanika” (218 employees)[47]. However, as it is shown in the table (Table 1.22), there was a significant 20% decline in investments from 2008 to 2018.

Impressive growth rates of 133% were observed in Švenčionys district municipality. Surge in investments can be explained by attraction of international device manufacturer “Intersurgical” into the municipality. In 2016, the municipality established a factory in the municipal town of Pabradė. The establishment of the factory led to huge capital investments and creation of 200 new jobs by 2019.

1.3.6 Foreign direct investment

As depicted in the figure below (Table 1.23), foreign direct investments in some target territories were growing faster than the national average, while in remaining - slower compared to the national average. On the one hand, impressive growth rates can be explained by low base effect – small absolute change from a low initial amount of FDI translated into a large percentage change. On the other hand, impressive growth can be attributed to objective reasons.

The leaders in terms of FDI accumulated in Utena+2 were Utena district municipality with € 4 143 per capita and Švenčionys district municipality with € 3 940 per capita.

[47] Number of employees is based on 2017 data.

Table 1.23: FDI per capita in Lithuania, Utena+2 and Vilnius county

Region of analysis	Foreign direct investment per capita in 2009 (€)	Ratio between national average and region of analysis in 2009	Growth 2009-2019	Foreign direct investment per capita in 2019 (€)	Ratio between national average and region of analysis in 2019
Lithuania	3 681	100%	80%	6 644	100%
Vilnius county	9 562	260%	73%	1 6522	249%
Utena+2	596	16%	177%	1 648	25%
Švenčionys d. mun.	776	21%	408%	3 940	59%
Kupiškis d. mun.	110	3%	57%	172	3%
Anykščiai d. mun.	18	0%	2657%	484	7%
Ignalina d. mun.	137	4%	129%	313	5%
Molėtai d. mun.	84	2%	25%	104	2%
Utena d. mun.	1 968	53%	111%	4 143	62%
Visaginas mun.	195	5%	50%	293	4%
Zarasai d. mun.	74	2%	75%	130	2%

Source: Consortium based on data of Statistics Lithuania, 2020

Relatively high level of foreign direct investment in Utena district municipality can be explained by the municipality's historical legacy. The municipality has inherited quite strong industrial basis with the primary focus on manufacturing and particularly textile, food and timber processing, beer and wine production and power engineering industries. Accordingly, the biggest accumulated investments in Utena district municipality till the end of 2017 include "Švyturys - Utenos alus" (beer producer with 340 employees), "ENGEL DALI" (textiles producer with 353 employees), "Nosted Mechanika" (tyre chains producer with 218 employees), "K.T.S. Production" (forestry machinery producer with 35 employees).

Meanwhile, relatively high foreign direct investment in Švenčionys district municipality can be explained by its proximity to the capital of Lithuania. Locating a business in the capital city creates relatively high costs (with tendency to increase over time), thus neighbouring municipalities like Švenčionys district municipality are seen by businesses as good location option, especially taking into account good infrastructure and communications within these municipalities and quite close distance to the capital city. Another reason behind surge of FDI in Švenčionys district municipality was previously mentioned attraction of an international device manufacturer "Intersurgical" into the municipality.

It is important to note that since "Intersurgical" is expanding its presence in the region by undertaking large investments in Visaginas municipality. Hence, it is likely that FDI in Visaginas will increase in the future.

1.3.7 Income levels

Given the already described lagging socio-economic outlook of Utena+2, income levels are consequently also below national averages.

Even though some municipalities of Utena+2 have fared comparatively well in terms of overall income increases, the region is still behind the national average in terms of absolute values. As it can be seen in the table below (Table 1.24), all municipalities of Utena+2 but one (i.e. Visaginas municipality) had lower levels of income than the national average in 2009. This

tendency has persisted into 2018 with Visaginas municipality also becoming a lagging area. The latter could be mainly explained by the closure of Ignalina Nuclear Power Plant which led to the losses of many high paid jobs.

Table 1.24: Net average wages in Lithuania and Utena+2

Region of analysis	Net wages in 2009 (€)	Ratio between national average and region of analysis in 2009	Growth 2009-2019	Net wages in 2019 (€)	Ratio between national average and region of analysis in 2009
Lithuania	464.00	100%	0.77	822.10	100%
Vilnius county	522.40	113%	0.75	911.90	111%
Utena+2	397.23	86%	0.68	666.86	81%
Švenčionys	383.50	83%	0.74	668.20	81%
Kupiškis	377.70	81%	0.72	649.20	79%
Anykščiai	376.20	81%	0.74	652.90	79%
Ignalina	365.50	79%	0.75	637.80	78%
Molėtai	390.10	84%	0.65	645.50	79%
Utena	425.20	92%	0.65	702.90	86%
Visaginas	503.90	109%	0.53	770.00	94%
Zarasai	355.70	77%	0.71	608.40	74%

Source: Consortium based on data of Statistics Lithuania, 2020

Even though lower than national average level of income should imply lower municipal budget revenues per inhabitant, this is not necessary the case for municipalities of Utena+2. As it can be seen from the table below (Table 1.25), all municipalities in 2008 and 7 municipalities in 2018 had higher municipal budget revenue rate than the national average. Vilnius county municipal budget revenues were also generally lower compared to Utena+2 and its municipalities.

Table 1.25: Municipal budget revenue per inhabitant in Lithuania, Vilnius county and Utena+2

Region of analysis	Municipal revenue in 2009 (€)	Ratio between national average and region of analysis in 2009	Growth 2009-2019	Municipal revenue in 2019 (€)	Ratio between national average and region of analysis in 2009
Lithuania	608.25	100%	100%	1 215.90	100%
Vilnius county	552.91	91%	116%	1 194.93	98%
Utena+2	676.23	111%	87%	1 262.70	104%
Švenčionys d. mun.	617.85	102%	102%	1 248.47	103%
Kupiškis d. mun.	725.16	119%	85%	1 344.42	111%
Anykščiai d. mun.	709.10	117%	82%	1 288.39	106%
Ignalina d. mun.	675.85	111%	81%	1 221.70	100%
Molėtai d. mun.	657.83	108%	89%	1 242.96	102%
Utena d. mun.	659.03	108%	58%	1 038.15	85%
Visaginas mun.	683.46	112%	141%	1 645.74	135%
Zarasai d. mun.	710.62	117%	84%	1 306.213	107%

Source: Consortium based on data of Statistics Lithuania, 2020

Higher budget revenue in regions lagging behind can be explained by the cohesion transfers from the national government – less economically developed regions acquire higher transfers

from the national government in Lithuania to compensate for lower than the country's average growth.

1.3.8 Gross value added and productivity

The total value added of Utena+2 in the overall national GDP amounted to 2.60% (or € 1 189 Million) in 2018. Only Tauragė county had lower GDP contribution of 1.9% (or € 859.9 Million)[48].

In terms of GDP per capita development of the last 10 years, a table below (Table 1.26) presents a summary of it in Lithuania and all its countries in 2009-2018.

Table 1.26: Recent developments of GDP per capita in Lithuania, 2018[49]

Region of analysis	GDP per capita in 2009 (€)	GDP per capita compared to the national average in 2009	GDP per capita growth from 2009 to 2018	GDP per capita in 2018 (€)	GDP per capita compared to the national average in 2018
Republic of Lithuania	8 500	100%	90.59%	16 200	100%
Vilnius county	12 600	147%	85.71%	23 400	145%
Alytus county	5 600	66%	75.00%	9 800	60%
Kaunas county	8 100	95%	106.17%	16 700	103%
Klaipėda county	9 500	111%	64.21%	15 600	96%
Marijampolė county	5 100	60%	84.31%	9 400	59%
Panevėžys county	6 200	73%	90.32%	11 800	73%
Šiauliai county	6 000	71%	103.33%	12 200	76%
Tauragė county	4 500	53%	102.22%	9 100	56%
Telšiai county	6 900	81%	68.12%	11 600	72%
Utena+2	7 200	84%	29.17%	9 300	57%

Source: Consortium based on data of Statistics Lithuania, 2020

As it can be seen from the table above, Utena+2 experienced the lowest GDP per capita growth from 2009 to 2018 amongst all regions of analysis – 29.17%. Such a growth rate was by far lower than the national average of 90.59%. A relatively low growth rate compared to the national average has increased regional divergence as the ratio between GDP per capita in Utena+2 and the national average GDP per capita has declined from 84% in 2009 to 57% in 2018. Relatively poor and unimpressive growth also resulted in the decline of the region's ranking vis-à-vis other 9 regions[50]. Utena+2 was the 4th best performing region out of 10 regions in 2009. The tables turned and the region was the 9th best (or 2nd worst) performing region out of 10 regions in 2018.

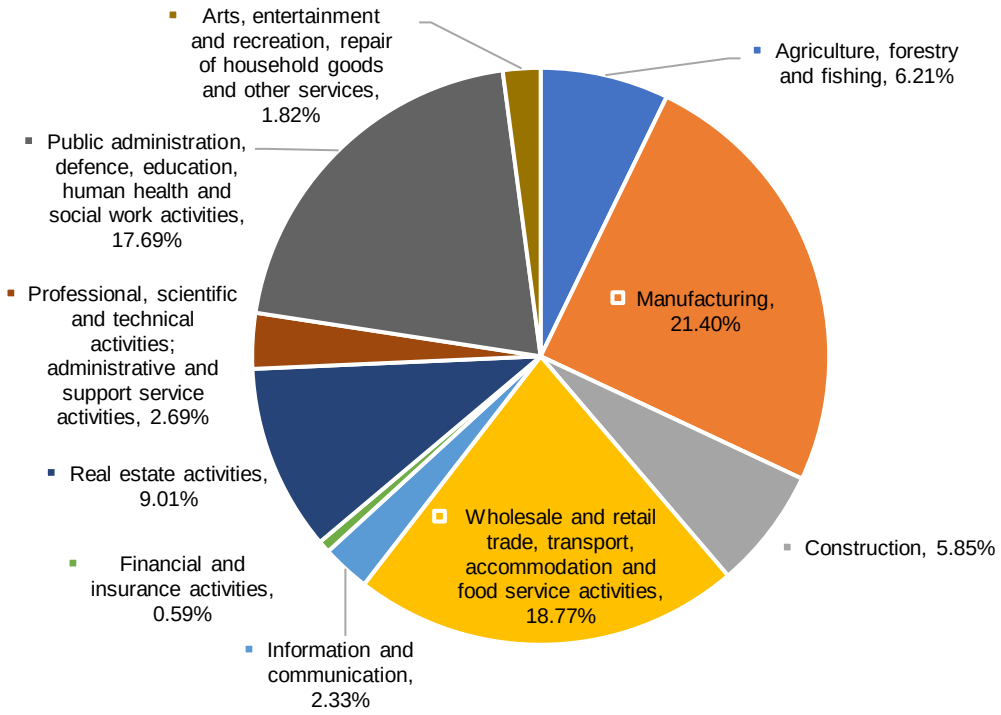
The figure below (Figure 1.11) illustrates sectorial contribution to the total gross value added of the region. From 2010 to 2017 the total gross value added increased by 21.6% from € 872 Million in 2010 to € 1 060 Milion in 2017.

[48] Since data for GDP is unavailable at LAU level, values for Utena county were used as a proxy to reflect Utena+2 contribution to GDP

[49] Since data for GDP per capita is unavailable at LAU level, values for Utena county were used as a proxy to reflect GDP per capita in Utena+2.

[50] Ranking is done amongst 9 Lithuania counties and Utena+2, excluding national average.

Figure 1.11: Total value added by NACE in Utena+2, 2017[51]



Source: Consortium based on data of Statistics Lithuania, 2020

The highest share (21% or € 227 Million) in the total value added of the region was produced in manufacturing sector (C). From 2010 to 2017, the total value added in this sector has increased by 26.60%. This led to a 6.05 percentage point increase in manufacturing share from 2010 to 2017.

Another important sector is wholesale and retail trade, transport, accommodation and food service activities (G_H_I). From 2010 to 2017, total value added in this sector increased by 18.77%. Since the value added growth of this sector was lower than that of the total value added, its share has also declined by 1.38 percentage points.

Agriculture, forestry and fishing (A) is another important sector. Its contribution in the total economy amounted to 6.21% in 2017, while its growth amounted to 53.61% from 2010 to 2017. Higher than the total value added growth resulted in increased sector's share in the economy by 1.29.

Increasing importance of agriculture, forestry and fishing (A) in Utena+2 is also depicted in the table below (Table 1.27). As it can be seen from the table, amongst the three most important economic sectors in Utena+2 and other regions of analysis, increase in agriculture, forestry and fishing (A) sector's share was the largest in Utena+2. This also means that the relative importance of the sector is higher in Utena+2 compared to the national average and Vilnius county.

[51] Structure of the economy Utena+2 is calculated by dividing each NACE branches' GVA by the total GVA . Since data on GVA is unavailable at LAU level, Utena county values were used as a proxy for Utena+2.

Table 1.27: Sectorial share development of the most important economic sectors in Lithuania, Vilnius county and Utena+2 from 2010 to 2017

Region of analysis	Agriculture, forestry and fishing (A)		Industry (B_TO_E)		Services (G_TO_U)	
	Share in 2017	Percentage point increase in share from 2010 to 2017	Share in 2017	Percentage point increase in share from 2010 to 2017	Share in 2017	Percentage point increase in share from 2010 to 2017
Lithuania	3.90%	0.53	22.12%	-1.18	67.28%	-0.22
Vilnius county	1.02%	0.09	16.02%	-1.47	76.96%	0.31
Utena+2	6.21%	1.29	35.01%	1.39	52.90%	-0.61

Source: Consortium based on data of Statistics Lithuania, 2020

In terms of region's productivity[52] developments, the table below presents a summary of it. As it can be seen from the table below, productivity growth in Utena+2 was below the national average. This resulted in increased productivity gap between Utena county and the national average. The same tendencies apply when comparing Utena county with Vilnius county.

Table 1.28: Productivity development in Lithuania and Utena and Vilnius counties[53]

NACE branches	NACE branches	Republic of Lithuania		Utena+2		Vilnius county	
		Productivity in 2017 (€)	Percentage change from 2010 to 2017	Productivity in 2017 (€)	Percentage change from 2010 to 2017	Productivity in 2017 (€)	Percentage change from 2010 to 2017
TOTAL	All NACE branches	27 883.77	38%	19 715.61	29%	35 776.98	36%
A	Agriculture, forestry and fishing	14 095.06	83%	10 803.28	44%	14 272.73	9%
B_TO_E	Industry	34 728.40	30%	26 528.57	29%	41 044.78	17%
G_TO_U	Services	27 942.59	37%	19 348.28	34%	35 637.89	38%

Source: Consortium based on data of Statistics Lithuania, 2020

In terms of sectorial labour productivity, Utena+2 experienced larger growth in agriculture, forestry and fishing (A) sector compared to Vilnius county. However, growth of the other two sectors was inferior to that of Vilnius county. Inferior growth of all sectors is also observed when comparing Utena+2 with the national average.

Productivity at the LAU level is reported in the table below (Table 1.29). As it can be seen from the table, the results at the municipal level are more or less the same as presented before (Table 1.28). Productivities in all three major sectors of all municipalities of Utena+2 and the region itself are smaller compared to the national average and Vilnius county. Although the value added calculation at LAU level excludes value added by financial entities, it can be observed that the disparity of the service sector productivity in Utena+2 and the national average and Vilnius county is even higher than the reported in Table 1.28. This implies the service sector productivity of the real economy is lower in Utena+2 compared to the national

[52] Productivity was calculated by dividing respective sector's gross value added at factor costs by the number of employees in that economic sector.

[53] Since GVA values are unavailable at LAU level, GVA in Utena county was used as a proxy to represent GVA in Utena+2. To be consistent, Utena county values for persons employed were also used in calculation for GVA per person employed.

average and Vilnius county, even after adjusting for less-knowledge intensive sectors (i.e. knowledge intensive sectors such as financial and insurance activities are of lesser importance for Utena+2 economy compared to the national average and Vilnius county).

Table 1.29: Development of productivity in Lithuania, Vilnius county, Utena+2 and its municipalities from 2010 to 2018

Region of analysis	All NACE branches		Forestry and fishing (A02_A03) (€)		Industry (B_TO_E) (€)		Services (G_TO_U) (€)	
	Productivity in 2018 (€)	Growth from 2010 to 2018	Productivity in 2018 (€)	Growth from 2010 to 2018	Productivity in 2018 (€)	Growth from 2010 to 2018	Productivity in 2018 (€)	Growth from 2010 to 2018
Republic of Lithuania	20 418.33	73%	20 639.334	97%	24 212.36	49%	19 739	86%
Vilnius county	23 853.64	76%	22 049.904	114%	29 349.65	49%	23 308.65	82%
Utena+2	13 956.08	61%	19 209.54	93%	17 762.82	45%	11 323.08	88%
Švenčionys d. mun.	13 861.7	57%	13 861.7	144%	20 954.02	36%	15 191.42	68%
Kupiškis d. mun	13 163.19	61%	13 436.21	20%	14 987.76	26%	11 405.25	103%
Anykščiai d. mun.	13 482.31	96%	17 800.781	74%	16 244.54	58%	11 671.94	147%
Ignalina d. mun.	11 718.46	60%	19 500	98%	15 379.06	45%	10 130.89	77%
Molėtai d. mun.	12 366.42	65%	11 477.48	38%	14 310.08	8%	10 916.9	96%
Utena d. mun.	15 611.6	73%	21 572.09	113%	20 831.76	63%	12 040.18	97%
Visaginas mun[54]	14 488.7	36%			20 076.37	45%	11 834.22	54%
Zarasai d. mun.	11 276.39	62%	11 696.99	-3%	16 430.95	100%	8 723.3	68%

Source: Consortium based on data of Statistics Lithuania, 2020

As it can also be seen from the table, the largest productivity increases in Utena+2 can be observed in Anykščiai district municipality. The productivity growth exceeded that of the national average and Vilnius county, although the absolute level is still relatively low. Impressive productivity growth of the municipality can be explained by the previously described expansion of tourism sector and the associated impressive growth of its productivity.

Other municipalities despite impressive and sometimes higher than the national average productivity gains in the three main sectors, which can mostly be explained by base effects, did not manage to reduce the productivity gap in relation to the national average.

[54] Since Visaginas municipality is almost exclusively urban, value added of agriculture, forestry and fishing (A) sector and forestry and fishing (A02_A03) sub-sector are negligible.

1.4 Conclusions

1. There are **three main objective causes** to the overall lagging behind situation of Untena+2:
    1.1. **declining population** leads to reduced supply of labour and lower consumption which both contribute to worsening the socio-economic situation of the region,
    1.2. **outlying or peripheral location** increases transaction costs of trade despite good level of infrastructure,
    1.3. **sparse population** makes the regional local market insignificant.
2. The **outward migration** continues as a result of an overall lagging situation of Untena+2 in comparison to other regions of Lithuania.
3. The inhabitants of the stakeholder territory became better educated with **increasing shares of population with higher education levels** and a substantial **decrease in vocational education attainment**. There are positive signs that the number of people with vocational training education will increase in the future due to vocational education system reform and academic excellence of Visaginas district municipality.
4. The **labour market** of the region consisted of 99 841 people of working-age (15-64) in 2019. There is a considerable level of unemployment ranging from the lowest 9.9% in Utena district municipality to 14.9% in Zarasai district municipality. Given that the unemployment rate remained almost the same in the last 10 years in the stakeholder theory, the rate inertia can be attributed to the mismatch of skills and worsening socio-economic conditions of the region. There are positive signs that the mismatch of skills will decline and consequently the unemployment rate. This is mainly because of a vocational education system reform which may lead to increased supply of skilled labour.
5. Although the EU external border has a strong **closing effect** and is seen as a **disadvantage** rather than opportunity for business development, it does not affect the socio-economic situation in the region very much. As it was mentioned previously, a relatively bad socio-economic situation in Utena+2 is not because of the region's proximity to the EU's external border but mostly because of the region's outlying or peripheral location. Raising political tensions with Belarus increases uncertainty and risks associated with business development in the region, although it is of little concern as connectivity between Utena+2 and Belarus is almost non-existent (all trade goes through Vilnius county which has a better connectivity with Belarus). Closing effects should be seen as a lost opportunity for business development but not as a real obstacle.
6. The region's businesses are export oriented and as such see major cities of Lithuania and the EU as main markets for exports.
7. Although the main road between Utena and Vilnius is of poor quality, economic agents are already adjusted to it. On the other hand, municipal infrastructure is constantly upgraded, is a relatively good shape and, as it was suggested by representatives of local businesses and public servants pose no issues for business development.
8. **Functional areas** are shaped by the governance structure of Utena+2. As such, there are 7 functional centres in the region, corresponding to municipal centres of the region.
9. Overall inhabitants of Utena+2 are not very entrepreneurial, while business activity over the last years remained almost the same. There were **15.21 enterprises and 31.14 local units per 1 000 inhabitants,** while the **number of self-employed per 1 000 inhabitants stood at 53.47.** All indicators were lower than the national averages. Companies are also of small scale with most companies having less than 50 employees.
10. Over the 10-year period (2007-2017), level of **investment into tangible fixed assets per capita** was lower than the national average almost twice and remained almost the same or even slightly declined in almost all municipalities (excluding Visaginas) of the region. There

are positive signs that this trend will reverse as the entrance of new major companies in the region (i.e. “Intersurgical”) will spur capital investments.

11. As for the access to the capital, the **region had the second lowest balance of loans** issued to legal entities. Even though FDI was growing faster in some municipalities of the region, FDI per capita leaders Utena district municipality (€ 4 146) and Švenčionys district municiplaity (€ 3 365) still had lower values than the national average (€ 6 079). There are positive signs that FDI will increase in the future. On the one hand, tourism development in Anykščiai district municipality is rapid and will continue in the future. On the other hand, the entry of “Intersurgical” will also increase FDI in Visaginas and Švenčionys district municipalities.
12. From the low level of entrepreneurship and investment follows low level of productivity. **Value added (per person employed)** constituted slightly more than 70% of the national average and stood at € 19 715.61 in 2017. The importance of agriculture, forestry and fishing increased by 1.29 percentage points from 4.92% in 2010 to 6.21% in 2017. This increase was significantly larger compared to the national average of 0.53 percentage points. The increase of manufacturing was also higher compared to the national average of 0.06 percentage points and amounted to 0.85 percentage points (from 20.55% in 2010 to 21.40% in 2017).
13. Low investment and productivity resulted in a low-middle income trap for the region. **Net average wages** were only around 80% of the national average, in spite of the fact that some regions experienced higher growth than the national average.
14. To compensate for low growth, national government redistributes tax revenues for poorer regions such as Utena+2. As such, over the last 10 years the poorest municipalities of Utena+2 have almost doubled their tax receipts per capita. The latter suggest that certain **urban-rural cohesion is taking place in the region**.
15. Interviews with municipalities have indicated that the **partnership and network environment** in Utena+2 is relatively well developed. Each municipality has a local business and tourism centre which provides consultations on business establishment, business support availability and related questions. In addition to this, each municipality has local action group which are associations that unite representatives of local businesses, rural communities and public sector.

The findings of **the targeted analysis approve one of the main hypotheses of this study**: “The external border location negatively affects the overall regional development potential and business opportunities in the stakeholder territories”. Due to, inter alia, also the external border situation, **the region of Utena+2 faces particular development obstacles**. The specific border realities pronounce closing effects to the potential economic space and the overall economy as a consequence.

However, it is important to note that the external border location is of second-order importance for socio-economic conditions in Utena+2. Closing effects should be seen as a lost opportunity for business development but not as an actual obstacle for business development. The majority of economic agents in Utena+2 take the current situation with Belarus as given and rather focus on trade with the capital city, other regions of Lithuania and the EU.

Nevertheless, the peripheral location of Utena+2 implies that business entry costs and transaction costs for local businesses are higher compared to businesses in capital region and other, more populous and urban regions.

2 Business support and territorial effects

2.1 Existing business support system

2.1.1 Finance

Even though there are currently no free economic zones in the Utena+2 region, all municipalities have established their own local business support funds and programmes. These funds and programmes are funded directly from municipal budgets and are aimed at creating favourable entry conditions for new businesses, promotion of self-employment, as well as providing small-scale support for the development of small and medium-size companies. The following types of support are offered in all Utena+2 municipalities:

- partial or full coverage of interest payments;
- partial or full coverage of establishment fees, expansion costs and costs of new equipment;
- partial or full coverage of costs associated with the creation of new vacancies.

It should be noted that the size of the mentioned support services and their requirements vary across municipalities depending on the size, business development priorities and financial capabilities of the municipality. According to the most recent data of 2018, the size of business support funds and programmes varied from the highest of € 60 000 in Švenčionys district municipality to the lowest of € 9 800 in Kupiškis district municipality. The rejection rate of applicants in all municipalities of Utena+2 was relatively small and did not exceed 5%[55].

In addition, a few municipalities offer financial support which has no equivalence in other municipalities. For instance, Molėtai district municipality offers tax breaks ranging from 30% to 100% depending on the size of investment made by a company, the number of job vacancies created and whether the employees of a company are registered as taxpayers in the municipality. Švenčionys district municipality offers the coverage of costs and losses related to *force majeure* events and compensations for the costs incurred in establishing new electricity lines, while Utena and Zarasai district municipalities provide partial or full compensation of labour-retraining costs and land rent reliefs for new businesses.

All municipalities support entrepreneurs and small businesses by providing partial or full coverage of their participation costs in exhibitions, fairs, and international business forums. The aim of this is to promote the recognition of their producers, service providers and the region in general, as well as to raise awareness of business development opportunities in the territory and to aid the search for new business partners. Similar initiatives are also available at the national level and funded by European Structural Investment Fund investments delineated in the Operational Programme for the European Union funds' 2014-2020 (hereafter ESIF OP)[56].

[55] The rejection rate refers to ratio between rejected number of applications divided by the total number of applications.

[56] ESIF OP are funded exclusively by European regional development fund, European social fund and Cohesion fund.

For instance, the measure “Business Cluster LT” provides grants to cluster companies, business associations and chambers of commerce grants, which can be used to cover the marketing and promotion costs of products, which allow for a better export penetration. Another measure, which is also available in the form of grant and can be used to cover costs of product promotion and participation in international business fairs, is “New opportunities LT”.

Besides the aforementioned investment inducement measures, Utena district municipality has approved the guidelines for the promotion of investment into production and other objects. According to the guidelines, if an investor invests more than € 1.45 Million and creates no less than 10 new vacancies in the municipality, the municipality can improve public infrastructure surrounding the investment object, facilitate the cooperation between the investor and local education institutions in relation to the provision of qualified labour, as well as ensure a regular transport for workers in new jobs.

During the interviews, the representatives of local municipalities suggested that since the economies of municipalities are mostly comprised of small and medium-sized companies and self-employed people, the established local business support funds and programmes play an important role in reducing the entry barrier for new companies of this type and individuals with spirit for entrepreneurship. This is mainly because the offered coverage of establishment and new equipment costs make the entry into the market almost costless. In addition to that, the interviewees also suggested that this type of support was tailored according to the needs of local businesses, as the current framework was created (and may be altered in the future) after consultations with businesses.

Even though municipal business support funds and programmes are important pillars of the overall business support system, they are relatively small in terms of their size and scale. For instance, representatives from Molėtai district municipality have suggested that they get more applicants each year, but the municipality is unable to satisfy the increased demand for funding due to its limited size of € 30 000. Representatives of Visaginas district municipality have also suggested that their material support is limited by its financial capabilities, but the municipality is putting all of its efforts to expand the support and is currently discussing options of establishing a free economic zone in Visaginas with the government of Lithuania.

Given these reasons, the most important part of the business support system is currently made up of measures, directly financed from the European Regional Development Fund (hereafter – ERDF), European Social Fund (hereafter ESF), Cohesion Fund and European Agricultural Fund for Rural Development (hereafter EAFRD). The most important measures of these funds are described in more detail in sub-chapter 2.3.

2.1.2 Infrastructure

Local municipalities are paying a lot of attention to the state of infrastructure and the level of overall connectivity, as this helps boost business development, as well as attracts new investment.

In terms of road development, each municipality of Utena+2 can apply for the funding as per the EAFRD measure “Investments into all-type small-scale infrastructure”. The goal of this measure is to improve the quality of public infrastructure with a strong emphasis on the construction of new roads of municipal importance, as well as the improvement in quality of the already existing roads. As of today, around € 3 M have been invested into infrastructure as per the measure.

Another source of support which helps to improve infrastructure is instituted by the Ministry of the Internal Affairs of the Republic of Lithuania. The Ministry facilitates financial assistance for investment in infrastructure to the so-called “targeted territories”. Targeted territories are territories which have below-average level of social and economic development and thus acquire additional investments with the goal of boosting their growth and reducing the socio-economic disparities within the country. These investments are essentially geared towards the renewal and creation of new infrastructure, business centres, as well as public spaces, and thus the creation of conditions for the development of business. From 2007 to 2013 such support was provided to Ignalina and Švenčionys district municipalities, as well as towns of Utena and Visaginas. The total amount invested stood at around € 4 M for the said period. Similar support was also provided in the period of 2014-2020, albeit the investments were geared towards the new targeted areas and included towns of Anykščiai, Kupiškis, Molėtai and Zarasai within the Utena+2 region. The rationale for increased investment in infrastructure within these towns was their rapid decline in population, slower growth of the number of firms, as well as the fact that a large portion of the population in these towns worked in primary economic sectors from 2001 to 2013.

2.1.3 Consultation

A wide range of business advisory services are available in Utena+2. These services are mainly provided through business support and tourism centres, which exist in each municipality and are established by the local municipalities. The consultation and advisory services provided by the centres involve:

- Legal consultation on the legislation and requirements of establishing new businesses;
- Provision of information on financial support available in the municipality;
- Help in preparing legal documents, regarding the establishment of new business and applying for financial support;
- Help in the provision and search of land and real estate for new businesses.

Additional services are provided at the national level by non-profit agencies, established by the Ministry of Economy and Innovation of Lithuania - Enterprise Lithuania and Invest Lithuania. The goal of Enterprise Lithuania is to provide advisory and assistance services for Lithuanian businesses. As such, the agency provides a one-stop-shop for national entrepreneurs on regulations, requirements, licenses as well as other related issues. In addition to the consultation and advisory services for the already established businesses, the agency

facilitates the development of the start-up community and ecosystem in Lithuania. The latter is developed through coordination and supervision of Start-up Lithuania - a one-stop-shop which provides all necessary information on the start-up ecosystem in Lithuania.

On the other hand, Invest Lithuania is oriented towards the provision of advisory services to foreign investors who want to establish businesses in Lithuania. The agency provides tailored in-depth market, industry insights and free-of-charge advice on business running costs, the local labour market situation and the legal business regulation framework for potential investors. The agency also helps investors get in touch with local government authorities and introduces them to peer companies and universities.

Besides business consultation services which are available at the municipal and national levels and are directly oriented towards businesses, there are several initiatives which provide consultations on employment and retraining opportunities for individuals. For instance, the Lithuanian Employment Service under the Ministry of Social Security and Labour has its office in each municipality of Utena+2; it maintains the most comprehensive database for jobs in Lithuania, while providing direct consultation and help for job seekers. In addition to that, it also provides retraining services for long-term unemployed individuals.

Another labour consultation initiative which is more oriented towards youth is entitled “Youth Employment Enhancement”, under the Youth Employment Initiative funded by the European Social Fund. The initiative provides retraining, coaching, consultation regarding employment opportunities and employment through subsidies services to NEET youth from 15 to 19 years old.

2.1.4 Events & Marketing

Enterprise Lithuania — in conjunction with the most promising companies from all Lithuania, including those in the Utena+2 region — participates in international trade fairs and exhibitions, and also organizes trade missions to foreign countries. In addition to that, Enterprise Lithuania and Startup Lithuania organize hackathons and workshops exclusively for high-tech start-ups, thus providing a venue for increased cooperation between companies, as well as options for attracting investment and promoting products.

A more subtle product promotion initiative at the municipal level is for companies which are operating in the national parks and protected areas. Each company or self-employed individual operating in such territories acquires a certificate and a trademark, which indicates that their product is from protected areas and was made in an environmentally friendly way. These measures should signalize that products from these areas are of better quality and thus more valuable. Also, since the oldest national park in Lithuania “Aukštaitijos National Park“ is located in the Utena+2 region, all companies and self-employed people operating in the park’s territory can acquire a certificate and a trademark of the park.

2.2 Main business policies

The main measures of business support in the stakeholder territory are derived from the closely-interlinked policy documents and development strategies at the regional, national and EU levels. These documents not only set up the long-term strategy and trajectory goals of social and economic development, but also provide a short and medium-term implementation and intervention logic for investments of various business support measures which will inevitably allow for the achievement of long-term goals. Even though it is sometimes difficult to outline the clear link and hierarchy of these policy documents and development strategies, this chapter will try to provide a clear-cut relationship between the various planning documents and implementation programmes.

For the purpose of generality and in line with the main topic of this report, only the measures which have businesses of Utena+2 as direct beneficiaries of support and are largest in terms of their financial magnitude will be assessed and contextualised. Given that all major business support measures in Utena+2 are primarily and mostly EU funded, it is useful to start the analysis from the EU level of planning, and then from there onwards proceed to the national and, consequently, regional level.

2.2.1 EU business policies

The most important strategic documents creating a framework for policies which perceive businesses as direct beneficiaries are:

- Europe 2020;
- Common Strategic Framework 2014-2020;
- Common Agricultural Policy.

Europe 2020 is a 10-year strategy adopted by the European Commission for advancement of the economy of the EU. The strategy stipulates three main goals:

- Smart growth: developing an economy based on knowledge and innovation;
- Sustainable growth: promoting a more resource efficient, greener and more competitive economy;
- Inclusive growth: fostering a high-employment economy delivering social and territorial cohesions.

A Common Strategic Framework 2014-2020 (hereafter CSF) was established to achieve these goals in the medium run. In a nutshell, the CSF translates the goals of Europe 2020 into possible actions for the 5 ESIF. As such, the CSF essentially delineates the main role, thematic objectives and guidelines for 5 ESIFs. The latter three are then translated into the national and regional contexts through the Partnership Agreement for Lithuania 2014-2020.

The Common Agriculture Policy (hereinafter CAP) is another important strategic EU level document which determines the framework of business support policies. The importance of

CAP stems from its role in determining the long-term rural development objectives for 2014-2020 which in turn determine the priorities for the investments of EAFRD. These investment priorities are as follows:

- Fostering knowledge transfer and innovation in agriculture, forestry and rural areas;
- Enhancing the viability and competitiveness of all types of agriculture, and promoting innovative farm technologies and sustainable forest management;
- Promoting food chain organisation, animal welfare and risk management in agriculture;
- Promoting resource efficiency and supporting the shift toward a low-carbon and climate resilient economy in the agriculture, food and forestry sectors;
- Restoring, preserving and enhancing ecosystems related to agriculture and forestry;
- Promoting social inclusion, poverty reduction and economic development in rural areas.

To address these priorities each member state formulates their own rural development programmes tailored for the specific conditions and challenges of their economies. The specificities of the Lithuanian Rural Development Programme will be explained in the next sub-chapter.

Another important strategy for the region is **The EU Strategy for the Baltic Sea Region**[57] which focuses on the following three key challenges:

- Saving the sea: dealing with environmental aspects of development around the region;
- Connecting the region: working to improve connectivity and opportunities for cooperation;
- Increasing prosperity: looking for innovative ways for fostering sustainable business and economic development.

2.2.2 Business development policies on the national level

Only the policies which have already been effective, or are effective at the period that the analysis covers (which is the current programming period, i.e. 2014-2020) have been described here.

The most relevant planning documents are:

- Lithuania 2030 (hereinafter LT2030);
- Lithuanian National Development Plan 2014-2020 (hereinafter LNDP 2020);
- Lithuania Innovation Development Programme 2014-2020 (hereinafter LIDP 2020);
- Operational Programme for EU Structural Funds Investments in Lithuania for 2014-2020 (hereinafter OP 2020);
- Lithuanian Rural Development Programme 2014-2020 (hereinafter LRDP 2020).

Even though Lithuania has more than 10 national strategies which guide development programmes, most of them set development visions for areas which are not directly linked to economic and business development. As such, the only strategy which sets the vision for

57 https://www.balticsea-region-strategy.eu/

economic and business development is **LT 2030**. In addition to this, **LT2030 is the main long-term national strategy** document approved in 2012 by the Parliament of the Republic of Lithuania[58]. It is a key planning document that must guide strategic decisions and the preparation of state plans or programs. The main vision outlined in LT2030 is as follows: Lithuania is a modern, energetic country, embracing differences, and with a strong sense of national identity. It is aimed at creating an environment that would enable progress-related values, such as openness, creativity and responsibility. There are three key areas of progress: smart society, smart economy and smart governance. The Smart Society sets a vision for a happy society, which seeks greater personal and economic security and dynamism, as well as fairer income distribution, cleaner environment, better social and political inclusion, better access to education and training, skills improvement and good public health. The Smart Economy sets goals for Lithuania to be the most favourable business environment in the Nordic-Baltic region, as well as prevailing culture of social corporate responsibility, and economic development, based on sustainable use of resources and integrity of national economy. The third key area - Smart Governance – distinguishes major areas, such as a strategically potent government, as well as an open and empowering governance, which meets public needs. Furthermore, the implementation of these three key areas and the LT2030 would enable Lithuania to become, in the year 2030, one of the 10 most advanced European Union Member States. While the document is the main long-term national strategy, no separate funding is provided for the implementation of LT2030.

One of the strategic documents to implement LT2030 is **LNDP 2020[59]**. The programme was approved in 2012 by the Government of the Republic of Lithuania. LNDP 2020 aims to implement LT2030 and to create an advanced, modern and strong state characterised by the harmony of a smart society, smart economy and smart management. The programme sets 5 major vertical objectives, which include: 1) the education of society, science and culture (the objective seeks to encourage every inhabitant to realise their opportunities by learning, creating, researching, taking responsibility for themselves, the state and the environment), 2) active and united society (the objective seeks to improve quality of life, strengthen social cohesion and ensure equal opportunities for all), 3) economic growth environment (the objective seeks to create an environment conducive to growth and competitiveness), 4) high value-oriented, integrated economy (the objective seeks to promote the orientation of the economy towards high added value), 5) meeting the needs of society and advanced public governance (the objective seeks to achieve results of public administration that meet the needs of the society and are oriented towards the progress of the country). Also, LNDP 2020 sets 4 horizontal objectives such as: 1) culture (the objective seeks to strengthen the identity and

[58] Lithuania's progress strategy "Lithuania 2030", approved by Resolution No. XI-2015 of the Parliament of the Republic of Lithuania, 15th May, 2015. https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.425517 .

[59] Lithuanian National Development Plan 2014-2020, approved by Resolution No. 1482 of the Government of the Republic of Lithuania, 28th November, 2012. https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.439028/asr

creativity of society by developing competitive cultural services throughout Lithuania), 2) regional development (the objective seeks to ensure balanced, sustainable and disparity reduction-oriented regional development) and 3) health. The horizontal objectives cover areas with complex problems which cannot be solved by one or more sectoral policies. The implementation of LNDP 2020 is coordinated by the objective coordinators (responsible ministries) and monitored by the Office of the Prime Minister. No separate funding is provided for the implementation of LNDP 2020.

Another strategic document for the implementation of LT 2030 is the **LIDP 2020[60].** The programme was approved in 2013 by the Government of the Republic of Lithuania. The strategic goal of the LIDP 2020 is to enhance competitiveness of the Lithuanian economy through the development of an effective innovation system, promoting economic innovation. The document sets 4 major objectives: 1) to develop an innovative society by developing new knowledge and its application; 2) to enhance the potential of business innovation; 3) to promote the cooperation of value networking, development and internationalisation; 4) to increase efficiency of innovation policy-making and implementation, and to promote innovation in the public sector. Lithuania Innovation Development Programme 2014-2020 is implemented according to the Action plan, which covers the measures of implementation for all objectives and targets of the Programme to be implemented over the period established in the Action Plan. It is prepared to cover two periods: 2014–2017 and 2018–2020. The implementation of the document is coordinated by the Ministry of Economy of the Republic of Lithuania. No separate funding is provided for the implementation of LIDP.

Since no separate funding for the achievement of set goals of LNDP 2020 and LIPD 2020 is provided, most of the funding comes from the EU. The provision of EU funds is delineated in the **OP 2020** and **LRDP 2020**, which in turn incorporate the goals and objectives of the Europe 2020 strategy, Common Strategic Framework 2014-2020 and CAP. Given this framework of funding, it can be said that LNDP 2020 and LIPD 2020 are consistent in terms of strategic goals for socio-economic developments with the Europe 2020 strategy, Common Strategic Framework and CAP. This consistency is then established through Partnership Agreement for Lithuania 2014-2020 which in turn determines the size of ESIF funding and framework on how ESIF funding should be used in Lithuania. The framework on the usage of ESIF funding is further delineated and enshrined in the OP 2020 and LRDP 2020. Consequently, OP 2020 and LRDP 2020 provide the majority source of funding for the achievement of set goals of LNDP 2020 and LIPD 2020.

The Lithuanian multi-fund **OP 2020** brings together several key EU investment funds – EFRD, ESF and Cohesion fund. It reflects the goals of the Europe 2020 strategy, as well as Common Strategic Framework 2014-2020, with a clear emphasis on boosting research and innovation,

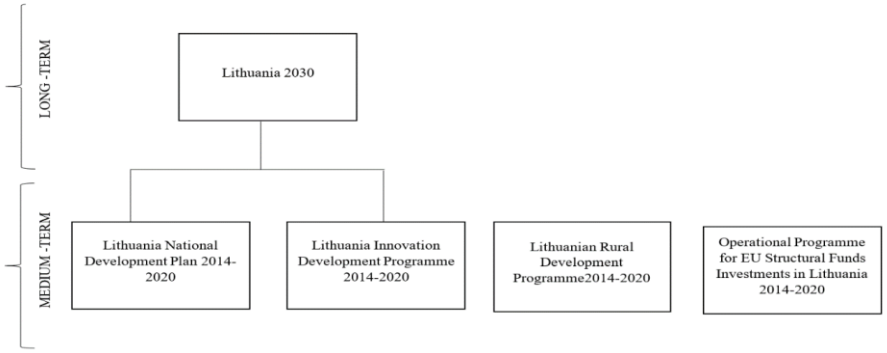
[60]Lithuania Innovation Development Programme 2014-2020, approved by Resolution No, 1281 of the Government of the Republic of Lithuania, 18th December, 2013. https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.463361

SME competitiveness, the shift to a low-carbon economy, the promotion of human capital, especially concerning young people, and the fight against poverty. OP 2020 was approved in August, 2014[61]; nevertheless, it is reviewed and updated every year (the last amendment was approved in June 2019). The programme sets 12 investment priorities: 1) strengthening research, technological development and innovation; 2) promoting information society; 3) promoting competitiveness of small and medium-sized business; 4) promoting energy efficiency and production, and use of renewable energy; 5) environment, sustainable use of natural resources and adaptation to climate change; 6) developing sustainable transport and key network infrastructures; 7) promoting quality employment and participation in the labour market; 8) promoting social inclusion and combating poverty; 9) educating the society and strengthening the potential of human resources; 10) society-oriented smart public administration; 11) technical assistance for the administration of the Operational Programme; 12) technical assistance for communication and evaluation of the Operational Programme. The managing authority of OP 2020 is under the Ministry of Finance, while the other ministries are responsible for the delegated implementation functions. The total OP 2020 budget is € 6 709 Million.

LRDP 2020 takes into account the main goals of CAP and EAFRD investment priorities. It does so by setting up investment measures which target at least four out of six investment priorities, mentioned in the previous chapter. The investment measures of LRDP 2020 are funded by EAFRD. The total budget of the Lithuanian Rural Development Programme for 2014-2020 is € 2 101 Million.

The figure below illustrates all the aforementioned planning documents and their hierarchy. It is important to notice that most of Lithuania's short-term and medium-term planning documents will expire after 2020. Together with the new financial period, Lithuania intends to change the strategic planning guidelines in order to reduce surplus short-term programmes and better integrate strategic documents.

Figure 2.1: Lithuania's relevant planning documents and their relations.



Source: Chancellery of the Government of the Republic of Lithuania, 2020.

[61]Operational Programme for EU Structural Funds Investments in Lithuania for 2014-2020, approved https://www.esinvesticijos.lt/lt/dokumentai/2014-2020-metu-europos-sajungos-fondu-investiciju-veiksmu-programa

Another important document which guides regional development is the Law on Regional Development. The law stipulates that the main goal of the national regional policy shall be reducing socio-economic disparities among and within the regions, as well as promoting a balanced and sustainable development of the entire territory of Lithuania. As such, the law delineates the "target territories" which were mentioned previously in sub-chapter 2. The funding for these territories is provided by the OP 2020.

2.2.3 Business development policies on the regional level

At the regional level, business development policies are mainly delineated by various regional development and municipal development programmes. Their goals, objectives and priorities for socio-economic development correspond to the previously mentioned goals of the EU and national strategic documents, but they also incorporate the fact that municipal socio-economic conditions differ and as such they need specifically tailored goals and policies for improved development. The key development documents at the regional level are:

- Lithuanian Regional Policy White Paper (hereinafter White Paper);
- Regional development plan of Utena county for 2014-2020;
- Integrated territorial development programme for Utena county for 2014-2020;
- Strategic action plan of Kupiškis district municipality, Švenčionys district municipality, Ignalina district municipality, Visaginas municipality, Utena district municipality, Anykščiai district municipality, Molėtai district municipality and Zarasai district municipality for 2018-2020.

The White Paper on Lithuanian Regional Policy was designed to coordinate the visions on territorial cohesion of institutions of national and local governments, social and economic partners, as well as the actions necessary to achieve them. It was approved in 2017 at a meeting of the National Regional Development Council. The aim of the White Paper is to provide a long-term perspective for regional development (2017–2030) that would remain valid for several political cycles and would be consistent with the EU's long-term financial planning. The new objective in the White Paper fundamentally changes the logic of Lithuanian regional policy by identifying problems related to the specific needs of individuals, villages, cities or regions, and then employing State, regional or local government instruments to meet those needs. The regional policy strategy in the White Paper also defines the following main goals: 1) creating an effective regional policy system; 2) ensuring that harmonious and sustainable economic growth is geographically balanced; 3) creating quality living conditions throughout Lithuania; 4) improving the image of the regions. The White Paper highlights changes in regional policy including the introduction of a more "bottom-up" approach, identifying issues for particular areas and then mobilizing local, regional and national measures to address those needs. In addition, new concepts for strategic planning were included, such as regional specialisation and availability of quality public services. It also puts forward a more coordinated vision of regional policy by consolidating the individual needs of regions, counties,

municipalities with the national regional strategy. As for the implementation, no separate funding is provided.

The goal of the Regional development plan of Utena for 2014-2020 is to provide socio-economic analysis of Utena county and to set main priorities, objective tasks for the region, as well as to evaluate constantly changing perspectives of development for the region and to draw up measures for socio-economic development of the region. The regional development plan of Utena county for 2014-2020 is valid since 2014 January 1st, until 2020 January 1st. It sets out three main priorities (which are later detailed into objectives and tasks):

- To enhance territorial cohesion in the region;
- To develop an integral economy in the region;
- To improve quality of life in the region.

Approximately € 61 Million were allocated for the implementation of the Regional development plan of Utena county for 2014-2020, of which almost € 48 Million were taken from ERDF.

The integrated territorial development programme of Utena county for 2014-2020 provides analysis, development objectives, tasks and measures as well as a programme action plan. The integrated territorial development programme was adopted in 2015 September 15th. The integrated territorial development programme for Utena county for 2014-2020 sets out two main objectives for the region's socio-economic development:

- To increase economic activity in Utena county;
- To maintain stable employment rate in Visaginas municipality.

Both objectives are specified with tasks that are essential for reaching objectives. The first objective is a reaction towards main problems in the region, which are low added value generated by business enterprises located in the region, as well as strong depopulation trends. The second objective is motivated by a shrinking workforce in Visaginas municipality, which is a consequence of the Ignalina Nuclear Plant closure.

The programme received funding of over € 95 M, of which almost € 70 M were EU funds.

Strategic action plans of all eight municipalities (Kupiškis, Švenčionys, Ignalina, Visaginas, Utena, Anykščiai, Molėtai and Zarasai) propose main strategic directions for the municipality and list all programmes designed for development in every strategic direction. As all eight municipalities face similar problems, all eight plans propose similar strategic direction for development. Most common strategic directions are:

- The development of municipality's infrastructure to ensure better quality of life for residents, and in some cases (in Kupiškis, Švenčionys and Anykščiai municipalities) to support the development of agriculture sector;

- The improvement of effectiveness in municipality public governance, as well as improving municipality's public image;
- An increased quality and accessibility of public services;
- The improvement of the municipality's economy to create favourable conditions for the development of tourism, agriculture and other economic sectors, as well as to attract investments.

The amount of money allocated for each action plan varies from approximately € 100 Million to approximately € 150 Million.

2.3 Effects of selected business mechanisms

Given the lower than national average socio-economic performance and economic structure of Utena+2 described in the previous chapter (see chapter 0), it should be expected that support measures and investments of both ESIF OP and EAFRD should be biased towards Utena+2. On the one hand, it should be expected that the investments of ESIF OP will be more oriented towards Utena+2 with the purpose of creating conditions for economic and social cohesion within the country. This is in line with the primary goal of the biggest fund of ESIP OP – ERDF – to promote balanced development in different regions.

On the other hand, investments of EAFRD are also expected to be oriented towards Utena+2 given the region being relatively more rural in terms of population and agriculture, forestry and fishing (A) being relatively more important sector in the region's economy.

Hence, it is thus interesting to find out whether Utena+2 and other lagging territories with similar characteristics received higher ESIF OP and EAFRD funding (per capita) compared to more wealthier regions in Lithuania in the current mainstream ESIF programming period.

In the table below, the socio-economic situation of NUT3 regions and Lithuania overall is presented both in 2013 and in 2018. The table also presents cumulative ESIF OP support per capita in euros[62] and cumulative EAFRD support per capita[63] from January 1, 2014 to December 31, 2019. The table indicates that some wealthier counties received more ESIF OP support per capita than the poor ones. For example, the second wealthiest Klaipėda county received the highest ESIF OP support (per capita), while the poorest Tauragė county received the smallest amount of ESIF OP support (per capita). Utena county is somewhere in the middle in terms of both indicators. Correlation between cumulative ESIF OP support per capita and

[62] Cumulative ESIF OP support per capita in euros is calculated by firstly calculating the total cumulative investments of all measures funded by ERDF, ESF and Cohesion fund from January 1, 2014 to December 31, 2019 in each analysed region. The acquired figure is then divided by each analysed region's population in 2013.

[63] Cumulative EAFRD support per capita in euros is calculated by firstly calculating the total cumulative investments of all measures funded by EAFRD from January 1, 2014 to December 31, 2019 in each analysed region. The acquired figure is then divided by each analysed region's population in 2013.

the GDP per capita in 2013 two indicators is 0.46[64], allowing to conclude that the wealthier territories in principle received more ESIF support per capita, thus violating precondition needed for cohesion[65]. In addition to this, strong correlation between ESIF OP support per capita and GDP per capita in 2013 indicates that wealthier regions have higher capacity to absorb investments.

Table 2.1: GDP per capita and ESIF support per capita matrix

Analysed region	GDP per capita in 2013 (€)	Agriculture, forestry and fishing (A) share (%) of GVA in 2013	Cumulative ESIF OP support per capita (€)	Cumulative EAFRD support per capita (€)	GDP per capita in 2018	Change of GDP per capita (%) from 2013 to 2018
Lithuania	11 800	4%	1 883	369	16 200	37%
Vilnius county[66]	17 100	1%	-	354	23 400	37%
Klaipėda county	12 600	2%	1 225	294	15 600	24%
Kaunas county	11 600	4%	1 080	217	16 700	44%
Telšiai county	9 200	6%	1 012	831	11 600	26%
Šiauliai county	8 900	10%	746	443	12 200	37%
Panevėžys county	8 700	9%	832	729	11 800	36%
Utena county	7 800	6%	1 069	1160	9 300	19%
Alytus county	7 600	6%	1 205	582	9 800	29%
Marijampolė county	7 500	13%	1 126	468	9 400	25%
Tauragė county	6 600	12%	488	1 066	9 100	38%

Source: Consortium based on data of National Payments Agency, Ministry of Finance and Statistics Lithuania, 2020

In terms EAFRD support analysis, it can be firstly noticed that higher agriculture, forestry and fishing (A) share of GVA in 2013 is associated with higher cumulative EAFRD support per capita. The latter is confirmed by a relatively strong and positive correlation between the two

[64] Correlation was done between values GDP per capita in 2013 and cumulative ESIF OP support per capita of all analysed regions but Vilnius county and Lithuania.

[65] The reason for analysing GDP per capita in 2013 is that, as it was mentioned previously, the financial support of 2014-2020 should be streamlined to the regions which before 2014-2020 were poorer in terms of economic performance. As such and in line with hypothesis testing, it is important to see whether poorer regions before the financing period of 2014-2020 actually acquired higher ESIF support per capita of current 2014-2020 financing period to catch-up with wealthier regions.

[66] Vilnius county values for cumulative ESIP OP support per capita are not presented due to methodological issues. As projects implemented at the national scale are attributed to Vilnius city in the monitoring system, thus making reported investments in Vilnius County overvalued.

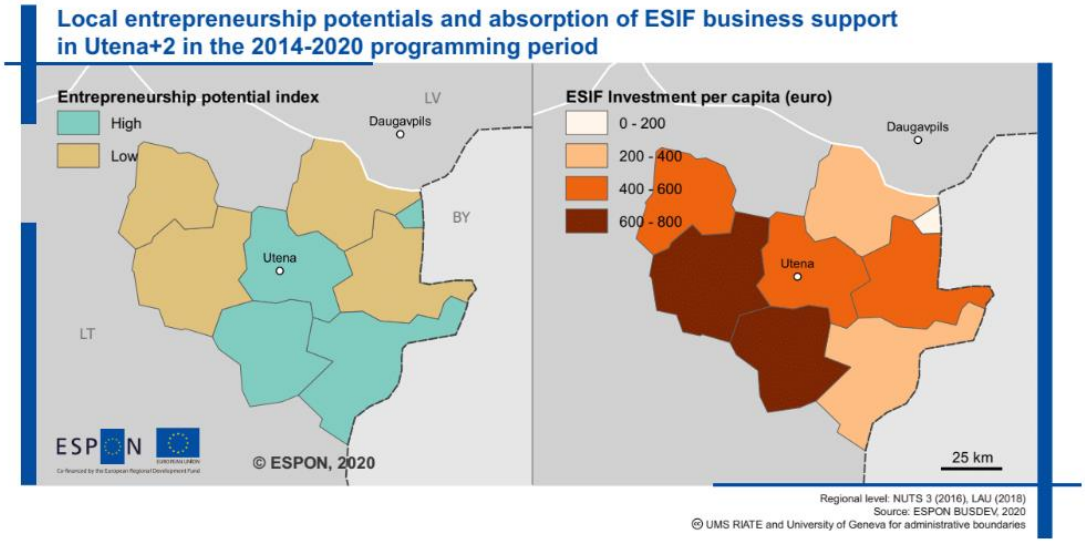
indicators which was 0.40[67]. From this follows that higher agricultural capacity is associated with higher investments.

Such a prima facie macro analysis of the relationship between the acquired support in the current financing period and economic performance before the period suggests that better higher capacity for uptake precedes higher investments. The latter implies that support measures are not necessarily tailored according to the needs of economically poorer regions, this way exacerbating regional divergence.

Somewhat similar story holds within Utena+2 as well. As it can be seen in the map below, municipalities with lower values of entrepreneurship potential index (

Table 1.21) have lower levels of ESIF business support investments per capita[68] as of December 31, 2019.

Map 2.1 Entrepreneurship potential captured by dynamics of six proxies in the time period 2014-2018 and ESIF business support investments in Utena+2 in the 2014-2020 programming period



Source: Consortium calculations based on data by Ministry of Finance and Statistics Lithuania, 2020

However, such analysis may not be sufficient as it may be the case that even if economically poorer regions get less total funding per capita, they get more funding per capita with particular measures which target the region's main weaknesses. As such, the initial macro analysis allows

[67] Correlation was done between values of agriculture, forestry and fishing (A) shares of GVA in 2013 and cumulative EAFRD support per capita of all analysed regions. Values for the whole country were excluded.

[68] ESIF business support investments include cumulative support of ERDF, ESF and EAFRD funded measures oriented towards businesses from January 01, 2014 to December 31, 2019. These measures include ERDF funded measures "Partial compensation of interest", "Regio Invest LT+, "HIT Industry+", "Industry digitalization LT", "Competence voucher", ESF funded measure "Subsidies for starting a business" and EAFRD funded measures "Setting up of young farmers", "Starting of economics activities in rural areas", "Investments for setting up development of economic activities", "Investments into agricultural holding" and "Investments into processing of agricultural products, in marketing and (or) development".

to formulate three main hypotheses which will further guide the analysis of effectiveness of selected business support measures:

- **Hypothesis 1 (H3) –** Due to low level of entrepreneurial capacity in the stakeholder territories business support funding uptake is lower in the stakeholder territories than in other parts of the same country.
- **Hypothesis 2 (H2) –** A lack of flexibility to address the needs of businesses in the stakeholder territories also contributes to a low uptake of business support funding. This limits the relevance of available business support for business units in the stakeholder territories**.**
- **Hypothesis 3 (H3) –** Business support funding (as a proxy for all business support measures) has a positive effect on the business performance, viability, and productivity in the stakeholder territories but to less extent compared to the results achieved in other parts of the same country**.**

The three hypotheses are tested using both qualitative and quantitative methods which seek to determine whether various support measures allowed Utena+2 to catch up with the rest of the country. As it was already delineated and implied in the previous chapter, main weaknesses of the region are the following:

- Low level of entrepreneurship
- Dominance of small size companies which do not scale
- Low productivity of SMEs

To tackle these weaknesses, various business support measures are implemented in the region. For the purpose of this analysis, only ESIF funded measures which were the largest in terms of financial magnitude and had businesses as direct beneficiaries in the stakeholder region were selected for further analysis. As such, 5 measures funded by EAFRD and 6 measures funded by ESIF OP were selected for further analysis. These measures were further assembled into different groups according to their intervention logic[69]. In total, three groups were formed, and the groups are as follows:

- Measures aimed at business creation;
- Measures aimed at business development;
- Measures aimed at business productivity increases.

[69] Intervention logic of these measures is elaborated in the following sub-chapter.

To analyse the effectiveness of these groups of measures in tackling the previously mentioned region's weakness and test the three hypotheses, assessment model was created and is presented in the table below.

Table 2.2: The assessment model

Key problems Utena+2	Group of measures	Outputs	Effects
Low level of entrepreneurship	Measures aimed at business creation	• Number of enterprises receiving funding / number of projects funded / amount of support received	• Increased level of entrepreneuship
Dominance of small size companies which do not scale	Measures aimed at business development	• Number of enterprises receiving funding / number of projects funded / amount of support received	• Increased turnover • Increased size of companies • Increaed employment
Low productivity of SMEs	Measures aimed at business productivity increases	• Number of enterprises receiving funding / number of projects funded / amount of support received • Private investment attracted	• Increased productivity

Source: Consortium

As it can be seen from the assessment model table, groups of measures were tied to the weaknesses that they aim to tackle. Information on outputs (available from institutions which supervise implementation of measures) allows to see the performance and effectiveness of measures at the measure level. This information also allows to test H1 as it refers to financial uptake in the stakeholder region.

On the other hand, information on effects is mainly obtained from Statistics Lithuania and interviews with beneficiaries and representatives of municipalities. Whereas information from statistics Lithuania allows to see whether the analysed measures had a positive effect on various macro indicators, overall socio-economic situation in the stakeholder region and thus test H3, interviews with beneficiaries allows to strengthen macro indicator analysis and essentially test H2.

Following sub-chapters are devoted to the analysis of each group of measures as per the assessment model. Each sub-chapter provides a synthesised view on the policy context of various measures within a group, financial and applicant magnitude of each measure and presents the results achieved in Utena+2.

2.3.1 Measures aimed at business creation

In total, three business measures were ascribed to this group. Two measures selected are part of LRDP 2020 and thus are directly funded from EAFRD, while another measure is part of the OP 2020 and is thus funded from ESIF OP. The list of the measures, their source of funding

and performance in terms of projects funded and amount of money per capita invested[70] in Lithuania and Utena+2 region is reported in the table below (Table 2.3).

Table 2.3: Performance of measures aimed at business creation and its early development[71]

Source of funding	Name of the measure	TOTAL: whole country			TOTAL: Utena+2		
		Total investment M€	No. of approved projects (success rate)	Per capita invested €	Total investment M€	No. of approved projects (success rate)	Per capita invested €
EAFRD	**Setting up of young farmers**	55.27	1 271 (56%)	18.60	9.08	203 (63.84%)	47.29
EAFRD	**Starting of economic activities in rural areas**	24.74	1 135 (33.7%)	8.33	4.98	221 (44.29%)	13.47
ESIF OP	**Subsidies for starting a business**	6.28	620 (100%)	2.11	0.19	21 (100%)	0.97

Source: Consortium based on data of the Ministry of Finance, 2020

The rationale for ascribing these measures to this group mainly stems from the fact that their intervention logic is more or less the same. Firstly, only small and medium-sized companies or natural persons can apply for these measures. Support for enhancing business creation and development builds on the assumption that SMEs and natural persons face difficulties in obtaining the funding necessary to set-up a business or survive the initial phase. Thus, they lack market access to financing. These measures, consequently, aim to reduce entry barriers by offering financial support that is not available to these persons and SMEs otherwise

For instance, in case of measures "Setting up of young farmers", "Starting of economic activities in rural areas" and "Subsidies for starting a business", the mentioned goals are achieved through provision of grants for creating new businesses. Whereas the former measure is primarily aimed at establishing new businesses in the agricultural sector, the latter two measures are aimed at establishing new businesses in industrial and service sectors. The main difference between EAFRD measures "Starting of economic activities in rural areas" and "Subsidies for starting a business" is that the former promotes development of new businesses exclusively in rural areas, while the latter is not urban-rural typology bounded.

Another difference amongst the measures is the requirements for applicants. In case of measure "Setting up of young farmers", the applicants ought to be younger than 40 years old and have a legal status of a farmer. Age limitation restriction is made with the purpose of

[70] Per capita investments are calculated by firstly calculating the total cumulative investments of each separate measure from January 1, 2014 to December 31, 2019 in Utena+2 and Lithuania overall. The acquired figures are then divided by the total population of Utena+2 and Lithuania overall in 2013.

[71] It should be noted that division of cumulative EAFRD support by rural population yields essentially the same results.

encouraging young people to move back or remain in more rural areas by establishing agricultural businesses and creating jobs in these areas.

In case of measure "Starting of economic activities in rural areas" applicants for grants have to be natural persons or small size companies. As for the second measure in the group, all applicants of the measure "Subsidies for starting a business" have to be natural persons or small size companies and, more importantly, the applicants must be recipients of funding from a measure "Business promotion 2014-2020"[72]. The latter requirement for the applicant implies that the measures "Business promotion 2014-2020" and "Subsidies for starting a business" are essentially complements. However, measure "Business promotion 2014-2020" is excluded from this analysis as the data of measure's performance is not available at LAU level.

The size of the grants also differs amongst the three measures. Measure "Setting up of young farmers" offers grants of up to € 40 000, while measure "Starting of economic activities in rural areas" offers grants of up to € 37 600. On the other hand, measure "Subsidies for starting a business" offers grants for the coverage of employment costs of up to € 500 per employee per one month. The grant can be provided for up to 18 months.

In terms of their achieved effect, no studies have so far been conducted as the implementation of the measures is still ongoing. However, the performance of the selected measures seems to indicate that absorption of funds is not necessarily smaller in economically poor regions such as Utena+2. Per capita investment of measures "Setting up of young farmers" and "Starting of economic activities in rural areas" were significantly higher than the national average, while for measure "Subsidies for starting a business" smaller, as it is seen in the table above. These results are in line with the fact that agricultural, forestry and fishing sector is more important in the economy of Utena+2 the economy, as shown in sub-chapters 1.1.1. and 1.3.8. Absorption of EAFRD measures is also higher because EAFRD measures have lower regulatory barriers, are more generous and, as it was indicated by respondents of public institutions, managing agency of EAFRD funds – National Payment Agency – provides quicker and more efficient consultations for applicants.

Lower uptake of ESIF OP measure "Subsidies for starting a business", on the other hand, is mainly because of the set requirement for applicants to be recipients of support of the measure "Business promotion 2014-2020". Given that the provision of measure is contingent on acquiring a loan form a commercial bank or a credit union, and since relatively bad socio-economic conditions imply that businesses in the region are deemed as more risky, local businesses face higher premiums and / or higher collateral requirements from credit institutions. These higher premiums and collateral requirements are sometimes too much of a burden for local businesses and they refrain from taking out a loan.

[72] The measure "Business promotion 2014-2020" provides loans of no more than € 25 000 for business creation purposes for natural persons or small size companies.

In addition to this, the potential of acquiring a grant as per measure "Subsidies for starting a business" does not provide a sufficient motivation to acquire a loan. Once again, grim socio-economic conditions (i.e. high unemployment, scarcity of skilled labour, etc.) in Utena+2 means that the payback period of establishing new business is significantly longer – it takes much longer time for newly established business to become profitable. As such, the set maximum amount of subsidy of € 9 000[73] is simply insufficient to cover initial business running costs of labour, and potential beneficiaries simply refrain from applying for the support in the first place.

The second reason of lower uptake of measure "Subsidies for starting a business" is already low level of entrepreneurial spirit in the region. As it was shown in sub-chapters 1.1.1. and 1.3.4, both the growth rate and absolute values of local units and number of self-employed people per 1 000 inhabitants were lower in Utena+2 compared to the national average. Lower values of entrepreneurial spirit indicators naturally suggest that the uptake will be lower in Utena+2 because there is simply smaller number of potential beneficiaries. Representatives of public institutions also suggested that people in the region are somewhat lacking "entrepreneurial" spirit, and the reason for this is the previously described legacy of monotowns (1.1.1) – generations of Utena+2 used to be employees of a few industries, and when these industries contracted, people simply did not have skills or will to establish their own businesses.

The third reason of lower uptake of measure "Subsidies for starting a business" is fragmented ESIF OP support system. Differently from EAFRD measures where National Payment Agency provides one-stop consultation services regarding all EAFRD support measures, consultation and provision of ESIF OP measures is divided amongst three agencies. This fragmentation means that not only the reach of support is lower but also that it is harder for businesses with no experience to acquire support for the preparation of necessary documents for the support. The latter leads to higher number of rejected applications due to faulty support applications and consequently lower uptake. Representatives of public institutions of Utena+2 indicated that this is indeed the case in the region. Representatives suggested that local businesses have lack of experience in preparing business support applications, and fragmented consultation network is not efficient enough in providing assistance.

In terms of achieved effects in Utena+2, higher per capita investments of measures "Setting up of young farmers" and "Starting of economic activities in rural areas" did not lead to the higher growth rates of local units per 1 000 inhabitants in agriculture, forestry and fishing sector. It was observed that from 2014 to 2020, the local units per 1 000 inhabitants in agriculture, forestry and fishing sector did not increased and stayed the same. The growth rate in the rest of the country was higher and stood at 17% for the same period. In terms of absolute numbers, Utena+2 maintained higher rate as it stood at 1.49 local units per 1 000 inhabitants, while in the rest of the country at 0.99 local units per 1 000 inhabitants in 2020.

[73] 18 months multiplied by the maximum amount of grant per one month per employee (i.e. € 500)

Similar tendencies in terms of growth of new businesses were observed also when analysing business growth in all sectors. From 2014 to 2020, the growth rates of local units per 1 000 inhabintats was 4.27% in Utena+2, while the growth stood at 17% in the rest of the country. In terms of absolute numbers, the number of local units per 1 000 inhabitants stood at around 26.83 and 39.66 in 2014 and at 32.00 and 46.25 in 2020 in Utena+2 and the rest of the country, respectively.

Although it is hard to attribute changes in number of local units per 1 000 inhabitants in 2014-2020 exclusively to the analysed measures, growth tendencies of both indicators suggest that the analysed support had higher impact at the national level compared to Utena+2. Nevertheless, the general impact was positive in Utena+2 and interviews with local beneficiary and public institutions support this view.

For instance, representative of local beneficiary UAB Ars Bona[74] indicated that the company acquired support of the measure "Subsidies for starting a business" in order to increase company's profitability and overcome the risk of bankruptcy. The case study of how the acquired support allowed the company to overcome its development obstacles is available in the relevant sub-chapter of the Factsheet #1 "FACT SHEET 1_BUSINESS CREATION".

Representatives of public institutions indicated that the support of measures "Starting of economic activities in rural areas" and "Setting up young farmers" also significantly and positively contributes to business creation in relatively more rural areas such as Utena+2. According to representatives, the support of both measures positively contributes to small and medium size local business creation and ensures survivability of "rural start-ups". The majority of new businesses operate in service sector (i.e. local repair shops, small scale garment and food production, etc.). New businesses help in turn to reduce seasonal employment adjustments in more agricultural business-oriented areas such as Utena+2, and thus also contributes positively to stabilisation of demographic situation in rural areas by reducing incentives of people to migrate.

Since the number of applicants of the measure "Starting of economic activities in rural areas" exceeded the number of expected applications by almost 3 times, the representative suggested that funding for these measures was increased in order to accommodate local needs.

All in all, from the described results of performance analysis of the selected measures follows that hypothesis 1 – business support uptake is lower in the stakeholder territory due to low level of entrepreneurial capacity – is not validated in cases of EAFRD measures and validated in case of ESIP OP measure. Agriculture, forestry and fishing sector, as it was indicated in sub-chapters 1.1.1. and 1.3.8, plays a larger role in the region's economy and consequently the capacity for uptake and the final uptake is also higher. Lower entrepreneurial spirit, as indicated

[74] The company specializes in the provision of auditing and accounting services. As such, its NACE classification is M.

in sub-chapters 1.1.1. and 1.3.4, consequently leads to lower entrepreneurial capacity and lower uptake of ESIF OP measure.

Hypothesis 2 – lack of flexibility to address the needs of businesses in the stakeholder territory contributes to a low uptake of business support funding – is also not validated in cases of EAFRD measures and validated in case of ESIP OP measure. EAFRD measures have lower regulatory barriers and are more generous in terms of financial support provided. In addition to this, EAFRD measures are supervised by a single agency (i.e. National Payment Agency) which provides one-window consultations for all EAFRD support measures. This also contributes to a better reach of EAFRD measures.

Support of ESIP OP measure, on the other hand, is in general insufficient to cover the initial business running costs of labour to ensure business profitability in Utena+2. In addition to this, consultation network of ESIF OP measures is fragmented and leads to lower reach of the measure in Utena+2. Nonetheless, the interview with local beneficiary indicated that when the support is acquired, it helps to ensure survivability of business by increasing its profitability.

As for hypothesis 3 – business support funding has a positive effect on the business performance, viability and productivity in the stakeholder territories but to less extent compared to the results achieved in other parts of the same country–, the hypothesis is also somewhat validated. The growth local units per 1 000 inhabitants was lower in Utena+2 compared to the national, though it was still positive.

Nevertheless, interviews with local beneficiary and public institutions indicated that the support contributes positively to business creation in the region. This is particularly the case for EAFRD measures which, according to representatives of public institutions, help to reduce seasonal employment adjustments and contribute positively to stabilisation of demographic situation in rural areas, through creation of new jobs.

2.3.2 Measures aimed at business development

In total, two business measures were ascribed to this group. One measure selected is part of EAFRD and thus is directly funded from EAFRD, while the second measure is part of the ESIF OP and thus is funded by ERDF. The list of the measures, their source of funding and performance in terms of projects funded and amount of money invested in Lithuania and Utena+2 region is reported in the table below (Table 2.4)[75].

[75] Per capita investments are calculated by firstly calculating the total cumulative investments of each separate measure from January 1, 2014 to December 31, 2019 in Utena+2 and Lithuania overall. The acquired figures are then divided by the total population of Utena+2 and Lithuania overall in 2013.

Table 2.4: Performance of measures aimed at business development[76]

Source of funding	Name of the measure	TOTAL: whole country			TOTAL: Utena+2		
		Total investment M€	No. of approved projects (success rate)	Per capita invested €	Total investment M€	No. of approved projects (success rate)	Per capita invested €
ESIF OP	**Partial compensation of interest**	25.68	3 254 (99%)	8.64	1.13	86 (98%)	5.90
EAFRD	**Investments for setting up and development of economic activities**	23.63	162 (36.4%)	7.95	2.48	16 (29.63%)	12.89

Source: Consortium based on data of the Ministry of Finance, 2020

The measures analysed in this section have similar intervention logic. All of these measures are aimed at the provision of funding opportunities for the development of products, improvement of productive capacities and ultimately business development

For instance, in case of measure "Partial compensation of interest", the mentioned aim is achieved through provision of grants for the coverage of interest payments. Since only small and medium size companies can apply for this measure, it is recognised that these types of companies are subject to higher interest rate premiums due to their size and thus assumed risk. As such, the coverage of interest payments helps to reduce the burden of interest payments and acquire loans for the development of products and investment into productive capacities on a preferential basis.

The non-repayable grant for interest rate coverage is capped at € 200 000 as per *de minimis* rules and the maximum period of 36 months. In addition to this, the grant provides coverage to the 95% of interest payments but the interest on loans cannot exceed 7% per annum. In the face of COVID-19, the guidelines and regulations of the measure were updated and now allows for the full 100% compensation of interests. Although non-repayable grant is capped at € 200 000, in reality the average size of the grant provided is around € 7 000 due to mentioned restrictions on the maximum period of grant provision.

As for the measure "Investments for setting up and development of economic activities" the target group and end beneficiaries of the measure are natural and legal persons residing in rural areas. All applicants have to be operating continuously for no less than 12 months and acquired income from their operations should be no less than the sum of average wages over preceding 12 months. The eligible support intensity is up to 50%, while the maximum volume of funding per project depends on the number of jobs to be created. If one job is to be created,

[76] It should be noted that division of cumulative EAFRD support by rural population yields essentially the same results.

then the maximum size of the grant is € 50 000. The maximum size of the grant is € 200 000 when the project aims to create 4 or more than 4 jobs

In terms of the achieved effect, as it is the case with the previous group of measures, no studies have been conducted so far. As it is seen from the table above, per capita uptake of EAFRD measures is higher than the national average, while per capita uptake of ESIP OP measures is lower. Similar explanation as in the previous group of measures holds here, namely, that agricultural, forestry and fishing sector is more important in the local economy compared to the rest of the country. In addition to this, EAFRD measure has lower regulatory barriers, is more generous and, as it was indicated by respondents of public institutions, managing agency of EAFRD funds – National Payment Agency – provides quicker and more efficient consultations for applicants.

As for lower uptake of the ESIP OP measure, somewhat similar explanation as in previous group of measures also holds here, namely, that the measure does not address the main obstacles of expanding businesses in remote areas with grim socio-economic conditions, namely, high risk. Since the provision of measure is contingent on acquiring a loan from a commercial bank or a credit union, and since relatively bad socio-economic conditions imply that businesses in the region are deemed as more risky, local businesses face higher premiums and / or higher collateral requirements from credit institutions. These higher premiums and collateral requirements are sometimes too much of a burden for local businesses and they refrain from taking out a loan. However, the latter implies that the capacity for acquiring support of measure “Partial compensation of interests” is also lower.

In addition to this, interview with an unsuccessful applicant company UAB Šilelio nekilnojamas turtas[77] suggested that the measure may not be tailored to everyone’s need and sometimes is not able to achieve its intended purposes. According to the representative of the company, the company unsuccessfully applied for funding and was rejected because there were too many employees in the company. It was implied from the representative’s statement that even if the turnover of a company is small, it has a small amount of capital and thus collateral but the high number of workers, such a company may not be able to acquire financial support for investment purposes due to the measure’s regulations. From the latter follows that in some instances, the set requirements may not allow the measure to achieve its intended purposes, namely, provision of investment funds for companies, provided the company in question is operating in a service sector. See relevant sub-chapter of the Factsheet #2 “FACT SHEET 2_BUSINESS DEVELOPMENT” for more information regarding the main reasons behind company’s unsuccessful application for support.

Despite the unsuccessful application, there were other 86 successful applicants (98% success rate) in Utena+2. Many of the applicant companies are successfully operating in the service

[77] The company specializes in the provision of real estate consultancy services. As such, its NACE classification is L.

sector. In addition to this, the interviewed applicant was the only unsuccessful applicant in the region. As such, it can be assumed that the reject applicant's case is an exception, while its observations about unjust requirements of the measure are ill-founded.

Another viable reason for lower uptake of the ESIF OP measure in Utena+2 compared to the national average is relatively low level of entrepreneurship in Utena+2. When there are fewer potential applicants, the uptake would naturally also be lower.

As for the performance of the other measure, interviews with representatives of public institutions indicated that the EAFRD measure "Investments for setting up and development of economic activities" is particularly successful in promoting business expansion in the region. A good example of this is UAB Naivu – a company specializing in producing chocolate[78]. According to the representative of the company, the acquired funding helped to company to to modernize its equipment and increase potential revenue. As of today, the company is a rising star of gourmet chocolate in the world. See relevant sub-chapter of the Factsheet #2 "FACT SHEET 2_BUSINESS DEVELOPMENT" for more information on how the acquired support helped the company to achieve its development goals.

As for ESIF OP measure "Partial compensation of interest", although per capita uptake of the measure is lower than the national average, a large number of firms that acquired funding (i.e. 86 companies) indicates that the support is relevant for the region and is helping the region's businesses to expand.

All in all, it can be concluded that hypothesis 1 – business support uptake is lower in the stakeholder territory due to low level of entrepreneurial capacity – is not validated in case of EAFRD measures and validated in case of ESIP OP measure. The main reason for higher uptake than the national average of EAFRD measure is that agriculture, forestry and fishing play a larger role in the region's economy and consequently the capacity for uptake and the final uptake is also higher.

On the other hand, uptake of ESIF OP measure "Partial compensation of interests" is lower mainly because the support provision is contingent on loan acquisition. Since many businesses in Utena+2 refrain from taking out a loan, this consequently indicates that the capacity for uptake of the measure is lower and the final uptake is thus also lower.

In addition to this, since the measure does not tackle the main obstacles of expanding businesses in remote areas with grim socio-economic conditions, namely, high risk, it can also be concluded that hypothesis 2 is also validated. Another reason for lower uptake is lower level of entrepreneurship spirit in Utena+2. When the base of applicants is lower, the uptake is also consequently lower.

[78] NACE classification of the company is G.

As for EAFRD measure, hypothesis 2 is not validated. This is mainly because EAFRD measure has in general lower regulatory barriers and is more generous in terms of financial support provided. In addition to this, EAFRD measures are supervised by a single agency (i.e. National Payment Agency) which provides one-window consultations for all EAFRD support measures. This also contributes to a better reach of EAFRD measures.

As for hypothesis 3 – business support funding has a positive effect on the business performance, viability and productivity in the stakeholder territories but to less extent compared to the results achieved in other parts of the same country–, the hypothesis is also somewhat validated in case of ESIF OP measure and not in case of EAFRD measure. In case of ESIF OP measure, it is likely that the main beneficiaries of support expanded their businesses. On the other hand, the smaller per capita uptake of the measure indicates that the achieved effect was smaller than in the rest of the country.

As for EAFRD measure, both the interviewed company and higher per capita uptake of the measure indicate that the measure is tailored according to the needs of potential beneficiaries of Utena+2 and consequently leads to good performance results in the region.

2.3.3 Measures aimed at business productivity increases

In total, six business support measures were ascribed to this group. Two measures selected are part of EAFRD and thus are directly funded from EAFRD, while the rest four measures are part of the ESIF OP and thus are funded by the ESF and ERDF. The list of the measures, their source of funding and performance in terms of projects funded and amount of money invested in Lithuania and Utena+2 region is reported in the table below (Table 2.5)[79].

Table 2.5: Performance of measures aimed at business productivity increases[80]

Source of funding	Name of the measure	TOTAL: whole country			TOTAL: Utena+2		
		Total investment M€	No. of approved projects (success rate)	Per capita invested €	Total investment M€	No. of approved projects (success rate)	Per capita invested €
ESIF OP	**Regio Invest LT+**	69.63	65 (84.4%)	23.43	5.97	6 (60%)	31.10
ESIF OP	**Industry Digitalisation LT**	52.77	97 (98.9%)	17.76	2.16	4 (100%)	11.29
ESIF OP	**HIT industry LT+**	15.31	37 (90.2%)	5.15	0.36	1 (100%)	1.87
ESIF OP	**Competence voucher**	3.31	735 (98.9%)	1.11	0.04	7 (100%)	0.16
EAFRD	**Investments into agricultural holdings**	374.60	4 851 (70.4%)	126.03	51.26	669 (74.50%)	266.93

[79] Per capita investments are calculated by firstly calculating the total cumulative investments of each separate measure from January 1, 2014 to December 31, 2019 in Utena+2 and Lithuania overall. The acquired figures are then divided by the total population of Utena+2 and Lithuania overall in 2013.

[80] It should be noted that division of cumulative EAFRD support by rural population yields essentially the same results.

Source of funding	Name of the measure	TOTAL: whole country			TOTAL: Utena+2		
		Total investment M€	No. of approved projects (success rate)	Per capita invested €	Total investment M€	No. of approved projects (success rate)	Per capita invested €
EAFRD	**Investments in to processing of agricultural products, in marketing and (or) development**	58.78	67 (66.6%)	19.78	2.59	5 (62.50%)	13.47

Source: Consortium based on data of the Ministry of Finance, 2020

Support aimed at business productivity increases creation builds on the assumption that SMEs and natural persons face competitive pressures in the face of intensified digitalisation of agriculture and industry in the world. As such, all measures within this group are aimed at helping these companies to transform their business and improve their productivity positions in order to remain competitive in the international markets.

For instance, in case of measures of ESIF OP “Regio Invest LT+”, “Industry Digitalisation LT” and “HIT industry LT+”, small and medium-sized companies of industrial sector can apply for the funding of up to M€ 2.9 for investments in various capital goods, retraining of employees and digitalisation of production processes which should boost the productivity of a recipient company. It is important to note that support intensity depends on the type of an applicant company. Support intensity for micro and small companies is 45%, for medium-sized companies – 35%.

On the other hand, in case of the measure “Competence voucher”, productivity increases are achieved through provision of vouchers for state or municipal companies, as well as private legal persons, with the purpose of increasing accumulation of human capital. Successful applicant can acquire a non-repayable grant or a voucher of up to € 4 500. In this instance, a recipient of a voucher can use it to acquire necessary qualification upgrade services for its company’s workers from the list of educational services provided created by the public company “Enterprise Lithuania”.

Measures of EAFRD “Investments into agricultural holdings” and “Investments in processing of agricultural products, in marketing and (or) development” are also aimed at business productivity increases, albeit in the agricultural and related sectors. For instance, measure “Investments into agricultural holdings” provides up to € 50 000 grant for an applicant per project with the purpose to boost investments into capital goods, so the applicant could modernize and restructure its material and technical equipment. Support intensity varies from 40% to 50% depending on the agricultural sub-sector of the applicant. Support intensity can be increased by 20% if the applicant is a young farmer (not older than 40 years old).

Another measure “Investments in processing of agricultural products, in marketing and (or) development” is similar in that it also aims to increase productivity of farms oriented to food

processing and food industry companies, but through provisions of funds to innovations in the production process and marketing activities. The offered grant is up to M€ 1.3 per one project but cannot exceed M€ 4 in total. Support intensity for the measure is 40%, but if the applicant is an agricultural cooperative, the support intensity increases to 50%.

In terms of the achieved effect of measures, no studies have so far been conducted as the implementation of the measures in question is still ongoing. As it is seen from the table above, per capita uptake of the two largest measures in the group (i.e. “Investments into agricultural holdings” and “Regio Invest LT”) is higher than the national average, while per capita uptake of all other measures is lower. Higher per capita uptake of EAFRD measure “Investments into agricultural holdings” can be explained by the fact that agriculture, forestry and fishing sector plays a larger role in the region’s economy compared to the national average, as it was indicated in sub-chapters 1.1.1. and 1.3.8. Larger role implies that the capacity for uptake is higher and consequently the final uptake per capita is also higher.

On the other hand, per capita uptake of the measure “Investments in processing of agricultural products, in marketing and (or) development” is lower in Utena+2 mainly because the measure is more oriented to food processing companies. And although, as it was mentioned in sub-chapter 1.1, Utena+2 has a strong and well-developed food processing industry, the industry is dominated by two food processing industrial giants UAB Utenos mėsa and UAB Rokiškio pieno gamyba. Since these companies dominate the local market, the uptake of the rest of the companies is consequently lower because there is simply smaller number of potential applicants. In addition to this, these companies are large enough to fund their productivity enhancement projects themselves, using internal funds.

Higher uptake of the largest ESIF OP measure “Regio invest LT+” also be explained by stronger relative importance of industry and especially manufacturing in Utena+2 economy compared to the national average, as it was argued in sub-chapters 1.1.1 and 1.3.8. Larger role of industry sector and manufacturing sub-sector sector implies that the capacity for uptake is also larger.

Smaller uptake of measures “Industry Digitalisation LT” and “HIT Industry LT+” can be explained mainly by the fact that these measures are aimed at productivity increases through promotion of digitalisation and automatisation of traditional industries. The eligible funded activities under these measures are installation of nano-electronic technologies, biotechnologies, nanotechnologies, advanced materials and advanced productions systems in the production processes of companies. “Regio Invest LT+”, on the other hand, aims to improve productivity through investments in reconstruction and renewal of production lines, acquisition of modern equipment and retraining of employees. As such, the former two measures are oriented towards companies which are innovative and built their productivity increases through installation of new technologies into production processes, while “Regio Invest LT+” towards companies which only seek to improve productivity through new capital investments. Since, as it was mentioned in sub-chapter 1.2.3, the number of innovative firms in Utena+2 is

relatively small, the uptake of measures “Industry Digitalisation LT” and “HIT Industry LT+” is consequently also smaller.

Lower uptake of the final ESIF OP measure “Competence voucher” in Utena+2 compared to the rest of the country can be explained three main reasons. Firstly, as it was indicated in sub-chapter 1.1.1, most companies in Utena+2 are small size and thus quite specialised. From this follows that they do not necessarily need human capital improvement services. Secondly, the overall level of entrepreneurship is lower in Utena+2. For instance, number of local units and self-employed people per 1 000 inhabitants is lower in Utena+2 compared to the national average. Naturally the uptake is also lower. Thirdly, some of human capital improvement services that are covered by the voucher are only available in regions outside Utena+2. Since voucher does not cover transportation and related costs (i.e. accommodation), companies simply do not want to incur short-term costs in favour of potential long-term gains.

In terms of achieved effects of measures, the higher per capita investment of “Regio Invest LT+” can be said to be effective in terms of achieved results as the productivity in the industry sector[81] seem to have increased in Utena+2 more than in the rest of the country. From 2014 to 2017[82], gross value added per worker employed in industry sector increased by 7.46% in Utena+2 compared to 3.98% in the rest of the country[83]. Absolute values were still lower in Utena+2 and stood at around € 26 529, while in the rest of the country at € 35 786 in 2017.

Higher uptake per capita of the largest EAFRD measure “Investment into agricultural holdings” can also be reflected in the fact that gross value added per worker employed in agriculture, forestry and fishing sector did grow more in Utena+2 than in the rest of the country. 37.02% growth in the indicator was observed in Utena+2, while in the rest of the country the growth was at 35.84% from 2014 to 2017. Despite higher growth, absolute values were still lower in Utena+2 and stood at around € 10 803, while in the rest of the country at € 14 055.

In spite of the higher growth in both industry and agriculture, forestry and fishing sectors, the positive productivity increases did not spillover to other sector economic sectors as the growth of gross value added per worker employed was lower in Utena+2 than in the rest of the country from 2014 to 2017. Whereas the growth in Utena+2 was 11%, the growth in the rest of the country was 12%. The absolute value differences were also observed as the gross value added per worker employed were € 19 826 and € 28 030 in Utena+2 and the rest of the country in 2017, respectively.

[81] NACE classification B_TO_E

[82] The latest available data on gross value added per worker employed is only available up to 2017.

[83] It is important to note that since gross value added is not available at LAU level, results of Utena county are used as a proxy for the development and tendencies of the whole Utena+2 region.

Interviews with beneficiaries also indicate that the measures were successful in achieving the set aims. Interviews with UAB Hoda[84], UAB Viri Technologija[85], UAB Umaras[86] and UAB Strapa[87] indicate how measure "Regio Invest LT+" contributed positively to productivity increases in these companies. Interviews with UAB Akadas[88] and UAB Seifuva[89] indicate how measures "Industry Digitalisation LT" and "HIT Industry LT" contributed positively to productivity increases in these companies. See relevant sub-chapters of the Factsheet #3 "FACT SHEET 3_BUSSINESS PRODUCTIVITY INCREASES" for more information on how the acquired support helped companies to increase productivity.

All in all, it can be concluded that hypothesis 1 – business support uptake is lower in the stakeholder territory due to low level of entrepreneurial capacity – is not validated in cases of EAFRD measures "Investment into agricultural holding" and ESIP OP measure "Regio Invest LT+2 and validated in case of the rest of the measures. The main reason for higher uptake of the mentioned measures is that the agriculture, forestry and fishing sector and industry sectors play a more important role in Utena+2 economy compared to the national average. Larger importance of these sectors means that the capacity of entrepreneurs is also higher and consequently the uptake.

As for the rest of the measures, their uptake is lower mainly because of the previously described mismatch between the main target groups of the measures and the majority of companies in Utena+2. In case of EAFRD measure "Investments into agricultural holdings", uptake is lower because Utena+2 food processing market is dominated by two industrial giants which can finance productivity enhancement projects using internal funds. As for measures "HIT industry LT+" and "Industry Digitalisation LT", the share of innovative companies is lower in Utena+2 compared to the rest of the country. Naturally, the uptake is also lower.

"Competence voucher" uptake is lower because of the dominance of small-scale specialised companies in Utena+2, as well as the fact that certain human capital upgrade services are available outside Utena+2.

Hypothesis 2 – lack of flexibility to address the needs of businesses in the stakeholder territory contributes to a low uptake of business support funding – is not validated in all cases.

As for hypothesis 3 – business support funding has a positive effect on the business performance, viability and productivity in the stakeholder territories but to less extent compared to the results achieved in other parts of the same country–, the hypothesis is also somewhat validated in all measure cases. As it was seen, productivity in agriculture, forestry and fishing

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and industry sectors grew faster from 2014 to 2017 in Utena+2 compared to the rest of the country. The growth of these sectors did not, however, translate into higher productivity growth of the entire economy.

2.4 Conclusions

1. Even though the commitment of municipal authorities in creating favourable economic and business environment remains high, its actual role is constrained by the relatively small funding it has available at its disposal. Most of the business support funding that is in actual control of municipalities is small scale and quite limited. Nevertheless, as most of municipalities have suggested during the interviews, the existing municipal support system is line with the needs of local businesses as they are always being involved in the decision making of the creation and update of support framework. Of course, the scale of support could be higher, however, the latter is limited by the financial capabilities of municipalities.

2. The funding gap at the municipal level is sought to be bridged through provision of ESIF funding. However, as it was seen in the preceding sub-chapters, ESIF funding uptake in terms of analysed business support measures is not necessarily higher than in the rest of the country. It has been observed that in terms of analysed measures, financial uptake of EAFRD measures is generally higher in Utena+2 than in the rest of the country. This is in line with the fact that agriculture, forestry and fishing sector is more important in Utena+2 compared to the rest of the country. The uptake of EAFRD measures is also higher because of well-developed support system, higher support intensities, less rigorous regulatory requirements and more generous support. This allows to better accommodate the needs of local businesses.

3. In terms of the majority of ESIF OP measures, the uptake of them is generally lower in Utena+2 compared to the rest of the country, with the exception of the uptake of the largest measure in terms of financial scale “Region Invest LT+”. Smaller uptake of the ESIF OP measures aimed at business creation and business development implies that the provided support is inefficient in solving problems of low level of entrepreneurship and dominance of small size companies which do not scale in Utena+2. Lower uptake of these type of measures is mainly because these types of measures lack flexibility to address the needs of local businesses. Grim socio-economic conditions in the region implies that local businesses face higher risk. Since the provision of this type of support is contingent on acquiring a loan from a commercial bank or a credit union, and since relatively bad socio-economic conditions imply that businesses in the region are deemed as more risky, local businesses refrain from acquiring loans due to higher premiums and / or higher collateral requirements from credit institutions. In addition to this, the payback period of business development projects is longer and require higher investments for success, which are not guaranteed by the support. As such, higher premiums and collateral requirements are sometimes too much of a burden for local businesses, while the provided support is

insufficient to ensure business success. These two factors mean that local businesses simply refrain from acquiring support.

4. Smaller uptake of the majority of ESIF OP measures aimed business productivity increases but “Regio Invest LT+” is mainly because the measures “Industry Digitalisation LT” and “HIT Industry LT+” are aimed at innovative firms. Since the number of innovative and share of innovative firms in Utena+2 is relatively low, the uptake is consequently also lower.

   As for the lower uptake of the business productivity measure “Competence vouchers”, it is mainly because the majority of companies in Utena+2 are small size and thus quite specialised. From this follows that they do not necessarily need human capital improvement services. Secondly, some activities that are covered by the measure are only available in the regions outside Utena+2. Since voucher does not cover transportation and related costs (i.e. accommodation), companies simply do not want to incur short-term costs in favour of potential long-term gains.

5. The higher uptake of the measure “Regio Invest LT+” compared to the national average is mainly because the industry sector and manufacturing sub-sector play a relative more important role in the region’s economy compared to the national average. In addition to this, the measure aims to increase business productivity through capital investments, which are in high demand in Utena+2.

6. Besides the mentioned reasons, the lower uptake of the majority of ESIF OP measures in Utena+2 compared to the national average is also because of the lower level of entrepreneurship in the region, fragmented ESIF OP support system, higher regulatory barriers and lower support intensities of ESIF OP measures compared to EAFRD measures. Lower level of entrepreneurship implies that there is simply less applicants for uptake. Fragmented ESIF OP support systems and higher regulatory requirements of ESIF OP measures imply that that the potential applicants face higher search, transaction and support-funded project implementation costs compared to their counterparts in more economically prosperous regions and compared to applicants for EAFRD measures. Lasty, lower support intensities mean that the needs of higher funding in less economically developed regions for business development success are not addressed.

7. Despite lower uptake of the majority of ESIF OP measures, the acquired support can be said to be effective at the individual company level. The same applies for EAFRD measures. The acquired support has helped successful applicants to achieve the set business development goals whether it was creation of a new business, business expansion or business productivity increases. This is well reflected in increased employment and increased wages within the successful applicant companies.

8. The success of the analysed measures are also reflected in the recent developments of sectorial productivities in Utena+2. Although it is hard to attribute productivity growth exclusively to the analysed measures, the productivity growth in agriculture, forestry and

fishing and industry sectors was higher in Utena+2 compared to the national average from 2014 to 2017. As such, it can be said that the largest in terms of financial scale measures of ESIF OP (i.e. “Regio Invest LT+”) and EAFRD (i.e. “Investment into agricultural holdings”) have contributed positively sectorial productivity increases in Utena+2. And although the absolute levels of sectorial productivities were still lower in Utena+2 compared to the national average, the higher observed growth of sectorial productivities indicate regional convergence.

9. In addition to this, if it had not been for the analysed support in conjunction with support policies in other fields (i.e. transport, education, health care, etc.) socio-economic situations would have been much worse in the region. As such, it can be said that the analysed support mechanisms have allowed the region to maintain its status quo.

10. Notwithstanding the success of the measures at the individual company level, higher than the national average sectorial productivity growth and maintenance of the status quo, the positive effects of the measures did not have a strong pronounced effect on the level of entrepreneurship in the region and other the macro level indicators. For instance, the observed growth of local units in both agriculture, forestry and fishing sector and overall economy was lower in Utena+2 compared to the national average. The same applies for the overall growth of productivity in Utena+2, which grew slower compared to the national average over the observed period in 2014-2017.

11. All in all, the uptake of the analysed business support funding in Utena+2 is insufficient to create conditions for regional convergence, and did not have significant impact on well-being of its residents. As of 2018, GDP per GDP per capita in Utena+2 was almost twice lower compared to the national average and almost three times lower compared to the most prosperous region in Lithuania – Vilnius county.

3 Territorial capital matrix

Findings on Utena+2's business environment (Chapter 1) and business policies and measures (Chapter 2) were used to define the region's territorial capital. A territorial capital matrix summarises these findings in two main perspectives or dimensions – (1) territorial and (2) business – as they are called in the matrix.

The territorial dimension elaborates on **five territorial development keys:** (1) accessibility, (2) services of general interest, (3) territorial capacities/assets, (4) city networks and (5) functional areas. Territorial keys identify the elements of convergence related to territorial capital. They position the region on the regional, national, cross-border and the European levels by grouping issues into policy-oriented aggregates. Each territorial development key is broken down into three sub-topics to reveal the regional territorial potential. Each sub-topic has 'three key words' and links are made to the four territorial levels.

The business dimension concludes on the business environment in the territories and how its various components play out in a spatial dimension. They reveal findings of the regional potential analysis with a focus on **five business determinants:** (1) clusters and networks, (2) professional support, (3) legal and financial framework, (4) education and innovation and (5) the business support system. The business dimension capital matrix for follows the same logic as for the territorial, linking them to territorial levels.

The Territorial capital matrix encompasses analysis findings per territorial development key and business determinant. Transposing the main elements discloses the regional potential while also relating them to the national, cross-border and territorial contexts. The matrix highlights the strengths and weaknesses of the region in focus and puts them in a larger territorial context.

The process entailed answering three questions on five categories under both territorial development keys and business determinants. These were divided into three sub-topics on average which have three key words at the four territorial levels. The process is standardised where possible for the matrices be comparable and aligned between the three territories in this analysis.

The introduction to the three reference questions is similar, while its final part depends on the territorial level. Each question has four similar color-coded multiple-choice responses. These vary only by territorial level, with the regional level having its own set and the other three levels have the same set of responses. The responses have been standardised allowing for comparison and alignment between the sub-topics.

Figure 3.1 Sample of the extended Territorial Capital Matrix including the reference questions and colour-coded multiple-choice responses

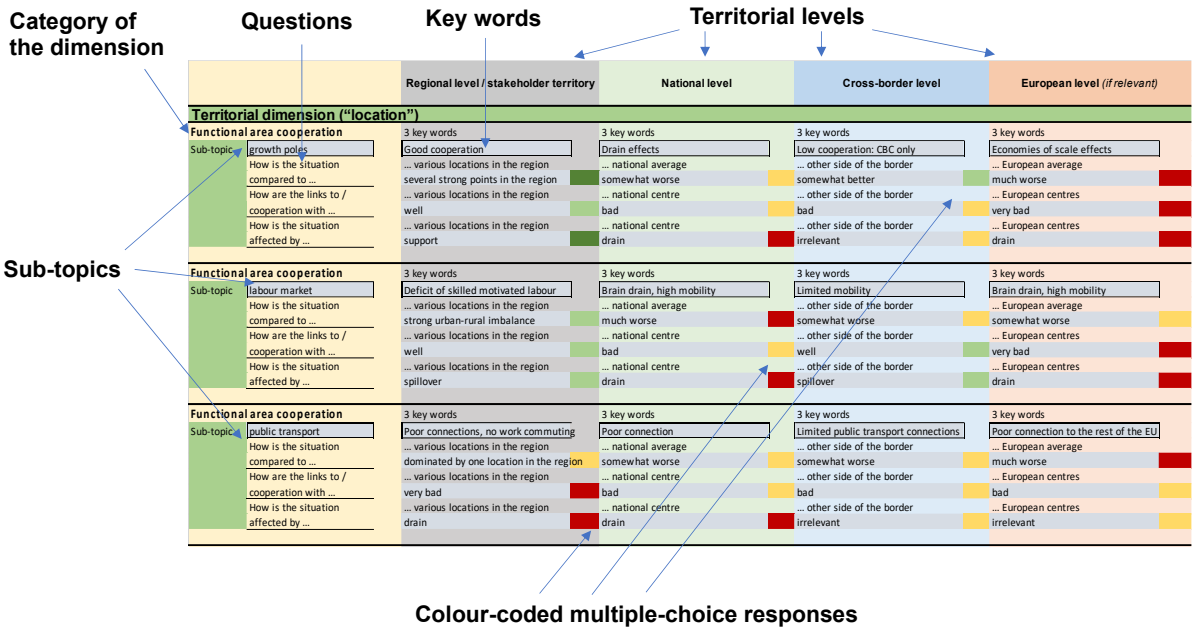

Table 3.1 Reference questions and multiple-choice responses by the territorial levels

Reference questions	Multiple-choice responses at the regional level	Multiple-choice responses at the national, cross-border and European level
1. How is the situation compared to …		
1.1. various locations in the region for the regional level? 1.2. the national average for the national level? 1.3. other side or a cross-border area for the cross-border level? 1.4. the European average for the European level?	dominated by one location in the region	much better
	several strong points in the region	somewhat better
	strong urban-rural imbalance	somewhat worse
	no strong points in the region	much worse
2. How are the links to / cooperation with …		
2.1. various locations in the region for the regional level? 2.2. the national average for the national level? 2.3. other side or a cross-border area for the cross-border level? 2.4. the European average for the European level?	dominated by one location in the region	much better
	several strong points in the region	somewhat better
	strong urban-rural imbalance	somewhat worse
	no strong points in the region	much worse
3. How is the situation affected by …		
3.1. various locations in the region for the regional level? 3.2. the national average for the national level? 3.3. other side or a cross-border area for the cross-border level? 3.4. the European average for the European level?	dominated by one location in the region	much better
	several strong points in the region	somewhat better
	strong urban-rural imbalance	somewhat worse
	no strong points in the region	much worse

3.1 Territorial dimension

	Regional level / stakeholder territory	National level	Cross-border level	European level *(if relevant)*
Territorial dimension ("location")				
Functional area cooperation				
Regional centre / -s or growth pole/ -s	Strong municipal centres	Capital region dominates	Zero to none cooperation	Not enough information
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Labour market	Similar unemployment rates	High unemployment	Lower unemployment	More inclusive labor market policies
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Public transport	Underdeveloped public transport infrastructure	Higher accessibility	No public transport linkages	Not enough information
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Accessibility				
Roads	Similar quality of infastructure	Better road infrastructure	No road linkages	Better road infrastructure
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Internet	ICT network	Higher ICT accessibility	Lower ICT accessibility	Higher ICT accessibility
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Other, railway or airport or both	Only one centre	Lower quality and routes	No linkages	Better network
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Services of general interest				
Education	Equal distribution of schools	More universities	Worse quality of education	Higher quality of education
Benchmarking				
Links / cooperation				
Impact from development in other locations				
State and municipal customer service	Main services are accessible	Wider array of services available	Centralized system	Higher de-centralization
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Health care	Main services are accessible	More hospitals	Poor infrastructure	Higher de-centralization
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Territorial capital				
Labour force	Similar labor market outcomes	More job opportuntiies and higher employment		Better employment opportunities
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Entrepreneurial activity	Small-medium size companies	National centre dominates	Public dominates private	More entrepreneurial
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Dominance of certain sectors	No clusters	More clusters and more diversified economy	High industry dominates	
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Cultural / natural assets	Nature tourism	More points of attraction	Underdeveloped tourism sector	Worse infrastucture and accesibility
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Networking between local authorities				
Local authorities	Multiple centres	More accountability and represtation	Public sector dominates private initiative	Higher de-centralization
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Civil society	Few associations and NGOs	More NGOs	Public sector dominates private initiative	Better cooperation private vs public
Benchmarking				
Links / cooperation				
Impact from development in other locations				

3.2 Business dimension

	Regional level / stakeholder territory	National level	Cross-border level	European level *(if relevant)*
Business dimension ("beyond the location")				
Clusters and networks				
Business associations	Somewhat similar number across municipalities	Better network	Public sector dominates private	Longer traditions
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Industrial clusters	One centre in Utena	More developed cooperation	Clustering around strong industry sector	More developed cooperation
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Sector associations	Do not exist	Several strong associations	Public dominates private	Longer tradition
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Proffessional support				
Experts at the local level	Equal distribution of support centr	Better network of support	Highly centralized network	Better network of support
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Business incubators	Do not exist but are forming	A few incubators in major cities	Do not exist	Longer trandition
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Legal and financial framework				
Taxation	Shadow economy	Better taxation compliance	No information	No information
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Access to finance market	Few banks and credit unions	Banks, unions and stock market	State-run mostly	More capital available
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Land-use policy	Favorable to businesses	More favorable to businesses	No information	No information
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Education and innovation				
Skilled labour force	Vocational centres	Tertiary education	No information	Better accessibility to retrainign services
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Training / life-long learning	Vocational centres	Access to education facilities	No information	No information
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Innovation potential	Small scale companies	Access to financial services	Highl centralization	Strong R&D sector
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Business support system				
Business support centres	Equal distribution of centres	Good network of support	Public sector dominates private	Longer tradition
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Grants and subsidies	Equal appropriation	Higher uptake	No information	No information
Benchmarking				
Links / cooperation				
Impact from development in other locations				
Financial instruments	Equal appropriation	Higher uptake	No information	No information
Benchmarking				
Links / cooperation				
Impact from development in other locations				

4 Recommendations

4.1 Further investments should be encouraged into agriculture, forestry and fishing sector

Rationale: The uptake of EAFRD measures is generally higher in Utena+2 compared to the national average (sub-chapter 2.3) This is partly because of the relative importance of the agriculture, forestry and fishing sector in Utena+2's economy. EAFRD financial support seems thus to address a demand in the region.

Moreover, EAFRD support measures have higher support intensities, lower regulatory barriers and are more generous in terms of financial support provided than some other forms of financial support. This means that EAFRD well accommodates the needs of businesses with low capacities for financial uptake and that EAFRD support is well available for investments into the sector in which the region already has a strong capacity. The region should utilise its sectorial capacity and further exploit the benefits of easy-to-access support and develop its competitive advantage in the sector.

Recommended actions:

1. Good accommodation of local business needs in agriculture, forestry and fishing sector should continue and be further encouraged in the next programming period. This will allow the region to further built its competitive advantage in the sector and ensure faster growth.
2. Increased investments are further needed to promote farming among young people. This would not only increase employment opportunities in rural regions such as Utena+2 but would also serve as a tool to reduce migration from the region.
3. Promoting farming among young people should be coupled with increased availability of agriculture advisory services. A particular importance should be given to advisory services for the preparation of the business development plans and advisory services on different agri-environmental issues. This could further increase use and uptake of provided support, increase survival chances of young farmers in the sector, and raise awareness of potential benefits from environmental-friendly farming.
4. It is important to note that the future EAFRD support should be aligned with the goals of European Green Deal. Investments with the primary focus on organic farming, adoption of carbon-neutral technologies in harvesting and food processing and further digitalisation of agriculture should not only improve productivity and spur economic growth but also increase the region's competitive advantage.

4.2 ESIF OP measures should better accommodate the needs of local businesses

Rationale: The financial uptake of ESIF OP measures is generally lower in Utena+2 compared to the national average (sub-chapter 2.3). This is mainly because ESIF OP measures do not

reflect the needs of local businesses – support intensities are relatively low, regulatory requirements are strict and the business support system is fragmented. The former two factors mean that the problems associated with high risk of establishing or expanding a business in regions with relatively bad socio-economic perspectives, like Utena+2, are not addressed. This discourages businesses from acquiring financial support and ultimately leads to a situation where available funding does not allow local business to develop. A fragmented business support system implies that transaction and search costs for acquiring financial support are relatively higher for businesses with lower capacity for financial uptake.

Hence, there is a need to improve support conditions of ESIF OP measures. Improved support conditions of ESIF OP measures could increase financial uptake in the region and create conductive conditions for business development.

Recommended actions:

1. Local business needs could be better accommodated by increasing business support intensities of ESIF OP measures in lagging territories, such as Utena+2. One possible way of doing this would be by providing a "problematic territories"-status to lagging territories such as Utena+2 as it was done in the ESIF programming period 2007–2013. This time, however, support intensities should be increased not only for public infrastructure projects but also for business support measures.
2. Provision of consultation services regarding support availability in the region should also be improved. This could be done by improving capacities of local business information centres providing business consultation services in Utena+2. This should reduce transaction and search costs of acquiring financial support which arise because of a fragmented business support system.

4.3 Support measures should be built on the success of the past and in accordance with the region's strengths

Rationale: The financial uptake of ESIF OP measure "Regio Invest LT+" was in Utena+2 higher compared to the national average and can be said to be successful in terms of increasing industrial productivity (sub-chapter 2.3). The success of the measure can be attributed to strong industrial capacity in the region and high demand for capital investments in new machinery, and renewal of assembly and production lines.

As such, support measures in the next programming period of 2021–2027 should similarly focus on increased capital investments into new machinery and renewal of production lines. In addition to this, a particular importance should be given to companies developing and introducing Industry 4.0 solutions that allow for increased productivity, such as, artificial intelligence, smart technologic solutions including logistics chains, etc.

Recommended actions:

1. Support to companies in need of new capital investments in new machinery, renewal of production lines, and introduction of new technologies should continue and be encouraged further. This would allow industrial companies in Utena+2 to modernise its industrial base and improve their competitiveness.
2. Introduction of new technologies should be encouraged through provision of professional mentoring and training activities. These types of activities should assist local businesses in making strategic business development decisions, including preparing a business plan and applying for funding, if necessary.
3. Given that introduction of new technologies may lead to increased demand for training services, a complementary support measures should be provided to cope with consequences of introducing new technologies. When there is increased demand for training services, support should be given to companies to organise new trainings for workers. This could be done by providing small-scale grants (i.e. competence vouchers) for the organisation of training courses and apprenticeship programmes.

4.4 Strengthen vocational network system in Utena+2

Rationale: Lack of qualified labour is one of the main reasons behind the lagging socio-economic performance of Utena+2. Persistent unemployment encourages migration and puts a fiscal burden on municipalities.

At the same time, strong vocational education institutions with their focus on academic excellence and improved quality of human capital is one of the most important factors for attracting foreign investments in the region. This is well known in Utena+2. International medical device manufacturer “Intersurgical” decided to establish factories in both Visaginas and Pabradė (Švenčionys district municipality) mainly because of a well-established apprenticeship programme system in Visaginas’ vocational education centre. The centre is in close cooperation with “Intersurgical”, and from 2016 the centre has been preparing qualified specialists on an apprenticeship basis for the company.

Following these successful examples, transforming Utena+2’s vocational education network and subsequently increase the availability of skilled labour should signal international companies about the region’s attractiveness. Existing and future success cases should contribute to attracting new large companies to the region. This is particularly relevant in the current geopolitical situations. The current trend of repatriating large companies and supply chains from East Asia to Europe offers a big opportunity to Utena+2.

Recommended actions:

1. The role of the regional vocational education institutions in the region’s economy has to be increased substantially. Firstly, cooperation amongst vocation education institutions of the region should increase. Each vocational education institution should specialise in the provision of vocational education in which it has most experience and

which corresponds best to the local market needs rather than aim to provide the broadest spectrum of vocational education programmes.

2. In order for vocational education services to better reflect market needs, cooperation between vocational education institutions and local businesses should increase. Increased cooperation with local businesses would in turn also increase availability of apprenticeship programmes which are deemed to be the most successful ones in terms of providing the most relevant and market-demanded vocational education.

3. Creation of knowledge transfer centres and developing clusters should also be encouraged. Local authorities could coordinate and facilitate cooperation processes between vocational education institutions and local businesses.

4.5 Increase regional cooperation and spatially functional division of Utena+2

Rationale: Today, municipalities of Utena+2 cannot compete individually with Vilnius city, Kaunas city and other, more prosperous municipalities for private investments. Completely different and unfavourable situation of endowments (i.e. accessibility of capital, public services, availability of skilled labour, etc.) are the main reasons behind this. Hence, only a strong and truly functional cooperation among municipalities of Utena+2 is capable of untapping the regional potential, attracting companies and maximising investments in the region.

Recommended actions:

1. Increased regional cooperation among municipalities should firstly translate into reduced competition against each other at the national level, when there are discussions and negotiations with foreign investments. Local municipalities should cooperate and be presented to potential investors as a single entity divided into functional zones, utilising each municipalities' endowments. For instance, Zarasai, Švenčionys, Ignalina and Anykščiai district municipalities should be presented as tourism-oriented municipalities, abundant in recreation places. Utena and Visaginas municipalities should be presented as industrial municipalities with strong a transport system, an industrial basis and abundance of skilled labour. This way, Utena+2 would market itself as a single entity where each municipality's strengths diminish another municipality's weakness in the eyes of potential investors.

2. Spatially functional division of Utena+2 should also be emphasised during discussions with the national government when creating measures for the next ESIF programming period 2021-2027. Such a division would allow national policy makers to create ESIF-funded business support measures in a way that better reflect needs and endowments of local municipalities.

4.6 Local authorities should join their efforts in improving business environment

Rationale: Efforts of local municipalities in developing relevant infrastructure and improving business conditions are mostly contained in the respective municipalities, without paying much attention to common regional development goals. As such, there is room for cooperation improvements, especially when addressing the dynamic business environment.

Recommended actions:

1. Infrastructure investments aimed at enhancing the business environment and reducing businesses costs (i.e. development of wind and sun energy parks or industrial parks) should be implemented jointly.
2. Municipalities should join their efforts in developing municipal business support mechanisms. Given that the role of municipal business support mechanisms is currently constrained by the relatively small funding municipalities have available at their disposal, local municipalities should pool their resources together in order to provide higher and more efficient support for businesses. The provided support should follow the rule “higher support for a few rather than smaller support for the many”. The potential business support gap should be bridged by the previously described improved conditions of ESIF OP funding and EAFRD funding.
3. Municipalities should join their efforts at the national level speeding up the establishment of a special economic zone and building relevant infrastructure for it in the region.

4.7 Specific attention to the overall quality of life in sparsely populated and strategically important territories

Rationale: For a balanced regional development and greater national security, regions on EU external borders need people and healthy communities including business communities, where the people can meet certain expectations towards quality of their lives. Presently the low uptake of support impedes not only opportunities for business growth, but also possibilities for Utena+2 inhabitants, especially outside urban areas, to improve their living conditions.

The following actions are proposed to increase quality of life in the border area. These actions are aimed at returning people to the region, especially, people who wish to enjoy the work-life balance in a natural resources abundant region such as Utena+2.

Recommended actions:

1. Re-emigration efforts should be continued and reinforced. Not only from abroad, but particularly from the capital city that has enticed too many bright minds from the region. The COVID-19 pandemic has shown that many modern jobs can be performed from distance. It has also allowed re-assessing the true-life values including being closer to

nature. The momentum of ebb tide should be utilised by supporting more flexible work modes.

2. The current support system where the state provides subsidies for young families to acquire housing in regions outside major urban areas must continue and be further improved. The system could be improved by ensuring that young families have access to children education facilities, healthcare services and relevant infrastructures for remote work.

3. Attraction of highly skilled labour force to the region should be encouraged. Apart from appealing to those inhabitants of the region that have left it at some point, the region should also consider ways and means to attract experts that its industries require. It has to be ready to accommodate the needs of both nationals as well as ex-pats that their concern living conditions, including the housing, education opportunities, health care etc.

4.8 Explore and capitalise advantages of the border area when they appear

Rationale: Though presently mainly closing effects define business development at the EU external border, Utena+2 should always keep an eye on various opportunities that might appear with time. The following actions are aimed to exploit potential benefits of the border area in Utena+2.

Recommended actions:

1. Interreg programmes are a good opportunity to know your neighbours better and these can be used for business growth as well. Due to the observed moderate open border effect in the economic dimension, it is strongly advised to integrate a business priority in the cross-border programme between Belarus and Lithuania. After the contested Presidential elections in the Republic of Belarus of 9 August 2020 there is a certain potential for influx of people and capital from Belarus to Lithuania.

   However, given that the majority of trade and connection between Belarus and Lithuania takes place along the Vilnius-Minsk corridor, Utena+2's chances of benefiting from the potential influx of capital and people are quite limited. The only way how the region can benefit from the potential influx is through increased regional cooperation at the national level (i.e. recommendation 4.5). When there are discussions and negotiations with potential companies from Belarus at the national level, Utena+2 should represent itself as a single entity with all its socio-economic strengths. This would increase the possibility of attracting Belarusian companies into the region.

2. The internal border potential with Latvia seems to be also not fully exploited. The second biggest city of Latvia – Daugavpils – is closer for some parts of Utena+2 (i.e. Utena, Visaginas, Švenčionys, Ignalina and Zarasai district municipalities) than the capital city Vilnius. In addition to this, Latvian stakeholder territory of this targeted

analysis – Latgale region – has strong capacities in the manufacturing sector, similar to that of Utena+2. Local business should try to exploit these opportunities and synergies of a common cross-border market. Utena+2 should also consider more active cooperation with Latgale on tourism. This is particularly important for Zarasai district municipality which is only a few kilometres away from Daugavpils and has many recreation places to offer for visitors.

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Annex 1: List of interviewees

Interviews with representatives of public institutions and NGOs of Utena+2 from the business, April and September, 2020

No.	Date	Municipality	Representatives
1.	13.04.20.	Utena district municipality	Romualda Serbentienė, Head of Strategic Planning and Investment Department
2.	20.04.20.	Anykščiai district municipality	Vilma Vilkickaitė, Head of Investment and Project Management Departments
3.	13.04.20.	Kupiškis district municipaliy	Arūnas Valintėlis, Head of Public Procurement and Strategic Planning Department
4.	14.04.20.	Zarasai district municipality	Renata Sipavičienė, Head of Investment and Development Department
5.	14.04.20.	Ignalina district municipality	Vidmantas Čepulėnas, Head of Investment, Planning and Asset Management Department
6.	15.04.20.	Ignalina district municipality	Rita Karedelienė, Coordinator of Investment Projects in Investment, Planning and Asset Management Department
7.	15.04.20.	Visaginas municipality	Irina Michailova, Head of Strategic Planning and Investment Management Department
8.	16.04.20.	Molėtai district municipality	Vakaris Atkočiūnas, Head of Strategic Planning and Investment Department
9.	16.04.20.	Švenčionys district municipality	Vaida Babrauskienė, Head of Strategic Planning and Investment Department
10.	22.09.20	Utena district municipality	Irina Šeršiniova, Director of Utena Business Information centre
11.	22.09.20	Zarasai and Visaginas district municipalities	Julija Goštautaitė – Adomavičienė, Public relations officer of Zarasai-Visaginas local action group
12.	22.09.20	Utena district municipality	Inga Šidlauskienė, Director of Lithuanian Office of Euroregion “Country of Lages”

No.	Date	Municipality	Representatives
13.	22.09.20	Ignalina district municipality	Ligita Smagurauskienė, Head of Ignalina region local action group administrative group for local development strategy
14.	22.09.20	Visaginas district municipality	Vytautas Petkūnas, Director of Visaginas Technology and Business Vocational Education and Training Centre
15.	22.09.20	Zarasai district municipality	Ramunė Šileikienė, Chief specialist of Investments and Development Department of Zarasai district municipality
16.	22.09.20	Švenčionys district municipality	Vaida Babrauskienė, Head of Strategy Planning and Investment Department of Švenčionys district municipality

Interviews with the representatives of business associations and applicants of ESIF support of Utena+2, April and September 2020

No.	Date	Municipality	Representatives
1.	13.04.20.	Anykščiai district municipality	Valdas Trinkūnas, CEO of UAB Šilelio nekilnojamas turtas
2.	16.04.20	Ignalina district municipality	Žygimantas Slavickas, CEO of Ars bona
3.	15.04.20	Utena district municipality	Ingrida Slidžiauskienė, CEO of UAB Strapa
3.	17.04.20	Zarasai district municipality	Karolis Vitas, CEO of UAB Akadas
4.	22.09.20.	Utena district municipality	Jurgis Dumbrava, Director of Utena office of Panevėžys Chamber of Commerce, Industry and Crafts

FACTSHEET #1

Measures aimed at business creation

1 Policy context

Policies analysed in the following sections are aligned to the medium-term development document – Lithuanian Development Plan 2014-2020 **(LNDP 2020)**, while their funding are determined and provided by the Rural Development Programme of Lithuania 2014-2020 **(LRDP 2020)** and Operational Programme for EU Structural Funds Investments in Lithuania for 2014-2020 **(OP 2020)**. Such a structure of policy implementation means that whereas LNDP 2020 has no separate funding and mainly set medium-term vertical and horizontal objectives for the development of Lithuania's economy, LRDP 2020 and OP 2020 provide the means for achieving the set objectives. Given that this factsheet is dedicated exclusively to measures aimed at business creation, two measures of LNDP 2020 and one measures of OP 2020 will be analysed. The analysed LNDP 2020 measures are entitled "Setting up of young farmers" and "Starting of economic activities in rural areas". Both measures are funded by EAFRD. The analysed OP 2020 measure is entitled "Subsidies for starting a business". This measure is funded by ESF.

OP 2020 measures contribute to all vertical and horizontal objectives of LNDP 2020 by providing investment into 11 priority axes. The selected OP 2020 measure "Subsidies for starting a business" contributes to the set goals of LNDP 2020 by providing investments in accordance with OP 2020 PRIORITY AXIS 7 "Promoting quality employment and participation in the labour market"

LRDP 2020 measures similarly contribute to all vertical and horizontal objectives of LNDP 2020 by providing investments into 6 priorities. The selected LRDP 2020 measures "Setting up of young farmers" and "Starting of economic activities in rural areas" contribute to the set goals of LNDP 2020 by providing investments as per LRDP 2020 priorities "Promotion of competitiveness" and "Promotion of reduction in poverty, social inclusion and economic development".

2 Setting up of young farmers

2.1 Overview – the policy in numbers

The guidelines of the administration of measure have been set by the order 3D-309 of the Ministry of Agriculture of the Republic of Lithuania[90]. The order provides the main information with regards to the overall set-up of measures of LRDP 2014-2020, i.e. eligibility criteria for potential applicants.

[90] Available at https://www.e-tar.lt/portal/lt/legalAct/55721f607bcf11e9863cb9ed35b4647a/asr

The total public funding as provided by the LRDP 2014-2020 for the measure is around 64.7 M€.

Table 2.1 Implementation performance of the LRDP 2020 measure "Setting up of young farmers" as of December 31, 2019

TOTAL: Lithuania				TOTAL: Utena+2			
EAFRD allocation planned	**EAFRD requested**	**EAFRD approved**	**Number of approved projects (success rate)**	**Number of approved projects (success rate)**	**EAFRD approved in Utena+2**	**M€ as % of the total approved**	**EAFRD requested in Utena+2**
64.7 M€	106.28 M€	55.27 M€	1271 (56%)	203 (63.84)	9.08 M€	16.43%	14.60 M€

Source: Consortium based on data of the National Payments Agency

The number of projects approved in Utena+2 account for 15.97% of all projects. The total financial share of the public funding contracted in Utena+2 accounted for 16.43% The latter suggest that the financial uptake per one project was higher in Utena+2 region compared to the country's average. Average size of the project in Utena+2 was around € 44 738.06, while in Lithuania it was € 43 488.65.

2.2 Intervention logic

The measure "Setting up of young farmers" provides funding for production and processing of agricultural products, as well as their supply for market for newly established young farmers, not exceeding 40 years old. The nature of this measure presupposes that it is hard for people to acquire funding for either business establishing purposes or improvement of current business activities purposes on the open market basis within agricultural sector. From this follows the main priority this measure, namely, to boost vitality, competitiveness and adoption of agricultural innovations of agricultural sector by making it easier for newly established farmers or soon to be established farmers to acquire funding for the maintenance of essential activities. The main goal of the measure is in turn to boost creation and survivability of new businesses in the region. This priority and goal are fulfilled by providing non-repayable grants which is provided for investments into new equipment, machinery, technologies (including software) and construction or renovation of production premises, as well as marketing activities.

The target group and end beneficiaries of the measure are either both natural persons which are not older than 40 years old and which are qualified farmers. The eligible support intensity

is up to 100%, while the maximum volume of funding per project is € 40 000. The grant is paid in two parts: 80% of the funding is provided as an advance payment before the project is implemented, while 20% of the funding is provided after the project is finished.

3 Starting of economic activities in rural areas

3.1 Overview – the policy in numbers

The guidelines of the administration of measure have been set by the order 3D-773 of the Ministry of Agriculture of the Republic of Lithuania[91]. The order provides the main information with regards to the set-up of measure "Starting of economic activities in rural areas". The total public funding as provided by the LRDP 2014-2020 for the measure is around € 30 M.

Table 3.1 Implementation performance of the LRDP 2020 measure "Starting of economic activities in rural areas" as December 31, 2019

TOTAL: Lithuania				TOTAL: Utena+2			
EAFRD allocation planned	**EAFRD requested**	**EAFRD approved**	**Number of approved projects (success rate)**	**Number of approved projects (success rate)**	**EAFRD approved in Utena+2**	**M€ as % of the total approved**	**EAFRD requested in Utena+2**
83.70 M€	63.6 M€	24.74 M€	1 135 (33.7%)	221 (42.29%)	4.98 M€	20.13%	12.34 M€

Source: Consortium based on data of the National Payments Agency

The number of projects approved in Utena+2 account for 19.47% of all projects. The total financial share of the public funding contracted in Utena+2 accounted to 20.13%. Average size of the project in Utena+2 was around € 22 539.51, while in Lithuania it was € 21 800.29.

3.2 Intervention logic

The measure's logic is similar to that of described in sub-chapter 2.2 when discussing intervention logic of measure "Setting up for young farmers". The main difference, however, is that the measure "Starting of economic activities in rural areas" is not focused exclusively at business development in agricultural sector but rather at all economic activities but agricultural activities, rural tourism and accommodation services in rural areas. As such, the main priorities of this measure are to promote social inclusion, reduce poverty and boost economic activity in

[91] Available at https://www.e-tar.lt/portal/lt/legalAct/88eee020d85b11e8a1baff673bb7216a/asr

rural areas. The set priorities set the main target areas of the measure, namely, diversification of economic activities and creation of new jobs and businesses in rural areas.

The target group and end beneficiaries of the measure are residents of rural areas and legal persons residing in rural areas. The eligible support intensity is up to 100%, while the maximum volume of funding per project depends on the number of jobs to be created. If one job is to be created, then the maximum size of the grant is € 18 800. If two jobs to be created, then the maximum size of the grant is € 37 600.

The grant is paid in two parts: 80% of the funding is provided as an advance payment before the project is implemented, while 20% of the funding is provided after the project is finished.

4 SUBSIDIES FOR STARTING A BUSINESS

4.1 Overview – the policy in numbers

PRIORITY AXIS 7 "Promoting quality employment and participation in the labour market", its investment priority 7.1. „Supporting employment-friendly growth through the development of endogenous potential as part of a territorial strategy for specific areas, including the conversion of declining industrial regions and enhancement of accessibility to and development of specific natural and cultural resources" and specific objective 3.1.1. "Diversify economic activities and improve conditions for attracting investment in support of job creation in target territories" seeks to address territorial development challenges that hinder balanced employment in towns and their metropolitan areas and preclude attracting of investment that generates high value-added and quality employment in small and medium-sized towns or disadvantaged territories of larger towns, by minimising the impact of demographic changes on urban areas. With this objective in mind, the analysed measure seeks to provide investment into new business and job creation by providing non-repayable grants to businesses for the partial coverage of labour costs.

The newest guidelines and regulations of the measure are set by the Order AI-90 of the Ministry of Social Security and Labor of the Republic of Lithuania dated February 25, 2015[92]. The planned allocation for the measure was around 16 M€.

[92] Order available at https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/cd81aa10bd3911e49dbcef88c569812c?jfwid=-k57xaqcxy.

Table 4.1 Implementation performance of the OP 2020 measure "Subsidies for starting of business" as of December 31, 2019

TOTAL: Lithuania				TOTAL: Utena+2			
ESF allocation planned	**ESF requested**	**ESF approved**	**Number of approved projects (success rate)**	**Number of approved projects (success rate)**	**ESF approved in Utena+2**	**M€ as % of the total approved**	**ESF requested in Utena+2**
16 M€	5.93 M€	6.28 M€	620 (100%)	21 (100%)	0.19 M€	3.15%	0.18 M€

Source: Consortium based on data of the Ministry of Finance of the Republic of Lithuania.

By June 2020, a relatively small amount of the allocation funding has already been distributed. It was observed that only 39.25% of planned allocation was provided. The immediate results of Utena+2 show that around 2.98% of total approved funding of the measure was provided in the region, while the number of approved projects amounted to 3.39% of all approved projects of the measure. From this follows that the uptake per project was on average lower in Utena+2 than in Lithuania overall. Average size of the project in Utena+2 was around € 8 906.92, while in Lithuania it was € 10 134.69.

4.2 Intervention logic

The rationale for providing partial coverage of labour costs is that it is recognized that one of the highest entry barriers for new businesses is high initial labour costs when proceeds from the sales are still not available, while provision of financing from commercial banks and other financial intermediaries is scarce and limited. As such, the measure aims to address business needs for reduction of entry barriers, while the measure's main goal is new business and job creation.

The target group and beneficiaries of the measure are very micro or small companies and natural persons which intend to establish a business or are operating for less than one year and have acquired funding from another measure entitled "Promotion of entrepreneurship 2014-2020", which provides loans of no more than € 25 000 for business creation purposes for natural persons or small size companie[93]s.

The maximum size of non-repayable grant size is capped at € 200 000 as per *de minimis* rules, while the actual funding available for the applicants depends on the jobs created and

[93] Measure "Business promotion 2014-2020" is excluded from this analysis as the data of measure's performance is not available at LAU level

qualifications of people employed. In general, the measure sets the fixed compensation rate of € 498.48 per one job, while the actual compensation is then further capped at 50% or 75% depending on the jobs created and qualifications of people employed and available for up to 18 months. For instance, if a newly established company created 5 jobs and the associated labour costs per one job was € 600, the compensation of labour costs provided by the measure is calculated in the following way: *€ 498.48 x (number of months company incurred labour costs x number of people employed).* The acquired sum is further multiplied by 0.50 or 0.75 depending on the jobs created or qualifications of people employed.

The expected output to be reached nationally is measured by the following output indicators:

- Share of companies which acquired funding and are successfully operating - 70%.
- Number of enterprises receiving funding for the compensation of labour costs – 500.

There are no specific regional output or result indicators.

4.3 Case study

UAB Ars Bona is a company that specializes in the provision of auditing and accounting services. As such, its NACE classification is M. The company was founded in 2018. Based in the Ignalina district municipality, the company currently employs 4 people

The company acquired support as per measure “Subsidies for starting a business” for the project “Reimbursement of Part of the Salary Costs of the Employee(s) of the Borrower of the Financial Instrument “Promotion of Entrepreneurship 2014–2020” No. 07.3.3-IVG-T-428-01-0593”, under the 7th priority of the European Union Funds Investment Operational Program for 2014-2020, “promoting quality employment and participation in the labor market”. According to the representative, the company was on the verge of closing before the acquisition of support because it could not cover operating labour costs. Since the company is operating in the service sector, the only way to ensure increased revenue and thus profitability was to increase employment. As such, the acquired funding allowed company to employ two additional employees, while maintaining low operating labour costs. This allowed company to increase its profitability and ultimately ensured its survival.

4.3.1 Motivation

The company applied for the support mainly because of the risk of bankruptcy. The newly established company generated low levels of revenue which were not enough to cover operating costs. As such, the acquired support was an important factor in increasing firm’s profitability by reducing operating labour costs.

4.3.2 Application

Support application was received on January 27, 2020, with an estimated project value of € 12 500.00 and the requested the full outlined funding amount. The project was signed on February

5, 2020, allocating the full amount of funding requested. The project is planned to be finished by July 31, 2021.

4.3.3 Implementation, results and assessment

The acquired support allowed the company to become profitable and create 2 additional long-term vacancies. Although the final impact of the support will be seen in the future, the intermediate results indicate that the support allowed the company to overcome the previously mentioned business development obstacles.

In the upcoming 5 years, the representative of the company suggested that the company will expand and will apply for support of tangible fixed assets in transportation. This will allow expand its reach of business outside its native Ignalina district municipality and provide accounting and auditing services in other regions.

4.3.4 Sources

Interview with Žygimantas Slavickas, the CEO of UAB Ars Bona.

Financial and application data of the company retrieved from the Ministry of Finance.

5 Overall results in the stakeholder territory

The table below presents the normalised uptake of the analysed measures as of December 31, 2019. Per capita uptake was calculated by firstly calculating the total cumulative investments of each separate measure from January 1, 2014 to December 31, 2019 in Utena+2 and Lithuania overall. The acquired figures were then divided by the total population of Utena+2 and Lithuania overall in 2013

Table 5.1 Uptake of measures aimed at business development

Programme of funding	Source of funding	Name of the measure	Per capita invested in Lithuania (€)	Per capita invested in Utena+2 (€)
LRDP 2020	**EAFRD**	**Setting up of young farmers**	18.60	47.29
LRDP 2020	**EAFRD**	**Starting of economic activities in rural areas**	8.33	13.47
OP 2020	**ERDF**	**Subsidies for starting a business**	2.11	0.97

Source: Consortium based on data of National Payments Agency and the Ministry of Finance, 2020

As it can be seen from the table, the uptake of the measure of OP 2020 measure “Subsidies for starting a business” is lower in Utena+2 compared to the national average. On the other hand, the uptake of the two LRDP 2020 measures is higher than the national average.

The main reasons for lower uptake of the OP 2020 measure are the same as indicated in the main report. Firstly, the level of entrepreneurship in Utena+2 is significantly lower compared to

the country's average. When the base of applicants is low, the final uptake is consequently also lower. Secondly, the support acquisition is contingent on loan acquisition. Since many businesses in Utena+2 refrain from taking out a loan, this further indicates that the capacity for uptake of the measure is also lower in Utena+2. The latter consequently leads to lower final uptake. Thirdly, the measure does not tackle the main obstacles of expanding businesses in remote areas with grim socio-economic conditions, namely, high risk. The support provided for labour compensation is insufficient to incentivize companies to undertake risk and acquire loans for business developing purposes.

As for the reasons of higher uptake of LRDP 2020 measures, they are also the same as indicated in the main report. Firstly, agriculture, forestry and fishing sector plays a larger role in the region's economy compared to the national average. This implies that the capacity for uptake is larger in Utena+2 compared to the national average. Secondly, the measure has relatively low regulatory barriers and is generous in terms of financial support provided. Thirdly, the measure is supervised by a single authority which provides one-window consultations for potential applicants. This means that search and transaction costs of acquiring support are also relatively low.

Given that the main aim of this group of measures is new busines creation, macroeconomic indicators such as the growth of local units per 1000 inhabitants should theoretically reflect the performance and effectiveness of this group of measures. Higher per capital investments of measures "Setting up of young farmers" and "Starting of economic in rural areas" did not lead to the higher growth rates of local units per 1 000 inhabitants in agriculture, forestry and fishing sector. It was observed that from 2014 to 2020, the local units per 1 000 inhabitants in agriculture, forestry and fishing sector did not increase and stayed the same. The growth rate in the rest of the country was higher and stood at 17% for the same period. In terms of absolute numbers, Utena+2 maintained higher rate as it stood at 1.49 local units per 1 000 inhabitants, while in the rest of the country at 0.99 local units per 1 000 inhabitants in 2020.

Similar tendencies in terms of growth of new businesses were observed also when analysing business growth in all sectors. From 2014 to 2020, the growth rates of local units per 1 000 inhabitants was 4.27 in Utena+2, while the growth stood at 17% in the rest of the country. In terms of absolute numbers, the number of local units per 1 000 inhabitants stood at around 26.83 and 39.66 in 2014 and at 32.00 and 46.25 in 2020 in Utena+2 and the rest of the country, respectively.

Although it is hard to attribute changes in number of local units per 1 000 inhabitants in 2014-2020 exclusively to the analysed measures, growth tendencies of both indicators suggest that the analysed support had higher impact at the national level compared to Utena+2. Nevertheless, the general impact of the measures was positive, at least at the individual company level in Utena+2. Interviews with the previously described local beneficiary UAB Ars Bona and public institutions support this view.

Representatives of public institutions indicated that the support of measures “Starting of economic activities in rural areas” and “Setting up young farmers” also significantly and positively contributes to business creation in relatively more rural areas such as Utena+2. According to representatives, the support of both measures positively contributes to small and medium size local business creation and ensures survivability of “rural start-ups”. The majority of new businesses operate in service sector (i.e. local repair shops, small scale garment and food production, etc.). New businesses help in turn to reduce seasonal employment adjustments in more agricultural business-oriented areas such as Utena+2, and thus also contributes positively to stabilization of demographic situation in rural areas by reducing incentives of people to migrate.

All in all, it can be concluded that that the acquired support is effective primarily at the individual level. In terms of positive impact at the regional level, EAFRD support is also effective, as it was indicated by the representatives of public institutions. According to representatives of public institutions, EAFRD support helps to reduce seasonal employment adjustments and contribute positively to stabilization of demographic situation in rural areas, through creation of new jobs. As such, it can be concluded that the support contributes to regional development goals and to LNDP 2020 goals, albeit the contribution is limited by small scale of the support provided.

FACTSHEET #2

Measures aimed at business development

1 Policy context

Policies analysed in the following sections are aligned to the medium-term development document – Lithuanian Development Plan 2014-2020 **(LNDP 2020)**, while their funding are determined and provided by the Rural Development Programme of Lithuania 2014-2020 **(LRDP 2020)** and Operational Programme for EU Structural Funds Investments in Lithuania for 2014-2020 **(OP 2020)**. Such a structure of policy implementation means that whereas LNDP 2020 has no separate funding and mainly set medium-term vertical and horizontal objectives for the development of Lithuania's economy, LRDP 2020 and OP 2020 provide the means for achieving the set objectives. Given that this factsheet is dedicated exclusively to measures aimed at business development, one measure of LNDP 2020 and one measure of OP 2020 will be analysed. The analysed LNDP 2020 measure is entitled "Investments for setting up and development of economic activities", and is funded by EAFRD. The analysed OP 2020 measure is entitled "Partial compensation of interest, and is funded by ERDF.

OP 2020 measures contribute to all vertical and horizontal objectives of LNDP 2020 by providing investment into 11 priority axes. The selected OP 2020 measure "Partial compensation of interest" contributes to the set goals of LNDP 2020 by providing investments in accordance with OP 2020 PRIORITY AXIS 3 "Promoting competitiveness of small and medium-sized businesses".

LRDP 2020 measures similarly contribute to all vertical and horizontal objectives of LNDP 2020 by providing investments into 6 priorities. The selected LRDP 2020 measure "Investments for setting up and development of economic activities" contributes to the set goals of LNDP 2020 by providing investments as per LRDP 2020 priority "Promotion of competitiveness".

2 PARTIAL COMPENSATION OF INTEREST

2.1 Overview – the policy in numbers

PRIORITY AXIS 3 "Promoting competitiveness of small and medium-sized business", its investment priority 3.1. „Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators" and specific objective 3.1.1. "Increasing the level of entrepreneurship" suggests that insufficient access of SMEs' to the necessary sources of financing remains one of the main disadvantages in the Lithuanian business environment. In addition, due to limited financial capacity and their size, SMEs are usually subject to higher interest rate premiums due to their size and assumed risk. The latter puts a drag on SMEs' development and investment capabilities. To combat this problem, measure "Partial compensation of interests" is implemented.

The newest guidelines and regulations of the measure are set by the Order 4-220 of the Ministry of Economy and Innovation of the Republic of Lithuania dated April 10, 2020[94]. The planned-initial ERDF allocation for the measure was 26.4 M€.

Table 2.1 Implementation performance of the OP 2020 measure "Partial Compensation of Interest" as of December 31, 2019[95]

TOTAL: Lithuania				**TOTAL: Utena+2**			
ERDF allocation planned	**ERDF requested**	**ERDF approved**	**No. of approved projects (success rate)**	**No. of approved projects (success rate)**	**ERDF approved in Utena+2**	**M€ as % of the total approved**	**ERDF requested in Utena+2**
26.4 M€	650.62 M€	25.69 M€	3254 (99%)	86 (98%)	1.13 M€	4.39%	17.20 M€

Source: Consortium based on data of the Ministry of Finance.

A substantial amount of the allocation funding was already been distributed as of December 31, 2019. The immediate results of Utena+2 show that 4.39% of total approved ERDF funding was provided in the region, while the number of approved projects amounted to 2.79% of all approved projects. From this follows that the uptake per project was on average higher in Utena+2 than in Lithuania overall. Average size of the project in Utena+2 was around € 13 139.53, while in Lithuania it was € 8 335.49.

2.2 Intervention logic

Based on the OP 2020 and the guidelines of the measure, the measure aims to increase business development and its investment into productive assets by providing non-repayable grants for the coverage of interest payments on loans. The measure essentially aims to contribute to the task of the improvement of SMEs' access to finance. The objective of the measure is to ease the burden of financial obligations by partially compensating investment credit interests for SMEs' and support their development accordingly.

The OP recognizes that insufficient access of SMEs to the necessary sources of financing remains one of the main disadvantages and challenges in the Lithuanian business environments. Insufficient access to finance in conjunction with limited financial capacity of SMEs implies that it is hard for SMEs to obtain the required information, advisory,

[94] Order available at https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/a104f6d27b6211eaa38ed97835ec4df6.

[95] It should be emphasized that ERDF requested value in the table refers to the value of loans for which the measure provides interest reliefs.

methodological and other support on the issues of searching for potential markets, introduction of new technologies and thus hinders capacity of SMEs to develop and scale. As such, the measure aims to address business needs for better accessibility to finance in order to increase business development opportunities, while the measure's main goal is the sustainable growth and development of already established businesses.

The target group and beneficiaries of the measure are commercial SMEs, excluding SMEs operating in agricultural sector and undertaking activities related to gambling and weaponry commerce.

The non-repayable grant is capped at € 200 000 as per *de minimis* rules and the maximum period of 36 months. In addition to this, the grant provides coverage to the 95% of interest payments but the interest on loans cannot exceed 7% per annum. In the face of COVID-19, the guidelines and regulations of the measure were updated and now allows for the full 100% compensation of interests.

The expected output to be reached nationally is measured by the following output indicators:

- Number of enterprises, receiving subsidies – 3145
- Number of new enterprises, receiving investment support - 451

There are no specific regional output or result indicators.

2.3 Case study

UAB Šilelio nekilnojamasis turtas is a a service sector company specializing in the provision of real estate consultancy services in Lithuania, founded in 2018. The company's NACE classification is L.

The company applied for the financial instrument "Partial Interest Compensation" for the project "Partial Interest Compensation No. 03.1.1-IVG-T-809-01-3816". The company was unsuccessful in acquiring the support mainly because it did not fit the set requirements of the measure. According to the representative of the company, the main reason of the company's failure to acquire funds was that the number of workers in the company exceeded the set requirements of the measure for the number of employees in the company.

2.3.1 Motivation

As it was indicated previously, the main motivation behind the company's application for support was the risk of bankruptcy. Due to imposed quarantine regulations, the business stopped providing its consultancy services on 16 March, 2020. Since the company had outstanding contractual loan obligations, these obligations were feeding into the company's liquidity and posing a risk of bankruptcy. As such, the company applied for the partial compensation of interests which would have provide a short-term relief.

2.3.2 Application

Project application was received on April 14, 2020, with an estimated project value of € 200 000.00 and requested the full outlined funding amount. After suitability assessment the application was rejected on April 26, 2020, and no funding was provided

2.3.3 Implementation, results and assessment

The application for the financial instrument “Partial Interest Compensation” was rejected and thus UAB Šilelio nekilnojamasis turtas did not achieve its intended goals. According to the representative of the company, the main reason of the company’s failure to acquire funds was that the number of workers in the company exceeded the set requirements of the measure for the number of employees in the company. According to the representative, such requirements are wrong, as these types of measures should be prioritised to companies with a large number of workers, especially in the service sector, where business expansion can only be achieved through increased employment. In his view, given that more than 50% of costs in the service sector is related to labour and the fact that service sector is labour intensive, the set requirements unjustly punishes service sector companies. It may be implied from the representative’s statement that even if the turnover of a company is small, it has a small amount of capital and thus collateral but the high number of workers, such a company may not be able to acquire financial support for investment purposes due to the measure’s regulations. From the latter follows that in some instances, the set requirements may not allow the measure to achieve its intended purposes, namely, provision of investment funds for companies, provided the company in question is operating in a service sector.

Despite the unsuccess of the applicant, there were other 86 successful applicants (98% success rate) in Utena+2. Many of the applicant companies are successfully operating in the service sector. In addition to this, the interviewed applicant was the only unsuccessful applicant in the region. As such, it can be assumed that the reject applicant’s case is an exception, while its observations about unjust requirements of the measure ill-founded.

2.3.4 Sources

Interview with Mr. Valdas Trankūnas, CEO of UAB Šilelio nekilnojamas turtas.

Financial and application data of the company retrieved from the Ministry of Finance.

3 Investments for setting up and development of economic activities

3.1 Overview – the policy in numbers

The guidelines of the administration of measure have been set by the order 3D-507 of the Ministry of Agriculture of the Republic of Lithuania[96]. The order provides the main information with regards to the overall set-up of measures of LRDP 2014-2020, i.e. eligibility criteria for potential applicants.

The total public funding as provided by the LRDP 2014-2020 for the measure is around € 80.7 M.

Table 3.1 Implementation performance of the LRDP 2020 measure "Investments into agricultural holdings" as of December 31, 2019

TOTAL: Lithuania				**TOTAL: Utena+2**			
EAFRD allocation planned	**EAFRD requested**	**EAFRD approved**	**No. of approved projects (success rate)**	**No. of approved projects (success rate)**	**EAFRD approved in Utena+2**	**M€ as % of the total approved**	**EAFRD requested in Utena+2**
80.7 M€	63.63 M€	23.63 M€	162 (36.4%)	17 (29.63%)	2.48 M€	11%	7.56 M€

Source: Consortium based on data of the National Payments Agency

The number of projects approved in Utena+2 account for 10.49% of all projects. The total financial share of the public funding contracted in Utena+2 was around 11%. The average uptake per project was slightly lower in Utena+2 compared to Lithuania overall. Average size of the project in Utena+2 was around € 154 758.68, while in Lithuania it was € 145 847.08.

3.2 Intervention logic

The measure "Investments for setting up and development of economic activities" aims to provide funding for business development and improvement of human capital in rural areas. The main priorities of this measure are promotion of social inclusion, reduction poverty and increased economic activity in rural areas. As such, the mentioned priorities set the main goals

[96] Available at https://www.e-tar.lt/portal/lt/legalAct/c67909602ae111e9b66f85227a03f7a3/asr

of the measure, namely, diversification of economic activities, creation of new jobs and sustainable growth and scaling of already established businesses.

The target group and end beneficiaries of the measure are natural and legal persons residing in rural areas. All applicants have to be operating continuously for no less than 12 months and acquired income from their operations should be no less than the sum of average wages over preceding 12 months. The eligible support intensity is up to 50%, while the maximum volume of funding per project depends on the number of jobs to be created. If one job is to be created, then the maximum size of the grant is € 50 000. The maximum size of the grant is € 200 000 when the project aims to create 4 or more than 4 jobs

3.3 Results achieved in Utena+2

In total, 17 unique companies received measure funding. Representative of public institutions indicate that the measure is particularly successful in promoting business expansion in the region. However, the results of the measure in terms of creating significant long-term impact on region's economy are quite limited. Though it can be assumed that the projects will be benefiting the region's economy and thus to certain extent also to the regional development goals, their contribution to LNDP 2020 goals and main macroeconomic indicators will be limited due to small scale of the support provided.

3.4. Case study

UAB Naivu is a company specializing in producing chocolate. The company is one of only 200 chocolate produces worldwide where the chocolate production cycle starts with a dried cacoa bean. The company is mainly a family business and currently employs 3 people. Company's NACE classification is G.

The company applied for the support as per measure "Investments for setting up and development of economic activities" for the project "19VK-KV-18-1-04755-PR001". According to the representative of the company, the acquired funding helped to company to modernize its equipment and increases its potential revenue.

3.4.1 Motivation

Representative of the company indicated that the main motivation behind the company's application for the support was the outdated production machinery. This did not allow company to expand its production in the face of increasing demand. In addition to this, the company wanted to diversify its activities and begin to organize chocolate tourism activities. It was believed that the machinery upgrade and diversification of activities would create 6 additional jobs.

As such, the acquired support was used mainly for the purchase of new machinery and improvements to the current factory. Improvements to the current factory included creation of infrastructure necessary for chocolate tourism activities where visitors could watch the whole production process and taste the chocolate.

3.4.2 Application

Project application was approved on June 18, 2019. The company received € 181 343 support. Since the company had previously successful applied for ESIF support, it had more experience in the application process. Nevertheless, there is no information on whether the application process was deemed to be cumbersome by the beneficiary.

3.4.3 Implementation, results and assessment

Current results of the company are clouded by COVID-19 and related restrictions on production, logistics, and sales. In addition to this, the company could not complete fully diversification of activities (i.e. begin to organize chocolate tourism activities) due to COVID-19 crisis imposed quarantine restrictions.

Nevertheless, representative of the company indicated that if it had not been for the acquired support, the company would not have decided to upgrade its production machinery and diversify its activities due to high risk. The company produces around 150 000 chocolate plates per year and exports 95% of it. However, the current production has significantly declined due to COVID-19 crisis. The crisis also prevented the company from creating 6 additional jobs. Hopefully the production will pick-up and exceed the pre-crisis level in 2021, when pandemic is over.

3.4.4 Sources

Publicly available interview with Domantas Užpalis, the co-founder of UAB Naivu.

Financial and application data of the company retrieved from the National Payments Agency database.

4 Overall results in the stakeholder territory

The table below presents the normalised uptake of the analysed measures as of December 31, 2019. Per capita uptake was calculated by firstly calculating the total cumulative investments of each separate measure from January 1, 2014 to December 31, 2019 in Utena+2 and Lithuania overall. The acquired figures were then divided by the total population of Utena+2 and Lithuania overall in 2013

Table 4.1 Uptake of measures aimed at business development

Programme of funding	Source of funding	Name of the measure	Per capita invested in Lithuania (€)	Per capita invested in Utena+2 (€)
OP 2020	**ERDF**	**Partial compensation of interest**	8.64	5.90
LRDP 2020	**EAFRD**	**Investments for setting up and development of economic activities**	7.95	12.89

Source: Consortium based on data of National Payments Agency and the Ministry of Finance, 2020

As it can be seen from the table, the uptake of the measure “Partial compensation of interest” is lower in Utena+2 compared to the country’s average. The uptake of the measure “Investments for setting up and development of economic activities”, on the other hand, is higher compared to the country’s average.

The main reasons for lower uptake of the OP 2020 measure are the same as indicated in the main report. Firstly, the level of entrepreneurship in Utena+2 is significantly lower compared to the country’s average. When the base of applicants is low, the final uptake is consequently also lower. Secondly, the support acquisition is contingent on loan acquisition. Since many businesses in Utena+2 refrain from taking out a loan, this further indicates that the capacity for uptake of the measure is also lower in Utena+2. The latter consequently leads to lower final uptake. Thirdly, the measure does not tackle the main obstacles of expanding businesses in remote areas with grim socio-economic conditions, namely, high risk. The support provided is insufficient to incentivize companies to undertake risk and acquire loans for business developing purposes.

Reasons for the higher uptake of the LRDP 2020 are also the same as indicated in the main report. Firstly, agriculture, forestry and fishing sector plays a larger role in the region’s economy compared to the national average. This implies that the capacity for uptake is larger in Utena+2 compared to the national average. Secondly, the measure has relatively low regulatory barriers and is generous in terms of financial support provided. Thirdly, the measure is supervised by a single authority which provides one-window consultations for potential applicants. This means that search and transaction costs of acquiring support are also relatively low.

Given that the main aim of this group of measures is business expansion, macroeconomic indicators such as the growth rate of turnover per enterprise and the growth rate of employees of SMEs should theoretically reflect the performance and effectiveness of the analysed measures. However, since the scale of both measures combined was relatively low, it is highly unlikely that the measures created significant impact on the mentioned indicators.

Nevertheless, the acquired support can be said to be effective at the individual level. It is most likely that the acquired support has helped applicants to achieve the set business development goals. Although spillovers from companies to region’s economy are small, they still contribute to the improvement of socio-economic conditions in the region. As such, though it can be assumed that the projects will be benefiting the region’s economy and thus to certain extent also to the regional development goals, their contribution to LNDP 2020 goals and main macroeconomic indicators will be limited due to small scale of the support provided.

FACTSHEET #3

Measures aimed at business productivity increases

1 Policy context

Policies analysed in the following sections are aligned to the medium-term development document – Lithuanian Development Plan 2014-2020 **(LNDP 2020)**, while their funding are determined and provided by the Rural Development Programme of Lithuania 2014-2020 **(LRDP 2020)** and Operational Programme for EU Structural Funds Investments in Lithuania for 2014-2020 **(OP 2020)**. Such a structure of policy implementation presupposes that whereas LNDP 2020 has no separate funding and mainly set medium-term vertical and horizontal objectives for the development of Lithuania's economy, LRDP 2020 and OP 2020 provide the means for achieving the set objectives. Given that this factsheet is dedicated exclusively to measures aimed at business productivity increases, two measures of LNDP 2020 and four measures of OP 2020 will be analysed. The analysed LNDP 2020 measures are entitled "Investments into agricultural holdings" and "Investments in to processing of agricultural products, in marketing and (or) development". These measureS are funded by EAFRD. The analysed OP 2020 measures are entitled "Regio Invest LT+", "Industry Digitalization LT", "HIT Industry LT+" and "Competence voucher".

OP 2020 measures contribute to all vertical and horizontal objectives of LNDP 2020 by providing investment into 11 priority axes. The selected OP 2020 measures "Regio Invest LT+", "Industry Digitalization LT" and "HIT industry LT+" contribute to the set goals of LNDP 2020 by providing investments in accordance with OP 2020 priority axis 3 "Promoting competitiveness of small and medium-sized businesses". The selected OP 2020 measure "Competence voucher" contributes to LNDP 2020 by providing investments in accordance with OP 2020 priority axis 8 "Promoting quality employment and participation in the labour market".

LRDP 2020 measures similarly contribute to all vertical and horizontal objectives of LNDP 2020 by providing investments into 6 priorities. The selected LRDP 2020 measures "Investments for setting up and development of economic activities" and "Investment into agricultural holdings" contributes to the set goals of LNDP 2020 by providing investments as per LRDP 2020 priority "Promotion of competitiveness".

2 REGIO INVEST LT+

2.1 Overview – the policy in numbers

Priority axis 3 "Promoting competitiveness of small and medium-sized business", its investment priority 3.3. „Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes" and specific objective 3.3.1. "Increasing the productivity of SMEs" suggests that the value-added generated by production costs per one employee of SMEs in Lithuania is nearly three times lower than the EU's average. In addition to this, the productivity of the manufacturing industry, which is the most important economic sector for exports in Lithuania, is also far below the EU's average. The labour productivity of SMEs is often limited by a low level of innovation, which, in turn, reduces competitive advantages of SMEs. The main factors limiting innovations by SMEs are: expensive implementation of technological innovations in business and improvement of technological capacities; lack of funds; and insufficient level of organisational and non-technological innovations launched in business by companies. As such, the measure "Regio Invest LT+" aims to tackle the problem of low level of productivity of SMEs by providing non-repayable grants for companies that seek to modernize their assembly lines and production processes.

The newest guidelines and regulations of the measure are set by the Order 4-9333 of the Ministry of Economy and Innovations of the Republic of Lithuania dated December 12, 2014[97]. The planned allocation for the measure was around 70.1 M€.

Table 2.1 Implementation performance of the OP 2020 measure "Regio Invest LT+" as of December 31, 2020

TOTAL: Lithuania				**TOTAL: Utena+2**			
ERDF allocation planned	**ERDF requested**	**ERDF approved**	**Number of approved projects (success rate)**	**Number of approved projects (success rate)**	**ERDF approved in Utena+2**	**M€ as % of the total approved**	**ERDF requested in Utena+2**
70.1 M€	85.31 M€	69.63 M€	65 (84.4%)	6 (60%)	5.98 M€	8.58%	11.24 M€

Source: Consortium based on data of the Ministry of Finance of the Republic of Lithuania.

[97] Order available at https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/232bee7087cb11e495dc9901227533ee?jfwid=nz8qn74cb&buildNumber=1529559095629.

A substantial amount of the allocation funding was already been distributed as of December 31, 2019. The immediate results of Utena+2 show that 8.58% of total ERDF funding was provided in the region, while the number of approved projects amounted to 9.23% of all approved projects. From this follows that the uptake per project was lower in Utena+2 compared to the country's average. Average size of the project in Utena+2 was around € 995 551, while the national average was € 1 071 271.78.

Although there were 10 applicants for the support in Utena+2, only 6 companies acquired the support. The majority of companies are operating in industrial manufacturing sector. The table below indicates all beneficiaries in the region and their sector of economic activity.

Table 2.2 Beneficiaries of the measure "Region Invest LT"

Name of supported company	NACE	Status	Total project costs M€	Total ERDF M€	Private investments M€	Territory
UAB Hoda	C-manufacturing	Finished	3.13	1.09	2.04	Molėtai district municipality
UAB Dubingiai diamond resort	I- accomodation and food service activities	Currently being implemented	4.99	1.5	3.49	Molėtai district municipality
UAB Strapa	C-manufacturing	Finished	4.69	1.61	3.08	Utena district municipality
UAB Umaras	C-manufacturing	Finished	0.56	0.19	0.37	Utena district municipality
UAB VIRI TECHNOLOGIJA	C-manufacturing	Finished	0.5	0.23	0.27	Visaginas municipality
UAB Barauba	C-manufacturing	Currently being implemented	3.02	1.36	1.66	Visaginas municipality

Source: Consortium based on data of the Ministry of Finance of the Republic of Lithuania.

As it can be seen from the table above, the measure has also successfully boosted private investment. By December 31, 2020, measure induced private investment amounted to € 12.90 M. The success of the support at the individual company level are reported in the following sections. Case studies were conducted for UAB Hoda, UAB Strapa, UAB Umaras and UAB VIRI TECHNOLOGIJA.

2.2 Intervention logic

Given that productivity level of Lithuanian companies is below the EU average, competitiveness of Lithuanian companies is mostly based on price factors. Since competition on price factors is not sustainable, as empirical literature suggests that in the long-run competitiveness is mainly determined by the level of technology adopted and the quality of goods produced, the measure aims to achieve transformation of the industry by providing funding for the deployment of technologies (KETs) important for the innovation of the industry and the economic growth in SME production processes. KETs have a multiple effect on many industrial value chains and sectors. They help create value in the entire chain: from materials, equipment and machinery to goods and services. As such the offered is expected to substantially boost the productivity of Lithuanian SMEs.

The measure is a non-repayable grant. The target group and beneficiaries of the measure are micro, small and medium-size companies. The share of public non-repayable co-founding depends on the size of the company:

- for micro or small companies - 45%
- for medium-size companies – 35%

The maximum size of the grant is capped at € 1.5 M. The companies are required to prepare a project application and a business plan defining equipment which will be bought with the grant and which will lead to productivity increases.

The expected output to be reached nationally is measured by the following output indicators:

- Value-added at factor costs, created by SMEs, per employee
- Number of enterprises receiving grants
- Private investment matching public support to enterprises (grants)
- Labour productivity increases in enterprises receiving investment
- Long-term jobs created in enterprises receiving investment

There are no specific regional output or result indicators.

2.3 Case study I

UAB Hoda is one of the biggest plastic injection moulders in the Baltic States, founded in 1993. Based in Molėtai district municipality, it currently employs 187 people. The company produces plastic components for a range of industrial purposes. During 2015–2019, UAB Hoda utilized the financial instrument “Regio Invest LT+” for the project "Modernization of UAB Hoda production and increase of labour productivity No. 03.3.1-LVPA-K-803-01-0051", under the priority axis 3 of the European Union Funds Investment Operational Program for 2014–2020, “Promoting competitiveness of small and medium-sized enterprises”.

2.3.1 Motivation

UAB Hoda planned significant investments in the installation of new production technological lines and modernization of existing production technological lines, purchasing modern plastic moulding machines, an extruder, installing a centralized raw material supply system, and installing bridge cranes. For the needs of the project, the production premises were expanded by reconstructing the existing production building, and internal engineering networks were installed. The modernization of production was aimed at increasing the company's productivity, contributing to the company's profit growth and further expansion of sales in domestic and foreign markets.

2.3.2 Application

The project application of UAB Hoda was received on May 21, 2015, with an estimated project value of € 3 113 897.65 and the requested funding amount of € 1 089 864.18. The project was signed on January 13, 2016, with € 1 089 864.00 in funding from the financial instrument. Project activities ended on April 30, 2019, while the support contract expired on August 28, 2019.

2.3.3 Implementation, results and assessment

As it was indicated previously, the implementation of the project for UAB Hoda comprised purchases of machinery (plastic moulding machines), sets of robots for said plastic moulding machines, as well as the construction of industrial premises. This allowed company to achieve the set productivity goals and led to increases of wages of more than 10% within half a year after the completion, whereas previously, before the acquisition of support, wages were stagnant.

2.3.4 Sources

Financial and application data of the company retrieved from the Ministry of Finance.

Wage and employment data of the company retrieved from the State Social Insurance Fund Board under the Ministry of Social Security and Labour.

2.4 Case study II

UAB Viri Technologija is a light steel frame design and manufacturing company, based in the Visaginas municipality. It currently employs 13 people. The company is based in construction, manufacturing and infrastructural maintenance. During 2017–2020, UAB Viri Technologija utilized the financial instrument “Regio Invest LT+” for the project “Modernization of UAB Viri Technologija production No. 03.3.1-LVPA-K-803-02-0027”, under the priority axis 3 of the European Union Funds Investment Operational Program for 2014–2020, “Promoting competitiveness of small and medium-sized enterprises”.

2.4.1 Motivation

UAB Viri Technologija wanted to modernize its production and invest in innovative equipment for the production of metal products. The purpose of this equipment was to make the company competitive not only in the local market, but also throughout Europe. By acquiring said equipment, the main goal was to increase the company's productivity, thus increasing the output of high value-added products (and diversifying them), in order to meet specific needs of targeted clients. The additional objectives comprised the creation of new long-term jobs and increased sales. UAB Viri Technologija also wanted to create 10 new long-term workplaces in the company as an indicator of success for the project.

2.4.2 Application

The project application was received on March 10, 2017, with an estimated project value of € 502 630.63 and the requested funding amount of € 226 183.00. The project was signed on August 4, 2017, allocating the full amount of funding requested. Project activities were implemented on December 12, 2019, while the support contract expired on January 27, 2020.

2.4.3 Implementation, results and assessment

During the project, the main expense for UAB Viri Technologija was the purchase of machine tools for the manufacture of light metal frame structures, which matched the expressed need for the company to modernise its production toolkit. The acquired support allowed the company allowed the company to increases its productivity. This productivity increase provided many benefits for the company's workers. There was an immediate 30% spike in the average wage after the conclusion of project activities.

2.4.4 Sources

Financial and application data of the company retrieved from the Ministry of Finance.

Wage and employment data of the company retrieved from the State Social Insurance Fund Board under the Ministry of Social Security and Labour.

2.5 Case study III

UAB Umaras is a polyethylene production company, founded in 1993. Based in the Utena district municipality, it currently employs 181 people. The products of the company are certified under quality management, environmental management and good manufacturing practice standards. During 2017–2018, UAB Umaras utilized the financial instrument "Regio Invest LT+" for the project "Introduction of Modern Technologies in Creation of New Production Capacities for the Manufacture of New Products, No. 03.3.1-LVPA-K-803-02-0019", under the third priority of the European Union Funds Investment Operational Program for 2014–-2020, "promoting competitiveness of small and medium-sized enterprises".

2.5.1 Motivation

UAB Umaras sought to increase the production volumes to develop new products and to widen the range of the company's products, thus meeting evolving market needs. Modern equipment, enabling the production of bags from 2 prototypes created during the lifetime of former projects was intended for purchase during the period of project implementation. UAB Umaras also wanted to create 6 new workplaces as an indicator of success for the project.

2.5.2 Application

The project application was received on March 10, 2017, with an estimated project value of € 554 640.00 and the requested funding amount of € 188 578.00. The project was signed on September 15, 2017, allocating the full amount of funding requested. Project activities were implemented on February 1, 2019, while the contract expired on April 2, 2019.

2.5.3 Implementation, results and assessment

During the project, the main expense for UAB Umaras was the renewal of plastic bag production equipment. The project successfully created 6 new long-term work roles at the company, and the average wage rose by 34% from the end of implementation to the end of the year of 2019. The same period saw an overall stable increase of employees from 155 to 171, which occurred at an unprecedentedly faster pace than before the implementation of the project. Hence, it can sufficiently be said that the support allowed the company to boost its productivity.

2.5.4 Sources

Financial and application data of the company retrieved from the Ministry of Finance.

Wage and employment data of the company retrieved from the State Social Insurance Fund Board under the Ministry of Social Security and Labour

2.6 Case study IV

UAB Strapa is a manufacturing company in Lithuania, founded in 2011. Based in the Utena district municipality, it currently employs 33 people. The company specializes in the production of strapping band made of polypropylene (PP) and polyester (PET), which is designed for light to medium-duty palletizing and securing production from the furniture industry to food, and others. During 2015–2019, UAB Strapa utilized the financial instrument “Regio Invest LT+” for the project “UAB Strapa Investments in the Development of Strapping Band Production No. 03.3.1-LVPA-K-803-01-0019”, under the 3rd priority of the European Union Funds Investment Operational Program for 2014-2020, “promoting the competitiveness of small and medium-sized enterprises”.

2.6.1 Motivation

UAB Strapa sought to increase its productivity by expanding production in the company and introducing globally innovative PET production technology. By implementing the project, UAB

Strapa planned to acquire modern PET production technological line, upgrade and supplement other necessary auxiliary production equipment, as well as invest in the construction of a new production building. The additional objectives comprised the creation of 21 new long-term jobs, increase the volume of production and sales of products, thus creating conditions for a significant increase in the added value and productivity. Implementation of outlined objectives is complex process and the payback of the project takes time, therefore financing instruments facilitated the process.

2.6.2 Application

The project of UAB Strapa application was received on May 20, 2015, with an estimated project value of € 4 691 463.35 and the requested funding amount of € 2 100 000.00. The project was signed on December 10, 2015, with the financial instrument coverage of € 1 610 019.00. Project activities were implemented on October 31, 2018. The contract expired on January 29, 2019. The total cost of the project was € 4 479 148.13, with the financial instrument covering € 1 567 701.82.

2.6.3 Implementation, results and assessment

The implementation of the project for UAB Strapa comprised purchases of an innovative technological line for the production of PET band, as well as additional necessary auxiliary production and equipment for computerization of 11 workplaces. During the project the new PP and PET production building was successfully built and a solution specially developed and adapted to the needs of the company was implemented. Although, the previously outlined goal of creating 21 new long-term roles in the company did not succeed. The average of company salary has steadily increased by 48% in the year and a half since the end of the project. The same period saw an increase of employees (from 21 to 33), whereas previously the employment process had been stagnant.

The company indicated that in the next 5 years it will further expand. As such, the company indicated that it will need investments into robotization of production and solar energy production.

2.6.4 Sources

Financial and application data of the company retrieved from the Ministry of Finance.

Wage and employment data of the company retrieved from the State Social Insurance Fund Board under the Ministry of Social Security and Labour.

3 INDUSTRY DIGITALISATION LT

3.1 Overview – the policy in numbers

Measure “Industry digitization LT” falls under the same framework as measure “Regio Invest LT”. As such, priority axis 3 “Promoting competitiveness of small and medium-sized business“, its investment priority 3.3. „Supporting the capacity of SMEs to grow in regional, national and

international markets, and to engage in innovation processes" and specific objective 3.3.1. "Increasing the productivity of SMEs" suggests that the value-added generated by production costs per one employee of SMEs in Lithuania is nearly three times higher than the EU's average. In addition to this, the productivity of the manufacturing industry, which is the most important economic sector for exports in Lithuania, is also far below the EU's average. The labour productivity of SMEs is often limited by a low level of innovation, which, in turn, reduces competitive advantages of SMEs. The main factors limiting innovations by SMEs are: expensive implementation of technological innovations in business and improvement of technological capacities; lack of funds; and insufficient level of organisational and non-technological innovations launched in business by companies. As such, measure "Industry digitalization LT" aims to tackle the problem of low level of productivity of SMEs by providing non-repayable grants for technological audit services and digitalization and automatization of whole production line.

The newest and updated guidelines and regulations of the measure are set by the Order 4-147 of the Ministry of Economy and Innovations of the Republic of Lithuania dated March 03, 2020[98]. The planned allocation for the measure was around € 70.1 M.

Table 3.1 Implementation performance of the OP 2020 measure "Industry digitalization LT" as of December 31, 2020

TOTAL: Lithuania				**TOTAL: Utena+2**			
ERDF allocation planned	**ERDF requested**	**ERDF approved**	**Number of approved projects (success rate)**	**Number of approved projects (success rate)**	**ERDF approved in Utena+2**	**M€ as % of the total approved**	**ERDF requested in Utena+2**
71.2 M€	54.14 M€	52.77 M€	97 (98.8%)	4 (100%)	2.17 M€	4.11%	2.24 M€

Source: Consortium based on data of the Ministry of Finance of the Republic of Lithuania

A substantial amount of the allocation funding was already been distributed as of December 31, 2019. The immediate results of Utena+2 show that 4.11% of total ERDF funding was provided in the region, while the number of approved projects amounted to 4.12% of all approved projects. From this follows that the uptake per project was on average slightly lower

[98] Order available at https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/24ce3262624511eaa02cacf2a861120c?jfwid=ddv34irfd.

in Utena+2 compared to the national average. Average size of the project in Utena+2 was € 541 968.5 , while the national average was € 544 054.1.

All 4 companies that applied for support received it 6 companies acquired the support. All of the beneficiaries are operating in manufacturing. The table below indicates all beneficiaries in the region and their sector of economic activity.

Table 3.2 Implementation performance of the OP 2020 measure "Industry digitalization LT" as of December 31, 2020

Name and registration supported company	NACE	Status	Total project costs M€	Total ERDF M€	Private investments M€	Territory
UAB Samsonas motorsport	C-manufacturing	Finished	0.3	0.13	0.17	Utena district municipality
UAB Umaras	C-manufacturing	Currently being implemented	2.34	0.77	1.57	Utena district municipality
UAB Recon Modul	C-manufacturing	Currently being implemented	0.78	0.28	0.5	Visaginas municipality
UAB Akadas	C-manufacturing	Currently being implemented	2.87	1.01	1.86	Zarasai district municipality

Source: Consortium based on data of the Ministry of Finance of the Republic of Lithuania.

As it can be seen from the table above, the measure has also successfully boosted private investment. By December 31, 2019, the measure induced private investment amounted to € 4.1 M. The success of the support at the individual company level are reported in the following sections. A case study was conducted for UAB Akadas

3.2 Intervention logic

Given that productivity of Lithuanian SMEs is below the EU's average, while increased digitalization of industries across the globe puts competitive pressure on Lithuanian companies, digitalization and automatization of production lines is of the highest importance for companies. In addition to that, since digitalization and automatization is costly, while Utena+2 is dominated by small and medium size companies which are financially constrained, the measure aims to provide funding which would allow companies to overcome competitive challenges, modernize their production lines and increase productivity accordingly.

The target group and beneficiaries of the measure are micro, small and medium-sized companies.

The eligible activities under the measure are technological audit services, which will show company how its production processes can be digitalized, and automatization of production lines through installation of various business management tools and systems.

The share of public non-repayable co-funding depends on the size of the company:

- for micro and small companies – 45%
- for medium-size companies – 35%

The minimum size of the project is set at 4000€, while the maximum size of the project is set at € 2.9 M.

The expected output to be reached nationally is measured by the following output indicators:

- Value-added at factor costs, created by SMEs, per employee
- Number of enterprises receiving grants
- Private investment matching public support to enterprises (grants)
- Labour productivity increases in enterprises receiving investment

There are no specific regional output or result indicators.

3.3 Case study I

UAB Akadas is one of the largest manufacturers of pine outdoor furniture in the Baltic States, founded in 1993. Based in the Zarasai district municipality, it currently employs 86 people. The company provides a wide range of wooden products, from outdoor furniture to windows or doors. During the 2018–2022, UAB Akadas will utilize the financial instrument “Industrial Digitization LT” for the project “Installation of UAB Akadas Production Process Equipment with Integrated Digitization Technologies No. 03.3.1-LVPA-K-854-01-0055”, under the 3rd priority of the European Union Funds Investment Operational Program for 2014-2020, “promoting the competitiveness of small and medium-sized enterprises”.

3.3.1 Motivation

UAB Akadas sought to implement complex measures, including the digitization of existing equipment, installation of terminal workstations and optimization of the existing business management system. The additional goal of the company provides for the purchase of an automated equipment with integrated digital technologies for industrial SMEs, based on the recommendations of the performed technological audit. By acquiring said equipment, the main goal is to increase the company’s productivity as an indicator of success for the project.

3.3.2 Application

The project of UAB Akadas application was received on September 4, 2018, with an estimated project value of € 2 868 500.00 and the requested funding amount of € 1 005 000.00. The project was signed on April 16, 2019, allocating the full amount of funding requested. Project activities will be implemented by April 14, 2022.

3.3.3 Implementation, results and assessment

During the project, the key expense for UAB Akadas is the purchase of automated equipment that will fully fulfil the company's production process. The comprehensive evaluation of achieving objectives will be available only after the expected end of the project in 2022. Although in two years since the beginning of project activities implementation (2018) the average wage of company has risen by almost 26% and continue to grow steadily. Also, the company already created 11 long-term jobs.

The company indicated that in the 5 years it will expand further. As such, the company indicated that it will need investments into robotization and modernization of production process. Representative suggested that in the future support should not raise the requirement to create new job and should have higher intensity.

3.3.4 Sources

Financial and application data of the company retrieved from the Ministry of Finance.

Wage and employment data of the company retrieved from the State Social Insurance Fund Board under the Ministry of Social Security and Labour.

4 HIT INDUSTRY LT+

4.1 Overview – the policy in numbers

Measure "Hit industry LT+" fall under the same framework as other measures aimed at business productivity increases. As such, As such, priority axis 3 "Promoting competitiveness of small and medium-sized business", its investment priority 3.3. „Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes" and specific objective 3.3.1. "Increasing the productivity of SMEs" suggests that the value-added generated by production costs per one employee of SMEs in Lithuania is nearly three times higher than the EU's average. In addition to this, the productivity of the manufacturing industry, which is the most important economic sector for exports in Lithuania, is also far below the EU's average. The labour productivity of SMEs is often limited by a low level of innovation, which, in turn, reduces competitive advantages of SMEs. The main factors limiting innovations by SMEs are: expensive implementation of technological innovations in business and improvement of technological capacities; lack of funds; and insufficient level of organisational and non-technological innovations launched in business by companies. As such, measure "HIT Industry LT+" aims to tackle the problem of low level of productivity of SMEs by providing non-

repayable grants for the installation of high impact technologies into production lines of industrial companies.

The newest guidelines and regulations of the measure are set by the Order 4-244 of the Ministry of Economy and Innovations of the Republic of Lithuania dated March 25, 2016[99]. The planned allocation for the measure was around 15 M€.

Table 4.1 Implementation performance of the OP 2020 measure "HIT Industry LT+" as of December 31, 2020

TOTAL: Lithuania				TOTAL: Utena+2			
ERDF allocation planned	**ERDF requested**	**ERDF approved**	**Number of approved project (s**	**Number of approved projects**	**ERDF approved in Utena+2**	**M€ as % of the total approved**	**ERDF requested in Utena+2**
15.00 M€	21.11 M€	15.31 M€	37 (90.2%)	1 (100%)	0.36 M€	2.34%	0.42 M€

Source: Consortium based on data of the Ministry of Finance of the Republic of Lithuania

A substantial amount of the allocation funding was already been distributed as of December 31, 2019. The immediate results of Utena+2 show that 2.34% of total ERDF funding was provided in the region, while the number of approved projects amounted to 2.70% of all approved projects. From this follows that the uptake per project was on average lower in Utena+2 compared to the national average. Average size of the project in Utena+2 was € 358 985, while the national average was € 413 831.59.

Only one company applied for the support in Utena+2, and its application was approved. The success of the support at the company level is reported the following sub-section on case study.

4.2 Intervention logic

Intervention logic of the measure is similar to other previously analysed measures which aimed at business productivity increases. However, in this measure's case, only companies which are operating in manufacturing sector (C) can apply for the funding. This eligibility requirement is mainly because the measure is specifically oriented towards productivity gains in SMEs of traditional industries.

As such, the target group and beneficiaries of the measure are micro, small and medium-sized companies of traditional industries.

[99] Order available at https://e-seimas.lrs.lt/portal/legalActPrint/lt?jfwid=-lrklxcj6s&documentId=e006fd00f2cd11e5bf4ee4a6d3cdb874&category=TAD.

The eligible activities under the measure are purchase of nano-electronic technologies, biotechnologies, nanotechnologies, advanced materials and advanced production systems and their application in production processes.

The share of public non-repayable co-funding depends on the size of the company:

- for micro and small companies – 45%
- for medium-size companies – 35%

The minimum size of the project is set at € 50 000, while the maximum size of the project is set at € 2.9 M.

The expected output to be reached nationally is measured by the following output indicators:

- Turnover increases in enterprises receiving investment – 30402.76%
- Number of enterprises receiving grants - 37
- Private investment matching public support to enterprises (grants) – € 2.77 M.
- Labour productivity increases in enterprises receiving investment – 8093.00%

There are no specific regional output or result indicators.

4.3 Case study I

UAB Seifuva is the sole certified safe manufacturing company in Lithuania, founded in 1991. Based in the Utena district municipality, it currently employs 104 people. The company manufactures safes with a security classification (from 0 to 4), where the quality and resistance of the product is confirmed by externally issued certificates. During 2016–2018, UAB Seifuva utilized the financial instrument “DPT pramonei LT+” for the project “Implementation of an advanced production system, No. 03.3.1-LVPA-K-841-01-0011”, under the third priority of the European Union Funds Investment Operational Program for 2014–2020, “promoting competitiveness of small and medium-sized enterprises”.

4.3.1 Motivation

UAB Seifuva did not produce fire-resistant safes due to a lack of high-precision equipment. The needs of the company's clients, ranging from businesses to police, have increasingly required this feature, and there was only a limited amount of companies in the European Union to match the demand. By implementing the project, UAB Seifuva planned to offer the market higher quality products which are resistant not only to burglary, fire, but also to water (drowning). For the production of products, the project funds were intended to purchase high-impact technologies and equipment for photonics and advanced production systems (robotics). By meeting the needs of the market and modernising the production infrastructure, UAB Seifuva pursued higher turnover, production volume and competitiveness

4.3.2 Application

The project application was received on August 1, 2016, with an estimated project value of € 1 205 100.00 and the requested funding amount of € 421 785.00 M. The project was signed on January 2, 2017, with the financial instrument coverage of € 358 085.00. The implementation of the project activities started earlier, on October 24, 2016 and ended on October 23, 2018. The contract expired earlier, on June 5, 2018.

4.3.3 Implementation, results and assessment

During the project, the key expense for UAB Seifuva was the purchase of robotic welding systems, as well as metal cutting and bending machines. These purchases directly contributed towards infrastructure required for producing higher quality fireproof and waterproof safes. Within a month from the conclusion of the project, the productivity within the company significantly increased, while the company successfully created 3 additional jobs.

4.3.4 Sources

Financial and application data of the company retrieved from the Ministry of Finance.

Wage and employment data of the company retrieved from the State Social Insurance Fund Board under the Ministry of Social Security and Labour.

5 COMPETENCE VOUCHER

5.1 Overview – the policy in numbers

Measure “Competence voucher” fall under the same framework of priority axis 8 “Educating the society and strengthening the potential of human resources“, its investment priority 8.4. „Enhancing equal access to lifelong learning for all age groups in formal, non-formal and informal settings, upgrading the knowledge, skills and competencies of the workforce, and promoting flexible learning pathways including through career guidance and validation of acquired competences” and specific objective 8.4.1. “Improve consistency of vocational and adult training with the labour market needs and make it more attractive” suggests that the quality of vocational and adult training services is insufficient. As demonstrated by figures provided by the Lithuanian Industrialists Confederation, as many as 44% of the enterprises in the country were not hiring new people in 2012 because they were not able to find skilled specialists. In addition to that, employers have expressed their opinion that competences acquired at vocational training institutions do not meet the labour market needs. As such, the measure aims to provide funding for and labour qualification services to ensure that job skills meet the labour market needs and ultimately increase labour productivity.

The newest guidelines and regulations of the measure are set by the Order 4-611 of the Ministry of Economy and Innovations of the Republic of Lithuania dated November 07, 2016[100]. The planned allocation for the measure was around € 2.70 M.

Table 5.1 Implementation performance of the OP 2020 measure "Industry digitalization LT" as of December 31, 2020

TOTAL: Lithuania				**TOTAL: Utena+2**			
ESF allocation planned	**ESF requested**	**ESF approved**	**Number of approved projects (success rate)**	**Number of approved projects (success rate 100%)**	**ESF approved in Utena+2**	**M€ as % of the total approved**	**ESF requested in Utena+2**
2.70 M€	3.34 M€	3.31 M€	693 (98.9%)	7	0.032 M€	1.00%	0.03 M€

Source: Consortium based on data of the Ministry of Finance of the Republic of Lithuania

The immediate results of Utena+2 show that 1.00% of total approved ERDF funding of the measure was provided in the region, while the number of approved projects amounted to 1.00% of all approved projects of the measure. The average size per project was the same as the national average and amounted to 4 500 €.

5.2 Intervention logic

Intervention logic of the measure is similar to other previously analysed measures which aimed at business productivity increases. However, in this measure's case, state and municipal companies can also apply for funding. Successful applicant can acquire non-repayable grant up to 4 500 € for the compensation of labour qualification upgrade services. The services are provided by companies which were approved by the Ministry of Economics and Innovation.

The expected output to be reached nationally is measured by the following output indicators:

- Number of workers which have successfully finished qualification upgrade courses - 225920
- Number of workers which have participated in qualification upgrade courses - 245760

There are no specific regional output or result indicators.

[100] Order available at https://e-seimas.lrs.lt/portal/legalActEditions/lt/TAD/314354308cc911e6a0f68fd135e6f40c.

6 EAFRD – Investments into agricultural holdings

6.1 Overview – the policy in numbers

The guidelines of the administration of measure have been set by the order 3D-70 of the Ministry of Agriculture of the Republic of Lithuania[101]. The order provides the main information with regards to the overall set-up of the measure "Investments into agricultural holdings", i.e. eligibility criteria for potential applicants.

The total public funding as provided by the LRDP 2014-2020 for the measure is around € 440 M.

Table 6.1 Implementation performance of the LRDP 2020 measure "Investments into agricultural holdings" as of December 31, 2020

TOTAL: Lithuania				**TOTAL: Utena+2**			
EAFRD allocation planned*	**EAFRD requested**	**EAFRD approved**	**Number of approved projects (success rate)**	**Number of approved projects (success rate)**	**EAFRD approved in Utena+2**	**M€ as % of the total EAFRD approved**	**EAFRD requested in Utena+2**
440 M€	528.66 M€	374.60 M€	4851 (70.4%)	669 (74.5%)	51.26 M€	13.68%	66.32 M€

Source: Consortium based on data of the National Payments Agency

With most of the funding already by December 31, 2019, the number of projects approved in Utena+2 account for 13.79% of all projects. The total financial share of the public funding contracted Utena+2 stood at 13.68%. As such, the average uptake per project was lower in Utena+2 compared to the national average. Average size of the project in Utena+2 was around € 76 624, while in Lithuania it was € 77 212.80.

6.2 Intervention logic

Given the ongoing industrial, as well as agricultural changes in the world, as well as the fact that Lithuania's agriculture, forestry and fishing sector productivity was only 65% of EU's average in 2018, the main goal of this measure is to increase the sector's productivity. One of the main reasons why productivity is low in the agricultural, forestry and fisheries sector is that the sector is dominated by small and medium scale farms. As such, small and medium size

[101] Available at https://www.e-tar.lt/portal/lt/legalAct/c67909602ae111e9b66f85227a03f7a3/asr

farms do not have enough financial opportunities to modernize their firms or increase value added from agricultural activities because their costs will always be relatively higher compared to larger farms which can exploit economies of scales. Another reason why small size farms are at disadvantage is their relative technological backwardness. Small and medium size farms are inefficient because of their outdated machinery or even lack of it. Even in large size farms, the machinery's capacity is not utilized to its full capacity. In turn, the vitality and productivity are mostly dependent on the ability of small and medium size farms to process agricultural production on their own and sell them without intermediaries, i.e. directly to customers.

As such the measure has set the procedural priorities to increase vitality and competitiveness of farms by improving productivity of their activity and promoting adoption of innovative agricultural technologies, as well as promote organization of food chains, including production and supply of agricultural products. To achieve these procedural priorities the measure aims towards modernization and restructuration of material and agricultural basis of agricultural sector, increasing income from agricultural production and related activities, as well as production of higher value added in agricultural and related sectors. Hence, the ultimate goal of the measure is to boost productivity of the agricultural sector.

The target group and end beneficiaries of the measure are either both natural and legal persons which undertake agricultural activities. Another requirement for potential beneficiaries is that 50% of their income should originate from agricultural activities and they should be performing agricultural business for no less than a year before the submission of the application.

Support of the measure is in a form of non-repayable grants which is provided for investments into new equipment, machinery, technologies (including software) and construction or renovation of production premises, as well as marketing activities.

The eligible support intensity varies from 40% to 50% depending on the agricultural sub-sector of the applicant, as well as the purpose of investment. It is important to note that support intensity can be increased by 20% if the applicant is a young farmer (is not older than 40 years old).

The maximum volume of funding per project is € 50 000, while the total funding acquired from RDP 2014-2020 from this measure cannot exceed € 0.4 M.

7 Investments in processing of agricultural products, in marketing and (or) development

7.1 Overview – the policy in numbers

The guidelines of the administration of measure have been set by the order 3D-356 of the Ministry of Agriculture of the Republic of Lithuania[102]. The order provides the main information with regards to the overall set-up of the measure "Investments in processing of agricultural products, in marketing and (or) development", i.e. eligibility criteria for potential applicants.

Table 7.1 Implementation performance of the LRDP 2020 measure "Investments into processing of agricultural products, in marketing and (or) development" as of December 31, 2020

TOTAL: Lithuania				**TOTAL: Utena+2**			
EAFRD allocation planned	**EAFRD requested**	**EAFRD approved**	**Number of approved projects (success rate)**	**Number of approved projects (success rate)**	**EAFRD approved in Utena+2**	**M€ as % of the total approved**	**EAFRD requested in Utena+2**
80.2 M€	82.26 M€	58.78 M€	67 (66.6%)	5 (62.5%)	2.59 M€	4.39%	4.42 M€

Source: Consortium based on data of the National Payments Agency

The number of projects approved in Utena+2 account for 7.46% of all projects. The total financial share of the public funding contracted in Utena+2 – 4.39%. In absolute numbers, only 5 companies have acquired funds. The average uptake per project was lower in Utena+2 compared to Lithuania overall. Average size of the project in Utena+2 was around € 517 159.4, while in Lithuania it was € 877 259.97.

7.2 Intervention logic

Intervention logic of this measure is similar to that of described in the previous sub-chapter, when discussing intervention logic of the measure "Investment into agricultural holdings". As such, the goal of this measure is in the face of ongoing industrial, as well as agricultural changes in the world, to increase business productivity, especially in agriculture, forestry and fishing sector, which productivity was only 65% of EU's average in 2018. As such the main priorities of this measure is to improve survivability and competitiveness of agricultural farms, promote

[102] Available at https://www.e-tar.lt/portal/lt/legalAct/c67909602ae111e9b66f85227a03f7a3/asr

adoption of innovative production methods in business and promote organization of food chains, including productions of agricultural products and their supply for the market. The set priorities are fulfilled by the measure channelling its investments towards promotion of competitiveness of agricultural sector, development of new agricultural products, adoption of innovations and new technological processes, as well as promotion of marketing activities of agricultural products.

Support in a form of non-repayable grants is provided for projects which improve processing of fruits, berries, vegetables, meat, and dairy products, as well as their marketing. The target group and end beneficiaries of the measure are legal persons which produce agricultural products.

The eligible support intensity varies from 40% to 50% depending on the agricultural sub-sector of the applicant, as well as the purpose of investment. The maximum size of grant is up to € 1.3 M per one application, and the total amount support received cannot exceed € 4 M per this measure.

7.3 Results achieved in Utena+2

In total, only 4 companies acquired measure funding. Even though the measure is relatively small in terms of its scale and number of beneficiaries, measure's nature and main goals (i.e. productivity gains in agriculture, forestry and fisheries sector) are similar to the previously analyzed measure "Investment into agricultural holdings". As such, it is likely that the measure did have a positive impact upon overall productivity increase in the region, while also positively affecting productivity of all beneficiaries.

8 Overall results in the stakeholder territory

The table below presents the normalised uptake of the analysed measures as of December 31, 2019. Per capita uptake was calculated by firstly calculating the total cumulative investments of each separate measure from January 1, 2014 to December 31, 2019 in Utena+2 and Lithuania overall. The acquired figures were then divided by the total population of Utena+2 and Lithuania overall in 2013.

Table 8.1: Performance of measures aimed at business productivity increases

Programme of funding	**Source of funding**	**Name of the measure**	Per capita invested in Lithuania (€)	Per capita invested in Utena+2€
OP 2020	**ERDF**	**Regio Invest LT+**	23.43	31.10
OP 2020	**ERDF**	**Industry Digitalisation LT**	17.76	11.29
OP 2020	**ERDF**	**HIT industry LT+**	5.15	1.87
OP 2020	**ERDF**	**Competence voucher**	1.11	0.16
LRDP 2020	**EAFRD**	**Investments into agricultural holdings**	126.03	266.93
LRDP 2020	**EAFRD**	**Investments in to processing of agricultural**	19.78	13.47

Programme of funding	**Source of funding**	**Name of the measure**	Per capita invested in Lithuania (€)	Per capita invested in Utena+2€
		products, in marketing and (or) development		

Source: Consortium based on data of the Ministry of Finance, 2020

As it can be seen from the table, the uptake of the majority of OP 2020 measures was lower in Utena+2 compared to the national average. On the other hand, the uptake of the largest LRDP 2020 measure "Investments into agricultural holdings" was higher in Utena+2 compared to the national average.

Higher per capita uptake of measure "Regio Invest LT+" is because of the same reasons reported in the main report. Industry and especially manufacturing are much more important economic sector in Utena+2 compared to the national average. Hence, larger role of industry sector and manufacturing sub-sector sector implies that the capacity for uptake is also larger in Utena+2 compared to the national average. Lower uptake of the other measures is mainly because these measures are aimed companies which are innovative and built their productivity increases through installation of new technologies into production process and increased quality of human capital. Since the number of these type of innovative companies is relatively low in Utena+2, the uptake is also lower.

The main reasons of higher uptake of the measure "Investments into agricultural holdings" are also the same as reported in the main report. Agriculture, forestry and fishing sector plays a larger role in the region's economy compared to the national average. As such, larger role implies that the capacity for uptake and the final uptake are also consequently higher. Lower uptake of the other LRDP 2020 measure is mainly because the food processing industry in Utena+2 is dominated by a few large companies. Since these companies dominate the local market, the uptake of the rest of the food processing companies is lower simply because there are smaller number of potential applicants. In addition to this, the dominating companies are large enough to fund their productivity enhancement projects themselves, using internal funds.

In terms of achieved effects of measures, the higher per capita uptake of "Regio Invest LT+" can be said to be effective in terms of achieved results as the productivity in the industry sector seem to have increased in Utena+2 more than in the rest of the country. From 2014 to 2017[103], gross value added per worker employed in industry sector increased by 7.46% in Utena+2 compared to 3.98% in the rest of the country[104]. Absolute values were still lower in Utena+2 and stood at around € 26 529, while in the rest of the country at € 35 786 in 2017.

Higher uptake per capita of the largest EAFRD measure "Investment into agricultural holdings" can also be reflected in the fact that gross value added per worker employed in agriculture,

[103] The latest available data on gross value added per worker employed is only available up to 2017.

[104] It is important to note that since gross value added is not available at LAU level, results of Utena county are used as a proxy for the development and tendencies of the whole Utena+2 region.

forestry and fishing sector did grow more in Utena+2 than in the rest of the country. 37.02% growth in the indicator was observed in Utena+2, while in the rest of the country the growth was at 35.84% from 2014 to 2017. Despite higher growth, absolute values were still lower in Utena+2 and stood at around € 10 803, while in the rest of the country at € 14 055.

In spite of the higher growth in both industry and agriculture, forestry and fishing sectors, the positive productivity increases did not spillover to other sector economic sectors as the growth of gross value added per worker employed was lower in Utena+2 than in the rest of the country from 2014 to 2017. Whereas the growth in Utena+2 was 11%, the growth in the rest of the country was 12%. The absolute value differences were also observed as the gross value added per worker employed were € 19 826 and € 28 030 in Utena+2 and the rest of the country in 2017, respectively.

All in all, case studies and growth tendencies of macroeconomic productivity indicators suggest that the measures were effective and created a strong impact in terms of sectorial productivity increases. Although sectorial productivity increases did not spillover to the whole regional economy, the measures can be said to be effective in terms of contributing positively to regional development goals and goals of LNDP 2020.

ESPON 2020 – More information

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The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States, the United Kingdom and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.