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When the past becomes the future: The problem of policies in 'left behind' places

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Abstract:

The concept of "left behind" places encompasses economic, demographic, infrastructural, social and political aspects. Different studies of the left behind place concept focus on different aspects or combinations of these. The theoretical model by Hertrich and Brenner (2024) assumes an interplay of many aspects that lead to the left behind feeling but emphasizes the emerging dynamics of opinion. The purpose of this paper is to analyze this interaction of individual factors in detail in a case study and thus gain a deeper understanding of the processes that presumably play a role in many other regions. Contrary to perception, the Labor market region (LMR) Gera is developing dynamically in many parameters. We find that although the reasons for the left behind feeling can be assigned to the pillars of the model, in most cases they relate to the past. We conclude that the political measures and developments in the LMR to date have not had an effect due to the strong formation of opinion based on historical events. In addition, the dynamics of opinion formation play a major role in left behind places, which has so far been neglected in politics.

Keywords: Case study, left behind place, feeling left behind, lagging region, regional development, territorial inequality, policy measures.

JEL Classifications: O18, O20, R11, R12

1 Introduction

Concerns about the rise of populism are spreading in many countries, also in Germany. In many German regional parliaments - including in East Thuringia - populist parties are already a significant faction, sometimes even the strongest at local level. This increase in populism in society is part of a series of developments in other countries (Rodriguez-Pose 2018).

Populist electoral trends emanate in particular from left behind places (Rodriguez-Pose 2018). The concept of left behind places encompasses economic, demographic, infrastructural, social and political aspects (Hertrich and Brenner 2024). Different studies of the left behind place concept focus on different aspects or combinations of these. Essentially, a region does not have to score negatively in each of these aspects to be classified as left behind (MacKinnon et al. 2022). Rather, it is about the interplay of these different factors and their dynamics. For this reason, many studies examine a variety of characteristics. Velthuis et al. (2023) identify different types of left behind regions in Europe on this basis. While there are various studies for Germany on lagging, economically weak or innovation-weak regions as well as typifying approaches with partly socio-economic parameters (Iammarino et al. 2019; Koschätzky and Kroll 2019; Hüther and Diermeier 2019; Küpper and Peters 2019; Hertrich and Brenner 2023; Oberst et al. 2019) explicit analytical case studies on left behind places are rather rare (Butzin and Flögel 2022; Hannemann et al. 2023; Leibert and Golinski 2017). Deppisch (2019, 2020) analyzes the discourse around the feeling left behind. Building on this, Hertrich and Brenner (2024) focus on the psychological aspects of the feeling of left behind, which is derived from a lack of autonomy and low appreciation. The authors analyze the individual mechanisms in left behind places and focus in particular on the formation of opinion in a region.

The aim of this paper is to analyze this interplay of individual factors in detail in a case study in order to gain a deeper understanding of the processes in left behind places. The detected fundamental mechanisms presumably play an important role in many other regions that are in a similar situation. With the help of survey data and expert interviews from the labor market region (LMR) of Gera, we identify which mechanisms are held responsible for the feeling of being left behind. With the help of statistical data, we compare various indicators of the LMR Gera with the national average. Contrary to the perception in and of the region, the LMR Gera is developing dynamically in many parameters, in some cases more dynamically than the national average. We conclude that the measures and developments in the LMR to date have little effect due to the strong formation of opinion based on historical events and that the dynamics of opinion formation therefore play a major role in left behind places, which has been neglected in policy - and political measures - so far.

Section 2 deals with the concept of left behind places. Section 3 describes the case study of LMR Gera (section 3.1) and explains the two methodological approaches, the expert interviews (section 3.2) and the questionnaire survey (section 3.3). Section 4 is devoted to the results, in particular the causes of left behind in the LMR Gera (section 4.1), the feeling of left behind (section 4.2), various aspects of opinion formation (section 4.3) and (possible & applied) political measures (section 4.4). The paper ends with a conclusion (section 5).

2 Left behind places

The concept of left behind places is complex and multidimensional. Chapter 2 therefore deals with the concept of left behind places. Section 2.1 explains the characteristics in more detail. Section 2.2 deals with the feeling of left behind. Section 2.3 analyzes the characteristics of opinion formation and section 2.4 the characteristics of regional identity. Section 2.5 concludes by explaining the causes of the left behind.

2.1 Usual characteristics

Typical characteristics of left behind places are that they grow little or not at all over longer periods of time compared to the national average. They suffer from economic stagnation, low productivity, high unemployment and a low number of highly qualified jobs. This often goes

hand in hand with low wages, falling real wages and social tensions. Deindustrialization and the lack of knowledge and innovation hubs exacerbate these problems, while residents are stagnating in their social status or have difficulties in social advancement (McCann 2020; Oberst et al. 2019; Tomaney et al. 2021; Feldman and Florida 1994; MacLeod and Jones 2020).

In left behind places, the population is often shrinking or stagnating for a number of reasons. Demographic changes such as an ageing society and low birth rates contribute to this. In addition, the migration of young, well-educated people to prosperous regions exacerbates this phenomenon. As a result, less well-educated and older people often stay behind in these places (Rodriguez-Pose 2018; MacKinnon et al. 2022; Pike et al. 2023). An above-average number of people in left behind places have increased immobility and live in their county of birth (Lee et al. 2018).

Left behind places are often rural areas that have limited connectivity. These regions are often poorly connected to neighboring cities, leading to a sense of detachment and isolation from other parts of the country (Davenport and Zaranko 2020; Mattinson 2020; Tomaney et al. 2021). This form of infrastructural isolation manifests itself in the fact that important services of general interest such as transport and communication infrastructure are often inadequate or absent in these areas. In left behind places, there is often a lack of important social infrastructure such as schools, health facilities and public services. These facilities are often closed or in poor condition due to population decline and financial challenges (MacLeod and Jones 2020; Rodriguez-Pose 2018; Davenport and Zaranko 2020; Oberst et al. 2019).

People who live in left behind places tend to have a lower standard of living. This is partly due to limited job opportunities, high unemployment rates and the population's declining purchasing power (Essletzbichler et al. 2018; Dijkstra et al. 2020). The economic situation contributes to social and cultural marginalization and leads to above-average poverty and disadvantage in these regions (Dijkstra et al. 2020; Ford and Goodwin 2014). The population also has limited access to health services, which leads to lower life expectancy and poorer health conditions. In addition, people in these regions tend to have lower educational attainment and skills, which further exacerbates economic problems and increases marginalization (Oberst et al. 2019; Tomaney et al. 2021).

The discourse on left behind places is often used in connection with empirical studies on the Brexit referendum. Spending cuts combined with tax increases due to the British government's public austerity policy following the 2008 subprime market crisis led to the Brexit vote, particularly in left behind places (MacLeod and Jones 2020; Gray and Barford 2018). There is a sense of political neglect in these regions, as political engagement is rarely visible. This feeling is exacerbated by the combination of spending cuts and limited investment in social and economic infrastructure. For many municipalities, this creates a vicious financial cycle, as a weak economy leads to lower tax revenues, which in turn leads to reduced infrastructure spending for the population (Tomaney et al. 2021; Davenport and Zaranko 2020).

2.2 Feeling left behind

Left behind places are predominantly described in the literature with the characteristics described above. Although the initial preoccupation with these places stems from the increasingly populist electoral tendencies emanating from these regions. The feeling of being left behind is said to play a key role here, but this does not necessarily have to be linked to objective, measurable socio-economic parameters. Deppisch (2020) analyzes the media course and the feelings attributed to the concept by the media, such as fear and dissatisfaction. Other authors in the academic literature also report feelings of being left behind, be it nostalgia (Rodriguez-Pose 2018), economic dissatisfaction (Gordon 2018), a perceived injustice (Rodrik 2018), anxiety (Ford and Goodwin 2014; Dijkstra et al. 2020), alienation and loss of sense (Mattinson 2020; Tomaney et al. 2021), neglect (Davenport and Zaranko 2020; Tomaney et al. 2021) and bitterness (Hannemann et al. 2023). Hertrich and Brenner (2024) analyze the psychological mechanisms behind the concept. They argue that the feeling of left behind - based on the Self-

Determination Theory (SDT) of psychologists Ryan and Deci (2000) - consists of two fundamental deficits:

1) Autonomy deficit: The need to be able to determine one's own future, one's own goals and wishes, but also with regard to the region (regional identity) in a self-determined and free manner. This is not sufficiently fulfilled in left behind places.

2) Low appreciation: People from left behind places do not feel fully accepted, recognized and valued by people from other regions (the out-group).

Hertrich and Brenner (2024) also note that the various mechanisms that lead to the feeling of left behind are very complex and can be closely linked to the regional identity of a region. According to their understanding, left behind places are therefore those places where a large part of the population feels left behind. Hertrich and Brenner (2024) argue that people in left behind places increasingly have a stable attitude or conviction that is part of the regional identity and which is very difficult to change through (political) measures. The process of opinion formation and change thus becomes the focus of research on left behind places.

2.3 Opinion formation

The feeling of left behind is based on an opinion-forming process as well as certain attitudes and beliefs. However, the formation of convictions in societies is a very complex process that is influenced by a variety of factors (Bar-Tal 2000). Personal experiences also influence beliefs and attitudes. A growing high level of economic inequality can be a source of social tensions and thus attitudes in the long term (Piketty 2017). People compare their own situation with that of others (Festinger 1954). In this respect, people also form their beliefs through social interactions (Levine et al. 2001). Membership of certain social, political or ethnic groups often plays an important role in this. In addition, media and other sources of information have a considerable influence on the formation of beliefs (Groshek and Koc-Michalska 2017). The way in which information is presented can also influence opinion formation. However, culture itself also influences opinion formation, as the beliefs, values and norms of a culture are adopted and passed on through socialization (Deeley 2004; Bar-Tal 2000).

Attitudes and beliefs help a person to make decisions relatively quickly and effortlessly (Sanbonmatsu and Fazio 1990). How the corresponding opinion is formed is very complex and is not the same for all individuals. However, two processes deserve closer examination. Firstly, people tend to interpret information in a way that is consistent with their existing beliefs (confirmation bias) or tend to perceive information that serves to maintain their own beliefs (selective perception) (Donchin 2022; Kahneman 2016). Secondly, the pressure to conform to a prevailing belief is an important determinant. The greater the pressure to adopt certain beliefs, the more likely it is that certain attitudes will be adopted (Martin and Hewstone 2001). Belonging to certain (social) groups or important opinion leaders are important factors in this regard (Samnani and Singh 2013).

2.4 Regional Identity

According to Social Identity Theory (SIT) (Tajfel and Turner 1986; Hogg and Reid 2006), part of our identity and our self-esteem is fed by belonging to significant groups. People classify themselves and other people into certain categories on the basis of shared social identities and engage in intergroup differentiation processes. There are also individually unchangeable aspects of identity that people cannot choose, such as geographical origin (Psaltis and Cakal 2016; Hogg and Reid 2006; Lüders et al. 2016). The concept of cultural identity assumes that cultural identities are continuously constructed dynamically in social and cultural contexts and are shaped by cultural, historical and social influences (Hall and Du Gay 1996). A regional identity builds on this and consists of similar cultural (e.g. language, art), social (e.g. network, connectedness) and historical characteristics and a sense of belonging and identification to a geographic region (Haußer and Frey 1987; Raagmaa 2002; Paasi 1996). Paasi 1986 describes the socio-spatial awareness of the inhabitants and the anchoring of regional identity in the minds of the inhabitants (Paasi 1986; Raagmaa 2002). Regional identities are socially

produced, perceived, reproduced and remembered products within a physical and social space (Raagmaa 2002). Regional identity can manifest itself in the form of inferiority complexes, regional pride or regional frustration (Raagmaa 2002; Cserne 2020; Iyer and Jetten 2011; Santos and Pereira 2021). It can be assumed that people who live in left behind places also have such a regional identity. From the preliminary considerations, this identity consists of the shared memories, perceptions, attitudes and beliefs of the region - in this respect, the feeling of being left behind.

According to Hertrich and Brenner (2024) left behind places are therefore those places where a large part of the population feels left behind. This feeling can result from the change in one or several regional characteristics, which changes the perception of the region from inside and outside. These regional changes ultimately lead to a deficient sense of autonomy and a low appreciation, which trigger certain feelings and become an integral part of the regional identity of a left behind place through social interaction and memory (opinion formation). The characteristic-specific causes that lead to a lack of autonomy and low appreciation are briefly presented below.

2.5 Causes for left behind

Long-term economic decline due to deindustrialization processes and major economic upheavals and restructuring often takes place in left behind places. Globalization has led many companies to relocate their production to countries with lower labor costs and less stringent environmental and occupational health and safety regulations (Essletzbichler et al. 2018). Due to lower production costs in other countries, left behind places have lost their competitiveness and industries. Technical progress is also taking place in large metropolitan areas and requires fewer workers (Braun and Schulz 2012; Bathelt and Glückler 2003). People in left behind places have lost their jobs in industry or production; new jobs are being created in metropolitan areas. Those affected can feel useless and incapable, as their own skills no longer have any economic or social value (autonomy deficit).

Well-educated people also leave the region (brain drain) to take advantage of opportunities in other regions that their own region does not offer. It is mostly the less well-educated older people who remain in the region. The constant out-migration from the regions leaves holes in the social fabric of the community in the places left behind and there is no new impetus from in-migration. In addition, older people start fewer businesses compared to younger people (Azoulay et al. 2020), and these circumstances also lead to further economic decline in the region in the long term. These people in left behind places have the feeling that they have been left behind by society and are no longer needed (low appreciation).

Left behind places are often characterized by a lack of infrastructure and connectivity, which hinders people's development (autonomy deficit). In some places austerity policies following the 2008 economic crisis have increased this problem by cutting back public, digital and social infrastructure in already lagging areas (MacLeod and Jones 2020; Rodriguez-Pose 2018; Davenport and Zaranko 2020; Oberst et al. 2019). As described in the last section, this worsens the framework conditions for companies and leads to increased emigration. People in left behind places do not feel sufficiently appreciated due to the lack of connections and thus opportunities.

The closure of schools and other educational institutions is worsening educational opportunities in the region, leading to dissatisfaction and reduced job options. In addition, the economic decline and deindustrialization in left behind places leaves people dependent on transfer payments (autonomy deficit). The closure of healthcare facilities particularly affects the older population, which is disproportionately represented in these places. This leaves the population with a feeling of low appreciation.

Left behind places are increasingly regions that have lost political significance over time. Politics is increasingly focusing on high-tech companies in the metropolitan areas (Rodriguez-Pose 2018). Many people in left behind places feel unnoticed and neglected by politics. The

shift away from the originally important regions towards political insignificance is gnawing away at regional pride.

Figure 1 summarizes the various dimensions and causes. The aim of this paper is to analyze this interplay of individual factors and causes in detail in a case study and thus gain a deeper understanding of the processes that presumably play a role in many other regions.

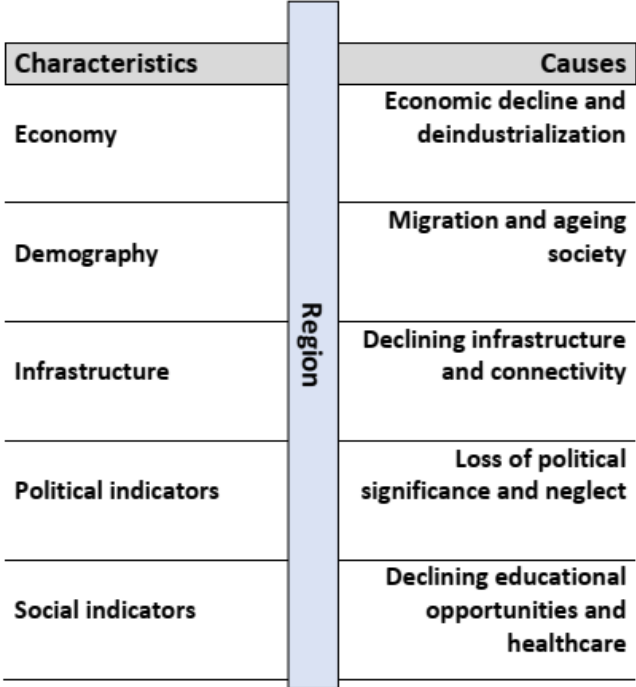


Figure 1: Summary of causes according to Hertrich and Brenner (2024).

3 Methodical approach

After a description of the study region (Gera labor market region) (section 3.1), we describe the two methods used in this paper: expert interviews (section 3.2) and a questionnaire (section 3.3).

3.1 Case description

The Gera labor market region, located in the eastern part of the federal state of Thuringia, consists of the independent city of Gera with around 94,000 inhabitants and its surrounding district of Greiz with around 96,000 inhabitants. Gera is also the third largest city in the federal state of Thuringia (Stadt Gera 2023; Statistik 2023). The region's origins date back to the Middle Ages, when it was already known as an important trading center and center for craftsmanship and textile production. Especially in the 19th century, the textile industry flourished in the labor market region of Gera and consolidated its reputation as the leading location for high-quality textile production in Germany. Mining played a significant role in Gera and the surrounding area, particularly in relation to uranium mining during the period of German division. The city of Gera itself was an important location for the administration and logistics associated with uranium mining, which was mainly carried out by the Soviet-German Wismut AG. This rich historical past has shaped the cultural and economic identity of the region and can still be felt today in the form of well-preserved half-timbered towns, historic factory buildings and industrial monuments. This industrial boom brought prosperity and growth to the region and led to the development of a strong employee community. During the time of the German Democratic Republic (GDR), the town held an important political position in the East German region. East Germany was structured into 14 governmental regions and Gera was the capital of one of them, which meant that it was the political, economic and cultural center of this administrative district (Kämpfer 2019).

After the reunification of Germany and the end of German division, the Gera region underwent a profound transformation. The collapse of Wismut AG's uranium mining operations was only one part of these changes. The region was also confronted with the demise of other important branches of industry (e.g. textile production and mechanical engineering). These former industries were restructured or closed down in the course of privatization and liquidation by the Treuhandanstalt (privatization agency) which led to massive job losses and social challenges. The high unemployment rates in Gera after reunification were one of the most visible effects of the economic upheaval in the region. The loss of political significance became apparent when Erfurt became the capital of the Free State of Thuringia and the region's important political position declined due to the loss of the capital status. The economic challenges in Gera also led to a decline in population, as many residents migrated to other regions due to a lack of job opportunities (Schubert 2012; Wagner 2009). Despite these challenges, Gera has made efforts in recent years to renew itself economically and improve the quality of life for its citizens. In the following, we attempt to classify whether the LMR Gera (county-free city of Gera and district of Greiz) exhibits certain characteristics of a left behind place on the basis of the characteristics presented above.

A look at the quantitative data reveals that the LMR Gera lags well behind the national average in terms of absolute economic indicators. The region is less innovative, has a significantly lower economic power and the disposable income of its inhabitants is also lower (Table 1). The demographic factors in the Gera LMR are also below average. In contrast to the national average, the population has shrunk considerably in recent decades, which is partly due to the historically negative overall migration balance. One consequence of this is that the region's population is significantly older than the population in most other regions in Germany. At least the independent city of Gera performs somewhat worse in terms of unemployment and has an above-average number of housing benefit recipients. The LMR also scores very poorly in terms of direct political project funding, which is due to the fact that the region is economically worse and, above all, less innovative than the average in Germany. The strong populist electoral tendencies in the region are striking and one reason for selecting the LMR as a case region. The populist Alternative for Germany (AFD) party has been the strongest force in various elections at different levels and has a share of over 25 percent, which is significantly higher than the average in Germany. The characteristics of the region described above are all features that are also characteristic of left behind places in the literature.

On the other hand, the picture is not quite so clear. The LMR Gera is steadily catching up economically compared to other German regions and is developing more dynamically than many other regions. The income growth of each individual citizen is also increasing faster than the national average. The region is also relatively well connected and can be reached well by train, car and plane. The (social and digital) infrastructure and the number of employees in the public sector also appear to be around the average for other German regions. Despite the previously described low inflow of public funding in the form of project funding, the region is strongly supported in the German funding landscape, as a relatively large amount of funding from GRW funding and urban development funding flows into the region. In addition, the municipal budgets are less indebted than most other regions in Germany. Table 1 provides an overview of the various characteristics of the labor market region of Gera and Germany.

Table 1: Characteristics of the labor market region Gera and Germany.

Cate- gory	Characteristics	Data source	Gera district	Greiz district	Germany
Economic indicators	GDP per inhabitant in 1000 € per inhabitant; development 2000-2020	INKAR	+ 66,3 %	+ 74,4%	+ 58,2 %
	GDP per inhabitant in € 1000 per inhabitant; development 2010-2020	INKAR	+ 29,7 %	+ 40,6 %	+ 29 %
	GDP per inhabitant in 1000 € per inhabitant (2020)	INKAR	30,1	23,2	40,5
	Population development 31.12.2002-31.12.2022	TLS*, destatis	-13,37%	-20,43%	+3,58%

Demographic factors	Average age in years (31.12.2021)	TLS*, statista	49,2	50,2	44,7
	Total net migration per 1000 inhabitants	INKAR	2000: -12,7 2010: -1,6 2020: -2,9	2000: -4,9 2010: -6,5 2020: +2,9	-
Infrastructure and connectivity	Average car journey time to the nearest IC/ICE train station in minutes (2020)	INKAR	2,6	27,4	27,4
	Average car journey time to the nearest international airport in Germany in minutes (2020)	INKAR	62,2	70,2	56,7
	Average car journey time to the nearest highway junction in minutes (2020)	INKAR	8	13,6	16
	Hospital beds per 1000 inhabitants (31.12.2021)	TLS, destatis	10,6	3,9	5,8
	Population-weighted linear distance to the nearest elementary school (in meters)	INKAR	793	1655	1029
	Broadband coverage (50 Mbit)	INKAR	98,6%	96,9	98,2%
Social indicators	Inflation-adjusted income growth from 2010 to 2020 (assumed cumulative inflation rate of 18.4%)	Own calculations Destatis, TLS*	7,4%	11,5%	6,3%
	Disposable income of private households per capita 2020	TLS*, destatis	20765 €	21561 €	23916 €
	Unemployment rate (07.2023)	TLS*, destatis	9,2%	5,3 %	5,7 %
	Unemployment rate of long-term unemployed 2022	TLS*, destatis	2,6 %	1,5 %	2,0 %
	Percentage of households receiving housing benefit per 1,000 households (2020)	INKAR	19,3	14,6	14,4
Political indicators	Criminal offenses per 1000 inhabitants	Crime statistics	10862	4117	6072
	Debt in € of the core budgets of municipalities and associations of municipalities per inhabitant as at 30.06.2021	Regional data base	746	553	1521
	Employees in the public sector (full-time equivalent) per 1000 inhabitants 30.06.2021	Regional data base	49,5	27,9	41,9
	Total planned federal financial aid for urban development in € per inhabitant (2020) (long-term + short-term)	INKAR	150,2	219,6	122,5
	Grants approved for joint task 'Improvement of the regional economic structure, individual regional promotion' in € per inhabitant (short-term + long-term) (2020)	INKAR	607,2	630,8	142,8
	Grants approved for the joint task 'Improvement of regional economic structures, infrastructure' in € per inhabitant (short-term + long-term) (2020)	INKAR	138,7	158,9	92,5
	Actual expenditure for direct project funding of selected departments in € per inhabitant (short-term + long-term) (2020)	INKAR	146,9	297,0	1276,5
	Election result of the AFD in the 2021 federal election (VT = voter turnout)	TLS*, destatis	27,2 % (VT 70,7%)	27,7 % (VT 76,4%)	10,3% (VT 76,6%)
	Election result of the AFD in the 2019 state elections of Thuringia (VT = voter turnout)	TLS*, destatis	28,7% (VT 62,2%)	26,7 % (VT 66,5%)	-
	Election result of the AFD in the 2019 European elections (VT=voter turnout)	TLS*, destatis	29,6 % (VT 56,8%)	25,5% (VT 64,1%)	11,0% (VT 61,4%)

* Thuringian State Office for Statistics (TLS)

Due to the characteristics described above, it is not clear whether the LMR Gera is considered a left behind place in Germany. Oberst et al. (2019:113) also come to the conclusion: "There is no region in Germany that is at risk in all indicators and is left behind in this sense". Nevertheless, at least three characteristics can be clearly identified in the LMR: 1) The region is still economically underdeveloped, despite its positive momentum. 2) In addition, the region is severely affected by demographic change - which could slow down the momentum in the future and have a lasting impact on many other factors. 3) Many people in the region appear to be dissatisfied with the current situation and vote for populist parties much more frequently than the national average. Although it is clear from the quantitative data analyzed that the population appears dissatisfied, it is not possible to work out why this is the case. Currently, the development of many indicators is better and would therefore not justify such a high level of problems with regard to populist electoral tendencies. In this respect, the underlying mechanisms - in the

sense of Hertrich and Brenner (2024) - must be analyzed in detail. For this reason, additional expert interviews and a survey were conducted, which are described in more detail below.

3.2 Expert interviews

We conducted guided semi-structured expert interviews in 2021 and 2022. The aim was to ensure the most comparable data collection possible with an orderly interview process without losing flexibility with regard to new or as yet unknown topics. In order not to predetermine the content of the interviews, we conduct the interviews on the general topic of economic development and innovativeness. The key questions of the questionnaire were deductively derived from theory and are based on the research interest. Overall, the questionnaire was divided into 4 thematic blocks, one of which is of central importance for this study and was analyzed. We asked questions about the general economic situation and the measures that are being applied. We asked the experts the following two questions, among others:

1) What reasons do you see for the rather below-average economic structure in the region?

2) Can you name successful and less successful projects and funding programs that should/should improve the economic structure and/or innovation performance of the labor market region? What were the positive and negative components and experiences?

A total of 9 interviews with experts from the LMR region were conducted, transcribed and analyzed. The respective experts were selected on the basis of their professional function and thus their knowledge and specific experience (Hopf 2022; Kruse 2015; Mayer 2018). The criteria for selecting the experts were based on administrative/institutional responsibility, place of residence in the region and the associated function. The anonymization of the data is important and necessary and was assured to the interviewed experts (Helfferich 2022; Mayer 2018). The intention was to include very different perspectives in the analysis, so that the experts interviewed came from the following different stakeholder groups: Chambers of Industry and Commerce and Chambers of Crafts (2 experts), companies (2 experts), regional economic development institutions (2 experts), research institutions (1 expert), politicians (1 expert), employment agency (1 expert).

In order to ensure a systematic data analysis, a qualitative content analysis was carried out using the interview transcripts according to Mayring (2022). The transcribed expert interviews were analyzed using MAXQDA (Rädiker and Kuckartz 2019). A categorization system was created mainly deductively from theory, with some inductive changes according to the interview responses (Kromrey et al. 2016). The text passages from the expert interviews are assigned to the various categories from the category system, with new categories also being created. The standardized coding procedure enables us to carry out comparative evaluations of the material and also quantitative analyses (Mattissek et al. 2013; Rädiker and Kuckartz 2019). In order to reduce the subjectivity resulting from the subjective assessment of the analyzing researcher, mainly main categories are analyzed. Main categories and thus topics are usually clearer and provide a good overview. Excerpts from selected interviews reflect the qualitative part of the analysis. The research project is part of a larger study. In total, over 6000 codes were assigned to 77 interviews with 78 experts.

3.3 Questionnaire survey

Questionnaire studies are a proven tool for collecting data from a broad participant base and identifying statistically relevant patterns and correlations. The results from the surveys make it possible to quantify and statistically analyze trends, preferences and opinions in relation to left behind places (Hollenberg 2016; Kromrey et al. 2016). This data serves as a supplement to the qualitative insights from the expert interviews.

The questionnaire was divided into different parts. In the first general part, personal characteristics were collected. In the second part, respondents were asked about their motives for changing jobs, in the third part they were asked to rate the characteristics of their place of residence, and in the fourth part they were asked to rate the reputation or attractiveness of ten other well-known regions, of which the LMR Gera was one. Finally, respondents could write

down up to ten associations per region (open field). Figure 2 shows the characteristics surveyed and the Likert scale used. The same characteristics and scale was used for the evaluation of the conditions in the LMR Gera by people living in other places.

3.3) How satisfied are you with the following characteristics of your current region of residence?			
		1-2-3-4-5-6	
<i>Living conditions</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Digital infrastructure</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Cost of living</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Size of the municipality</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Wide range of job opportunities nearby</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>„Lifestyle“</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Safety from crime</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Cultural and leisure offerings</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Education opportunities</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Shopping opportunities</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Environmental factors</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Climate factors</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Transport infrastructure and connection</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Availability of kindergartens & schools</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Reputation as an innovative region</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>An economically successful region</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>
<i>Attitudes of the population to extremism</i>	<i>very dissatisfied</i>	<i>0-0-0-0-0-0</i>	<i>very satisfied</i>

Figure 2: Part of the questionnaire on the characteristics of the place of residence surveyed.

The questionnaire was outsourced to the survey institute *Talk Online Panel GmbH* and the data was then cleaned up for errors and analyzed using standard software. A total of 1006 people were surveyed, 45 of whom lived in the Gera labor market region at the time of the survey (August 2022).

4 Results

Although it is clear from the quantitative data analyzed (Table 1) that the population in the Gera LMR appears dissatisfied, it is not possible to work out in detail from the descriptive data why this is the case. In search of the specific reasons and mechanisms in the LMR Gera, we first analyze the causes for the decoupling of the region mentioned by the interviewed experts (section 4.1). In Sections 4.2 and 4.3, we derive implicit reasons for the feeling of left behind in the region from the expert interviews and the survey data. Section 4.4 derives policy measures for the region - or for regions in a similar situation.

4.1 Causes: Left behind the Gera LMR

The following section looks at the most significant causes that, according to the experts surveyed, are responsible for the decoupling of the region.

4.1.1 Economic decline and deindustrialization

One of reasons usually mentioned first for Gera LMR's current economic sluggishness is that there is a lack of companies, particularly large companies, in the region. This finding is consistent with the survey results. One interviewed entrepreneur from the labor market region described this as follows:

“There are few large companies or groups based here, i.e. no groups with headquarters and few subsidiaries with an industrial character” (Interview_Company 2021b:11).

or

"96% of our member companies have fewer than 20 employees or, in other words, 9 out of 10 companies have fewer than 10 employees" (Interview_Chamber 2021:14).

According to our experts from the region, the region's situation has a lot to do with the region's past. The city of Gera was founded in the 12th century and has a long history as an important trading town and residence. In the 16th century, the city developed into a cultural and economic center under the regency of Heinrich Posthumus. During the time of the Democratic German Republic (GDR), the city was a political heavyweight, making it a city of workers. The city's population grew to over 130,000 inhabitants. Gera was an important industrial and production location in the GDR. The focus on industrial production in the region was intentionally generated by the government, as district towns were supposed to be cities of the working class, according to one actor:

"The district capitals were often not the towns of intellectual potential (...). District capitals were always supposed to be towns in which the working class, i.e. the ordinary worker, dominated. (...) They didn't want a second Jena, or whatever. Because it is clear that students (...) are not the most comfortable for politics in a critical examination of social conditions" (Interview_Politics 2021:11).

During the GDR era and before, Gera LMR was known for its textile industry, machine tools, electronics and equipment manufacturing and the uranium ore mining operations of SDAG Wismut in Ronneburg. However, the most important economic sectors before 1990 are of little or no significance today - after reunification. Most of the GDR companies were unable to retain their positions in the world market after reunification and were either wound up by the Treuhand (privatization agency) or relocated. An actor from the labour market region describes the massive structural change, the decline of entire sectors and the deindustrialization as a result of reunification as follows:

"That has something to do with the fact that there was uranium ore mining. (...) The 20,000 jobs were completely eliminated with the end of uranium mining. (...) With economic reunification, of course, arms production, which was geared towards the Eastern Bloc, was closed down. And the third area is that we had a very large number of jobs in the machine tool industry. This was completely wound up by 1995. The jobs could never be adequately replaced. And that is indeed a gap that has led to the city having the highest unemployment rate in Thuringia for 25 years, not consistently, but relatively often" (Interview_Employment Agency 2021:11).

Another player sums up:

"Large parts of companies that existed here have disappeared. And over the course of many years, there has been no way of compensating for this in any way" (Interview_Chamber_craft 2021:11).

However, the earlier exodus of companies in the course of the founding of the GDR and the threat of nationalization of companies in this context is also cited as a reason for today's economic lagging:

"And thus also many entrepreneurs who had companies here from history and who of course finally packed their bags with the nationalization and finally, I'll say it, crossed the border" (Interview_Politics 2021:11).

4.1.2 Emigration and an ageing society

There were two main waves of emigration from the Gera LMR in terms of people, families and the associated know-how. The first wave took place in the course of the founding of the GDR and the construction of the Wall in 1960. The second wave took place after reunification in 1990. The emigration of mostly young people, the associated ageing of society (see section 6) and the resulting loss of innovative potential is seen as one reason for today's economic underdevelopment. One stakeholder from the labor market region describes the fact that the migration of people has probably not only led to holes in the social fabric of the region (social connectedness), but also to an enormous outflow of knowledge and thus to a lower sense of competence as follows:

"In principle, we experienced twice, in a relatively short period of time, that the creative potential migrated. One time, in the 1950s, when it was practically clear that the two German states were creating different conditions for entrepreneurship, whole classes left, if I analyze this in retrospect through contacts I had, it wasn't the dumbest who left, but those who were confident that they could make it in another world, even in the western part of Germany, or at least manage there" (Interview_Politics 2021:11).

The high level of emigration in the past still has a major impact on the composition of the population today. As the parents' generation has left, there is naturally also a lack of their

children; of young and future people in the region, as one stakeholder from the Gera LMR describes:

“Not just one generation has been lost, but a generation and a half, because the children that these young people had or should have had back then were not born here, but were born somewhere else and are now making themselves painfully felt on the labor market. In the form of: There are simply not enough young people. That is dramatic. The effects, as experts say, are worse than the Second World War. That’s a drastic statement. But demographically speaking, yes” (Interview_Economic development agency 2021:8).

4.1.3 Loss of political significance and wrong decisions

Time and again, stakeholders cite wrong political decisions as "home-made mistakes" (Interview_Politics 2021:11) in the past as reasons for today's economic weakness. Obviously, political actors positioned the region economically in the wrong way after reunification or decided in a too ideological way, as one actor describes:

“So it wasn’t quite so easy during the reunification phase, I don’t want to say that one or two investments couldn’t have been made. Of course, there was also a lot of incompetence and ideological aspects of some that remained in the house and are perhaps even still there today, but this time could have been shaped differently for Gera, we weren’t exactly lucky with the elected mayors” (Interview_Politics 2021:21).

Two other actors from the LMR specify the political mistakes and describe the wrong direction after the fall of communism in 1990 as follows:

“An attempt was made to do this by focusing very strongly on the establishment of universities up until 2002/2005. But you have to know that the university location that outshines everything else is Jena, 40 kilometers away. The one with the Friedrich Schiller University and the Ernst Abbe University. It has such a strong pull that very little has succeeded in attracting university facilities or at least facilities that go in this direction. (...). I would say that they really did rely very heavily on the scientific card and that didn’t work” (Interview_Employment Agency 2021:13).

and

“Also with a somewhat misguided settlement or industrial policy in those very years” (Interview_Company 2021a:11).

It is clear from the interviews that the Gera LMR was and is confronted with major social and economic upheavals. Compared to the causes put forward by Hertrich and Brenner (2024), it can be seen that infrastructure and connectivity problems as well as social causes are perceived as less strong causes of left behind in the Gera LMR. Figure 3 summarizes the various causes identified in the Gera LMR and relates them to the expected causes of Hertrich and Brenner (2024).

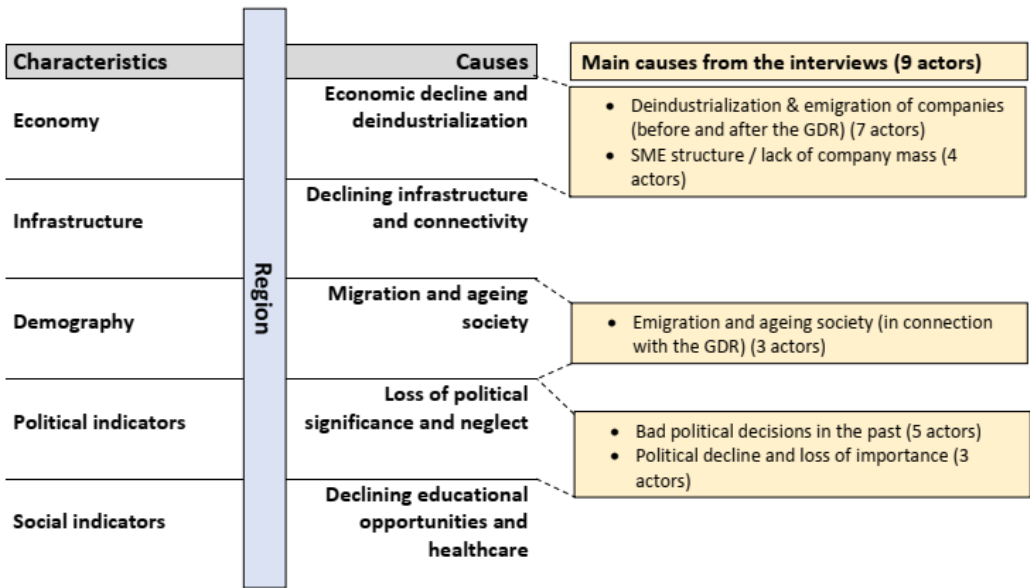


Figure 3: Reasons for the economic underdevelopment of the Gera LMR.

4.2 Feeling left behind: the deficit in autonomy

On the basis of the conducted questionnaire, Figure 4 provides a comparison between how people in Gera rate the conditions there in comparison to how people in other regions of Germany rate the condition in their place of residence. The comparison clearly shows that the residents of Gera rate almost all characteristics of the LMR worse than people in other regions. In line with the theoretical argument, we might interpret that the need of the resident population to be able to determine their own future, their own goals and wishes in a self-determined and free manner is not sufficiently fulfilled. There is mainly a lack of a diverse jobs and an unsatisfactory range of leisure activities (Figure 4).

In particular, Gera scores very poorly as an innovative location and an economically successful region among its residents. While in many categories Gera is rated similar to other economically weak regions (Figure 4), it is rated clearly below this comparison group in this aspects. It may be that the residents feel that they are not involved in new developments (in this case innovations) to the same extent as people from other regions and do not benefit from them. They are left out of many new innovative jobs and opportunities. According to Hertrich and Brenner (2024), this can lead to residents feeling incapable and ineffective. The expert from the employment agency report persistently high unemployment rates in the region (Interview_Employment Agency 2021). The diminished sense of competence is also diminished by the fact that the migration of young, educated or high achievers draws knowledge and skills away from the region.

"It wasn't the dumbest who left, but those who were confident that they could make it in another world, even in the western part of Germany, or at least get by there" (Interview_Politics 2021:11).

This means that the economic weakness and missing innovativeness is also part of the region's narrative and thus a component of regional identity.

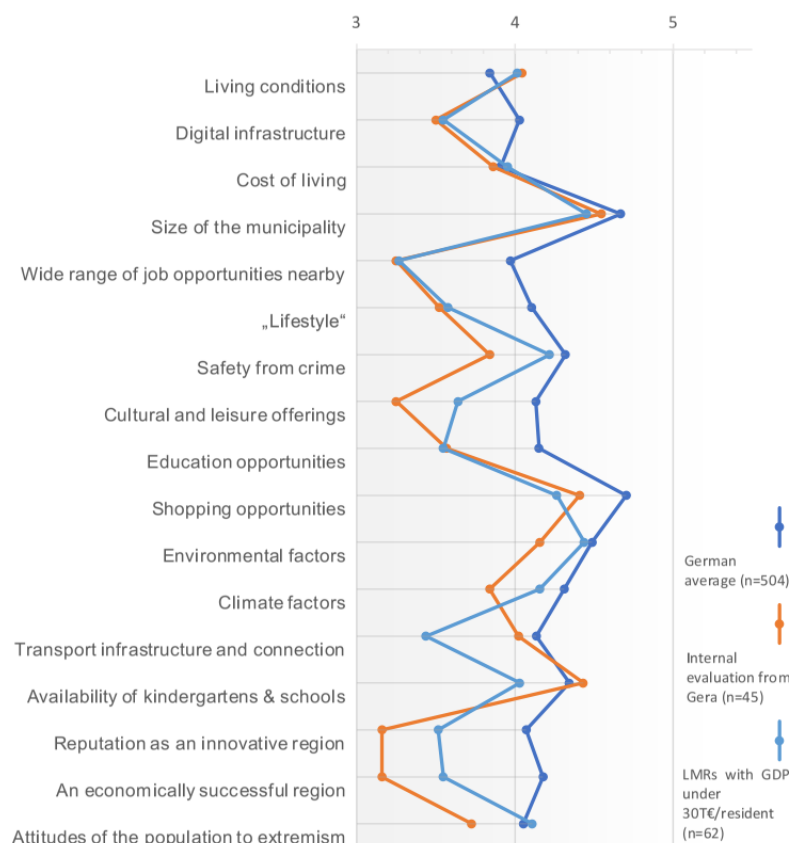


Figure 4: Internal assessment of Gera, German average and regions with low GDP (data from the survey).

4.3 How history determines the present

Section 3.1 showed that the Gera LMR is developing more dynamically than the national average in many measurable indicators, but still has below-average values in many respects. It can be assumed that many people in the Gera LMR feel left behind today (e.g. high approval rates for populist parties), but that this feeling is not (only) a result of the current situation. Figure 4 supports this impression, since the Gera LMR is not perceived as below average in many factors (except for economy, innovation, culture/leisure, crime and environment/climate) compared to regions with a similar economic strength. The availability of schools and kindergartens is even perceived as significantly better than in comparable regions. However, it is striking that Gera performs significantly worse than comparable regions, particularly in terms of "reputation as an innovative region" and "an economically successful region", although the LMR is developing dynamically in these categories. A deeper insight into this paradox can be gained from the interviews.

The interview material shows that the vast majority of explanations for the current feeling of left behind refer to past times, which continue to be upheld and determine current perceptions. The inhabitants look with great nostalgia at today's transformation and structural change processes and the regions affected by them. They are envious of the commitment, political will & help and also monetary incentives with which the state supports these regions in their transformation. It can be assumed that stakeholders compare the situation in the Gera LMR after reunification in 1990 with the situation in regions affected by structural change today. One stakeholder describes the feeling of neglect as follows:

"Whether it's in Cottbus or wherever, the politicians negotiate strongly, so if we close down the coal or whatever, the opencast mine, then we want a Fraunhofer Institute and then we want an S-Bahn connection to Berlin etc. that didn't exist [after the reunification]" (Interview_Politics 2021:13).

This could also serve as a starting point for today's feeling of being left alone and left behind. In addition, the city and the entire region flourished in the 19th century and was one of the richest cities in Germany in the heyday of the fabric and cloth industry and one of the 12 politically most important district capitals in the GDR era. The political and economic decline after 1990 was followed by a loss of importance and a fall from grace, as described by one of those involved:

"The situation until the fall of communism, when it was the district capital and relatively well situated, well positioned as one of 12 district capitals. The city didn't have to worry about falling short or anything like that. And that changed after reunification, when Erfurt became the state capital. And Gera, in terms of the region, East Thuringia, slipped out of the center and into the periphery, and I think that's a decisive factor in today's situation" (Interview_R&D 2021:11).

It can be assumed that this political and economic decline into insignificance - the perception that one is unimportant (Rodrik 2018) - after the fall of communism in 1990 has had an impact on self-confidence and ultimately on regional identity (Fukuyama 2018). This is reflected in the survey (Figure 4) in the very poor rating given by the resident population to the "reputation as an innovative region" and "economically successful region". It sounds somewhat nostalgic when an expert says:

"You have to look at history, you have to consider where the city comes from. The city was basically one of the richest cities in Germany at the turn of the century" (Interview_Politics 2021:11).

The inhabitants of the region feel stigmatized from the outside. One actor from the labor market region describes the stigmatization they experience as follows:

"That is an issue, that the region itself is already stigmatized. So that's clearly visible to me, and I experience it every day when students come here from different regions of Germany and decide to study here for whatever reason(...) And then they get to know the city and after a while we talk and then I often hear that Gera is much more pleasant than I previously thought. And I hear that again and again, the reputation that other regions or the inhabitants of other regions have of Gera is darker in comparison from my point of view and from what I hear about what it's really like to live here. So the stigma plays a role" (Interview_R&D 2021:17).

No such stigmatization can be inferred from our survey data. People outside the Gera LMR rate the region better in most characteristics than Gera residents rate their region (internal rating), as shown in Figure 5. Especially those characteristics that are very badly evaluated by the own population, such as the economy, innovativeness and cultural and leisure options, are

not so badly rated from the outside. The outside rather sees the overall living conditions and the extremist attitude as problems.



Figure 5: External reputation and internal evaluation from the LMR Gera.

The causes of the perceived stigmatization, which in reality may not (or no longer) exist to the extent that it is perceived, probably date back a long time. However, its reproduction and (perceived) perception persist vehemently in Gera's society.

However, Gera LMR still has a reputation problem. People outside the labor market region state the lowest willingness - in comparison with nine other regions surveyed - to move to Gera. Figure 6 shows the assessment of people outside the region as to whether they would move to the respective region if they had a suitable job.

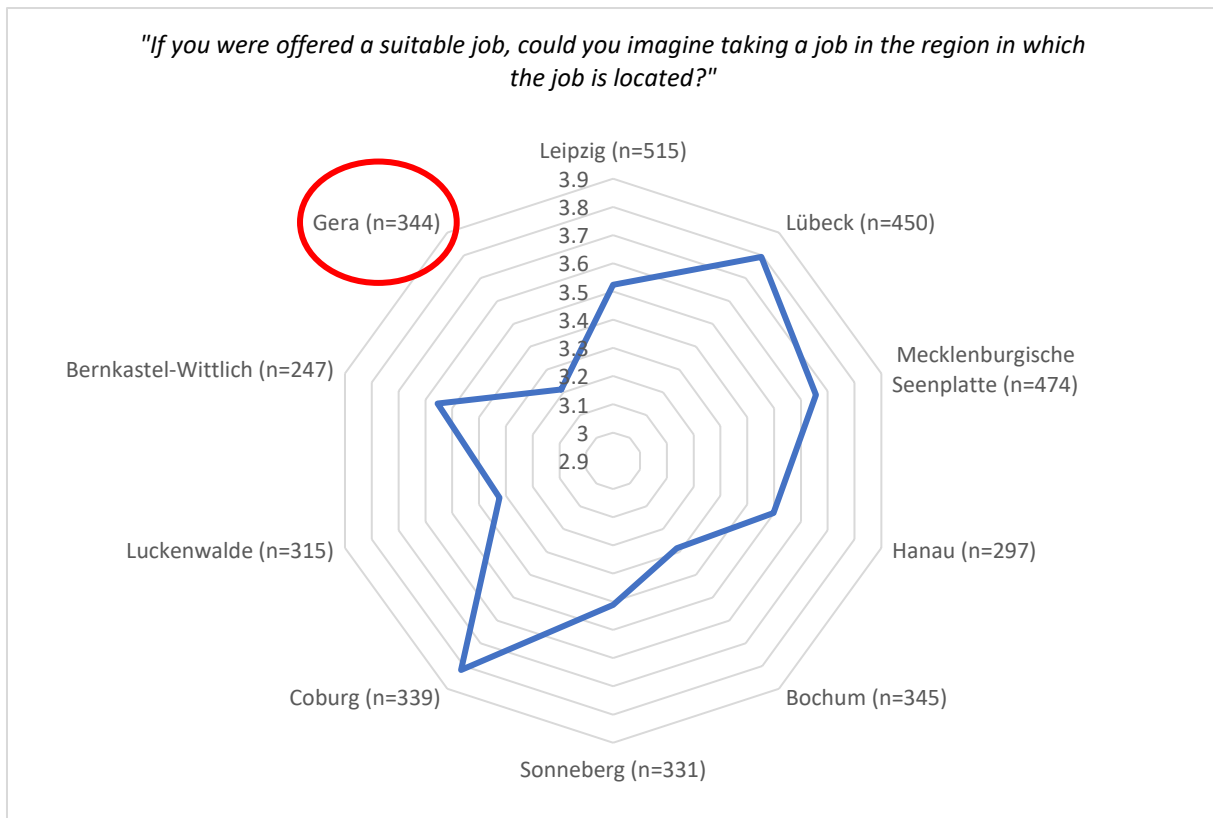


Figure 6: Assessment of whether people would move to the respective region (Likert scale: 1: 'not at all conceivable' to 6 'very conceivable'; average values).

A first hint on why people do not want to move to the region is provided by the above rating of the characteristics of the region. Extremist attitudes and low economic activities seem to play a role. Further information is provided by the associations that external people have with the Gera LMR. Those people that stated that they know Gera have been asked to formulate associations with the region (Figure 7). It can be seen that a large proportion associate the Gera LMR with East Germany or the GDR. These are among the first thoughts that predominantly West Germans have when they think of the Gera LMR. In this respect, it might be possible to speak of stigmatization. Although the GDR has long been history, it remains in people's minds. This confirms the assumption of Hertrich and Brenner (2024) that the past plays a significant role in regional identities, which contribute to the feeling of left behind.



Figure 7: Associations with the Gera LMR (>3 mentions; the larger, the more mentions) (excluding the population of Gera).

Figure 7 also shows that, apart from the association with GDR, only nature and recreation stand out. This fits better a tourism region, which the region is not in terms of overnight stays relative to other regions in Germany. The remaining subordinate associations are very contradictory and inconsistent. It is noticeable that the region does not have a clear reputation at all; at least that is what the associations suggest. The lack of clarity in the reputation of the Gera LMR could be one reason why the historical reputation of the region is ultimately so 'stuck in people's heads'. There is a lack of a new framing for the region; a new reputation that could be set against the past.

To summarize, we find that historical events have a very strong influence on today's well-being and the current feeling of left behind in the Gera LMR. Even if the situation in the region improves slightly or economic indicators develop more dynamically than in many other regions, the influence of long-past events remains very present in people's minds. In other words, their convictions and attitudes are very solidified and shaped by the past; they do not change with the changes in the characteristics of the region described above. This applies on the one hand to the perception of one's own region and on the other hand to the perceived stigmatization outside the region. This is due to the regional opinion-forming processes and is intensified by emigration processes that leave behind older people with similar experiences. Among other things, selective perception through entrenched thought patterns contributes to the perpetuation of beliefs.

4.4 Political measures

The interview excerpts thus show the great importance of history for current well-being and self-esteem. They also show that the opinion-forming processes described in section 2.3, in particular selective perception, repeatedly reproduce historical events. The feelings were and still are part of the regional identity in the Gera LMR. In this respect, the (political) measures in the Gera LMR should be geared towards breaking up old patterns of thought. Which brings the (political) measures of the Gera LMR Gera into focus.

4.4.1 Measures in the Gera LMR

Today, political players are attempting and have attempted in the past to combat the economic stagnation of the Gera LMR with the help of various measures and to advance the region economically. When looking at the primarily economic parameters and their dynamic development, it can be assumed that the political measures in their broad scope and the funding programs used have, at least partially, contributed to this dynamic development. This is also confirmed by various interviews with experts. For example, a business promoter from the labor market region stated:

"Well, first of all, the components are certainly the individual company support, the companies themselves via federal programs; sometimes also the EU. Which - if it has an effect - has a positive one" (Interview_Economic development agency 2021:16).

Start-up centers should strengthen the start-up activities of the Gera LMR and promote the region in the long term. This is probably not so easy, as one expert mentions that due to many years in a communist system, the option of private self-employment is not in people's minds and "an understanding of self-employment and entrepreneurs must also develop anew" (Interview_Chamber 2021:14).

The region should also become more innovative through cooperation support measures. The 'Innovationsforen Mitte' funding program was mentioned in the expert interviews (Interview_Chamber 2021:20). Technology centers and the establishment of public research institutions should act as incubators for innovation processes. The economic performance of the region is also to be increased by attracting new companies. For this purpose, commercial building land was developed and areas for the settlement and, if necessary, real estate were made available:

"Another component is the provision of suitable space and/or real estate for companies if they want to relocate or expand or open another product line, which is usually also linked to investment cycles" (Interview_Employment Agency 2021:16).

When financing various measures, the state development company is often interposed in order to avoid overburdening the municipal budget, or companies pay for individual components of development planning and other planning procedures themselves:

"The state development company was there to support us as a partner. Which is possibly still doing so today or will continue to do so. In some cases, the companies themselves, which have practically entered into the financing of planning procedures or planning services, if you do the whole thing via a project-related development plan and then projects" (Interview_Employment Agency 2021:18).

In addition to all these economic policy measures, other - non-business-related - measures are also mentioned that are intended to improve the economic and social situation in Gera LMR. As part of the aforementioned urban development program, buildings are being renovated, particularly in the city center, and marginalized districts and social hotspots within the city are being made more livable through the "Social City" funding program. Interestingly, the establishment or design of the 2007 Federal Garden Show is seen as a great success for the reputation, the improvement of the infrastructure and for brightening the mood in the city and is mentioned as such by two experts.

"What has happened is that, of course, with a Federal Horticultural Show as a rule and Gera has achieved this. A very positive mood has developed among the population. (...) the interesting thing about such federal garden shows, at least in Gera, is that practically the entire infrastructure cannot be included in the investments and then secondary investments have developed that were quite interesting and made the city more attractive. So the Federal Horticultural Show, which we had in 2007, was for a long time a flagship event, of course, where Gera, I would say, is supported to a certain extent by the infrastructure in order to provide economic impetus" (Interview_Politics 2021:21).

or

"So there are a few things that have worked well. For example, the Federal Garden Show. Where a lot has happened for the residents, for the feeling and the whole attitude towards the city. From my, really subjective observation, I have to say. The feeling was that we are a great city and a lot of people come here and think it's good and they like it. So it was very effective from my point of view. To have an event like this and to see that we can also show ourselves, that we are well received and noticed. So that was an important boost for the city, in my view" (Interview_R&D 2021:21).

The second expert, in particular, refers to the marginalized and stigmatized situation in the Gera LMR previously highlighted with the statement "we can also show ourselves, we are well received and noticed" (Interview_R&D 2021:21) and points to the wounded regional identity. Table 2 summarizes the measures mentioned in the expert interviews.

Table 2: Measures mentioned in the expert interviews to advance the region economically.

Dimension	Measures	Actors (9)
Economy	Business promotion (e.g. digitization vouchers, consulting, investment promotion)	4
	Locating companies	3
	Promote start-ups (e.g. start-up center)	3
	Initiate innovation processes (e.g. technology center, establishment of public research institutions, innovation vouchers)	2
	Strengthen cooperation	2
Social affairs	Upgrading the building fabric & participation "social city"	2
	Create modern / qualified living space	1
Infrastructure	Land management / industry building land	1
	Provision of commercial space/offices	1
Politics	Financing by regional development agency	1
	Companies pay for planning procedures and planning services of the city	1
Culture	Federal Garden Show 2007 / recreational value - reputation: "be seen"	2

4.4.2 Implications and measures

When looking at the causes of the region to be left behind and the policy measures, it is noticeable that many of the causes presented and described by the experts are at least partially covered by suitable policy measures. However, there are some gaps in measures that are probably typical for such regions.

Firstly, we have previously worked out how important reputation and framing are for economically weaker regions or even left behind places and their inhabitants. Stigmatization and defamiation have a counterproductive effect on the identity of these regions. It is perceived as a

regional humiliation when the once glorious region of Gera is looked down upon. The historical achievements of the region should be recognized and appreciated. The urge for recognition and social equality is very strong (low appreciation). At the same time, stigmatization also undermines the regional sense of competence and thus autonomy. A 'mere' upgrading of the infrastructure as part of urban development programs and GRW infrastructure funding is very beneficial and certainly makes the regions and in particular our case region Gera LMR more attractive, which is also demanded, as our survey data among the resident population shows and is necessary to stop the exodus and the associated competence deficit. However, the infrastructural upgrading of the LMR will probably only very slowly change the reputation, the narrative about a region and also the self-confidence of the residents. In our opinion, more needs to be done on this point. The interviews made clear what positive effects and important moments of success so-called lighthouse projects such as a regional garden show have. This would also help the local population to feel that they are seen, noticed and, above all, taken seriously by politicians (against the feeling of political neglect). Selective reputation campaigns could have an additional effect.

Secondly, we have shown that the feeling of being left behind in the Gera LMR is largely based on upheavals and events that took place a long time ago. Although the living situation is much better today and the economic development of the region is more dynamic than in many other regions of Germany, the residents seem to be trapped in their old ways of thinking. The perceived stigmatization, the inconsistent reputation of the region, the selective perception of the population and a high pressure to adapt to common beliefs are partly responsible for the maintenance of these beliefs and attitudes. It is very difficult to change regional identity and opinions. In the region, support programs such as "Live Democracy!" , which have goals such as strengthening democratic participation and civil society conflict regulation, promoting diversity and respect, recognizing diversity and working against ideologies of inequality and preventing extremism. However, the many political measures that have improved the situation in the region appear to be too small-scale and too inconspicuous to be widely recognized by the public. In addition, the measures mentioned by the experts are not primarily aimed at the opinion-forming processes. One solution could be to develop measures aimed in particular at breaking down old thought patterns and convictions in these regions. There is probably no general one-size-fits-all solution here. One possibility could be to frame the reputation of the region more stringently, so that a new reputation of the region can replace the historical reputation.

Thirdly, we highlighted in the results that the people in the region also suffer from a lack of autonomy. This is reflected on the one hand by the still poorer economic indicators and the resulting lower opportunities in the region and on the other hand by the loss of skills due to the departure of well-educated people. In other words, the current measures and components, which appear to have an effect on economic dynamics, should remain in place but possibly be changed so that the region has more co-determination (autonomy). Funding programs are nowadays designed in such a way that they are dependent on ideas from the applicant regions; the region therefore decides autonomously within the framework of the funding programs. In our opinion, however, these opportunities for the region are not sufficiently recognized at the individual level, as the exact design of the funding measures and the opportunities they offer often remain opaque to the population.

With all the proposals and measures designed, it is immensely important that they are coordinated with the Gera LMR and its interests in a participatory manner so that the region and its residents have the feeling of being able to make their own decisions; the feeling of being controlled by others should be avoided (sense of autonomy).

5 Conclusion

The concept of left behind places is complex and multidimensional. It includes economic factors, demographic aspects, infrastructure and connectivity criteria, social factors and political aspects. Hertrich and Brenner (2024) expanded the concept to include psychological aspects

and a focus on the feeling of being left behind. This paper analyzes the interaction of the individual factors of the concept in detail in a case study on LMR Gera, thus contributing to a deeper understanding of the processes in left behind places. With the help of survey data and expert interviews from the Gera LMR, we identify which mechanisms are responsible for the feeling of left behind.

We note that the Gera LMR is developing more dynamically than the national average in some characteristics. This does not correspond to the perception of people inside and outside the region. Our analysis leads us to the conclusion that the measures and developments in the LMR to date have had little effect on left behind sentiment due to the strong influence of historical events on opinion formation. This supports the view that the dynamics of opinion formation play a major role in left behind places. The analysis of policy measures shows that this aspect has not been considered in political measures to date.

We therefore argue for a region-specific support program that is explicitly tailored to decoupled and left behind areas that have populist electoral tendencies. Such a program would have to be designed in such a way that it is reputation-forming externally and identity-creating internally, offers the regions sufficient opportunities to adapt it to their own wishes and needs (autonomy) and, above all, implements measures that break up strongly anchored convictions from the past. In any case, the establishment of the Federal Garden Show in the Gera LMR has shown what a positive impression a single measure can make.

The results of this case study are relevant insofar as it can be assumed that the mechanisms described are likely to play an important role in many other regions that are in a similar situation. Especially considering the current political situation in many regions of Germany and other countries as described in the introduction, policy makers are under increased pressure to find an answer to and for left behind places.

Conflicts of Interest

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the result.

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