Implementing youth-oriented policies: A remedy for depopulation in rural regions?

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Abstract

The depopulation of rural areas has received increasing attention in recent years, both in scientific discourses and in policy-making. One main factor contributing to this rural shrinkage is the out-migration of the rural population. In particular, young and well-educated people have been leaving rural areas and moving to urban agglomerations. While the drivers as well as the consequences of out-migration have been well researched, less is known about measures to counteract youth outmigration as one of the main drivers of depopulation. Based on a comparative case study conducted in four rural regions affected by youth out-migration in Austria and Germany, this paper discusses policy measures that are specifically targeted at influencing young people's migration aspirations. In addition, the effects of these measures on rural youth migration are analysed. After implementing measures that take the needs of young people into consideration, all four case study regions started to experience a decrease in their negative youth migration balance. This was mainly due to an increase in in-migration, while youth out-migration rates remained stable. However, these developments follow the general trend of rural youth migration in Austria and Germany in recent years. Thus, more research is needed to evaluate the actual impact of youth-oriented measures. This paper introduces the "youth-oriented regional development" approach, and highlights perspectives for future research on policies aimed at mitigating the challenges facing rural regions that are experiencing depopulation.

Keywords: rural areas; depopulation; youth migration; regional development; rural policy; research perspectives

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1 Introduction

In recent years, the depopulation of rural regions has received increasing attention in scientific discourses and in policy-making. In general, rural depopulation is caused by a mix of decreasing fertility rates and high rates of out-migration. As it is mainly young people who are leaving rural areas to pursue education, work or entertainment opportunities, the demographic decline in these areas is closely linked to the ageing of the population. These two demographic processes can, in turn, lead to a self-reinforcing process of negative cumulative causation (Myrdal, 1957).

Today, this process of negative cumulative causation is specifically addressed by scientific discourses on urban (Bontje and Musterd, 2012; Haase et al., 2014; Wiechmann and Pallagst, 2012) and rural shrinkage (Galjaard et al., 2012; Haartsen and Venhorst, 2010; Hospers and Syssner, 2018), as well as on peripheralisation (Kühn, 2015; Kühn and Weck, 2012; Lang et al., 2022; Leibert and Golinski, 2016). Rural shrinkage is strongly linked to the out-migration of young people. While young people with lower education and qualification levels tend to move shorter distances and often stay within or close to their region of origin, young people with higher education and qualification levels generally move longer distances. This brain drain can have negative effects on a region's economic output, resulting in a decline in the quality of life, which may, in turn, lead to further out-migration (Elshof et al., 2014; Küpper et al., 2018). At the same time, depopulation and its negative effects can have severe consequences for municipal budgets that rely on demographic and economic development.

While the scientific discourse on urban and rural shrinkage mainly points to the interdependencies between demographic and economic development, the discourse on peripheralisation applies a more nuanced perspective to the (re)production of peripheries, going beyond the traditional understanding of the meanings of periphery and peripherality (Leibert and Golinski, 2016). According to the concept of peripheralisation, peripheries are social constructs – not geographic facts – that are produced through demographic, political and discursive processes (Bernt and Liebmann, 2013). As the starting point of the peripheralisation process, the outmigration of well-educated young adults is seen as evidence of the deficits of the regional education system and labour market, but also as a threat to the innovative potential of the affected regions. Hence, the future of rural regions has become a "demographic destiny" (Leibert and Golinski, 2016, p. 256).

1.1 Policy responses to population decline

To secure the sustainability of the affected regions, policy-makers in several countries have implemented strategies for adapting to or reversing the trend of population decline (Haartsen and Venhorst, 2010; Heeringa, 2020; Küpper, 2010; Meijer and Syssner, 2017; Syssner, 2016). In general, the scientific literature has identified four options for dealing with shrinkage: (1) trivialising the numbers, (2) counteracting

decline, (3) adapting to decline or (4) utilising shrinkage as an opportunity (Hospers and Reverda, 2015). While (1) and (2) are usually seen as the least promising strategies from a scientific perspective, they continue to be widely used by local and regional governments (Heeringa, 2020; Küpper, 2010; Syssner and Meijer, 2020). According to Syssner and Meijer (2020), one potential explanation for this insistence on growth-oriented policies is that many governments have spent years investing in a growth rhetoric. On the one hand, giving up the goal of counteracting decline and restoring population growth may signal governance failure. On the other hand, following a policy that aims at adapting to population decline by resizing public infrastructures in line with declining population densities can lead to a loss of quality of life for those "left behind", and limit the potentialities of the affected regions. A policy that simply focuses on resizing public infrastructures can fuel feelings of despair, resulting in discontent with political leadership and revenge by the "places that don't matter" at the ballot box (Rodríguez-Pose, 2018).

Thus, in recent years, scholars have discussed positive perspectives for dealing with population decline. Such visions can be subsumed under the label of "smart shrinking/shrinkage" or "smart decline" (Haartsen and Venhorst, 2010; Hollander and Németh, 2011; Peters et al., 2018). Here, population decline is seen as providing momentum for transformation – that is, as offering an opportunity to do things differently (Haartsen and Venhorst, 2010). Following the approach of smart shrinkage, effective measures for preventing processes of peripheralisation in rural regions that are experiencing depopulation must include policies and planning for growth as well as policies and planning for adaptation. Furthermore, such measures must position planning in areas of depopulation as an enabler of, rather than as a barrier to, economic and social development (Syssner and Meijer, 2020).

The integration of young people's needs into regional depopulation policy-making can thus be seen as an opportunity for doing things differently, as it implies that the needs of young people will receive greater attention in rural policy-making, and hence that the mode of policy-making itself will start to change. Following the logic of smart shrinkage, the inclusion of young people and their needs in rural policy-making could help to transform the social and institutional characteristics of rural regions. Integrating the needs of young people into policy-making could support the emergence of a more qualitative, and thus wellbeing-focused, regional development agenda of the kind that regional science and planning scholars have been strongly advocating in recent years (Pike et al., 2007; Shucksmith, 2018).

As youth out-migration is a key factor in population decline, policy-makers at different governance levels (from local to national) and in different European countries have, in recent years, implemented strategies specifically targeted at influencing young people's migration aspirations and reversing the process of rural-to-urban migration. Both out- and return migration and their consequences have been well researched since the early 2000s (e.g. Farrugia, 2020; Haartsen and Thissen, 2014; Ní Laoire, 2007; Pedersen and Gram, 2018; Rérat, 2014; Stockdale, 2004). As was mentioned above, there is a growing body of literature on the broader policy options for regions experiencing depopulation. However, less is known about

measures aimed at counteracting the out-migration of young people as a particularly important driver of depopulation.

1.2 The need for a youth-oriented approach

Against this background, the aim of the present paper is to offer a framework for the analysis of policy measures that are specifically targeted at influencing young people's migration decisions. The research questions guiding this analysis are as follows: How can the needs of mobile young people be integrated into rural policymaking? And, how can youth-oriented policies affect rural youth migration?

These two research questions will be answered through a comparative case study conducted in four rural regions in Austria and Germany. In its approach, the paper contributes to the scientific discourse on strategies for mitigating the challenges associated with population decline. It also examines policy options specifically targeted at addressing the needs of the population group with the highest mobility. Based on previous studies on strategies for regions experiencing depopulation, this paper seeks to shed light on youth migration as a central entry point for both policy research and design.

The remainder of this paper is structured as follows: Section 2 introduces the theoretical foundation for a regional development agenda that focuses on the needs of a young, mobile target group. Evidence on drivers of youth out- and return migration serves as the foundation for the concept of "youth-oriented regional development", which is presented in Subsection 2.2. Section 3 outlines the methodological approach followed in this study. Section 4 discusses the main findings on the integration of the needs of mobile young people into policy-making, and also addresses the potential impact of youth-oriented regional development on rural youth migration. The concluding chapter summarises these findings and highlights perspectives for future research.

2 Drivers of youth out-migration and policy options for reversing it

One of the main drivers of depopulation in rural areas is the out-migration of young people. Thus, integrating the needs of mobile young people into policy-making can be seen as an opportunity for achieving local and regional development goals in places where depopulation is occurring. While several European countries have implemented youth strategies in recent years to support the participation of young people in public life and policy-making, these strategies have often been place-blind. At the same time, policies that focus on territorial development often neglect the interests of the region's young residents. According to Faulde et al. (2020), a "real integrated approach" that combines youth policies with regional policies is rarely applied in practice.

Hence, the integration of youth policies into rural policies can be seen as a promising yet currently underexploited way to initiate a people-sensitive and a place-based approach to regional development that can serve as a foundation for the formulation of policies in rural regions affected by youth out-migration. By integrating the needs of mobile young people into measures that support regional development in rural areas, a youth-oriented regional development approach can be formulated, and a "real integrated approach" (Faulde et al., 2020) can become reality.

However, before this strategy can be implemented, an honest diagnosis of the problems in rural areas affected by youth out-migration is needed. Following Syssner and Meijer (2020, p. 165), "to plan and innovate in rural, depopulating areas, a clear diagnosis of its challenges, limitations, strengths and assets is indispensable". Thus, the starting point for the formulation of a youth-oriented approach to policy-making in regions experiencing depopulation must be to gain a better understanding of the characteristics and drivers of youth out-migration and return migration.

2.1 Characteristics and drivers of youth migration

Migration is an age-selective process that strongly correlates with life course transitions. As the most relevant transition is that from youth to adulthood, the propensity to migrate typically peaks at young adult ages. Research on internal migration, defined as "long-distance changes of address within national borders" (Mulder, 2018, p. 1152), indicates that two-thirds of such moves are completed by the age of 35 (Bernard, 2017). This pattern also applies to Austria and Germany: between 2010 and 2020, two out of three internal migrants in Austria and Germany were aged 35 years or younger (Statistics Austria, 2022; Statistical offices of the Länder, 2022).

In the scientific literature, the residential mobility of people between the ages of 16 and 35 years is usually defined as "youth migration" or "youth mobility" (King and Williams, 2018). In the scientific discourse, the definition of "youth" is based on a relational approach to the life course: this stage is placed between the stages of "childhood" and "adulthood", with "childhood" ending when an individual reaches sexual maturity and "adulthood" starting when a person becomes economically

¹ Both terms, "migration" and "mobility", today appear in the scientific literature on young people's residential relocations (e.g., Farrugia, 2016; Mulder et al., 2020b). They are often used as synonyms. King and Williams (2018), referring to Cohen and Sirkeci (2011), highlight two advantages of using "mobility" rather than "migration": (i) that "mobility" accommodates types of movement beyond the somewhat limiting UN definition of migration; and (ii) that "mobility" is a more dynamic term "that captures the changing, fluid nature of the migratory phenomenon in the contemporary world" (King and Williams, 2018, p. 3). While I acknowledge this perspective on prioritising the term "mobility" over "migration", I will use the two terms synonymously in this paper.

independent and socially settled (Faßmann et al., 2018, p. 15). This division of the life course into life stages is, above all, socially constructed. It is based on various features of a society, such as its culture, social class, or lifestyle groups (King and Williams, 2018). Hence, there is no uniform definition of this age group. Indeed, different international organisations, such as the UN, the OECD and the EU, have different delineations of this specific life stage. For example, the youth life stage may be broadly defined as covering ages 15 to 29 years (EU) or ages 15 to 34 years (OECD). From the perspective of developmental psychology, this life stage includes the phases of early adolescence (12 to 18 years), later adolescence (18 to 24 years) and early adulthood (24 to 34 years) (see Faßmann et al., 2018). While people in the youth life stage have the highest levels of residential mobility, the propensity to migrate decreases as people enter the life stage of adulthood by starting a family. In summary, residential mobility is triggered by certain life course events, such as the completion of higher education, a job change, union formation or the birth of a child (Feijten et al., 2008) – i.e., by events that usually mark the transition from youth to adulthood.

Apart from life course events, migration is linked to lifestyle as well as to social and economic resources. Academically oriented young people in particular are often forced to leave their rural places of origin due to the structural constraints implicit in acquiring higher education (Pedersen and Gram, 2018). Studies on migration selectivity have highlighted that well-educated young adults from middle-and upper-class households have a particularly high propensity for out-migration (Elshof et al., 2014; Rye, 2011; Scheibelhofer, 2018). Moreover, young rural-to-urban migrants tend to have a stronger orientation towards urban lifestyles characterised by cosmopolitanism and individualisation (Farrugia, 2016; Pedersen and Gram, 2018). Farrugia (2016) even described a "mobility imperative", whereby rural youth must be mobile "in order to access the resources they need to navigate biographies and construct identities" (Farrugia, 2016, p. 837). Thus, in the perceptions of others, mobility becomes obligatory for the identity formation of a successful adult (Mærsk et al., 2023), while staying in a rural area is associated with "being not clever enough" (Pedersen and Gram, 2018).

Overall, youth migration should be viewed as a multidimensional and complex process in which life course events as well as structural and socio-economic factors must be taken into account. While research on internal migration within western countries has generally identified work and education as the main drivers of internal migration, more recent studies have also highlighted the importance of cultural amenities as well as social ties, especially those to family members (Bijker and Haartsen, 2012; Mulder, 2018). Furthermore, people's norms and values – e.g., searching for an open and tolerant living environment – are potential drivers of migration (Florida, 2004; Fratsea, 2019).

Education- and work-related internal migration is often triggered by regional disparities. Remote areas are especially likely to lack opportunities for pursuing higher education or employment in the knowledge economy. Thus, attaining higher education and following certain career paths may require spatial mobility. Leavers

tend to have a stronger orientation towards individualisation and self-realisation than stayers. In contrast, stayers usually have stronger ties to their family and to other social networks in their region of origin (Dax and Machold, 2002; McLaughlin et al., 2014).

Nevertheless, leaving one's region for education- and career-related reasons is not necessarily a unidirectional decision. In different life stages, people may prefer different residential locations. While young people who are transitioning from school to university or from education to employment often move from rural to urban areas, people who have a family may prefer to live in suburban or rural areas. According to the "youthification hypothesis" (Moos, 2014; Moos et al., 2019), young people prefer to live in "amenity-rich, often already highly gentrified, downtowns 'successful' in the knowledge economy" (Moos et al., 2019, p. 224). Parents, by contrast, often seek out a high-quality environment for their children that offers safety and green surroundings (Kim et al., 2005). In their study on counter-urbanisation movements to peripheral areas in Denmark, Hansen and Aner (2017) found that people with children make up the largest share of all highly educated in-migrants to these areas. Furthermore, studies on rural-to-urban migration have highlighted the option of return migration, especially in the family formation phase (Haartsen and Thissen, 2014; Mulder et al., 2020a; Ní Laoire, 2007; Rérat, 2014). While family-related return migration is often linked to the image of a "country childhood idyll" (Jones, 1997; cited after Ní Laoire, 2007, p. 338), it is also driven by the desire for family support and for children to develop emotional ties to their relatives (Grimsrud, 2011; Mulder, 2018; Ní Laoire, 2007). Therefore, return migration can be seen as an opportunity for rural regions affected by depopulation. As temporal out-migration usually has a positive impact on individual development, rural regions can benefit from knowledge transfer and the inflow of human capital through return migration. Thus, the over-arching problem for rural regions experiencing depopulation is not out-migration, but the small numbers of people who return (Stockdale, 2004).

It is important to note that recent trends in youth migration were disrupted in 2020 and 2021 due to the Covid-19 pandemic. In an analysis of internal migration in Germany, Stawarz et al. (2022) found that the mobility of young adults declined in 2020, while urban-rural moves, mainly of families, remained stable. Another study on the impact of the Covid-19 pandemic on internal migration in Norway (Tønnessen, 2021) found record-high levels of out-migration from Oslo in 2020, coupled with particularly high levels of internal migration to other parts of Norway. While this wave out-migration from Oslo was mainly driven by families, the number of people in their sixties who moved out of Oslo also increased. On the other hand, out-migration from Oslo did not increase in 2020 among people under age 25. In the German study, Stawarz et al. (2022) expected rural-to-urban moves to return to previous levels after the Covid-19 pandemic ended. Similar effects are expected for other industrialised countries. Consequently, youth out-migration from rural areas will remain a challenge for the affected regions, even if the long-term consequences of the Covid-19 pandemic have yet to be fully assessed.

2.2 Policy options for steering youth migration: Towards a youth-oriented approach to regional development

In scientific debates about rural out-migration, it has been argued that young people should not be restrained from realising their desire for spatial mobility (Satsangi and Gkartzios, 2019; Shucksmith, 2010). Instead, a positive approach to migration would favour supporting return migration over preventing out-migration.

For many young people, a (potential) return is already integrated into their decision to temporarily leave their home region. In their study on return migration to the Northeast-Polder in the northern Netherlands, Haartsen and Thissen (2014) emphasised that many young migrants have mentally never left their home region. Decisions to leave could be intertwined with future plans to return to the region (Haartsen and Thissen, 2014). Furthermore, innovations in communications and transport technologies now allow individuals to maintain close ties to their place of origin. A study on migration and place attachment in rural America by Barcus and Brunn (2010) highlighted the relevance of communication technologies. The authors observed that people's ties to their place of origin can be characterised through the concept of "place elasticity", in which portability through mass communication is a central element. It is often difficult to draw clear lines between staying, leaving and returning because they intersect in the realities of young people's mobility decisions.

In most cases, voluntary migration is associated with a decision-making process that can take several years. Hence, policies should seek to actively influence this process. By emphasising the manifold opportunities in the region of origin and by investing in the creation of a regional identity, an attachment to the place of origin can be established that supports the decision to remain in or to return to the region of origin (Barcus and Brunn, 2010; Feijten et al., 2008). Studies on youth mobility have identified family and friendship ties, family roots and memories, residential familiarisation, and physical and natural qualities as relevant factors that support place attachment (Demi et al., 2009; Haartsen and Thissen, 2014; Rérat, 2014; Seyfrit et al., 2010; Stockdale et al., 2018).

Steering youth migration is a difficult task due to the complexity of the underlying motives of potential migrants. Nonetheless, it is possible to create incentives (Fidlschuster et al., 2016) for staying and returning that are tailored to the diverse needs of mobile young people. These incentives should consider the variety of needs young people have, and recognise the multidimensionality and interdependence of the operating drivers. To attract highly skilled immigrants to peripheral areas, Hansen and Aner (2017, p. 10) suggested implementing "a broad strategy that focuses on job opportunities as well as physical, recreational, cultural, and social aspects". Thus, policies aimed at influencing the mobility decisions of young people should include a bundle of measures that integrate hard, soft and social locational factors.

In the following, this contribution proposes "youth-oriented regional development" (Schorn, 2022) as an approach to rural policy-making in regions experiencing

Table 1: The youth-oriented regional development approach

Dimension	Potential measures	
Hard		
Jobs	Focus on jobs in the knowledge economy	
	Support entrepreneurs and start-ups	
	Support work-life balance	
	Support job-family compatibility	
	Support gender sensitivity in companies	
Education	Create/ensure a diversity of opportunities for (higher) education	
	Create/ensure a range of further training opportunities	
Transport	Develop alternative mobility concepts	
1	Secure public transport to improve the accessibility of work and leisure infrastructure	
	Ensure/expand the availability of public transport	
Housing	Ensure the affordability of housing	
	Support diverse housing options	
	Provide assistance for finding appropriate housing	
Soft		
Culture and leisure activities	Consider alternative lifestyles	
Culture and leisure activities	Create/secure leisure activities beyond clubs and associations	
	Ensure the openness and accessibility of leisure activities	
Social	uctivities	
Emotional ties	Implement location marketing measures to support emotional ties	
	Involve social networks as "intermediaries" of	
	communicative measures	
	Engage role models as authentic representatives of staying/returning	
Participation	Provide information about regional participation projects	
	Include diverse target groups in regional development processes	
	Apply contemporary forms of participation	
	Implement the results from participation processes	
Culture of openness	Show an openness to new ideas	
careare or openiness	Support social innovation	
	Be tolerant of diverse lifestyles	

Source: Author's own elaboration based on the scientific literature.

depopulation (see Table 1). Based on the literature on youth migration and governance in rural regions affected by depopulation, "youth-oriented regional development" is understood as an approach that follows the principles of integrated development. It acknowledges the diverse needs of mobile young people and the fluid forms of mobility. Furthermore, it goes beyond visions of a "rural idyll" by taking structural as well as institutional dimensions of rural development into account, and it supports the sustainable development of regions experiencing depopulation. The proposed approach includes eight dimensions that are derived from scientific discourses on youth migration/mobility and its underlying drivers. It covers hard, soft and social locational factors.

Building on the classification by Hooijen et al. (2017), hard locational factors include traditional economic aspects such as jobs. In traditional migration theories, the availability of jobs is usually considered the most relevant hard locational factor. Nevertheless, recent studies on gender-selective rural-to-urban migration have also highlighted the need for gender sensitivity in rural labour markets, as well as for support infrastructures that enable parents to achieve job-family compatibility and a better work-life balance in general (Bock, 2015; Leibert, 2016; Oedl-Wieser, 2016; Wiest and Leibert, 2013). Other hard locational factors that may be relevant for young adults include access to higher and further education, public transport and high-quality housing.

As soft locational factors, Hooijen et al. (2017) have observed that cultural and recreational amenities play a central role in community satisfaction and place attachment. In rural areas, the variety and the accessibility of leisure and cultural activities are especially important. For example, leisure activities should be available for people in different life situations, and should include leisure opportunities that can be utilised without having to be a member of an association.

According to Hooijen et al. (2017), social factors constitute a third category of locational factors that are relevant for determining young people's migration behaviour. The authors observed that social networks are especially important for the decision to migrate. While the capacity of policy measures to influence this factor is rather limited, studies on return migration have emphasised that social networks, such as family and friends, could be mobilised as "intermediaries" for the home region (Nadler, 2016; Wiest and Leibert, 2013). Furthermore, rural areas can invest in communication measures, such as location marketing that promotes positive perceptions of the area and regional identity formation among (potential) migrants, and that supports the maintenance of emotional ties. For example, successful returnees could promote the advantages of returning to their place of origin (Nadler, 2016). Moreover, participatory planning can be used to support spatial ties and the formation of a regional identity. Policies specifically targeted at the needs of young people could be implemented by encouraging their active participation in rural policy-making. Hence, mobile young people could be invited to participate in the formulation of innovative policy approaches in depopulating rural regions. However, for such a strategy to succeed, rural policy-makers and other relevant stakeholders would have to be open to integrating young people into policy-making processes, and

members of the young target groups would have to demonstrate that they have the abilities and capabilities needed for participation. The involvement of young people in policy-making may be limited by a range of factors, including time constraints due to other obligations, a lack of communication skills, and a lack of interest in participating. Thus, we need to find suitable modes for participation that consider how young people in the early 21st century actually want to be included in policy-making (Kamuf and Weck, 2022; Suppers, 2022). Furthermore, rural communities must display an overall "culture of openness" towards new ideas and a tolerance of diverse lifestyles to attract a target group whose lifestyle is characterised by cosmopolitanism and individualisation. This "culture of openness" is especially important for the institutional dimension of rural policy-making.

In summary, integrating the needs of mobile young people into rural policies can result in a youth-oriented regional development approach that applies both a people-sensitive and a place-based perspective to policy innovation in depopulating rural areas. However, given the multidimensionality of this approach, realising it is likely to be a challenge. How youth-oriented regional development can be realised in practice, and how this approach can help to steer rural youth migration, will be analysed in Section 4, following a presentation of the methodological approach of this paper.

3 Methods

We will seek to answer the two research questions through a comparative case study conducted in four rural regions in Austria and Germany that have been affected by youth out-migration since the early 2000s. These regions have implemented measures that follow the logic of youth-oriented regional development since the early 2010s, or even earlier. The case study approach helps researchers to gain a deeper understanding of a research problem (Stake, 1995), which in this paper is represented by the policy measures implemented on a regional scale to counteract youth out-migration and its negative consequences. Overall, the case study presented in this study follows an explorative and critical pragmatist approach (Forester, 2013; Wagenaar, 2011) that prioritises the principle of "learning from practice". Hence, this study sheds light on policy capacities in rural regions experiencing population decline, and opens up new research perspectives on measures aimed at mitigating the challenges associated with depopulation. In the following sections, we will present the selection criteria for the case study regions, as well as the strategies used for collecting and analysing data.

3.1 Case study selection

The analysis focuses on measures that have been implemented and actions that have been taken at the regional level. The case study regions have been consciously

selected through demographic data analysis, as well as through a thematic analysis of planning documents and projects. The selection was based on the following criteria:

- a peripheral location, with the majority of the case study area displaying a low level of accessibility to urban agglomerations;
- a negative internal youth migration rate since the early 2000s;
- the existence of a regional development agency or another key player responsible for policy-making on an inter-municipal level; and
- the implementation of regional measures to mitigate the outflow of young people in the 2010s.

Based on the selection approach of "purposeful maximal sampling" (Creswell, 2013), the Hochsauerlandkreis (North Rhine-Westphalia/Germany), the district of Freyung-Grafenau (Bavaria/Germany), the district of Pinzgau (Salzburg/Austria) and the region of Obersteiermark West (Styria/Austria) were selected for the analysis (see Figure 1).

While the selected regions share a history of ongoing youth out-migration, they have different geographical locations and economic situations. The Hochsauerland-kreis is characterised by its proximity to the metropolitan region of the Ruhrgebiet to the west and by its more remote areas to the south and east. It enjoys a generally favourable economic situation due to the presence in the district of highly specialised small- and medium-sized enterprises in the field of manufacturing. The district of Freyung-Grafenau is characterised by its peripheral location bordering the Czech Republic and Austria and its transforming economy. It is dominated by the glass manufacturing, construction and service industries. The Pinzgau is an Alpine region with a strong tourism industry, while the Obersteiermark region displays a more dispersed pattern. The western part of Obersteiermark features an Alpine landscape dominated by agriculture and forestry, while the eastern part of the region is more industrialised.

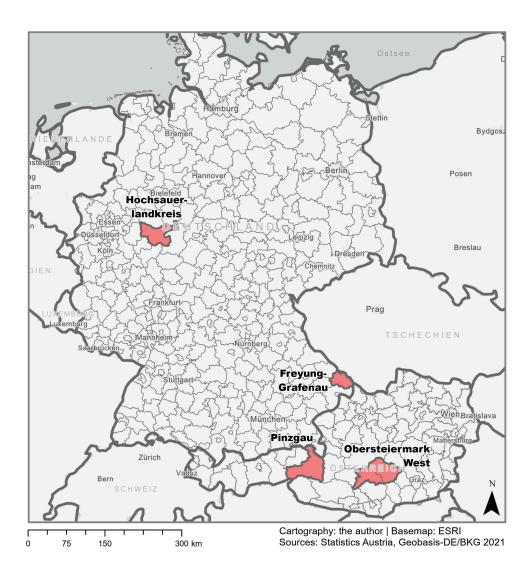
In each of these regions, the composition of the various stakeholders involved in the realisation of youth-oriented regional development is different. The stakeholders come from a range of policy fields, including rural development, economic development, education and social work. Different funding schemes support the implementation of policy measures that focus on the needs of young people.

Only measures that clearly address young people were included in the analysis. In each case study region, we identified one key project that most clearly reflects the youth-oriented regional development approach (see Table 2). Based on these key projects, we traced further regional measures that address young people and their needs, and that were implemented between the late 2000s and 2019.

3.2 Data collection and analysis

We have collected qualitative as well as quantitative data for this study, interviewing a total of 37 stakeholders for the qualitative research, with eight to 10 stakeholders

Figure 1: Location of the case study regions



per case study region (see Table A.1 in the Appendix). All interviewees possessed expert knowledge in the field of rural development or youth work. Each interviewee was involved in the design and/or implementation of youth-oriented measures in the case study region or in the funding of the implemented measures, or held a professional position in youth work. The interviews took place between March and June 2019. Additionally, 44 documents were collected, giving priority to documents that impacted the design of the regional measures in substantial and/or procedural

Case study region	Key project	Focus of key project	Founding year
Freyung-Grafenau	Mehr als du erwartest	Regional identity building	2016
Hochsauerlandkreis	Heimvorteil HSK	Supporting return migration	2015
Pinzgau	Komm-Bleib	Supporting the decision to stay or to immigrate	2012
Obersteiermark West	Regionales Jugend- management	Raising awareness of young people's needs	2012

Table 2: Key projects involving youth-oriented regional development in the case study regions

Source: Author's own elaboration (based on expert interviews and document analysis).

terms. The regional development strategy, as the central strategic document for collaboration at the regional level, was included in all four case study regions. The quantitative data for the demographic analysis came from the statistical databases of Austria (STATcube) and Germany (Regionaldatenbank Deutschland).

Qualitative data were analysed using the method of qualitative content analysis (Zhang and Wildemuth, 2009), and applying both inductive and deductive coding. Deductive coding followed the approach of youth-oriented regional development as presented in Table 1. Through inductive coding, the theoretical approach of youth-oriented regional development can be juxtaposed with the practice of youth-oriented policy-making.

Furthermore, we described the trends and trend breaks in the internal migration rates of young people (aged 18 to 29 years) for the 2005–2020 period in order to study the potential effects of the implemented measures on youth migration. To increase the validity of the findings, we included the internal migration rates of the 30- to 49-year-olds for the same period as an indicator of family-oriented migration. The age thresholds for youth and family migration were based on the availability of data in the Regionaldatenbank Deutschland. The internal migration rates of the 18- to 29-year-olds and of the 30-to-49-year olds were later compared to the national averages for rural regions. Regions were categorised as "rural" based on the urban-rural typology provided by Eurostat (Eurostat, 2021).²

² According to the urban-rural typology of Eurostat, the Hochsauerlandkreis is categorised as an "intermediate" region. However, as the district has a dispersed regional structure with low density and low connectivity, especially in its eastern part, it was included as "rural area" in the case study selection.

4 Youth-oriented policies in practice

This study is based on the hypothesis that youth-oriented policies can serve as a remedy for rural regions affected by youth out-migration. Youth-oriented regional development is an innovative approach to rural policy-making that scholars researching depopulation and youth out-migration often call for. While combining a people-sensitive perspective with a place-based perspective is an effective approach from a scientific standpoint, it is also a demanding task due to the different policy-making responsibilities involved. Thus, the question for policy-makers in rural areas that are undergoing depopulation is how the needs of mobile young people can be integrated into the practices of rural policy-making. Furthermore, it is important to consider how youth-oriented policies affect rural youth migration.

4.1 Approaches to youth-oriented regional development

All four case study regions have implemented measures to mitigate the negative effects of youth out-migration on a regional scale since the late 2000s, and especially since the early to mid-2010s. Depending on the regional context as well as on the stakeholders involved in the policy-making process, different measures have been implemented that together contribute to the realisation of a youth-oriented regional development approach. Economic actors play an important role in all four case study regions. These economic actors are often focused on strengthening regional competitiveness. On the other hand, in those regions where the stakeholders involved in the process of youth-oriented regional development have recognised the relevance of qualitative development (Hochsauerlandkreis), or where social and civil society actors are engaged in the process of rural policy-making (Obersteiermark West and Pinzgau), there is an increasing focus on wellbeing-related measures. Overall, the variety of measures implemented in the four case study regions clearly shows the place-based nature of youth-oriented regional development.

Nevertheless, the comparative case study also reveals the similarities of youth-oriented regional development strategies in practice (see Table 3). All four regions share a focus on the hard locational factor of "jobs", as well as on the social locational factor of "emotional ties". The realisation of these two dimensions is often interlinked. For example, the variety of career opportunities is highlighted through place-branding activities. A third relevant factor that all case study regions cover in their youth-oriented policy-making practices is the involvement of young people in rural policy-making processes. Hence, young people are seen as relevant stakeholders in youth-oriented development. The realisation of the different dimensions of youth-oriented development in the case study regions will now be presented in greater detail.

4.1.1 "Jobs" as the most dominant dimension

The hard locational factor of "jobs" dominates the regional approaches to youthoriented regional development. In all four case study areas, this is the dimension

Table 3: Realised dimensions of youth-oriented regional development in the four case study regions

Dimensions of youth-oriented regional development	Freyung- Grafenau	Pinzgau	Obersteier- mark West	Hochsauerland- kreis
Jobs				
Education				
Transport				
Housing				
Culture and leisure activities				
Social ties				
Participation				
Culture of openness				
Perspective on mobility	Staying (Returning) (Incoming)	Staying (Returning) Incoming	Staying (Returning)	(Staying) Returning (Incoming)

strong focus
partial focus
no focus

Source: Author's own elaboration.

with the largest number of measures. The relevance of this hard locational factor in the realisation of youth-oriented development can be explained by the discourse about skilled worker shortages, which the economic actors that are involved in rural policy-making have identified as a major driver of regional economic development.

Through regional initiatives, some of which also cover the life stage of childhood, young people are given insight into the different career opportunities in their region of origin. Members of the target group receive information about regional jobs

at job fairs and information events that are organised by regional stakeholders in cooperation with schools. The Hochsauerlandkreis, the district of Freyung-Grafenau and the district of Pinzgau have all implemented regional employment websites that address young people in particular. Furthermore, some of the implemented projects focus on job opportunities for specific highly qualified professionals working in the fields of healthcare (Hochsauerlandkreis and Freyung-Grafenau), tourism (Pinzgau and Hochsauerlandkreis) or technology (Hochsauerlandkreis, Freyung-Grafenau and Obersteiermark West). Alternatively, some projects try to encourage young people who are transitioning from school to work or college/university to participate in vocational training in one of the enterprises in the region. In these initiatives, an apprenticeship is presented as a promising career path relative to enrolling in higher education.

Since the mid-2010s, the opportunities arising through digitalisation as well as remote working have been recognised in some of the case study regions. For example, in the Freyung-Grafenau district, the regional development agency has established a partnership with a spin-off of the University of Applied Sciences Deggendorf (a neighbouring district of Freyung-Grafenau) called the TechnologieCampus Freyung, which provides a digital business incubator as well as co-working spaces. This measure, which is focused on the needs of young people in a knowledge-based society, could help the district attract and retain expertise that is relevant for innovative development. The implementation of co-working spaces in the districts Freyung-Grafenau and Pinzgau in the mid- to late-2010s further indicates a heightened awareness that specific infrastructure and support services are needed to support the new work models of the knowledge-based society.

The analysis also reveals that sensitivity to work-family compatibility has been increasing. Different actors have focused on creating an institutional and infrastructural environment that supports work-family compatibility. For instance, some actors have campaigned for awareness within municipalities and in companies, or have implemented pilot childcare projects (Obersteiermark West, Pinzgau and Hochsauerlandkreis). Thus, the measures realised in the "job" dimension incorporate both a quantitative, growth-oriented approach and a qualitative, wellbeing-oriented approach to regional development.

4.1.2 Investment in emotional ties through communication measures

Second only to the dimension of "jobs", the dimension of "emotional ties" is the most relevant dimension covered by the practices of youth-oriented regional development in the four case study regions. In the practices of the regions, the "emotional ties" dimension is strongly linked to the "jobs" dimension. The communication measures emphasise career opportunities as well as opportunities for self-realisation and individual wellbeing. The relevance of the link between these two dimensions is highlighted by the fact that three of the four key projects

identified in the case study regions (Table 2) cover both dimensions (Hochsauerlandkreis, Freyung-Grafenau, Pinzgau) and use place branding as a central instrument.

All four case study regions have established place-branding strategies since the early 2010s, some of which communicate messages that present visions of a "rural idyll". These measures address (potential) stayers and returnees in particular. Regional stakeholders have set up websites to distribute their messages to the target groups. Furthermore, they have created accounts on social media platforms such as Facebook or Instagram to engage with young people. Information on job opportunities, events or services that meet the lifestyle needs of young people in the respective region are presented on these platforms. In the place-branding strategies of the Hochsauerlandkreis and the Freyung-Grafenau district, examples are presented of individuals who pursued successful career paths in the region or who undertook a successful return that resulted in a better work-life balance. Overall, the aim of the place-branding measures is to reframe the perception of the region as a place where "nothing happens" to a place that has "a lot to offer for different needs". Through the communication measures, the strengths and opportunities of the region are emphasised, and efforts are made to create a positive regional identity. Hence, through their place-branding strategies, these regions that are experiencing depopulation are attempting to counteract the image that often dominates young people's narratives about rural places: namely, that these are "dull places" (Gunko and Medvedev, 2018; Pedersen and Gram, 2018). Thus, with these strategies, the regions are addressing the discursive processes that drive peripheralisation.

However, such communication measures should not only promote the region and its locational factors, but should also help residents maintain social ties and foster feelings of social connection to the region of origin – even for those who have temporarily left it. Here, the social media platforms are of central relevance. The regional profiles on Facebook, Instagram, and XING (Hochsauerlandkreis) or websites specifically created for this purpose (Obersteiermark West) enable an exchange between young stayers and leavers, but also allow for networking with potential employers. This exchange furthers the maintenance of social or professional networks with the region of origin.

As well as through social networks, social ties can be created through physical meetings. In the Hochsauerlandkreis, regular meetings with newcomers and returnees were organised before the start of the Covid-19 pandemic. The manager of the Heimvorteil HSK regional initiative in the Hochsauerlandkreis also organised regular gatherings and events for (potential) returnees around the Christmas season, when many young people who had left temporarily return to the area to visit their families. These events are aimed at encouraging potential returnees to reconsider their location decision through creating an emotional attachment to the place of origin.

4.1.3 Youth participation as a means to support place attachment

The third relevant dimension of youth-oriented policy-making that is realised in the regional practices is "youth participation". Through participatory projects, young people were at least occasionally involved in rural policy-making processes throughout the 2010s. In the four case study regions, youth participation is considered a suitable approach for implementing cultural and leisure opportunities tailored to the needs of young people. The participatory approaches the regions have implemented range from formalised participation in the context of children's and youth parliaments or youth forums organised at the local level (Hochsauerlandkreis, Pinzgau) to informal participation through selective and topic-related collaborative planning projects (all four case study regions). Providing information about projects developed by regional stakeholders is an inclusive form of involvement that is frequently practiced in all four case study regions. Information is distributed via the websites of regional initiatives, social media platforms, regional events or regional newspapers. However, providing information about regional projects is also the approach with the lowest levels of participation. In contrast to this basic mode of participation, young people themselves have been encouraged to initiate and implement projects in the Hochsauerlandkreis, the Obersteiermark West region and the Pinzgau district. Thus, in these regions, members of the target group have been empowered to take responsibility for the design of their living environment: i.e., the measures are implemented not just for young people, but also by young people.

In summary, especially in the three case study regions of Hochsauerlandkreis, Pinzgau and Obersteiermark West, a steady inclusion of young people in regional policy-making is a tried and trusted strategy. Through such participatory projects, young people's perspectives and needs are recognised. Thus, participatory projects can create a feeling of "we do matter", especially if the outcomes of participatory projects become reality. This process can, in turn, foster attachment to place.

4.1.4 Realisation of other dimensions depends on problem awareness and political will

In addition to the three dimensions mentioned above, other dimensions of youth-oriented regional development are considered, albeit in different ways. Some of the dimensions are again covered through an integrated approach, as was already observed for the "jobs" and "emotional ties" dimensions. A link to the "jobs" dimension can also be observed in the realisation of the "education" dimension, whereby education and career counselling frequently serve to inform young people about regional career opportunities. At the same time, measures that focus on the creation of higher education and further training opportunities were identified. For example, a college for nursery education was established in the Pinzgau district in 2016 after regional stakeholders had campaigned for it on state level. This measure

was intended not only to provide higher education to young people, but also to help fill a gap in the supply of childcare staff in kindergartens, and to meet the increasing demand for childcare.

Measures that focus on the creation of cultural and leisure infrastructure were found in all four case study regions, with this focus being especially strong in the Hochsauerlandkreis, Pinzgau and Obersteiermark West regions. Youth centres, culture, leisure and sports facilities were built, and the projects were often carried out based on the outcomes of participatory projects.

Measures that cover the "transport" and "housing" dimensions were realised less frequently. One example of a measure that addresses the transport dimension was found in the Obersteiermark West region. Based on a call for projects by the federal state of Styria, a strategy for micro-mobility was developed in 2018. The aim of this strategy was to support the daily mobility of young people by expanding micro public transport systems in the coming years. The dimension of housing has mainly been addressed in the Pinzgau district, where pressure on the housing market has been increasing because of the region's strong tourism sector and the limited availability of land due to its Alpine geography. In recent years, political measures have been implemented to ensure the affordability of housing, especially for young people.

Overall, it can be concluded that the realisation of the "qualitative" dimensions of youth-oriented regional development is above all a matter of problem awareness and political will. When actors identify a problem as being relevant, as has been the case for the "culture and leisure activities" dimension, or when the pressure to address a problem is particularly strong, as has been the case in the Pinzgau district for the "housing" dimension, more qualitative dimensions are covered. Another enabling factor for addressing qualitative factors is the availability of funding schemes with specific aims.

4.1.5 Perspectives on mobility

The analysis identified the different target groups that have been addressed by the youth-oriented regional development measures. Contrary to the claims made in previous scientific research, these measures do not primarily address return migrants, but instead focus on other target groups. This was found to be the case in three of the four case study regions. The main orientation of the practices followed in the Freyung-Grafenau, Pinzgau and Obersteiermark West regions has been towards preventing youth out-migration. In the Hochsauerlandkreis, by contrast, there has been a strong emphasis on enabling return migration. Although the initiatives of the Freyung-Grafenau and Pinzgau districts were originally founded with the intention of promoting return migration, this strategy was abandoned over time, largely because policy-makers discovered that these measures were not particularly efficient. In addition, the regional economies increasingly experienced a need for skilled workers, which was reflected in the discourse on the skilled worker shortage.

Overall, the discourse about the shortage of skilled workers was dominant in the regional approaches. Although qualitative aspects have received increasing attention in the implementation of job-related measures, the needs of the rural economy have remained the central focus of youth-oriented policy-making. The prioritisation of the rural economy can be explained by the dominance of the discourse on the skilled worker shortage, which has often been the driving force behind the implementation of youth-oriented policies in the four case study regions. Hence, a central reason why the regions have introduced youth-oriented measures is that all four regional economies have been affected by a shortage of skilled workers. In an approach that is primarily focused on the needs of the regional economy, convincing young people to stay in the region of origin is preferred over enabling them to return. From an economic standpoint, young people are mainly seen as human capital. Thus, the idea behind these strategies is that the need for skilled workers could (at least partially) be covered by preventing young people from leaving, largely by convincing them that their region of origin offers interesting career options and a high quality of life. Equally, the dominant focus on the hard locational factor of "jobs" can be interpreted as indicating that the actors involved in these strategies see career-oriented considerations as the main drivers of out-migration. Hence, it appears that policy-makers believe that a key solution to mitigating the challenges associated with youth out-migration is highlighting the - often underestimated career opportunities in rural regions.

On the other hand, it must also be recognised that over the long term, a youth-oriented regional development programme can only be realised through collaboration with economic actors. Economic stakeholders have co-financed many of the realised measures. This has been especially true for regions experiencing depopulation, as they often face financial constraints. Through collaborative approaches involving several stakeholders, measures have been implemented that focus on the needs not only of economic actors, but also of young people. The demand for skilled workers has led to an awareness in the case study regions that the perspectives of young people need to be considered in rural policy-making. This understanding has been coupled with a stronger orientation towards wellbeing-oriented regional development.

4.2 Youth-oriented policies and their effects on youth migration

The policy analysis has shown that youth-oriented regional development cannot be promoted through a single measure, but must instead be realised through a diverse approach that integrates different measures. A variety of projects have been implemented in the case study regions since the mid-2000s. Taken together, these projects define youth-oriented regional development practices. Depending on the problem definition and the actor arrangements, different priorities are integrated into the regional strategy. In most of the regions, the implementation of a youth-oriented regional development agenda is a process that has spanned

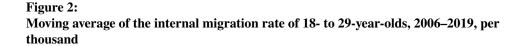
several years. While the first individual measures were implemented in the midto late 2000s, a more integrated approach that covers several dimensions of the proposed theoretical framework was not formulated until the early to mid-2010s. This becomes particularly obvious when looking at the key projects that were established in this period (Table 2). The key projects in the Hochsauerlandkreis and in the Freyung-Grafenau and Pinzgau districts were established as place-branding measures through which job opportunities and the high quality of life were promoted to young target groups transitioning from youth to adulthood. These projects also sought to encourage the formation a positive regional identity. In contrast, in the Obersteiermark West region, the policy field of youth management was integrated into the instrument of regional management. Thus, a social perspective became integrated into a territorial policy field.

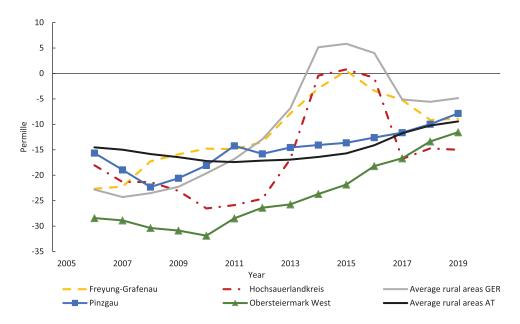
However, when examining the realisation of youth-oriented regional development measures, the question is not just what could be done or what was done in the individual regions, but also what the effects of this approach have been on the migration of rural youth. To provide an initial answer to this question, we have analysed the internal migration of 18- to 29-year-olds in the 2005–2020 period (see Figure 2). As the phase of family formation must be considered as a relevant life stage for potential return migration, we have also included the internal migration of 30- to 49-year-olds in the analysis (see Figure 3). Furthermore, we have used the moving average for illustrative purposes to smooth out short-term fluctuations (for the original data on internal migration, see Tables A.2 and A.3 in the Appendix). The data for the case study regions were compared to the national averages for rural regions in Austria and Germany.

The analysis of internal youth migration rates revealed that the negative trend has been less pronounced in all four case study regions since the mid-2010s. From that point onwards, the balance between out-migration and in-migration has stabilised. This overall positive trend is based on both increasing levels of youth in-migration and lower or stable levels of out-migration. However, the internal youth migration trends are very dissimilar across the four regions.

In the district of Freyung-Grafenau, for example, no decline in the number of outmigrants can be observed since the implementation of a more integrated approach towards youth-oriented regional development (see Table A.4 in the Appendix). In this district, the number of young out-migrants has remained relatively constant over time, with 2016 and 2017 being outliers. On the other hand, the in-migration of 18- to 29-year-olds has increased since 2014. Overall, the negative youth migration balance has stabilised since 2012 in this Bavarian district.

In the Hochsauerlandkreis, youth in-migration increased between 2012 and 2019 (see Table A.5 in the Appendix). An increase in the number of out-migrants can likewise be observed in the same period. In the rural parts of this southern Westphalian region, 2015 and 2016 represent statistical outliers in the internal migration trend. For example, there was an increase in youth in-migration in 2015 that was offset by an above-average number of young out-migrants in the following year. For both German case study regions, 2020 represents another statistical outlier, with





Source: Statistics Austria (2022) and Statistical offices of the Länder (2022).

both in- and out-migration among the 18 to 29 age group remaining at lower levels. This finding can be explained by the impact of the Covid-19 pandemic on residential relocations among young people; a trend that was also observed by Stawarz et al. (2022).

In the Pinzgau district (see Table A.6 in the Appendix), no clear changes in the development of internal youth migration can be observed for the 2005–2020 period. Overall, the negative migration balance decreased, but there was still less in-migration than out-migration in this region among 18- to 29-year-olds. However, the internal youth migration balance stabilised in the second half of the 2010s due to an increase in in-migration.

The most pronounced decrease in the number of out-migrants is observable in the Obersteiermark West region after 2018. Over the same period, the number of in-migrants remained relatively stable (see Table A.7 in the Appendix). As a result, the youth migration balance markedly improved in the 2018–2020 period compared to the preceding years. The question is, however, whether this decreasing trend will continue in the future.

Based on the youth migration trends in our four case study regions, the temporal relationship between the implementation of youth-oriented measures and the

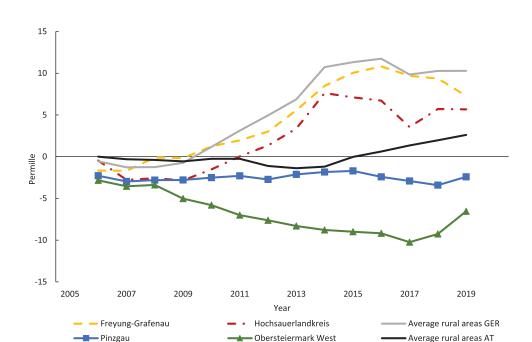


Figure 3: Moving average of the internal migration rate of 30- to 49-year-olds, 2006–2019, per thousand

Source: Statistics Austria (2022) and Statistical offices of the Länder (2022).

migration flows of 18- to 29-year-olds appears to be relatively limited. An association between a decrease in negative youth migration rates and the implementation of measures can be observed only for the Obersteiermark West region, where the negative trend in youth migration has improved since 2018.

On the other hand, the national averages for internal youth migration in rural areas in Germany and Austria indicate that overall, the negative trend in rural youth migration has improved since the mid-2010s. Thus, external trends that influence youth migration decisions must also be considered when assessing the impact of specific policy measures in the four case study regions.

This becomes obvious when looking at the 2015–2017 period, when the number of in-migrants was above average in all four case study regions, with the trend being most evident in the two German case study regions. The fluctuation of in-migrants in this period can be linked to the refugee movements of 2015. In this year, almost one and a half million refugees entered the European Union due to an escalation of the wars in Syria and Iraq, with Germany, Austria and Sweden being the main destination countries for refugees in this period (Pries, 2020). Furthermore, these countries followed a decentralised distribution policy for the accommodation of

refugees (Weidinger et al., 2017). Hence, some refugees were registered, at least temporarily, as residents of rural administrative districts. In both Germany and Austria, refugees were registered in initial reception centres before being distributed to more permanent housing. Thus, they appear in the statistics for internal – not for international – migration.

In addition, in recent years, studies have also examined the reasons why people stay in the countryside (Gruber, 2021; Mærsk et al., 2021; Stockdale et al., 2018). The increase in the immobility of young people can be explained in part by rising housing costs in urban areas (Stawarz et al., 2021), as well as by the emergence of ICT and the associated opportunities for remote working (Cooke and Shuttleworth, 2018). Moreover, some young people may have decided to stay because they were benefiting from location-specific insider advantages (Mærsk et al., 2021).

While the effects of youth-oriented measures on the migration decisions of 18-to 29-year-olds seem to be rather limited, the migration balances among 30- to 49-year-olds have been improving since the early 2010s. This is especially true for the two German case study regions of Hochsauerlandkreis and Freyung-Grafenau. When additionally considering the migration rate of people under age 18, it appears that the in-migrants who are moving to these regions are mainly families. Hence, the trend towards family-oriented counter-urbanisation in recent years that studies on rural Europe have found (Haartsen and Thissen, 2014; Hansen and Aner, 2017; Mulder et al., 2020a) can also be observed in the two German case study regions.

In the Hochsauerlandkreis and in the district of Freyung-Grafenau, both the number of family-oriented in-migrants and the number of out-migrants in the under 18 and the 30-49 age groups started to increase in the early 2010s, with 2015 (Hochsauerlandkreis) and 2016/2017 (Freyung-Grafenau) being statistical outliers (see Tables A.8 and A.9 in the Appendix). Nevertheless, the overall number of inmigrants was greater than the number of out-migrants in the most recent decade. For the Freyung-Grafenau district, it can even be concluded that family-oriented counter-urbanisation compensated for youth out-migration. The Bavarian region profited from the in-migration as well as the return migration of young families, as the number of such migrants was even higher than the number of youth out-migrants. For the two Austrian case study regions, the number of in-migrants aged 30 to 49 did not outweigh the number of out-migrants in the same age category in the 2005–2020 period. Here, the internal migration balance of 30- to 49-year-olds remained negative, even in the 2010s (see Tables A.10 and A.11 in the Appendix). In all four case study regions, the development of the internal migration rates of 30- to 49-year-olds was below the national averages for rural regions.

Based on the available data and the research methods we applied, we could not identify a causal relationship between the measures implemented to encourage youth-oriented regional development and actual migration levels. In the three case study regions of Hochsauerlandkreis, Freyung-Grafenau and Pinzgau, the out-migration rates have remained stable in this age group, even after a more systematised approach to youth-oriented regional development was applied through the implementation of key projects. We observed a decrease in youth out-migration only in the

Obersteiermark West region since 2018. However, due to the short period of time in which this development has emerged, the question of whether this trend will continue over the long term arises. On the other hand, youth in-migration has also increased in all four case study regions. Furthermore, there has been a positive development in family-oriented in-migration in the two German case study regions since the initial implementation of the youth-oriented regional development measures. Thus, further elaboration of the potential association between the realisation of a youth-oriented regional development strategy and an increase in in-migration and return migration is needed.

The migration data suggest that internal migration is also affected by external societal trends, such as the refugee movement of 2015 or an overall trend towards counter-urbanisation. The impact of a youth-oriented regional development approach overlaps with the effects of other social dynamics. Overall, more in-depth research is needed to provide a reliable assessment of the impact of youth-oriented policies.

5 Conclusion and research perspectives

While acknowledging its limitations, we conclude by reiterating that this exploratory study first and foremost established the groundwork for further discussions on policies aimed at mitigating the outflow of young people from peripheral rural areas. With the proposed approach of youth-oriented regional development, we introduced a conceptual framework to the scientific discourse that is relevant for both science and practice. On the one hand, this approach can serve as a tool for critically assessing the impact of regional measures in regions affected by depopulation. On the other hand, it can provide input for planning and innovating in regions that are experiencing depopulation.

With the proposed approach, we have entered new territory in the scientific discourse on the development of regions that are experiencing depopulation. While youth out-migration has been well researched, there are fewer studies that have examined the practical measures that have been implemented to influence the mobility aspirations of rural youth. By placing the needs of mobile young people in the centre of policy-making, this comparative case study revealed policy capacities on a regional scale, and identified trends and trend breaks in the internal migration rates of young people and young families that could give a first indication of the potential impact of the implemented measures on youth migration.

The four case study regions have adopted different approaches to youth-oriented regional development. In the three case study regions of Freyung-Grafenau, Pinzgau and Obersteiermark West, the objective was to prevent out-migration by implementing an approach that emphasised the career opportunities as well as the good quality of life in the region. In the Hochsauerlandkreis, the approach was focused instead on attracting young families and supporting return migration. All four case study regions took the hard locational factor of "jobs" into account in their applied measures. In recent years, they also began to increase their focus on

the social locational factors. Here, location branding has been a relevant instrument. Social media is a popular tool for engaging with the target group and for supporting regional identity formation, which should, in turn, lead to greater attachment to place. Participatory projects that were realised in the four case study regions, but that involved a different definition of participation, should help to integrate the perspectives of the target group into rural policy-making.

However, we should recognise the limited success of youth-oriented regional development in preventing out-migration. Mobility decisions are deeply personal and individual. Furthermore, the transition from youth to adulthood is characterised by a "mobility imperative" to an even greater extent today than it was in the past. Out-migration has arguably become a normal stage in the biographies of young people. Supporting return or even in-migration must be considered a more viable option for rural policy-making. The data suggest that since the implementation of youth-oriented measures in the four case study regions, the levels of youth out-migration have remained stable, while the levels of in-migration have increased among both adolescents and young families. However, when we consider the overall trend in rural youth migration by looking at the national averages, it is unclear whether the measures had an effect. Nevertheless, a youth-oriented regional development approach could support the transformation of policy-makers' perceptions of youth out-migration from representing a threat to regional development to providing an opportunity for a critical reconsideration of rural policy-making.

While this paper has provided a first impression of the degree to which youth-oriented regional development can serve as a remedy for the depopulation of rural regions, further research is needed. The analysis uncovered various perspectives for future research that could be of relevance in population research. To conclude, we identify four research gaps to which demographic research could make major contributions through further elaborations of the proposed approach.

First, as internal migration is influenced by external social trends, long-term observation of the demographic developments in the regions that have implemented measures is needed to control for the impact of these external trends. A longitudinal evaluation would acknowledge that migration aspirations are long-term decisions, and thus that the impact of the measures will be revealed only after a longer period of time. In particular, the effects on mobility decisions of measures that focus on the phases of childhood and youth will become apparent only over the long term. Overall, the conceptual approach of youth-oriented regional development that we presented in this paper would benefit from further refinement. By theoretically mapping the chain of effects from the measures to the potential mobility decisions, and systematically including alternative causal factors at each stage of the chain, the relevance of youth-oriented policies for mitigating depopulation could be re-evaluated.

Second, a systematic, quantitative analysis of the implemented measures following the logic of youth-oriented regional development in rural regions that are undergoing depopulation could help to validate the proposed approach. Thus, the theory-driven

approach could be refined through the inclusion of further findings on youth-oriented development practices. A systematic review of planning practices in rural regions suffering from depopulation could help stakeholders gain a better understanding of the conditions under which youth-oriented regional development measures should be implemented. This systematic review could include methods such as desk research, document analysis or a survey of rural policy-makers on the implemented measures. In a wider and more systematised study, creating a database of regions that are applying a youth-oriented approach could be valuable. This database could later be used for further analyses, such as a comparison with rural regions that are experiencing depopulation but have not implemented youth-oriented measures. This, in turn, leads to a *third research gap*: a comparative case study following a "most different cases" design is needed to assess the actual impact of youth-oriented policy-making on youth migration.

Finally, an assessment of the effects of a youth-oriented regional development approach should, above all, consider the attitudes of the target group towards the implemented measures themselves. An impact assessment could be performed to investigate how many young people are actually reached by the implemented measures, and whether these measures exert a relevant influence on their migration decisions. Hence, young people should be included as stakeholders in the assessment of the implemented measures. This stakeholder involvement could support the design of effective policies that mitigate depopulation driven by youth outmigration.

Overall, a deeper analysis can help stakeholders find efficient solutions to the problem of depopulation in rural regions, and can open up new research perspectives. The youth-oriented regional development approach can lead to the emergence of new and potentially fruitful debates, and provide opportunities for greater interdisciplinary cooperation between human geography, planning studies and population research in the coming years.

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Appendix

Table A.1: List of interviewed stakeholders

1	Regional manager in Freyung-Grafenau
2	LEADER manager in Freyung-Grafenau
3	Coordinator for municipal youth work in the Freyung-Grafenau administrative district
4	Manager of the ILE Ilzer Land initiative
5	Coordinator of the Regional Contact Point Europaregion Donau-Moldau
6	Manager Konversionsmanagement Freyung und Umgebung & ILE Wolfsteiner Waldheimat
7	Coordinator for municipal youth work at the Bavarian Youth Ring (BJR)
8	Coordinator for regional management and regional initiatives in the district government of Lower Bavaria
9	Project manager of Heimvorteil HSK
10	Coordinator for the Land(auf)Schwung funding programme in the Hochsauerlandkreis administrative district
11	Manager of the Hochsauerlandkreis business development agency
12	District administrator in the Hochsauerlandkreis
13	Coordinator for regional funding schemes in the Hochsauerlandkreis administrative district
14	LEADER manager of Hochsauerland
15	Member of the youth committee in the Hochsauerlandkreis administrative district
16	Coordinator of regional development at the Südwestfalen Agentur
17	Coordinator of regional marketing at the Südwestfalen Agentur
18	Regional planner in the district government of Arnsberg
19	Manager of the Komm-Bleib regional initiative
20	Coordinator of the Austrian Federal Economic Chamber/Zell am See district
21	LEADER manager of Nationalpark Hohe Tauern
22	Regional manager of Regionalmanagement Pinzgau
23	Coordinator of Akzente Salzburg in the Pinzgau district
24	Teacher and coordinator of the education & economy working group
25	Coordinator of the Kaprun youth centre
26	Coordinator of the Forum Familie Pinzgau initiative
27	Coordinator of the regional development department in the federal state of Salzburg
28	Coordinator of the rural development department in the federal state of Salzburg
29	Youth manager of the Obersteiermark West region
30	Regional manager of the Obersteiermark West region
31	LEADER manager of innovationsRegion Murtal
32	LEADER manager of Holzwelt Murau
33	Coordinator of the Austrian Federal Economic Chamber/Murau-Murtal district
34	School director of a commercial high school
35	Coordinator for regional youth management in the federal state of Styria
36	Coordinator for regional development in the federal state of Styria
37	Representative of the Styrian platform for public youth work

Table A.2: Internal migration rate ages 18 to 29 years, per 1000 in age group

	Freyung- Grafenau	Hochsauerland Kreis	Average rural areas GER	Pinzgau	Obersteiermark West	Average rural areas AT
2005	-17,1	-10,4	-21,0	-15,1	-24,5	-13,5
2006	-34,1	-21,8	-24,3	-15,2	-30,6	-14,8
2007	-16,7	-22,0	-23,1	-16,6	-30,2	-15,3
2008	-15,9	-20,2	-25,4	-25,1	-25,9	-14,8
2009	-19,2	-21,9	-22,0	-25,3	-35,1	-17,4
2010	-12,6	-27,1	-19,4	-11,4	-31,7	-17,1
2011	-12,6	-30,5	-17,5	-17,5	-28,9	-17,2
2012	-19,5	-20,0	-13,6	-13,8	-24,8	-17,9
2013	-8,4	-23,4	-7,7	-16,1	-25,4	-16,3
2014	4,3	-7,1	0,9	-13,7	-27,0	-16,6
2015	-4,7	29,3	22,3	-12,4	-18,7	-16,4
2016	2,0	-19,8	-5,7	-14,8	-19,9	-14,1
2017	-7,5	-12,0	-4,6	-10,7	-16,0	-11,9
2018	-10,2	-18,6	-5,0	-9,5	-14,1	-9,3
2019	-9,7	-13,6	-7,1	-9,8	-10,0	-9,5
2020	-6,8	-12,8	-2,4	-4,2	-10,6	-9,5

Source: Statistics Austria (2022) and Statistical offices of the Länder (2022).

Table A.3: Internal migration rate ages 30 to 49 years, per 1000 in age group

	Freyung- Grafenau	Hochsauerland Kreis	Average rural areas GER	Pinzgau	Obersteiermark West	Average rural areas AT
2005	-1,5	2,9	0,0	-1,6	-2,7	0,1
2006	-3,4	-2,8	-1,1	-2,9	-3,3	-0,2
2007	-0,1	-1,4	-0,5	-2,3	-2,6	0,2
2008	-1,5	-4,1	-2,2	-3,7	-4,8	-0.8
2009	1,4	-2,2	-1,0	-2,4	-2,8	-0,5
2010	-0,3	-2,2	1,0	-2,3	-7,5	-0,4
2011	2,6	-0,1	3,5	-2,8	-7,1	0,1
2012	3,5	2,4	4,8	-1,8	-6,4	-0,4
2013	2,9	1,8	6,6	-3,6	-9,4	-2,9
2014	10,3	5,9	9,3	-1,0	-9,2	-0,8
2015	12,3	15,1	16,4	-1,0	-7,8	0,1
2016	7,5	0,3	8,3	-3,2	-10,0	0,6
2017	12,6	4,8	10,5	-3,1	-9,7	1,2
2018	8,9	5,7	10,7	-2,5	-11,0	2,3
2019	6,5	6,7	9,6	-4,6	-7,0	2,4
2020	6,4	4,6	10,5	-0,2	-1,6	3,1

Source: Statistics Austria (2022) and Statistical offices of the Länder (2022).

Table A.4: Internal youth migration 2005–2020, Freyung-Grafenau

Year	Internal in-migration	Internal out-migration	Youth migration balance	Population aged 18–29 yrs	Internal youth migration rate	In- migration per 1000 in age group	Out- migration per 1000 in age group
2005	486	-676	-190	11098	-17,1	43,8	-60,9
2006	467	-847	-380	11135	-34,1	41,9	-76,1
2007	535	-717	-182	10870	-16,7	49,2	-66,0
2008	607	-779	-172	10830	-15,9	56,0	-71,9
2009	508	-718	-210	10920	-19,2	46,5	-65,8
2010	586	-723	-137	10894	-12,6	53,8	-66,4
2011	576	-714	-138	10986	-12,6	52,4	-65,0
2012	532	-739	-207	10640	-19,5	50,0	-69,5
2013	606	-694	-88	10454	-8,4	58,0	-66,4
2014	783	-738	45	10494	4,3	74,6	-70,3
2015	715	-765	-50	10644	-4,7	67,2	-71,9
2016	1019	-998	21	10751	2,0	94,8	-92,8
2017	1144	-1225	-81	10829	-7,5	105,6	-113,1
2018	711	-821	-110	10827	-10,2	65,7	-75,8
2019	720	-824	-104	10667	-9,7	67,5	-77,2
2020	648	-719	-71	10493	-6,8	61,8	-68,5

Source: Statistical offices of the Länder (2022).

Table A.5: Internal youth migration 2005–2020, Hochsauerlandkreis

Year	Internal in-migration	Internal out-migration	Youth migration balance	Population aged 18–29 yrs	Internal youth migration rate	In- migration per 1000 in age group	Out- migration per 1000 in age group
2005	2911	-3286	-375	36014	-10,4	80,8	-91,2
2006	2229	-3019	-790	36235	-21,8	61,5	-83,3
2007	2336	-3132	-796	36241	-22,0	64,5	-86,4
2008	2463	-3193	-730	36180	-20,2	68,1	-88,3
2009	2521	-3317	-796	36345	-21,9	69,4	-91,3
2010	2487	-3475	-988	36414	-27,1	68,3	-95,4
2011	2623	-3727	-1104	36158	-30,5	72,5	-103,1
2012	2833	-3528	-695	34823	-20,0	81,4	-101,3
2013	3049	-3860	-811	34657	-23,4	88,0	-111,4
2014	3603	-3848	-245	34358	-7,1	104,9	-112,0
2015	5449	-4435	1014	34656	29,3	157,2	-128,0
2016	4408	-5124	-716	36168	-19,8	121,9	-141,7
2017	3723	-4150	-427	35647	-12,0	104,4	-116,4
2018	3415	-4076	-661	35469	-18,6	96,3	-114,9
2019	3349	-3820	-471	34681	-13,6	96,6	-110,1
2020	2742	-3178	-436	34109	-12,8	80,4	-93,2

Source: Statistical offices of the Länder (2022).

Table A.6: Internal youth migration 2005–2020, Pinzgau

Year	Internal in-migration	Internal out-migration	Youth migration balance	Population aged 18–29 yrs	Internal youth migration rate	In- migration per 1000 in age group	Out- migration per 1000 in age group
2005	410	-611	-201	13286	-15,1	30,9	-46,0
2006	356	-557	-201	13220	-15,2	26,9	-42,1
2007	377	-595	-218	13157	-16,6	28,7	-45,2
2008	393	-721	-328	13086	-25,1	30,0	-55,1
2009	433	-762	-329	12995	-25,3	33,3	-58,6
2010	430	-578	-148	13000	-11,4	33,1	-44,5
2011	444	-673	-229	13055	-17,5	34,0	-51,6
2012	449	-628	-179	13007	-13,8	34,5	-48,3
2013	482	-690	-208	12905	-16,1	37,4	-53,5
2014	496	-673	-177	12873	-13,7	38,5	-52,3
2015	707	-867	-160	12943	-12,4	54,6	-67,0
2016	526	-718	-192	12968	-14,8	40,6	-55,4
2017	546	-683	-137	12856	-10,7	42,5	-53,1
2018	505	-626	-121	12788	-9,5	39,5	-49,0
2019	466	-591	-125	12723	-9,8	36,6	-46,5
2020	568	-621	-53	12491	-4,2	45,5	-49,7

Source: Statistics Austria (2022).

Table A.7: Internal youth migration 2005–2020, Obersteiermark West region

Year	Internal in-migration	Internal out-migration	Youth migration balance	Population aged 18–29 yrs	Internal youth migration rate	In- migration per 1000 in age group	Out- migration per 1000 in age group
2005	539	-920	-381	15532	-24,5	34,7	-59,2
2006	449	-915	-466	15238	-30,6	29,5	-60,0
2007	509	-958	-449	14872	-30,2	34,2	-64,4
2008	555	-935	-380	14697	-25,9	37,8	-63,6
2009	503	-1013	-510	14542	-35,1	34,6	-69,7
2010	516	-967	-451	14226	-31,7	36,3	-68,0
2011	580	-985	-405	14024	-28,9	41,4	-70,2
2012	588	-930	-342	13783	-24,8	42,7	-67,5
2013	624	-968	-344	13517	-25,4	46,2	-71,6
2014	579	-936	-357	13242	-27,0	43,7	-70,7
2015	698	-944	-246	13160	-18,7	53,0	-71,7
2016	720	-981	-261	13139	-19,9	54,8	-74,7
2017	599	-807	-208	12974	-16,0	46,2	-62,2
2018	513	-692	-179	12699	-14,1	40,4	-54,5
2019	520	-645	-125	12501	-10,0	41,6	-51,6
2020	534	-663	-129	12215	-10,6	43,7	-54,3

Source: Statistics Austria (2022).

Table A.8: Internal migration 2005–2020, ages 30–49 years, Freyung-Grafenau

Year	Internal in-migration	Internal out-migration	Internal migration balance	Population aged 30–49 yrs	Internal migration rate	In- migration per 1000 in age group	Out- migration per 1000 in age group
2005	595	-634	-39	25586	-1,5	23,3	-24,8
2006	555	-640	-85	25136	-3,4	22,1	-25,5
2007	508	-511	-3	24656	-0,1	20,6	-20,7
2008	570	-607	-37	24147	-1,5	23,6	-25,1
2009	550	-518	32	23572	1,4	23,3	-22,0
2010	528	-535	-7	23015	-0,3	22,9	-23,2
2011	601	-542	59	22390	2,6	26,8	-24,2
2012	636	-560	76	21443	3,5	29,7	-26,1
2013	672	-612	60	20988	2,9	32,0	-29,2
2014	796	-586	210	20408	10,3	39,0	-28,7
2015	802	-556	246	19965	12,3	40,2	-27,8
2016	963	-816	147	19599	7,5	49,1	-41,6
2017	1045	-802	243	19231	12,6	54,3	-41,7
2018	914	-745	169	18927	8,9	48,3	-39,4
2019	857	-735	122	18684	6,5	45,9	-39,3
2020	808	-691	117	18414	6,4	43,9	-37,5

Source: Statistical offices of the Länder (2022).

Table A.9: Internal migration 2005–2020, ages 30–49 years, Hochsauerlandkreis

Year	Internal in-migration	Internal out-migration	Internal migration balance	Population aged 30–49 yrs	Internal migration rate	In- migration per 1000 in age group	Out- migration per 1000 in age group
2005	2694	-2457	237	82397	2,9	32,7	-29,8
2006	2000	-2231	-231	81503	-2,8	24,5	-27,4
2007	2199	-2312	-113	80079	-1,4	27,5	-28,9
2008	2109	-2430	-321	78604	-4,1	26,8	-30,9
2009	2070	-2242	-172	76766	-2,2	27,0	-29,2
2010	2066	-2230	-164	74962	-2,2	27,6	-29,7
2011	2278	-2287	-9	73256	-0,1	31,1	-31,2
2012	2433	-2259	174	72439	2,4	33,6	-31,2
2013	2672	-2545	127	70655	1,8	37,8	-36,0
2014	2861	-2456	405	68636	5,9	41,7	-35,8
2015	4170	-3157	1013	66879	15,1	62,4	-47,2
2016	3373	-3355	18	65810	0,3	51,3	-51,0
2017	3150	-2846	304	63980	4,8	49,2	-44,5
2018	3177	-2824	353	62477	5,7	50,9	-45,2
2019	3038	-2624	414	61457	6,7	49,4	-42,7
2020	2695	-2415	280	60552	4,6	44,5	-39,9

Source: Statistical offices of the Länder (2022).

Table A.10: Internal migration 2005–2020, ages 30–49 years, Pinzgau

Year	Internal in-migration	Internal out-migration	Internal migration balance	Population aged 30–49 yrs	Internal migration rate	In- migration per 1000 in age group	Out- migration per 1000 in age group
2005	275	-318	-43	26552	-1,6	10,4	-12,0
2006	269	-346	-77	26511	-2,9	10,1	-13,1
2007	291	-352	-61	26185	-2,3	11,1	-13,4
2008	294	-389	-95	25953	-3,7	11,3	-15,0
2009	276	-338	-62	25569	-2,4	10,8	-13,2
2010	325	-383	-58	25251	-2,3	12,9	-15,2
2011	324	-394	-70	25010	-2,8	13,0	-15,8
2012	339	-383	-44	24707	-1,8	13,7	-15,5
2013	326	-414	-88	24544	-3,6	13,3	-16,9
2014	400	-424	-24	24217	-1,0	16,5	-17,5
2015	507	-530	-23	24071	-1,0	21,1	-22,0
2016	381	-457	-76	24099	-3,2	15,8	-19,0
2017	390	-465	-75	23898	-3,1	16,3	-19,5
2018	406	-464	-58	23636	-2,5	17,2	-19,6
2019	391	-499	-108	23361	-4,6	16,7	-21,4
2020	444	-448	-4	23047	-0,2	19,3	-19,4

Source: Statistics Austria (2022).

Table A.11: Internal migration 2005–2020, ages 30–49 years, Obersteiermark West region

Year	Internal in-migration	Internal out-migration	Internal migration balance	Population aged 30–49 yrs	Internal migration rate	In- migration per 1000 in age group	Out- migration per 1000 in age group
2005	391	-477	-86	32406	-2,7	12,1	-14,7
2006	397	-502	-105	32145	-3,3	12,4	-15,6
2007	381	-462	-81	31648	-2,6	12,0	-14,6
2008	364	-513	-149	31011	-4,8	11,7	-16,5
2009	403	-487	-84	30326	-2,8	13,3	-16,1
2010	381	-604	-223	29706	-7,5	12,8	-20,3
2011	442	-650	-208	29103	-7,1	15,2	-22,3
2012	420	-601	-181	28453	-6,4	14,8	-21,1
2013	446	-707	-261	27909	-9,4	16,0	-25,3
2014	444	-695	-251	27314	-9,2	16,3	-25,4
2015	518	-726	-208	26653	-7,8	19,4	-27,2
2016	496	-759	-263	26324	-10,0	18,8	-28,8
2017	433	-684	-251	25748	-9,7	16,8	-26,6
2018	414	-691	-277	25179	-11,0	16,4	-27,4
2019	428	-600	-172	24463	-7,0	17,5	-24,5
2020	440	-478	-38	23966	-1,6	18,4	-19,9

Source: Statistics Austria (2022).

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