Industrial Policy for Regional Development in Lithuania

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Industrial Policy for Regional Development
in Lithuania

Submitted to
William Ascher

By
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For
Senior Thesis
Spring 2020
May 11, 2020
Abstract

Lithuania is internationally recognized as a high-income developed country, but the high standard of living is limited only to a small minority of citizens. While the capital is emerging as a financial center and a hub for information technology, cities in the Western and Central parts of Lithuania are rapidly declining. Formerly industrial regions, Šiauliai, Panevėžys, Alytus, Utena, Tauragė, Telšiai and Marijampolė, now suffer from massive emigration, brain drain, high unemployment rates, and an increased risk of poverty and social exclusion among residents. Unlike larger cities, poorer counties have not been magnets for foreign direct investment and have benefited little from large-scale infrastructural projects. This thesis explores the weaknesses and strengths of the declining regions and assesses the Lithuanian government’s capacity to enact an industrial strategy to help reduce regional disparities. The analysis is also based on Dani Rodrik’s framework for the institutional infrastructure and the design of an industrial policy. The thesis culminates in a list of policy recommendations, considering the distinctive problems facing the declining regions.
Acknowledgements

I would like to thank Professor William Ascher, without whom this thesis would not have been possible. Thank You for Your patience, guidance, encouragement, mentorship, and moral support. Writing this extensive analysis has helped me to better understand my home country, my family and myself. I hope that You enjoy reading this thesis as much as I enjoyed writing it.

I would also like to thank Professor Minxin Pei, Professor Jennifer Taw, Professor Aseema Sinha, Professor Mieczyslaw Boduszynski, Professor Michael D. Steinberger, and Professor Jeffrey Flory for exceptional lectures, and for sparking my passion for international development.

In addition, I would like to thank Birutė Kurbanovaitė and Invest Lithuania, for helping me understand regional problems in Lithuania and for your relentless effort to reduce regional disparities. Your work is crucial for the successful future of the whole country.
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Introduction

Over the last three decades, Lithuania followed a path of development, economic growth, and innovation, with Vilnius at the forefront. However, most of the nation’s smaller cities and towns have been excluded from these processes and continue to decline rapidly. Central and Western regions of Lithuania lack social and physical infrastructure, experience high population loss through aging and emigration, receive little EU funding and struggle to attract foreign direct investment. The World Bank considers Lithuania a high-income country, but the reality is very different. With soaring unemployment rate, low wages and rising at risk-poverty rate, residents of the poorer counties are not enjoying the same standard of living as their counterparts in the capital and larger cities.

The Lithuanian government must take serious measures to reduce regional disparities, not only for the sake of social justice, but for the sake of the overall economy. The poor performance of seven out of ten counties places a drag on the national economy, forcing the government to spend on social welfare programs, instead of using those resources to create more wealth.

This thesis assesses the Lithuanian government’s capacity to enact an industrial strategy to uplift the declining regions. Because Lithuania is deficient in this capacity, this thesis outlines strategies to acquire it. The analysis culminates with a list of recommendations that Lithuania’s government can implement to reduce current regional disparities.
Regional Outlook

Counties and Municipalities of the Republic of Lithuania

Researching Lithuania on the Internet, it is not uncommon to encounter headlines featuring phrases like “the hub of financial technology”, “the Baltic Tiger,” and “the heart of Europe”. Below these headlines one can find photos of the capital’s high-rises or a birds-eye view of its well-preserved Old Town. Judging from these descriptions, Lithuania strikes as a

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cultural center with auspicious economic prospects. Unfortunately, these characteristics are only true for Vilnius.

Lithuania’s landmass stretches over 65,300 km, of which the capital region constitutes only 14 percent. Similarly, Vilnius county residents account for roughly 21 percent of the whole Lithuania’s population. Despite constituting a small part of the country, the capital is the unequivocal economic nucleus. In 2018 the capital’s contribution to the national gross domestic product (GDP) reached 41 percent, or more than €18 billion.\(^2\) Such an outcome may partially be due to lower unemployment rate, which remains around 4.4 percent in the capital, compared to 7.1 percent in the rest of the country.\(^3\) Another explanation points to wage disparity, averaging at €200 more in the capital compared to smaller counties. Lastly, Vilnius is a magnet for foreign direct investment (FDI). In 2018 FDI inflows in Lithuania amounted to €17 million, of which €11 million went to the capital.\(^4\) Sixty-four percent of the remaining five million euros was shared by the second and third largest cities. Per capita FDI in 2018 amounted to €14,755 for Vilnius residents and €2,557 to citizens in other parts of the country.\(^5\)

While the capital region is developing and thriving, smaller cities and towns are vanishing. Over the last ten years, an average of 80,000 people have left Western and Central Lithuania annually. In 2010 the figure reached 107,570.\(^6\) Although the capital region was not

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immune to emigration either, international or internal emigrants constituted only 2.8 percent of the local population in 2019. On the other hand, emigrants in smaller counties, such as Marijampolė, Šiauliai, Tauragė, and Telšiai, accounted for over four percent of residents in the same year. The loss of population in the capital and other larger cities is also offset by relatively high numbers of immigrants, compared to the other regions. Vilnius alone welcomes roughly 25,000 new immigrants every year. In Kaunas and Klaipėda, the second and third largest cities, immigrant inflows increase the population by 20,000 and 13,000 annually. Since 2017 only Vilnius, Kaunas, and Klaipėda have maintained positive net migration.7

Similar to emigration as a whole, internal net migration is only positive in Vilnius, Kaunas and Klaipėda. Most other counties lose around 3,000 to 4,000 people annually to internal migration, with Panevėžys and Šiauliai reaching around 6,401 and 8,789 in 2018, respectively.8 However, the crude departure rate was highest in Šiauliai, Tauragė, Telšiai with roughly 34 emigrants per 1000 of the population. In Tauragė, the crude net internal migration rate reached 10.4 in 2018.9

However, the most worrisome aspect about emigration is not the high figures, but the profile of the emigrants. Residents leaving their communities are usually young, college-educated professionals. In 2018, almost 73.6 percent of emigrants were between ages fifteen and forty-four.10 These are precisely the people that are needed to solve the problems in the declining

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10 “Emigration by Age”, European Migration Network https://123.emn.lt/en/#chart-8-desc
regions. As the youth leave their hometowns, the median age in Central and Western regions of Lithuania has increased, averaging at 45 years, with Utena even reaching 50.\footnote{“Median Age of The Population at The Beginning Of The Year,” The Lithuanian Department of Statistics, accessed May 9, 2020 https://osp.stat.gov.lt/statistiniu-rodikliu-analize#/} High outflow of emigrants and low fertility rates raise the dependency ratio and put even more of a strain on the youth who remain in their hometowns.

Emigration in Central and Western Lithuania left the regions with a shortage of labor force. In 2019 unemployment in Vilnius was 4.4 percent, less than the country’s average of 6.3 percent. On the other hand, unemployment in other parts of Lithuania averaged at 7.1 percent, with Utena county recording the highest 10 percent. Youth unemployment is another problem in smaller counties. In the capital, youth unemployment is similar to the general unemployment level. However, in the rest of Lithuania the percentage is significantly larger. Utena, again, is the unfortunate leader in this category, with over 30 percent of unemployment among 15-24-year-olds in since 2016. In other poor counties, youth unemployment fluctuates between 15 and 20 percent.\footnote{“Unemployment Rate” The Lithuanian Department of Statistics, accessed May 9, 2020 https://osp.stat.gov.lt/statistiniu-rodikliu-analize#/}

Those who are employed are only slightly better-off. On average, monthly salaries in smaller counties reach about €700-800, while in the capital the average is over €1,000.\footnote{“Wages: Average Earnings Monthly,” The Lithuanian Department of Statistics, accessed May 9, 2020 https://osp.stat.gov.lt/statistiniu-rodikliu-analize#/} Of course, different sectors yield different compensations. Some of the higher-paying jobs can be found in the fields of information and communication, public administration and defense, as well as science and technology. However, these sectors are concentrated in the capital. Majority of the labor force in smaller counties is employed in manufacturing, healthcare and education, as well
as in trade of motor vehicles and motorcycles. Although these sectors are prominent in the capital region as well, the labor force there is more diversified. For example, better-paying sectors like information and communication, science and technical activities and public administration account for four percent, six percent, and nine percent of all employees in the capital. On the other hand, the same categories in Central and Western parts of Lithuania constitute one, two and four percent of the labor force, respectively.  

Poverty in Lithuania has also increased. Since 2014, the share of persons living at risk of poverty and social exclusion in rural areas rose from 32 percent in 2014 to 36 percent 2018, peaking at 40 percent in 2016. In smaller towns, the figure increased as well, but less dramatically. In Vilnius, Kaunas, Klaipėda, Šiauliai and Panevėžys, the share of those living at risk of poverty and social exclusion has decreased steadily over the years, constituting only 19 percent in 2018.

The most at-risk groups include single adults (56.2 percent), single parents (53.5 percent) as well as families with three children or more (37.2 percent). The elderly also remain an group of interest in this category, with at risk of poverty rate doubling from 20.8 percent in 2012, to over 41 percent in 2018. Although pensions have increased over the last ten years, they remain low. In 2019, the average pension was €344.4. Unemployment benefits were a little lower,

16 Ibid.
about €337 per month.\textsuperscript{19} Considering that the average amount needed to make ends meet in Lithuania in 2018 was estimated at €414 (€428 in smaller cities and towns), it is difficult to understand why poverty is not more prominent.\textsuperscript{20} One explanation for this phenomenon could be increased reliance on social networks at retirement age and in times of crisis. However, given the prevalence of emigration, these networks may be less reliable in the future.

Even those who are not at risk of poverty may be one accident or illness away. In 2017 46 percent of Lithuanians report inability to face expected financial expenses of €260. In rural areas the share is as high as 61 percent and reaches 65 percent in Telšiai. Respondents also expressed inability to afford one week of annual holiday away from home. This sentiment was especially strong among those living in smaller towns and rural areas, with over 60 percent agreeing in Marijampolė and Telšiai.\textsuperscript{21}

\textbf{Determinants of Regional Disparities}

Regional problems in Lithuania are not an accident. High unemployment and poverty rate, low salaries, and loss of educated youth, are all outcomes of systematic developmental neglect. It is no surprise that the capital attracts students, entrepreneurs, and highly skilled workers. Most of the nation’s universities are located in Vilnius, along with the largest financial firms, such as Nasdaq, Western Union, Danske Bank, as well as Swedish giants Swedbank and SEB. Invest Lithuania on its brochure states that Vilnius is: “Home to two thirds of the country’s IT talent, as well as the majority of its technology universities and colleges. Vilnius is a hub for

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\textsuperscript{20} “Amount of Money Needed to Make Ends Meet, Per Capita Per Month,” The Lithuanian Department of Statistics https://osp.stat.gov.lt/statistinii-rodikliu-analize#/ 
software development, IT R&D and computer game development.”22 The capital is also well-connected nationally and internationally by Vilnius International Airport, railway and bus stations, as well as four-lane highways (hereafter expressways).

Compared to the capital, Lithuania’s poorer counties lack physical infrastructure, cluster development, quality of higher education institutions and talent. Lithuania’s two expressways connect only four out of ten counties and neither reach the fourth largest city, Šiauliai. Without proper road infrastructure, a car ride from Kaunas to Šiauliai (approximately 149 km) takes over two hours. Yet, the same time is needed to travel from Kaunas to Klaipėda (approximately 215 km) using expressway A1.

A weak road network is not the only problem. Trains also primarily serve larger cities and counties. For example, Vilnius-Kaunas train runs 19 times per day. The cheapest ticket costs €4.80 and the journey takes about an hour and a half. On the other hand, a two-hour ride from Šiauliai to Vilnius is only available six times per day and the cheapest ticket is €11.60.23 Tauragė and Alytus counties cannot be reached by a passenger train at all.24 Regarding logistics, the train system is rather comprehensive, but the main centers are again in Vilnius and Kaunas. There are also international routes, which primarily connect the four largest cities to China, Russia, Turkey, and the rest of Europe.

Vilnius, Kaunas and Palanga International are the three main airports in Lithuania and all of them are located far from poorer counties. Šiauliai is the only county that has a military airport. One of the largest military airports in the former Soviet Union, Šiauliai International Airport now houses NATO Baltic Air Policing. In 2003 the airport was permitted to serve as a civil air transport and offer cargo services. Some of its clients are American Kalita Air, Turkish MNG Airlines and Uzbekistan Airways. In 2015 the airport held 14 percent share of the total Lithuanian cargo volume. Despite limited cargo and passenger service, the airport is largely

underutilized, with the government, military, and aviation specialists unable to find a common ground.27

Port of Klaipėda is the only port in Lithuania, connecting sea, land, and railway routes.28 It can accommodate vessels 400 in length, provides an annual 65 million tons cargo handling capacity and is always open. The port welcomes international cruises, ranging from Scandinavia, UK, Italy, Portugal, Bahamas, and the Marshall Islands.29 Besides Palanga, Šiauliai, Kaunas, Klaipėda and Vilnius, the rest of Lithuania does not have any large transportation infrastructure to facilitate connectivity.

Free Economic Zones (FEZ) is another aspect that makes some cities more attractive for entrepreneurs. Currently there are seven such zones in Lithuania, five of which are located in smaller cities, while the remaining two are in Klaipėda and Kaunas. Kaunas’ FEZ has an area of 291 hectares and includes: a production and logistics zone; close proximity to the airport and to the second largest cargo-loading station in Lithuania; convenient public transport system between the FEZ and the city; access to the expressway and other amenities.30 Most of the territory is developed and utilized for greenfield investments. Like all FEZ in Lithuania, Kaunas also offers substantial tax incentives, which helped attract Continental, Hollister and Chemsys, as well as several logistics, electronics, food, and pharmaceutical companies.31

28 “About the Port,” Port of Klaipėda, May 9, 2020 https://www.portofKlaipeda.lt/about-the-port
30 “About Kaunas FEZ” Kaunas Free Economic Zone, Accessed May 9, 2020 https://ftz.lt/?lang=en
Free Economic Zones in smaller counties, such as Marijampolė, Kėdainiai, Panevėžys, Šiauliai, and Akmenė simply cannot compete Kaunas. For example, the size of Šiauliai FEZ is 107 ha. Although Šiauliai is a larger county, (8,537 km² compared to 8,086 km²), its FEZ is half the size of Kaunas’. Despite being smaller territory, most of Šiauliai FEZ is unoccupied; out of 107 ha, only 13ha is currently in use. Šiauliai FEZ was established in 2015, a decade later than Kaunas, and is yet underdeveloped. Whether it is the lack of experience or the lesser quality of resources, Šiauliai FEZ simply cannot compete with either Kaunas or Klaipėda. Unfortunately, there seems to be no protection against such competition.

Panevėžys FEZ is even smaller, encompassing only 34 ha. It has access to the city’s industrial district and is connected to major suppliers that operate in Panevėžys, as well as commercial, residential, and manufacturing facilities. One of Lithuania’s famous real estate companies Ogmios group has two legal offices, as well as construction management and maintenance units in the area.32 There are only three companies in Panevėžys FEZ: Norway’s clothing company Devold, furniture maker IMG, and local marketing company Spektrus.33 Similar to Šiauliai, Panevėžys FEZ lacks not only better resources to attract foreign companies but also larger land sizes.

The FEZ of Kaunas and Klaipėda are not only larger in size, have stronger transportation infrastructure, but can also offer access to clusters of different businesses and industries. Free economic zones in bigger cities are often located nearby science and technology parks, such as Nemunas and Santaka valleys in Kaunas, and Marine Valley in Klaipėda. These types of facilities bridge the gap between the scientific community and the private sector. They promote

33 Ibid.
startups, innovation and collaboration between local entrepreneurs and multinational corporations. While the quality of free economic zones varies among counties, Alytus, Telšiai and Utena do not have such zones at all.

Academic institutions are another important factor for regional development. Quality higher education programs attract talented youth and can lead to establishment of science and technology parks which spur innovation and entrepreneurship. Out of 20 universities in Lithuania, 11 are located in the capital, five in Kaunas, two in Klaipėda, one in Šiauliai and Telšiai. Lithuania also has 22 colleges, which offer more specialized programs and workforce education. Out of 22 colleges in the country, seven are in the capital, five in Kaunas, four in Klaipėda, two in Šiauliai, and one in each Utena, Panevėžys, Marijampolė and Alytus. Tauragė is the only county in the country with neither a university, nor a college. It is also one of the poorest counties in the country with the second highest proportion of emigrants.

The range and the quality of the university and college programs differ radically among the regions. In Kaunas and Vilnius students can choose from dozens of degree paths, including biomedical engineering, information systems and cyber security, global marketing, financial engineering, as well as mechatronics and robotics.\(^{34}\) English is also the primary language of instruction in many the nation’s more prominent universities, which gives the graduates an advantage when competing for positions at multinational organizations. On the other hand, Šiauliai county, which has only one university cannot match the quality and the variety of

programs offered at the two largest cities. Šiauliai University offers only four academic paths: economics, business administration, software engineering and music pedagogy. In Utena, Panevėžys, Marijampolė, and Alytus, the situation is even starker. Although these counties each have one college, the primary language of instruction is Lithuanian, and the range of programs is limited. Moreover, since graduate programs are limited, those students who intend to continue their education must move to a larger city or emigrate abroad.

The exodus of students to the capital or other countries contributes to the aging of the workforce in the smaller cities and towns. Considering that skills obtained at universities are not tailored to the markets of their hometowns, graduates have little incentive to return. One example of this skills mismatch is in research and development. Most employment opportunities in this industry are located in Vilnius, Kaunas or Klaipėda. According to the Lithuanian Department of Statistics, only four counties allocated funding for R&D between 2012 and 2016. Out of a €182 million gross expenditure on R&D in 2015, 58 percent was spent by Vilnius, 36 percent by Kaunas, and five and one percent by Klaipėda and Šiauliai respectively.35 This uneven allocation is expected, given the absence of R&D opportunities in poorer counties, but it is not sustainable in the long-term if Lithuania is to reduce regional disparities.

**Natural Resources and Regional Specializations**

Despite the absence of social and physical infrastructure, smaller counties have a lot to offer, especially in regard to natural resources. Alytus and Utena counties possess 4,494 and 5,820 hectares of unutilized agricultural land, respectively. Alytus is also the only county in the

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whole country to surpass Vilnius in the share of forest cover. Pakruojis, Joniškis, Akmenė, Biržai and Rokiškis municipalities in the North of Lithuania are rich in dolomite, an important resource in the chemical industry and the production of glass, bricks and ceramics. The largest volume of peat can be found in Šiauliai and Panevėžys counties, while limestone is present only in Akmenė municipality, Šiauliai county. Clay is another key resource, which can be used in building bricks or tiles. More than half of Lithuania’s clay is concentrated in Šiauliai county, while smaller concentrations can be found in Utena and Marijampolė. Lastly, a significant amount of oil can be found in Kretinga and Šilutė municipalities in the Western part of the country.

Invest Lithuania, the main agency for foreign direct investment and business development established by the Ministry of Economy and Innovation, released its own map of regional specializations. According to this resource, smaller counties possess competitive wood processing, furniture, textile as well as food and beverage industries. Alytus and Panevėžys also seem have a comparative advantage in machinery and electrical equipment, while Telšiai, Utena, and Marijampolė have strong metal processing and machinery industries. In contrast, the specializations in Vilnius and Kaunas include life sciences, information, financial, and medical technology, as well as advanced electric and mechanical engineering.

Soviet Industrial Policy

After Stalin’s death in 1953, the Khrushchev’s administration established a Seven Year’s plan focusing on reducing regional disparities. In Lithuanian SSR, the Soviet government decelerated industrialization in the larger cities and shifted its focus towards expanding and modernizing smaller towns. The goal was to establish ten regional centers, with a 50-60km radius, 30-50 thousand residents in the center, and 200-600 thousand residents in each county. The plan also included theaters, schools, cultural centers, gyms, museums, libraries, and public transportation. The Soviet industrial model gave rise to five regional centers – Alytus, Marijampolė, Utena, Plungė ir Jurbarkas – as well as five industrial towns Jonava, Kėdainiai, Mažeikiai, Švenčionėliai, and Rokiškis. Similar to urban development, villages were also planned out to ensure water supply, sewerage, central heating, electricity, radio, and telephone. The government was not only concerned with practical aspects of well-being, but also aesthetics. In Rokiškis, the government decided to build a park to improve the appearance of the “Pergalė” collective farm. Afterwards, parks were established in almost all such settlements.

The industrial development strategies were led by enthusiastic technical experts, who were part of Sovnarkhozy (the regional industrial administration), established in 1957. Although this type of economic-administrative reform was abolished shortly in 1965, it left a lasting impact by creating an elite of regional technical experts modernizing the industry and creating a feeling of regional economic autonomy. It also contributed to the growth of larger cities, like

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40 Ibid.
41 Ibid.
Klaipėda, Šiauliai and Panevėžys, causing almost a double increase in urban population between 1960 and 1976.42

Despite its initial successes, the Soviet model was one of the most important factors contributing to Lithuania’s current regional disparities. It is no secret that in the former USSR state-owned factories operated inefficiently and resulted in either shortages or overproduction. Prior to World War II, Lithuania’s industrial sector was small, accounting only for ten percent of all employment.43 Industry encompassed mostly food processing, light industry, and woodworking. However, the industrial development under the Soviet leadership in the 1960s and 1970s comprised mostly of machine building, chemicals, and electronics industries.44 By 1990s, employment in machine building and metallurgy sectors accounted for 38 percent of all industrial employment, or 193,200 workers.45 On average, 800 workers worked in one enterprise, which was much higher than 160 workers in the rest of the European Community.46

The Soviet Union operated nearly 600 state-owned industrial enterprises in Lithuania, 240 of which specialized in machine building and chemical subsectors. All enterprises were highly monopolistic or oligopolistic, had high degree of integration with Soviet Industry, and were producing goods for military purposes, especially in electronics and telecommunication industries.47 For some goods Lithuania was the main supplier to the Soviet Union. For example, Panevėžys accounted for 80 percent of all compressors for buses and large cars, while Vilnius

44 Ibid.
45 Ibid., 151
46 Ibid., 150
47 Ibid., 149
held an 85 percent market share in the fuel diesel pump industry.\textsuperscript{48} Yet, as the Soviet Union relied on Lithuania for manufactured goods, so Lithuania relied on Soviet Union for raw materials, such as metals, crude oil, basic chemicals, cotton, wool and other inputs.\textsuperscript{49}

Although the Soviet industrialization model penetrated every region of Lithuania, it was especially important in Central and Western Lithuania. Tauragė benefited from establishment of vegetable, ceramics, computer element factories, as well as a renovation of a meat processing plant.\textsuperscript{50} Šiauliai became known for its meat, textile, leather and bicycle industry as well as for a giant TV manufacturer “Tauras.”\textsuperscript{51} In Panevėžys a glass factory “Ekranas” was built, along with a cables industry and an auto compressor plant.\textsuperscript{52} In Marijampolė, the Soviet government nationalized and renovated a sugar factory, established a concrete factory and a bread processing plant.\textsuperscript{53} Industrial development prompted the rise of new districts and towns, such as Naujoji Akmenė, Elektrėnai and Visaginas.\textsuperscript{54}

Panevėžys “Ekranas” Factory\textsuperscript{55}

\textsuperscript{48} Ibid., 151
\textsuperscript{49} Ibid.
\textsuperscript{52} “Šiauliai in the Soviet System,” Šiauliai Tourism Information Center, accessed May 9, 2020 http://siauliuistorija.lt/2018/02/01/pramones-situacija-mieste/
The fall of the Soviet Union destroyed Lithuania’s manufacturing sector and along with it the newly established towns. Lithuania lost not only its main consumer but also its main supplier. Exporting products was also not an option, as Western goods were not only cheaper, but also of higher quality. By 1992, the output in more than half of all Lithuania’s enterprises declined; in the case of chemical and forest industries, the decline surpassed 50 percent.\textsuperscript{56} The output of the food industry and the machine building and metallurgy industry, declined by 44 and 48 percent respectively.\textsuperscript{57} From 1985 to 1990, Lithuania’s industrial personnel were reduced by almost 40 thousand.\textsuperscript{58} Due to an investment halt, factories started to close, unemployment skyrocketed and consumption decreased, forcing the country into recession.

\textsuperscript{50} \textit{Lithuania: The Transition to a Market Economy}, 151-152  
\textsuperscript{57} Ibid., 151-152  
History of Lithuania’s Industrial Strategy

After the restoration of independence in 1990, one would expect that the Lithuanian government would continue to develop the country and enact an even more impressive industrial strategy. Yet, despite the rhetoric of patriotism and national unity, Lithuania’s efforts to mitigate the rising regional disparities have been minimal at best.

Over the last thirty years Lithuania prepared a number of plans, programs and strategies emphasizing the ever-growing regional disparities and the need to rectify them. However, the Regional Development Program 2006 and the Regional Social and Economic Disparities Reduction 2007-2010 Program outline no concrete actions to improve the situation. On the contrary, explaining that smaller counties may not have the capacity to take full advantage of the EU structural funds, the government encourages to continue directing the largest portion of investments to the developed regions. The documents state that capitals and larger industrial centers, with favorable investment climate, well-developed infrastructure and skilled labor are predisposed to higher investment inflows and higher economic growth. Therefore, expecting a more equal economic performance among Lithuania’s counties is unreasonable. The problem these statements is that they regard investment climate, infrastructure, and skilled labor to be fixed factors. As evidenced by the growth of industrial towns during the Soviet era, quite the opposite is true.

To make matters worse, Invest Lithuania generated a map of regional specializations, which according to the former Minister of Agriculture Evaldas Gustas, acts as guide helping counties redirect their resources towards more efficient activities.\(^{60}\) Similarly, the former director of Invest Lithuania, Arvydas Arnašius claims that according to this map, “some Lithuanian regions, especially in regard to manufacturing, can successfully compete with Vilnius.”\(^{61}\) However, the reality is very different. It is unreasonable to claim that poorer counties have a fair chance, when the capital outperforms them in all aspects, including physical infrastructure, connectivity, cluster development, and skilled labor. Moreover, in 2017 Vilnius had the highest value added to GDP ratio in manufacturing and construction sectors, which are typically listed as the specializations of the declining regions.\(^{62}\) Even if Invest Lithuania’s map can provide some insight to regional specializations, poorer counties lag in the lowest end of the value chain.

It would be incorrect to claim that the Lithuanian government made no effort to improve regional disparities. Like the other former Soviet states, Lithuania is a recipient of EU’s structural and investment funding. From 2014 to 2020, Lithuania has received over eight billion euros of EU investment, with more than 60 percent in Cohesion and Regional Development Funds, which are specifically geared towards minimizing economic and social disparities, improving infrastructure, supporting SMEs, encouraging innovation, research and promoting sustainable development as a whole.\(^{63}\) Most of the funds were used to strengthen competitiveness.

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\(^{61}\) Ibid.


of SMEs, ease connectivity, improve resource efficiency and environmental protection, and create a low-carbon economy. One especially note-worthy project is Rain II. The project was started in 2009 and aimed to provide rural residents, businesses, and public institutions with access to broadband. The initiative was extremely successful, reaching 700,000 inhabitants, twice as much as its predecessor RAIN I. Together the projects covered over a million of inhabitants.64

In addition to RAIN I and II, there were also other smaller initiatives to spur regional development, specifically in the spheres of business, transport infrastructure, education, tourism, and the environment. From 2007 to 2013, EU funding supported the renovation of many museums, tourism-oriented mansions, camp sites and parks in Lithuania’s towns and cities. Performance venues, libraries, and youth centers also received funding, although such projects were fewer. Yet, the highest share of funding for categories that are more conducive to development, such as infrastructure and education, was allocated to Vilnius. While smaller counties underwent street and road renovations, such projects were usually small-scale and cost less than half a million euros. On the other hand, Vilnius spent €42 billion expanding a major highway.65 Klaipėda also completed a similar project, spending over €32 million, while Kaunas received almost €15 million for the airport modernization.66

This unproportional allocation of the EU funding continued in other spheres as well. Between 2007 and 2013, seven academic insitutions were financed by the EU, yet only one of

them was in a poorer county. The goal of the project at Panevėžys College was to minimize energy costs by renovating strategic buildings and improving insulation. On the other hand, the projects in Vilnius and Kaunas were much more complex and included: updating laboratory equipment and computer software for materials, and nano and light technology research.\textsuperscript{67} Improving the quality of programs through modernization of information and communication technology,\textsuperscript{68} and adoption of specialized testing for recognition of gifted students.\textsuperscript{69} In 2012 Vilnius University was engaged in 50 projects financed by the EU structural funds.\textsuperscript{70} Considering that Vilnius University is one of the most prominent academic institutions in the nation, the complexity of projects is expected. However, regional disparities will not shrink if colleges and universities in the declining regions are not given the same opportunities to upgrade their programs, labs, and management.

In the following 2014-2020 period, the two primary destinations for the EU cohesion and regional funding was still Vilnius and Kaunas, receiving €186 million and €156 million, respectively. However four smaller counties were allotted a rather generous amount. Telšiai received €121 million, Marijampolė – €113 million, Panevėžys – €74 million and Utena – €69 million.\textsuperscript{71} Although equalizing the distribution of investment takes time, it is, nevertheless, possible. Lastly, for the year 2021-2027, the amount of EU structural funds allotted to Lithuania

\textsuperscript{67}“Laser Physics Teaching Laboratory,” Vilnius University, accessed May 9, 2020 \url{https://www.ff.vu.lt/en/lrc/studies/teaching-laboratories/laser-physics-teaching-laboratory}
\textsuperscript{68}“Development and Implementation of Internal Study Quality Management System at Vilnius University,” The EU Structural Aid 2007-2013, accessed May 9, 2020 \url{http://www.espara.lt/projektas?id=26067}
\textsuperscript{69}“Recognition of Gifted Students: Standardization And Application Of Psychological Instruments,” The EU Structural Aid 2007-2013, accessed May 9, 2020 \url{http://www.espara.lt/projektas?id=25952}
\textsuperscript{70}“Vilnius University,” The EU Structural Aid 2007-2013, accessed May 9, 2020 \url{http://www.espara.lt/projektu-zemelapis?lat=54.683061&lng=25.28718&types=13,14&id=31912&zoom=10#title}
is planned to be reduced by 24 percent. This reduction may require the government to seek financing somewhere else, even for small-scale projects. Considering that poorer counties were not a priority in the past, the decline in EU grants may further exacerbate the situation in the future.

**Lessons from Poland**

Lithuania is not an exception when it comes to regional disparities. Lagging regions are not only common to the EU itself, but also to most former Soviet Union states and satellites. According to OECD 2018 data, regional disparities in Poland have increased since 2002, resulting in 44 percent lower GDP per capita in Lubelskie, Poland’s poorest region, when compared to its richest, Mazowieckie. While the productivity of the country grew on average 4.5 percent annually, productivity in the lagging regions such as Swietokrzyskie barely reached 1.2 percent. However, backwardness is measured not only in productivity. Per capita income, employment opportunities, access to social services, housing availability, safety, environmental conditions, and overall life satisfaction are all important factors to consider. The regions in the bottom 20 percent were marked by high crime rate, pollution, poor access to broadband services, low income and almost double unemployment level when compared to the wealthy regions.

Similar to Lithuania, the fall of the Polish People’s Republic resulted in high unemployment, poverty, and the decline of industrial towns. To combat these problems, the government engaged in a number of initiatives, both at the national and local levels. Initially, the development strategy was loosely coordinated and ineffective. Only in 1998, with the Act on

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Voivodship Self-Government, Poland finally achieved some regional development objectives. The act redrew regional boundaries and created sixteen large districts which were independent to use the EU’s funds for development purposes. However, the voivodships were responsible for establishing institutions to manage the funds they received. Between 2004-2006, Poland received €12.8 billion, which were dedicated to “to develop a competitive economy based on knowledge and entrepreneurship, capable of long term harmonious development, assuring growth of employment and achieving social, economic and spatial cohesion with the European Union on a national and regional level.” This objective was supposed to be achieved through modernization of industry, investment in human resources, increasing employment, improving investment climate, structural agricultural transformation and reinforcing development potential of regions, while countering marginalization. However, only €2760.7 million out of the original €12.8 billion were designated for regional development support. Furthermore, the richest areas, Mazowieckie and Śląskie, received the largest share of funding.

In the following 2007-2013 period, seven new operational programs were put in place, including Infrastructure and the Environment, Innovative Economy, Human Resources, Development of Eastern Poland, Technical Assistance Program, 16 Regional Operational Programs (ROP), and European Territorial Cooperation Operational Programs (ETCOP). Unfortunately, like in the previous period, most of the funding did not benefit regional economies. Out of €100 billion given to Poland in 2007-2013, only 23.8 percent was allocated to ROP, 1.0 percent to ETCOP and 3.4 percent to Development of Eastern Poland directly.

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74 Strzelecki, Zbigniew, “Regional Policy in Poland in the Years 2004-2013,” Mazovian Office for Regional Planning, no.17 (2015), 25
75 Ibid.
76 Ibid. 26
Moreover, the regions that received the largest portion of this funding were again, Mazowieckie and Śląskie.\textsuperscript{77}

Having learned the lessons of the previous two development periods, the Polish government departed from short-term subsidies to underprivileged areas and designed a long-term decentralized development model. The new approach included multi-sectoral cooperation, with regional public policy goals defined for specific territories, considering their unique social, economic, and environmental conditions.\textsuperscript{78} However, some objectives, including building a knowledge-based economy, increasing public-private R&D cooperation, supporting cluster development, revitalizing institutions in the business environment, and improving access to finance for SMEs were common among all the regions.\textsuperscript{79}

In 2017, the World Bank together with the European Commission, and the Polish government prepared a report analyzing Polish regional disparities. The report acknowledged that the lags of some regions is a natural outcome of industrialization and urbanization. However, the problems of the backward regions, albeit inevitable, are real and cannot be overlooked. With this mindset, the World Bank and the EU launched Lagging Regions initiative, first implemented in Podkarpackie and Świętokrzyskie in Poland. The program was a huge success, resulting in faster business registration in the two regions and a vocational education training system in Świętokrzyskie.\textsuperscript{80} However, perhaps the most important achievement of the project was the understanding what development objectives to prioritize, and which ones to deemphasize.

\textsuperscript{77} Ibid. 28
\textsuperscript{78} Ibid.
\textsuperscript{79} Ibid., 29-30
Since Poland funneled much of its EU funding to improving physical infrastructure in the country, further improvements to increase connectivity among the regions would only generate modest benefits. Of course, in areas where basic connectivity is poor, the prescription would be different and investment in physical infrastructure should be encouraged. However, the initial assessment of the future benefits before such a prescription is crucial. On the other hand, the government should always continue to invest in human capital, specifically through healthcare and education. According to the World Bank’s Competitive Cities for Jobs and Growth report, human capital and innovation are two of the most important determinants in spurring economic growth in upper-middle and high-income countries. While the World Bank acknowledges the difficulty in achieving spatial converge, it emphasis its feasibility for the upper-middle income countries and stresses its importance as part of the public policy.

**Industrial Strategy Literature**

In international development literature, intra-state regional development is rarely touched upon. International development still primarily refers to developing and developed countries, not developing and developed regions. Besides analysis of Sub-Saharan Africa, Latin America or Southeast Asia, there is little mention of regionalism within the broader development topic. Perhaps the notion of development deserves to be seen from a different perspective. Lithuania today is considered a high-income country, with little need for development. Yet, the problems in Lithuania’s smaller towns are not that different from the problems in the developing countries. Poverty, poor health, high unemployment, little economic opportunity, and grim life prospects

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81 Ibid., 41
83 *Poland Catching-Up Regions: Key Regional Development Dynamics*, 36
are just as common in Latin America as they are in rural Lithuania. While the standard of living in a small Lithuanian town is higher compared to Brazil’s favelas, the fear and struggles of poverty are just as real. Considering the different poverty line and the standard of living in the country, the problems of the lagging regions in the developed countries should receive as much attention as those in the developing states. It is in fact strange that the relationship between the two is rarely addressed, as solutions targeted to poorer states could very well benefit the backward regions of the wealthy countries as well.

In his “Industrial Policy for the Twenty-First Century,” economist Dani Rodrik argues that one way to improve economic conditions in a country is through smart industrial policy. He claims that history proves that neither state planning nor full-blown market liberalization alone can produce desired economic outcomes. Instead, what is required is a balance between the two, which has worked wonderfully in a number of states in East Asia, including South Korea, Taiwan, Singapore, and others. Although Rodrik acknowledges that industrial policy has earned a bad reputation through failed attempts in Latin America and, of course, the Soviet Union, he urges not to dismiss it entirely. In fact, he claims that industrial policy is still very much in effect today, yet it is hidden under an “outward orientation” label, which primarily comprises of export and FDI promotion. Unfortunately, as Rodrik explains, the focus on these two factors makes little sense as successes in these areas generate few spillovers. Instead, Rodrik recommends the focus of industrial policy to shift towards innovation. Contrary to past beliefs, merely adhering to a region’s comparative advantage will not create long-term, sustainable economic growth.

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Instead, such strategy will likely result in stagnation. Rodrik cites research by Jean Imbs and Romain Wacziarg, who found that “as poor countries get richer, sectoral production and employment become less concentrated and more diversified.”85 It is only after countries reach Ireland’s income that production becomes more concentrated. Imbs’s and Wacziarg’s findings show that to become wealthy, a poor country must first explore different sectors and industries where it could potentially have a comparative advantage in the future. Until that particular specialization is found, the country should remain on a path of diversification.

One of the most fundamental reasons for industrial policy is that the process of diversification cannot occur on its own. Engagement in what Rodrik calls “self-discovery” is quite costly and the prospect of non-traditional activities is hazy. Moreover, if the venture fails, it is the entrepreneur who bears the full cost. Yet, if the venture succeeds, producers must share the value of his discovery with other producers. Considering the absence of incentive on the part of entrepreneurs, it is no surprise that they would much rather engage in market-tested activities. However, leaving the entrepreneurs alone to bear the costs of self-discovery is not only impertinent, but also impractical. To assess an investment risk of a new product or activity, one must not only take into consideration the market but also the available infrastructure. For example, perhaps an entrepreneur notices a potential in remote learning industry in her town. She then must not only assess the potential market for this service, but also the availability of libraries, computer classes and resident access to broadband. Despite the potential for remote-learning industry, she is dependent on the government to ensure an environment in which this service could flourish.

85 Ibid, 6
Moreover, if the effort to pick winners is unsuccessful, the government must also reduce the pain for workers transitioning to other jobs. It is very important that self-discovery is not a hierarchical process, where the government commands business sector or vice versa. If the balanced is not maintained, the public-private relationship can quickly get spoiled by cronyism and rent-seeking, which not only fails to serve the economy but also wavers the trust of constituents.

However fickle it may be, the public-private collaboration is necessary. Acknowledging the sensitive nature of this relationship, Rodrik points out three important elements that must be in place before any formulation of industrial strategy. First, he asserts the importance of political “champions” in different branches government, including the president and the head of the parliament. Not only should the priorities of industrial strategy reach the highest levels of the government, but bureaucratic progress should also be thoroughly and systematically monitored. This not only prevents corruption on the lower levels, but also creates a checks and balances system across different branches of the government. Yet, perhaps most importantly, the leadership should not only be enthusiastic but have a personal stake in the success of the industrial strategy. That said, to avoid the bias of incumbents and insiders, it is important to establish independent coordination and deliberation councils. These councils would serve as a place for conversation and negotiation between stakeholders, as well as agents for gathering information on new investment ideas, pushing legislation and other logistical tasks. These councils would be supplied with technical experts and operate at national as well as sub-national levels. Lastly, nothing could be done without proper mechanisms for transparency and accountability. The industrial strategy should be created in a way as to benefit society as a whole, which should be reflected in plans and financial reports available to the public. Despite the
conditions of the first two elements, transparency could either make or break the entire undertaking.

Finally, once the right framework is in place, the government then can start drafting industrial strategy. In his paper, Rodrik lists ten design principles for the success of such strategy:

1. **Incentives to new activities:** As discussed earlier, the goal of the industrial strategy is to generate new areas of comparative advantage. However, seeking new activities and products to be introduced in the local market is usually very costly for an entrepreneur. To facilitate this burden, the government can provide tax incentives for innovative industries and firms. It is important to note that this category does not automatically include SMEs, as the criterion is based on the level of innovativeness and not the size of the business.

2. **Clear Benchmarks:** Poor investments are inevitable, but it is important to have a clear distinction between successful and failed ventures. Both the private and the public sectors must work together to establish clear criteria, largely based on productivity, that constitute success. As mentioned earlier, the goal is not employment or even output, but the ability to better products and to do so more efficiently.

3. **Sunset Clause:** Alternatively, if the project is failing, it is important to have the tools to shut it down before it unproductively drains resources.

4. **Targeting activities, not sectors:** The government should finance sectors directly, as such strategy has repeatedly failed in different countries. Instead, the goal of the industrial strategy is to support activities that would have spillovers in multiple sectors. (e.g., electrification, improving road infrastructure)
5. **Spillover Effects:** Chosen activities should not be too concentrated. (e.g., improving only one specific university program)

6. **Competent Agencies:** Although bureaucracy is usually evaluated as whole, it is important to recognize that some agencies in a country are often more transparent than others. Therefore, it is crucial that the agency in charge of the industrial policy is the most accountable among all. The choice of agency (e.g. development bank, commerce ministry) will also determine the tools used to administer the industrial strategy.

7. **Monitoring:** Bureaucrats must be regularly monitored and have a clear stake in the positive outcomes of the strategy. It is extremely important that the individuals overseeing the industrial strategy are high ranking officials who have influence over lower-level bureaucrats.

8. **Public-Private Collaboration:** Regulation communication between stakeholders is key to success. Decisions should not be taken unilaterally.

9. **Mistakes:** It is important to clarify both to administering agents and the public that some ventures will be unsuccessful.

10. **Blueprint:** The blueprint must remain rough and malleable. Expectations and circumstances of the product and process discovery will change; therefore, the strategy should be adapted accordingly.

    Despite his general framework, Rodrik argues that the industrial strategy should be quite specific. The government should conduct extensive research to identify areas where strategic action would most likely make a difference. Rodrik also notes the importance of taking global institutions into account. The rules of international organizations such as WTO or IMF may hinder some aspects of the strategy. For example, export subsidies, which were crucial to development of South Korea, Japan, Taiwan, and many other countries are now illegal. It is
important to hire bureaucrats who either have the knowledge of these restrictions or are skilled to do the necessary research.

**Institutional Infrastructure in Lithuania**

Although Rodrik’s model of industrial strategy is primarily geared towards increasing development in a nation as a whole, there is no reason such strategy could not be used to uplift declining regions. Instead of engaging in a self-discovery on a national level, the government’s focus should facilitate self-discovery in smaller counties. While previously Lithuania’s strategy was economic growth, the objective now should shift to not only a fairer, but also a smarter strategy of regional inclusivity. The neglect of the backward regions will eventually need to be accounted for through increased spending on social welfare programs.

However, before the government decides to design an industrial strategy, it must first assess if it has the capacity to enact it in the first place. Perhaps the reason for Lithuania’s failed attempts at an industrial strategy was not their flawed design, but the lack of state capacity. To test this hypothesis, the next three sections will use Rodrik’s framework to assess the state of Lithuania’s institutional architecture.

**Political Leadership**

On July 12th, 2019, Lithuania inaugurated its ninth president, Gitanas Nausėda, replacing the incumbent Dalia Grybauskaitė, who served since 2009. Like the predecessor, Nausėda comes from an economics background, having spent the last two decades serving first as the director of the Monetary Policy Department at the Bank of Lithuania, then as chief economist and adviser to the chairman of SEB Bank.86 Nausėda’s campaign promised to increase social spending, reduce

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regional salary disparities, improve education and the use of EU structural funds. Most of his support stems from smaller towns, such as Šalčininkai, where he reaped 91 percent of the votes.

Kęstutis Mažeika serves as the Minister of Environment, where among his many responsibilities, he is in charge of the urban and territorial planning. Mažeika was born in a small town of Marijampolė and has a doctorate degree in Agricultural Sciences. Prior to starting his political career with the Lithuanian Farmers and Greens Union, he served as a lecturer and a career center manager at the Veterinary Academy of the Lithuanian University of Health Sciences. He and his team, deputy ministers Marius Narmontas, Justina Grigaravičienė, Rasa Vaitkevičiutė and Chancellor Arminas Mockevičius, serve as the primary leaders for development strategy in Lithuania. Marius Narmontas is the initiator of one of the most important regional development documents in Lithuania, the Comprehensive Plan of the Territory of the Republic of Lithuania, which is currently being evaluated and discussed in the Seimas. Reflecting on issues of regional exclusion, ageing society, emigration and climate change, the plan aims to offer different solutions for each of Lithuania’s regions, with a development of metropolitan, regional, and local centers. If approved, the plan’s vision will define Lithuania’s development policy until 2050, while the actual strategies should be implemented by 2030.

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The Government is headed by the Prime Minister Saulius Skvernelis, a former police commissioner and Minister of Interior. He was appointed to his current role by Dalia Grybauskaitė in 2016. Respected for his humble small-town roots and work-ethic, Skvernelis became one of the most popular politicians in 2015 and 2016 and led the electoral list of the Farmers and Greens Union, which now holds the majority of seats in the Seimas. The party is in favor of small businesses, job creation and regional politics. With many of the members tracing their roots to smaller towns, the Farmers and Greens Union emphasizes regional development, support for agriculture and social welfare. The Speaker of the Seimas and a member of Farmers and Greens Union, Viktoras Pranckietis, was born in a small town in Kelmė municipality, Šiauliai county. Pranckietis has an undergraduate degree in agronomy and a doctorate degree in biomedicine. Upon his inauguration in office, he vowed to bring “the best academic provisions: a culture of dialogue, a culture of argumentation, listening, hearing, understanding, constructive discussion, respect of different opinions, dignified, cordial and ethical communication.”

Until August 22, 2019, The Ministry of Economy and Innovation was headed by Virginijus Sinkevičius, the youngest prominent Lithuanian politician, who now serves as the European Union Commissioner for Environment, Ocean, and Fisheries. His former position is unfilled, and the ministry is now managed by three vice-ministers: Marius Skuodis, Elijus Civilis and Jekaterina Rojaka. Lithuania does not have a separate development agency, except for Invest Lithuania and Enterprise Lithuania. Established by the Ministry of Economy, the two agencies

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promote foreign direct investment and local entrepreneurship. The ministry is also in charge of the business environment, tourism, and management of the EU structural funds.\(^\text{93}\)

Given the current leadership and their many commonalities including provincial roots, academic and bureaucratic experience, broad skillset, and expertise in economics, it seems that inter-governmental cooperation is clearly possible. Currently President Nausėda’s involvement in regional development seems modest, but that could be due to his limited time in office or lack of institutional power to assert influence. However, considering his campaign promises, he seems like a potential “champion” to excite the public and the government about an industrial strategy. The Minister of Environment, Kęstutis Mažeika, may not be the best official to be in charge of regional development, given his lack of experience and education in economics or urban and rural planning. Overall, it seems that regional planning objectives are rather out of place under the Ministry of Environment. Development goals would be much better coordinated the Ministry of Economy and Innovation, which oversees investment, innovation, business environment and other relevant departments. However, perhaps the real problem with the Ministry of the Environment is that it needs more young, enthusiastic, and creative leaders like Marius Narmontas. With expertise in construction and territorial planning, Narmontas is vastly more qualified to oversee the industrial strategy than Mažeika, even if the former has limited political experience.\(^\text{94}\)

Lastly, the Seimas’ leadership and the goals of the main ruling party seem to be consistent with the goals of regional development. More importantly, since a number of high-

ranking officials trace their roots to smaller Lithuanian towns, it would not be surprising if some
felt a moral responsibility to increase the standard of living in their hometowns and surrounding
areas. It is not uncommon for Lithuanians to lose ties to their hometowns after their relocate to
Vilnius for work or study. However, it is very important that government officials set an example
that honors smaller, industrial towns and villages from which so many of the country’s leaders
rose.

Coordination and Deliberation Councils

Lithuania’s skilled and capable government leadership comprise only part of the
industrial strategy equation. As Rodrik explains, self-discovery must be a collaborative, non-
hierarchical process. This is why it is so important that the country establishes coordination and
deliberation councils where both the public and the private sectors can express their needs and
concerns, eliminating information and coordination externalities.

Currently, the private sector in Lithuania is moderately organized, with Lithuanian
Confederation of Industrialists and Lithuanian Business Employers Confederation being two of
the most prominent organizations representing business interests. The Lithuanian Confederation
of Industrialists (LPK) traces its roots to 1922, when it emerged as a Lithuanian Industrial Union.
Upon its creation, the organization was responsible for representing the interests of the whole
manufacturing industry, but it now branched out to include research institutes, educational
institutions and law firms.95 Currently it covers all the main sectors of industry and unites over a
third of the Lithuanian work force, generating 60 percent of Lithuanian GNP.96 The organization

95 “Misija ir Tikslai,” Lithuanian Confederation of Industrialists, accessed May 9, 2020
https://www.lpk.lt/misija-ir-tikslai/
96 “Mission and Objectives,” Lithuanian Confederation of Industrialists, accessed May 9, 2020
has 51 branches, five regional associations and comprises of more than 3,000 medium and large enterprises. 97

The main objective of LPK is to ensure member competitiveness in regional and domestic markets, while promoting business development and sustainable growth of the Lithuanian economy. In pursuit of its goals, the organization regularly holds committee meetings and discussions on urgent economic issues in the country, participates in the discussion and preparation of draft laws and proposals to the Government and the Ministries of Finance, Energy and Economy. LPK also holds meetings with ministers, as well as other government officials. LPK delegates its experts to represent the interests of its members at various national and international governmental and interdepartmental conferences. 98 In 2017, LPK organized its own conference called “Business and Government Dialogue: How to Communicate?”. The conference welcomed politicians, bureaucrats, economists, analysts, entrepreneurs, business associations, journalists, non-governmental organizations, and foreign ambassadors. The program included a speech by the Minister of Agriculture at the time, Mindaugas Sinkevičius, who communicated government expectations and identified types of government assistance available to Lithuanian businesses. Other notable guests included Pär Nuder, a Swedish politician and former minister of Finance, as well as Joscha Ritz, a representative of the Federation of German Industries (BDI) and the Confederation of German Employers’ Associations (BDA). The guests presented public-private cooperation models utilized in their countries and offered potential strategies to be implemented in Lithuania. 99

97 Ibid.
98 Ibid.
Another prominent organization representing business interests in the country is the Lithuanian Business Confederation, a national chapter of International Chamber of Commerce. It is currently the largest business organization uniting service, trading, and high-tech companies in Lithuania. Representing 34 business associations, 3500 companies, it constitutes a quarter of Lithuania’s GDP. The goals of the Lithuanian Business Confederation mirror those of LPK, emphasizing competitiveness, sound business environment, reduction of bureaucratic obstacles, promotion of foreign trade and investment, as well as support for public-private collaboration and dialogue. LVK regularly holds bilateral business meetings and forums, involving negotiations between business and government officials. It also promotes international participation, through business missions and diplomatic conventions, which help to discover new business ideas, improve country competitiveness, and engage in international partnerships.

Besides these independent organizations, Lithuania has a few government agencies that aim to improve business relations and offer government support. One such organization is the Lithuanian Business Support Agency (LVPA), established by the Ministry of Economy and Innovation to administer EU structural funds and provide consultation for investment in business, R&D, energy, innovation and tourism sectors. Similar to other organizations, it too holds public-private conferences, but with respect to the EU Structural Funds. In September 2019 it held its annual “Gazelė” conference, where it introduced entrepreneurs to funding opportunities, helped utilize social media and shared employee retention and profit increasing.

101 Ibid.
strategies. The conference was organized in partnership with Enterprise Lithuania, another organization established by the Ministry of Economy and Innovation after dissolving Lithuania’s Development Agency. Formerly known was Export Lithuania, the organization seeks to promote entrepreneurship, support business development and foster export, with special focus on SMEs. It offers business consultations, mentoring sessions and trainings for young entrepreneurs. Among its many services, it also facilitates start-ups, especially through its co-working space “Spiečius”. Entrepreneurs who join this initiative, “Spietiečiai” gain access to a free office space, supplied with computers, printers, a seminar hall, and wide network of professionals. The initiative is geared mostly towards young businesses involved in digital and creative industries.

Given the number of public-private cooperation schemes already available in Lithuania, the implementation of coordination and deliberation councils as part of the industrial strategy should not be troublesome. Moreover, Lithuania already engages in regular concertation between the public and private sector, as well as the labor unions, in which many of the aforementioned organizations participate. In 1995 Lithuania established The Lithuanian Tripartite Council, aiming to strengthen the dialogue between the three groups and provide more power to social partners to regulate labor relations and lessen the imperative influence of the state.

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107 Ibid.
years, the partnership has been highly successful, resulting in tax reforms, approval of Employment Fund plans and other successes.\textsuperscript{109}

Mechanisms of transparency

Despite the number of organizations facilitating public-private cooperation in Lithuania, the relationship is more complex than it may originally seem. A mutually beneficial business and government relationship is usually quite difficult to establish, as it so often leads to corruption and cronyism. Given this trend, in his institutional infrastructure assessment, Rodrik includes an emphasis on transparency and accountability mechanisms.

According to transparency international, Lithuania ranks 35\textsuperscript{th} out of 180 countries in perceived corruption, positioning it between S. Korea and Slovenia. Despite a rather positive international analysis, the domestic figures reveal otherwise. According to 2016 perception of corruption report prepared by the Transparency International Chapter in Lithuania, 56 percent of the population, more than 560 respondents, consider corruption a very serious problem. The remaining 35 percent see it as sufficiently serious, seven percent as not especially serious, while only two percent do not consider it to be a problem in Lithuania. The same study also show that public views on corruption have changed little between 2005 and 2016, with most claiming it to be a serious problem. Similarly, firms also consider corruption to be significant and rank it 6\textsuperscript{th} on their list of concerns. Yet, despite the recognition of the problem, 23 percent of entrepreneurs agree with the statement: “Time in business is just as important as finance. Actions that reduce the time of administrative procedures can be seen as bribe-condoning investment in business.”\textsuperscript{110}


Thirteen percent also state having to often “pay extra” to government employees for getting administrative work done.¹¹¹

Second to only to the healthcare sector, the Parliament is where most Lithuanians and Lithuanian firms perceive cases of corruption. However, municipal governments, courts and parties are not far behind. Over the years the effectiveness of bribes has fallen in the eyes of Lithuanians, but not dramatically. In 2016, 68 percent of the population agreed that bribes facilitate in getting things done, but only 40 percent claimed they would engage in bribery. However, 33 percent report they have engaged in bribery over the past 5 years (2011-2016), and 16 percent report having done so in the last 12 months.¹¹² Despite the large figures, over the years the trend has been negative.

The latest data from the European Commission report even worse results for Lithuania, with 93 percent, or more than 937 of respondents, claiming corruption to be totally widespread in Lithuania in 2017. Yet, perhaps the most comforting finding from Eurobarometer’s report is the trust that Lithuanians put in specialized anti-corruption agencies. Compared to ten percent of Europeans, 33 percent of Lithuanians see the anti-corruption agency to be the most reliable institution in the country to deal with corruption, second only to police.¹¹³

The future prospects of corruption among Lithuanians were gloomy in 2016, with 46 percent reporting to expect no changes in the next three years. Their predictions seem to be correct, as Lithuania’s transparency score has risen only one point since 2016.¹¹⁴ Out of three

¹¹¹ Ibid., 14
¹¹² Ibid., 30
institutional framework elements, the lack of transparency seems to be the biggest obstacle to producing sound industrial strategy in Lithuania. Although the perception of corruption, along with public participation in bribery have decreased over the years, the government should strive harder to create a transparent and just society. Of course, part of the responsibility lies with the public to elect fair government officials who are genuinely interested in improving their communities.

**International Rules**

At the end of his paper, Rodrik identifies another factor that may affect enactment of sound industrial policy. As he explains, developing countries today operate in a global environment, where decisions of the national government are dependent on broader multilateral, regional and bilateral agreements.\(^{115}\) Furthermore, participation in the world trading system or the European Economic Area (EEA) comes with certain policy restrictions. For example, export subsidies are now illegal under WTO for all but the least-developed countries.\(^{116}\) Same restrictions also apply to “domestic content requirements and to enterprises that are linked to trade, quantitative restrictions on imports, and patent laws that fall short of international standards.”\(^{117}\) Similar to WTO, membership in EEA requires adherence to special laws and requirements. As mandated by the EU Customs Union, all members must engage in free trade, with no custom duties imposed on goods moving among the EU Member States.\(^{118}\) However, self-discovery, as discussed previously, requires investment in nascent industries, which may not be able to compete in the free market system in the beginning. Thus, it is crucial that high-

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\(^{115}\) Rodrik, 32  
\(^{116}\) Ibid., 33  
\(^{117}\) Ibid.  
potential industries receive market protection which would allow them to mature and take off. For this to occur, the government must be able to keep foreign competitors out of the domestic market in the beginning, either through tariffs or other means. Such strategy worked particularly well in South Korea, which led to a booming automotive and semiconductor industries. However, the EU membership seems to pose a real challenge to the adoption of a such strategy in Lithuania.

Some industries may not be able to receive government support at all. According to the European Commission (EC), industries that may affect the trade patterns between the EU states and distort competition are not eligible to receive direct assistance from the national government. In addition, government support that confers an advantage to specific companies, industries and regions is also not allowed.\textsuperscript{119} However, since the goal of the industrial strategy is to uplift the declining regions, these restrictions should not be concerning. According to the EC, national governments are allowed to provide support to disadvantaged regions, small and medium enterprises, as well as research and development.\textsuperscript{120} Fortunately, the European Regional Development Fund includes declining industrial towns and rural areas as part of the disadvantaged regions category.\textsuperscript{121}

Despite several drawbacks, international participation may also be extremely useful in enacting industrial strategy. Since its accession in 2004, Lithuania has made great progress to meet intellectual and private property protection requirements, to reform and strengthen the

\textsuperscript{119} “Government Support for Industry (State Aid),” European Commission, accessed May 9, 2020 \url{https://ec.europa.eu/competition/consumers/government_aid_en.html}

\textsuperscript{120} Ibid.

judicial system, to increase transparency of government institutions and to adopt free market mechanisms. All of these improvements helped Lithuania gain international trust and recognition, which is crucial for maintaining sound trade and diplomatic relations. Lastly, the EU membership allows Lithuania access to a wide international market, capital, and talent pool, which would otherwise not be available. Although some policy ideas may be restricted by international rules, it is likely that the EU’s net impact on Lithuania’s industrial policy is still positive.

**Industrial and Policy Strategies**

Given Lithuania’s capable government leaders and the public-private sector capacity to cooperate, it seems that enacting a sound industrial strategy in Lithuanian is definitely possible. One area on which the Lithuanian government should focus is the reduction of corruption. Both local and international sources show that corruption is still very much prevalent in Lithuania, specifically in the healthcare sector, the Parliament, regional governments, courts, and political parties.\(^{122}\) It should be noted that the executive office (The Government) and the ministries are perceived to be more transparent than the previously mentioned government institutions. For this reason, industrial policy should be spearheaded by the Prime Minister Saulius Skvernelis, together with the Ministry of Interior and the Ministry of Economy and Innovation. President Nausėda should endorse the industrial strategy and serve as high-profile “champion” who would excite and win support of the public. Considering his novice status, Nausėda may be seeking a large-scale project to undertake that could help him reflect his capabilities as President. The ministers and other bureaucrats involved should be not only fair and competent, but highly

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\(^{122}\) *Lithuania’s Corruption Map 2016*
knowledgeable in economics, territorial planning, urbanization, construction, and other relevant fields. Marius Narmontas, the Deputy Minister of Interior, is an excellent leader to be overseeing technical procedures of the industrial strategy and recruiting experts at the national and regional levels. His Comprehensive Plan of the Territory of the Lithuanian Republic offers a complex analysis of Lithuania’s regions and offers an ambitious plan for the future. His plan could be adapted further to reflect specific issues of lagging regions and propose concrete development strategies tailored to each county.

Although the growth of the Lithuanian economy as a whole is encouraged, it is important to remember that Lithuania’s status as a high-income developed country should apply to all of its regions, not only to the three largest cities. Keeping this objective in mind, the following paragraphs will identify potential strategies to raise living standards in the lagging regions and help their economies transform.

**Attracting Talent**

On March 16, 2020, the Polish Government made a decision to close its borders in response to the global COVID-19 crisis. The decision left more than 500 Lithuanians stuck between the German and Polish border. After successful negotiations between Polish and Lithuanian governments, the border was reopened, and citizens were safely transported home by bus and military aircraft. However, the incident led to a public outrage, interestingly directed not at the government but at the returnees themselves. In the comment sections of the media reports, the critics were mocking emigrants, urging them to stay where they had emigrated. This kind of

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123 “Confusion on the German-Polish border: trapped Lithuanians will not withdraw from the road, Poles will not miss cars,” *Lithuanian National Radio and Television*, March 16, 2020

reaction is not an exception, but rather an indication of Lithuanian’s persistent antagonism towards emigrants. The fact that Lithuanian nationals are hostile towards one another is well known and phrases like “a Lithuanian can cut another Lithuanian’s throat” are becoming a sad cliché. Such sentiments are further heightened towards emigrants, who are seen as traitors to their homeland.

Given such a stigma, it is no surprise that Lithuania struggles to attract back nationals living abroad. Not only are these nationals likely to be better situated or receive higher salaries abroad, they worry whether they will be welcomed home by the local population. The government, on the other hand, does little to change these attitudes, and instead promotes patriotism in hopes of guilting more citizens into staying inside the country. While such a strategy may work in limiting emigration, it makes it difficult to attract talented individuals who could help Lithuania grow. One way of showing government’s support to emigrants could be through broadening the eligibility for dual citizenship. Given current requirements, most of the 710,031 Lithuanians who left after the fall of the Soviet Union are not eligible to obtain dual citizenship. Considering that the typical emigrant is young, highly skilled, and educated, this is a huge waste of human capital for such a small country.

Even when some emigrants do return, they tend to concentrate in the capital region, where they can maintain high standard of living and receive employment in their industry. A return of a distinguished professor or a scientist may result only in marginal benefit to smaller counties or may not affect them at all. To change this, the government should invest in establishment of research centers and improve educational infrastructure in smaller regions, such

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124 “How Much Has Lithuania’s Population Decreased,” European Migration Network, accessed May 9, 2020
https://123.emn.lt/en/#emigration
as Panevėžys and Šiauliai. Highly specialized Lithuanians return to Vilnius not only for higher salaries, but also because the market meets their skills. This is not the case with smaller cities and towns. Of course, not every lagging county can become an educational cluster, but if taken seriously, Šiauliai and Panevėžys could offer some nationally competitive, quality programs, as it has done before.

**Infrastructure**

One of the most important factors for lagging regions is the physical infrastructure. It is not without a reason that the three largest cities – Vilnius, Kaunas and Klaipėda – are also the best-connected ones, equipped with airports, ports, railways, and expressways. Smaller counties, as discussed in the analysis, are poorly connected not only to larger ones but also to one another. Only two smaller counties, Marijampolė and Panevėžys, have direct access to expressways. Although expansion of road infrastructure is expensive, it is a crucial investment to help lift lagging communities. Ideally, all ten counties would be connected by expressways, but due to limited resources, this objective may be too ambitious. However, the government should at least ensure the excellent road infrastructure for Šiauliai and Panevėžys counties, as they have a high growth potential. For example, Šiauliai should have an expressway connecting it to Latvia’s capital Riga, which is only 130 km away.

Although railway connection is a little better, allowing for a relatively quick way to reach smaller towns and villages, three out of ten counties do not have railway connection for passengers at all. This is especially concerning, because Tauragė, Utena and Telšiai have high potential for country tourism as they are located near regional parks and nature reserves.

The government should also make use of decaying Soviet infrastructure. Lithuania is saturated with abandoned Soviet factories and building that are wasting land and spoiling the
country’s scenery. In Tauragė one can find remnants of what used to be a ceramics factory, in Panevėžys – vestiges of TV factory “Ekranas” and an abandoned textile factory in Lithuania’s Southeast. The equipment in these factories is mostly unusable, and so is the space itself. However, the land could absolutely be repurposed, and the materials recycled. Some Soviet infrastructure is usable, but not efficiently. Šiauliai International airport, which was used as a military airport during Soviet era and now houses NATO troops, is largely underutilized. Although the airport does allow passenger service, it is very limited, catering mostly to pilots, soldiers, and private jets. Considering the strategic location of this airport, more should be done to ensure its effective usage.

Foreign Direct Investment

As explained in the analysis, smaller counties simply cannot compete with Kaunas and Klaipėda for foreign direct investment. In industrial plans, including Lithuanian Regional Policy white paper and the novel Comprehensive Plan of the Territory of the Lithuanian Republic, Kaunas and Klaipėda are not compared against smaller counties. Larger cities have a clear advantage not only with respect to skilled labor, younger population, but also better physical infrastructure, science and technology parks and cluster networks. Smaller counties have a lot to offer, both in terms of human capital and physical resources. Unlike larger cities, smaller ones have abundance of underutilized and cheaper land. Although population is aging, there are many of younger workers with at least high school level education. After finishing high school, many move to Vilnius or Kaunas to attend university, while others test their luck abroad. Having only a high-school diploma, many engage in low-value added, manual labor in Sweden, Norway, the United Kingdom, and other larger European states. They are often cheated, underpaid, and vulnerable to poverty or human trafficking.
Attracting foreign manufacturing giants to lagging Lithuania’s regions is a win-win situation. Employers will receive great tax incentives and a labor force that is qualified and costs than that in the West or North Europe. For the local population, foreign companies would provide an alternative to emigration, higher salaries, and job security. It is crucial that government incentivizes large multinational corporations to establish offices and assembly factories in smaller Lithuania’s towns. Klaipėda and Kaunas should not act as competitors, but rather as mentors and guides to smaller counties.

Education

To help encourage multinational organizations to situate themselves in small Lithuanian towns, the government needs to first and foremost invest in human capital in those areas. At the height of the Soviet industrial boom, smaller towns were filled with engineers, electricians, mechanics, and technicians with experience in operating and repairing specific machinery. Many of these specialists are now retired and the government must invest in educating the new generation. Technologies are rapidly changing and so must the curriculum. The Investor’s Spotlight initiative administered by Invest Lithuania is certainly a step forward to bridge the gap between academics and business. However, such initiative is mostly targeted towards programs at universities in bigger cities.125 Smaller counties, with only one college or university, understandably cannot become educational hubs overnight. However, they also do not have to. The academic system in these areas should be reassessed and focus on short-term certificate programs targeted to very specific market needs. For example, the government could offer to pay

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for on-the-job training in these multinational organizations that free economic zones would attract.

On the other hand, it should not be assumed that colleges in poorer areas are not worthy of investment. As explained in the analysis, only four out of ten Lithuania’s counties allocate funding for R&D. An effort should be made to update research facilities and equipment in areas that have R&D potential, such as Šiauliai and Panevėžys. The Ministry of Education has already made some effort to reform the education system through its decision to establish STEAM centers in all ten Lithuania’s counties. Such centers connect scientists, teachers, and students to explore new methodologies and digital learning tools in the fields of science, technology, engineering, arts, and mathematics.126 More of such initiatives are needed, and targeted specifically to poorer counties.

**Innovation**

Financial technology, life science, and information technology sectors will likely remain concentrated in Vilnius, but sectors like textiles, furniture, food production and mechanical engineering are strongly situated in Central and Western Europe. The industrial strategy should work with natural comparative advantages in each region but should attempt to move up the value chain. If a town is engaged in furniture manufacturing, perhaps government can facilitate a transition to furniture design and marketing.

The dairy industry, one of the oldest and strongest sectors in Lithuania, also needs more investment. Despite producing internationally competitive products, Lithuania’s global market share of dairy products remains small. Given the emphasis on organic farming in Lithuania, an

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effort should be made to increase exports and expand production to new markets. Currently, 55 percent of milk exports go to Poland, while 47 percent of cheese exports are bought by Italy. Russia, for example, is known to have a huge deficit of dairy products, which indicates a potential opportunity for cooperation and improvement of foreign relations. The dairy sector could also benefit from a process innovation analysis. Germany for example is known to be giant producer of dairy, yet it accounts for 27 percent of Lithuania’s milk exports. This means that Lithuania’s dairy industry is quite competitive. Perhaps there is a way to make production more efficient and grasp a higher share of the global dairy market. Considering that dairy farms are situated primarily in Lithuania’s lagging regions, boosting production would bring significant revenue to communities that really need it.

Tourism

The last strategy for Lithuania is investment in environmental tourism. Lithuania is rich in wildlife and plant varieties, which has been relatively well preserved over the years. However, little has been done to capitalize on Lithuania’s scenery. Klaipėda, Palanga and Nida are well-known beach resorts, but tourism potential in smaller counties have not been tapped into yet. Ecotourism is especially relevant to counties which lack industrial competitiveness or an academic capability. Tauragė County, for example, lacks convenient connectivity to other regions but is located next to the Viešvilė Nature Reserve. The reserve is home to many tourist-attractive species, including wolves, lynx, otters, and cranes. Similarly, Marijampolė and Alytus Counties share the Žuvintas Biosphere Preserve, known for its incredible forests, wetlands,

meadows, and more than 240 bird species. In 2004 it was included in the European Union's Natura 2000 list network of the most valuable natural sites.\footnote{“Protected Area,” Žuvintas Biosphere Reserve, accessed May 9, 2020 http://www.zuvintas.lt/saugoma-teritorija}


Although tourism is not a novel idea in Lithuania, smaller counties, including Tauragė, Marijampolė, Alytus, Telšiai, and Utena have utilized this tool only minimally or not at all. While resourceful locals may figure out how to visit these areas or book a tour, foreigners would have a difficult time doing so, as information is rarely provided in English or other major languages. This does not apply to Lithuanian tourism in general, but specifically to tourism in the smaller counties.

Conclusion

In 2015 Lithuania became the 19th member of the Euro area and joined the ranks of the advanced economies. However, considering the country’s vast regional disparities, such a label
is simply unmerited. Should a country be considered developed even when a high standard of living is shared only by the privileged minority in the capital region? Is a country really developed when the lack of employment opportunities, the low salaries and the gloomy future prospects forced almost a million to emigrate over the last thirty years? Is a country really developed when 68 percent of those living in rural areas and smaller towns are at risk of poverty?\textsuperscript{131}

Lithuania’s current development model must change, as it is not serving the majority of the population living in poorer counties and decaying industrial towns. It has not served Lithuania’s youth, and has failed the elderly. It has put undue stress on Lithuania’s few large cities. The current development model has alienated thousands of talented emigrants, with little hope of welcoming them back. It has repeatedly privileged the capital as the hub of all industries, rendering other counties a substandard version of Vilnius. Neglect of the poorer counties is not only unjust, but it is also senseless economically, as the cost of regional disparities has increased spending on remedial social welfare. Over the last three decades, the spending on social protection has more than tripled, and the trends will likely continue if Lithuania does not make a change.\textsuperscript{132}

Fortunately, not all hope is lost for Lithuania. Declining regions have a lot offer, both in terms of natural resources and human capital. What poorer counties need is caring leaders who could utilize their untapped potential. Except for the Parliament, Lithuania’s government seems to be led by capable leaders, who could set the country on a better development path. One way of

doing so is through enactment of an industrial strategy, focused specifically on boosting the standard of living and economic growth in the declining regions, carefully targeting both existing and dynamic comparative advantages. A number of Lithuania’s top officials trace their roots to smaller towns and thus are likely to have a personal stake in seeing the industrial strategy through. The country also has a robust business community, which is an essential element of the development equation. The only institutional framework piece that Lithuania lacks is transparency. If the country fails to reduce corruption in the Parliament, courts, and the local government, even the best designed industrial strategy is doomed to fail. Institutional reform, and economic policies reflecting awareness of the country’s regional disparities, would strengthen all of Lithuania.
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