



**MATILDE**

Migration Impact Assessment to Enhance  
Integration and Local Development in  
European Rural and Mountain Regions

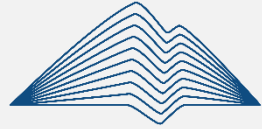
# Comparative report on TCNs' economic impact and entrepreneurship

**Qualitative analysis**

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## Qualitative analysis



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Comparative report on TCNs economic impact and entrepreneurship

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# 1. Introduction

This report provides a qualitative cross-country examination of the migration phenomenon in rural and mountain areas from an economic perspective. The main objective is to explain the impacts and effects that international migrant influxes have on the selected areas and look at changes, variations, developments, and innovations occurred in local firms and communities as a reaction to newcomers' arrival.

The WP4, upon which this report builds, consisted of four main tasks: definition of the working guidelines, quantitative assessment of economic impact, qualitative assessment of economic impact, and a comparative analysis of these results. This report presents the comparative analysis of the qualitative assessment of migrants' economic impact in the 10 countries of the MATILDE scientific consortium. Along with this examination, the Austrian research team has carried out a quantitative analysis on economic impact of migration at the national level which stands as report germane to this one. Both reports are built on indicators and scale of analysis defined in the MATILDE toolbox.

Generally, the Work Package 4 moved from the drafting of main guidelines under the supervision of UNIPR team with all the national research teams; these guidelines consider the national and regional levels, explain how to identify and engage subjects, identify methods for data collection, analysis and storage. For each region, research teams

had to select at least five companies, according to criteria defined in the guidelines (enterprises operating in the area of Foundational Economy - food production and distribution, construction, waste management, like health care and education, and energy production - that are either migrant-owned or migrant employers - including social enterprises). Then they assessed the economic impact through in-depth narrative interviews with at least five and up to ten subjects for each company. Subjects involved in the study are both migrants and native with diverse role in the local economy, they are entrepreneurs, employers, HR managers, workers, or trade unionists. The main goals for this task were to comprehend how migrants have been integrated in local economies, how this has determined changes in organizational structures of the selected companies, and features of the economic impact on local communities. Then each national research team had delivered a country focused report; on the basis of these empirical data, the UNIPR team has developed this comparative report.

The specific interest of the MATILDE Project is on the Third Country Nationals (TCNs); this is a heterogeneous and multifaceted group of people who arrive from non-EU countries to find place where work and live. As stated by the European Union Commission a TCN is:

*'Any person who is not a citizen of the European Union within the meaning of Art. 20(1) of TFEU and who is not a person enjoying the European Union right to*

*free movement, as defined in Art. 2(5) of the Regulation (EU) 2016/399 (Schengen Borders Code)*<sup>1</sup>

An exception is made for the United Kingdom report as the UNIPR team, also in charge of the UK case studies analysis, decided to include in the examination also EU citizens who migrated to the British territory.

This comparative report aims to underline the fundamental economic aspects of migrant influxes on the European rural and mountain areas; following the scientific debate on this topic (Hedberg & Haandrikman, 2014; Aure, Førde & Magnussen 2018; Perlik & Membretti, 2018; Corrado, Iocco & Lo Cascio, 2020), the research addresses two main research questions to lead the investigation, (a) what is migrants' economic impact on European rural and mountain areas? And (b) Does in-migration provoke innovations in firms and changes in communities in these areas? Results present a cross-national view on effects of immigration on rural and mountain areas showing how enterprises implement process of innovation and change to favour the integration of newcomers. As well, migrants themselves have become local economic agents starting-up their own business to create possibilities for themselves. Alongside, migration has had also broader effects and impacts even on the communities where these firms are located, findings illustrate the types of dynamics occurred in the various European countries. Moreover, findings from the selected areas illustrate the role of social enterprises in favouring migrants' integrations; rural social enterprises and third sector organizations can favour a sustainable development and social

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<sup>1</sup> Art. 3(1) of Directive 2008/115/EC (Return Directive) and Art. 2(6) of Regulation (EU) 2016/399 (Schengen Borders Code)



impact through work integration (Borzaga & Galera, 2016; Steiner & Teasdale, 2019; Calò, Montgomery & Baglioni, 2020; Olmedo, Twuijver & O'Shaughnessy, 2021).

Next section presents the methodology adopted for the research; then, the report discusses the scientific debate on the contribution of migration in the rural and mountain economic development. Section 2 illustrates main findings regarding the changes and innovation in organizational structure of local firms consequent to the migrants' arrival in the selected areas. Section 3 shows the economic effects of migration in the local communities in MATILDE regions. The conclusive section underlines the key findings of this analysis.

## Methodology

This report presents results from cross-case comparative analysis of 14 European rural and mountain regions; data collection went from January to May 2021.

The WP 4 Guidelines identify main selection criteria for the fieldwork and state requirements on the data collection procedure; when focusing on the economic impact and effect of migration, this work package adopts the concept of 'Foundational Economy' (FE), which indicates those [e]conomic activities that constitute the material infrastructure

of social life' (Bentham et al., 2013)<sup>2</sup>; further details about the FE are provided in the following sections.

This research is a qualitative analysis carried out through semi-structured interviews and focus-groups with both migrants and natives in their local contexts; subjects engaged have diverse positions such as entrepreneurs who employ migrants, migrant-owners of businesses, managers, employees, social enterprise workers, activists, and trade unionists. Many research teams have re-contacted subjects involved for WP3, as well as, extended the search to new organizations following advice from local partners.

Table 1 reports figures of the fieldworks carried out by the members of the MATILDE consortium in 10 European countries. Not all the teams had the possibility to complete the WP4 requirements (five companies per regions with a range of five – ten interviews for each organization). This issue is mostly caused by the strictly restriction for the Covid-19 pandemic that did not allow to travel and carry out appropriate fieldworks. Many teams have found, get involved, and interviewed the selected subjects via the internet (first contacts with emails then interviews with video call apps e.g. Microsoft Teams, Skype, Zoom).

Each research team has produced a report that explain the main economic features of each MATILDE area, the principal innovations and changes occurred to the selected companies, the role of migrant-owned businesses and social enterprises in favouring the

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<sup>2</sup> Barbera, F., Dagnes, J. & Salento, A. (2016), *Se questo è lavoro. Meccanismi estrattivi e pratiche di resistenza*, *Sociologia del lavoro*, 142:7-26; Bentham, J., et al. (2013), *Manifesto for the Foundational Economy*, CRESC Working Paper n.131.

integration, and the economic dynamics in local communities. The UNIPR team has generated this report from the comparison of the 10 country reports (Caputo et al., 2021a); the team members have developed a strategy to compare the results from each country through infra team discussions, contrast and comparison of each report key findings. For the two main topics related to the research questions - innovations in local firms and changes in local communities brought in by TCNs - the UNIPR team has identified the communalities among countries and discussed them at the light of existing literature; the next section presents an overview on the state of art about this topic.

Table 1. MATILDE Regions with Numbers of Selected Companies and Interviewed Subjects.

Country	Region	Number of enterprises that employ migrants	Number of migrant-owned enterprises	Number of social enterprises	Public organizations	Numbers of interviewees
Austria	Vorarlberg	3	0	1	0	16
Austria	Carinthia	2	5	2	0	21
Bulgaria	Haskovo	0	0	4	0	39
Finland	North Karelia	3	2	1	0	6
Finland	Ostrobothnia	2	1	1	0	4
Germany	Bavaria	4	1	2	0	33
Italy	South Tyrol	1	0	1	0	10
Italy	Metropolitan area of Turin	1	0	1	0	10
Norway	Midt-Gudbrandsdal	1	1	0	0	7
Norway	Nord-Østerdal	0	3	2 + 3 <sup>3</sup>	0	20
Spain	Aragón	4	0	0	0	25
Sweden	Dalarna	4	0	1	1	14
Turkey	Bursa	2	9	2	0	22
United Kingdom	The Outer Hebrides	4	3	0	0	14
	Total	31	25	21	1	241

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<sup>3</sup> There three social enterprises are owned and/or directly funded by public authorities; therefore, they fall in the middle between 'social enterprise' and 'public organization'.

# Migration in Rural and Mountain Areas: Economic Aspects

Rural and mountain areas have been experiencing a renaissance in the last decades. After a long period of marginality in the public debate and a destiny as appendixes of urban areas, they are now at the centre of new policies, in-migration fluxes, and dynamics of local development (Perlik & Membretti, 2018; Cejudo & Navarro, 2020; Corrado, Iocco & Lo Cascio, 2020; Chatzichristos, Nagopoulos & Poulimas, 2021). Consequently, this analysis moves from the examination of the scientific debate regarding the new dynamics in the development of rural and mountain areas.

The first main step is the contextualization of those elements that have been determinant for shaping these local economies. The intense agriculture productivist model, which has characterised the economies of rural areas, went in crisis during the 1980s (Henke & Carbone, 2014). This generated two tendencies in many ways opposite to each other: on the one hand a greater integration of a 'Global agri-food supply chain' system. On the other hand, new paradigms of qualitative modernization have been emerging focused on the rural development concept, which has addressed the centrality of local communities' needs and has influenced new agricultural policies. De Filippis and Henke (2014) consider qualitative modernization a path that has characterized the primary sector

from the 1980s onwards; it is not necessarily opposed to the productivist model, they can be two co-existing alternatives.

According to such authors (*Ibidem*), the specific composition of the Southern European agricultural economic fabric is the starting point for qualitative processes based on a mix of tradition and innovation to be investigated using some indicators in search of possible traces of the future. This perspective invites us to focus attention on aspects priority neglected on the idea of rural development. The consideration of resources within rural areas is a central aspect of this concept, particularly in those areas where productivist modernization is less developed. These resources can favour a qualitative modernization centred on 'processes of functional diversification and product differentiation' (De Filippis & Henke, 2014, p. 192, cited by Biagiotti & Lo Cascio, 2017). These resources are both tangible - environment and natural resources - and intangible - knowledge and skills - (De Benedictis, 2002; De Filippis & Henke, 2014).

Similarly, among the EU-28 members policies for rural and mountain areas over the period 2014 - 2020, the main innovation is the more central role of sustainability for these territories (Dwyer et al., 2016). Along with rural areas, mountain areas have had a new attention by residents, migrants, and decision-makers: as already pointed out almost thirty years ago (García-Ruiz et al., 1996), mountain areas have gone through a long and steady process of de-population. Nevertheless, more recently scholars have argued that there are

signs of a counter migration from urban areas to mountain ones and a revitalization of local economies (Perlik & Membretti, 2018; Bürgin & Mayer, 2020; Dax, 2020).

This involves the re-discovery of ancient works (e.g. shepherds, cheese producers, wood crafters) and traditions along with new forms of entrepreneurship with marked sustainable approach (e.g. slow tourism or clean-energy producers) and attention for the environment (Teneggi & Zandonai, 2017; Bianchi & Vieta, 2019). Such new trends of development for mountain areas intertwine also with goals related to community development and favour partnerships between local authorities and third sector organizations to enhance the local well-being, contributing overcoming the structural limits of these remote territories (Bianchi, 2021). In sum, generally, a growing international trend of new theories and perspectives on the rural and mountain areas has taken place; one which invokes a view more focused on local potentialities and bottom-up initiatives rather than exogenous and top-down actions promoted by external agents (Atterton et al., 2011; Bosworth et al., 2016; Cejudo & Navarro, 2020).

Second main step in the discussion of the research topic is the contextualization of the international migration phenomena within these rural and mountain contexts. Migration influxes have been having a central role in new dynamics of local development in rural and mountain areas; consequently, migration has determined economic effects and impacts. Data at the European level show how the enlargement of EU, the fall of Soviet

Union and the new corridors of mobility from Africa and Asia have generated a constant influx of newcomer workforce that have also chosen European rural areas as a destination (Rye & Scott, 2018). The convergence of multiple socio-economic aspects resulted in a restructuration of social and spatial mobility, and a re-territorialisation of migrations (Camarero, Sampedro & Oliva, 2012; Caruso & Corrado, 2015; Sampedro & Camarero, 2016; Papadopoulos et al., 2019).

Crucially, this process often entailed the re-orienting of migrants towards rural and marginal areas (Corrado, 2017; Membretti, Kofler & Viazzo, 2017). It follows that international migration is no longer an urban experience (McAreavey, 2016). Small, rural communities facing different new migration dynamics have emerged as ‘new immigrant destinations’ (Jentsch & Simard, 2009; McAreavey, 2012).

In this macro context of new development, the in-migration has a fundamental role; the debate around migrants’ economic impact has highlighted many aspects concerning the effects and changes that influxes can have on remote places. Firstly, migrants’ arrival in these areas determines a possibility to contrast the de-population helping to keep alive the local economies (Aure, Førde & Magnussen 2018); this can be defined as a ‘demographic re-fill’ (Hedberg & Haandrikman, 2014). Second, this contribution to implement the local population has a direct effect on local labour market, which mostly suffers the out-migration of young residents who decide to study and work in cities (Kasimis,



Papadopoulos & Pappas, 2010; Rye & Scott, 2018). Thirdly, the rural areas that most attract migrants are those with labour-intensive industries such as fishing and agriculture, as well as those with considerable tourist sectors, which consequently generate job positions in the food services and accommodation (Rye & Slettebak, 2020).

Furthermore, we have to consider new trends in attracting high-skilled by Western countries (Czaika, 2018), which determines both inputs of professionals in these areas and diverse effects and impacts on the territories (Aure, Førde & Magnussen 2018). Without the input of these new forces, many local economies could not survive therefore they have adapted to migrant workers' presence (Kasimis, Papadopoulos & Pappas, 2010). Fourth, mountain and rural areas can become even contexts for the integration of refugees and asylum seekers, albeit, their integration has to be favored and supported. Here, these people can provide their workforce and skills to the revitalization of local economies (Marcher et al., 2017).

We should also consider that these migrant influxes enter in areas characterized by geographical marginality (Pelc, 2017). Rural and mountain areas can have diverse grades of marginality, means proximity to urban areas, lower demographic density, and less economic opportunities (Laurin, Pronovost & Carrier, 2020; Rye & Slettebak, 2020). Nevertheless, they can also trigger endogenous processes for new dynamics of development using their local resources (Cejudo & Navarro, 2020). Small and medium

enterprises in rural and mountain areas are particularly sensible to the regional economic ecosystems that present different challenges, as well as, opportunities (Laurin, Pronovost & Carrier, 2020). Enterprises have to demonstrate an appropriate flexibility to make themselves adaptable to the socio-economic environment (Brozovic, 2018). Therefore, firms and companies in rural and mountain areas have to be more capable to modify their structure and functioning to optimize the few opportunities offered by local markets and to acquire new resources and strategies for their development. In this sense, human capital is a strategic element for these organizations, entrepreneurs can work to implement it but the support from institutions is also fundamental (Meccheri & Pelloni, 2006).

Such various signs of economic revitalization and evidences of rural and mountain areas as new destinations of migration influxes suggest that we should also consider how these territories are interconnected with global dynamics and spaces (Woods, 2007). Furthermore, it is fundamental to distinguish and acknowledge the various aspects of migration; indeed, this is a multi-faceted phenomenon (Aure, Førde & Magnussen, 2018; Perlik & Membretti, 2018) which needs to be carefully examined. Considering these elements, the arrival of TCNs workforce in European rural and mountain areas can represent an asset for their development but we should also investigate which kinds of changes and innovations they determine in local enterprises and how companies adapt their functioning and structure to ensure the permanence of newcomers in their territories.

As explained by Bosworth and Atterton (2012) migrants' economic impact on rural areas can be assessed also through the starting-up of their own businesses. These can have a key role in ensuring the provision of local services and can positively influence the socio-economic development also through migrants' international network relationships. Refugees too can find self-entrepreneurship to be a solution for their economic integration in rural areas and as a way to mitigate the difficulties they meet with in finding permanent and decent jobs (Barth & Zalkat, 2021).

However, particularly for refugees, the starting-up of their own-business can prove to be a very difficult experience because they experience further anxiety and fear related to their conditions of forced migrants (Harima, Freudenberg & Halberstadt, 2019) as well as to their difficulties in navigating administrative and legal hurdles, as well as accessing credit; additionally, they have to face the same customer-related conditions of other entrepreneurs operating in rural and mountain areas. Hence, the choice to open their own business can be seen as a sign of integration, it can also be the result of a reaction to the harsh conditions of the local market.

As analysed by Vitores, Fernández and Caro (2020), the migrant entrepreneurship can become a 'forced choice' in those areas where the economic development is lower. On the basis of previous scientific knowledge and theoretical analysis, this report addresses two main questions (a) what is migrants' economic impact on European rural and mountain

areas? And (b) does in-migration provoke innovations in firms and changes in communities in these areas? The next paragraph illustrates the theoretical framework adopted to carry out the examination of the empirical data collected on the field.

# Theoretical framework: Reading Migration Through the Foundational Economy.

This report adopts the ‘Foundational Economy’ (FE) (Bentham et al., 2013; Barbera, Negri & Salerno, 2018) as theoretical framework to analyse the empirical data collected by the national research teams of the MATILDE consortium. By FE it is meant: *‘the set of economic activities that constitute the material infrastructure of social life’*<sup>4</sup>. As stated in the WP4 guidelines, the foundational economy represents a valuable concept to understand the socio-economic structure of our society. Particularly, the foundational economy

*‘includes that large range of sectors, services and activities which allow the functioning of our societies, some of which are usually considered in traditional economic understanding and analysis as fully part of the ‘economy’ and accounted for (like food production and distribution, construction, waste management), while others are considered as part of either ‘the’ public sector (like health care and education), or part of a quasi-private one (like energy*

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<sup>4</sup> Barbera, F., Dagnes, J. & Salento, A. (2016), Se questo è lavoro. Meccanismi estrattivi e pratiche di resistenza, *Sociologia del lavoro*, 142:7-26; Bentham, J., et al. (2013), Manifesto for the Foundational Economy, CRESC Working Paper n.131.

*production and water usage), and consequently often neglected when assessing their role in the overall economic capacity of given context.<sup>5</sup>*

This conceptualization favours a wider understanding of the local economy intertwining the creation of value with the socio-economic development, the implementation of local infrastructures, and the never-ending process of rethinking local communities, which implies also the redefinition of ‘citizenship’ as the desire to act collectively (Carrosio, 2016; Barbera, Negri & Salerno, 2018). Engelen et al. (2017) use the FE theory to read the urban development dynamics and through this framework they have addressed important indications about the enhancement of local communities’ well-being; authors underline the necessity for regional and urban political agendas to focus on FE activities that can more stabilize the level of welfare because they aim to provide basic and fundamental goods and services (health, food, and energy) along with strategical infrastructures (e.g. affordable public transports).

On the contrary, political agendas have to avoid the prioritization of solely economic activities for speculation and profit maximization (e.g. favouring financial services or skyrocketing of house prices). This theory can help reading the local economic dynamics as enabling factors of migrants’ integration in local communities because FE theory does not contest the idea of the market as a form of economic coordination but it rejects the idea that market should be the only mean of integration within the social sphere (Barbera, Negri & Salerno, 2018). FE activities can be considered as a ‘civic infrastructure’ that favours the

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<sup>5</sup> ‘Guidelines for the qualitative part of WP4, Task 4.3’ Elaborated by UNIPR research team.

integration but only if they will be released from logics of short-termism growth, value extraction, and speculation (Barbera et al., 2016). Therefore, this analysis aims to translate such a theoretical framework in the examination of rural and mountain areas development. Consequently, the analysis applies the idea of FE to assess a setting of activities devoted to provide basic services, develop infrastructure, and assist people in daily life in areas with lower density of population and economic agents.

The acknowledgement of these economic agents is strategic to identify the main nodes in the local economic networks; as the Foundational Economy Collective authors (Arcidiacono et al., 2018) emphasize, it is important to look at the *'hybrid foundational alliances'* consisting of *'[s]tate actors of different scales, for-profit actors of different sizes, non-profit and informal institutions'* (p. 147). Over recent decades, post-productivist and new rurality theories have pointed out the key role that neo-rural residents have played in determining deep changes in these areas. They have through the promotion of social and economic re-structuring beyond agricultural productivism, i.e with tourism, quality productions, diversification and environmental conservation (Halfacree, 2012; Silva & Figueiredo, 2013).

The foundational economy theory enables our analysis to identify the key elements of local economic systems. This analysis considers the fundamental role that socio-economic contexts have in shaping and developing the strategies and functioning of enterprises (Welter, 2011) which are the principal agencies of economic development, thus they operate through processes of adaptation and flexibility to survive and grow (Brozovic, 2018). As Clausen (2020) points out, the geographical space of rurality influences how

agents and agencies think about their ventures. Consequently, MATILDE aims to understand how the contexts of rural and mountain areas at their turn affect migration influxes, as well as, how local economic agents react to migration.



## 2. Changes in business culture, innovations, and social entrepreneurship

In MATILDE regions, researchers have found diverse types of innovations and changes that companies implement to favour migrants' integration within their organizational structures as well as varied types of innovations introduced by migrant entrepreneurs.

### Innovation in companies employing migrants

In this first section, we explore the innovation as a process of adjustment between the companies and the migrant employees. Those changes aim to improve the recruitment process efficiency, to smooth the integration with the pre-existing workforce, and to facilitate intercultural communication and overcoming cultural barriers. Along with the necessity to deal with issues and complications related to migrants' integration, these firms

have also to face limits and barriers embedded in the geospatial conditions of rural and mountain areas. As results show, business in remote territories have to do a further step to accommodate certain employees' needs in order to ensure an attractive livelihood.

This section proposes a cross-examination of the 10 MATILDE country reports highlighting the communalities among the case studies, as well as showing those particular specificities of each national context. Results demonstrate an inclination of European companies to adequate their functioning to external inputs brought by migrants; these are the consequences of necessary adaptation to people with diverse languages and background but also the necessity to provide support - such as help with bureaucracy, mobility, and accommodation - to newcomers in remote, rural and mountain areas. We refer here to organizational changes as *'the reweaving of actors' webs of beliefs and habits of action as a result of new experiences obtained through interactions'* (Tsoukas & Chia 2002, p. 570). Furthermore, it is important to consider that organizational capacity to respond flexibly does not involve a single aspect but is a complex multi-factor process (Verdú & Gómez-Gras, 2009).

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## Recruitment process

Although the traditional forms are still in use (agencies, jobcentres, and advertisements), recruitment processes have implemented new methods to expand the geospatial scope of their searching for new workers. The objective is to look also outside the local territorial boundaries aiming to hire people even from other countries; this is a necessary consequence of the de-population of these remote areas where locals in their 20s and 30s

leave their native territories to move in cities to study and work (Kasimis, Papadopoulos & Pappas, 2010; Rye & Scott, 2018). Exemplary, Finnish high-tech companies open positions on websites which can be seen by people from all over the world, not limiting the spatial focus to the local region; in this way they can bring in people with the necessary skills (Rauhut et al., 2021).

Firms in the Outer Hebrides use the same method to hire workers in the fishing and accommodation sectors: due to the scarcity of local workforce, entrepreneurs take advantage of websites where they can select people from all over the world (Caputo et al., 2021b). Alongside the online recruitment, certain German companies pay for advertisements on regional media (Kordel, Weidinger & Güller-Frey, 2021).

The process of recruitment can also benefit from collaborations with other organizations such as job centres (Krodel et al., 2021) or local third sector organizations that operate to favour the integration of TCN workers, refugees, and asylum seekers (Gilli & Membretti, 2021; Kordel, Weidinger & Güller-Frey, 2021; Krasteva, 2021). In one case, an entrepreneur tried to recruit directly from the country of origin new workers but this strategy ended negatively (Krasteva, 2021). All these strategies prove the necessity of these companies, located in remote areas, to compensate the absence of local workforce with foreign workers. For these reasons, they have adopted new solutions or generated innovative ways to reach potential candidates who are not located in the same region.

These findings confirm the necessity of companies to develop a diversification of strategies to increase their channels of recruitment and use diverse methods (Fellini, Ferro

& Fullin, 2007). The internet plays a fundamental role, it has opened new frontiers for recruitment putting directly in contact employers and workers; the digital devices have become strategic tools to overcome the limits of the remoteness shortening the distance between companies and potential employees.

Nevertheless, migrants' word-of-mouth remains a common solution too. As Schapendonk (2015) considers in his analysis on migrants from Africa to Europe, networking has a fundamental role in explaining the migration phenomenon as networking is *'is thus about having and finding connectivity as well as mobilising the right connections at the right moments, which then involves some degree of path-dependency'* (p. 818). This remains the most used informal way to find new workers for many enterprises; companies can rely on migrants' personal networks to contact other potential employees (Caputo et al., 2021b; Kordel, Weidinger & Güller-Frey, 2021; Krasteva, 2021); in certain cases, employers offer bonus to those who bring new qualified workforce (Kordel, Weidinger & Güller-Frey, 2021). As illustrated by Caputo et al. (2021b) in the Scottish case study, these personal connections can also allow a basic form of newcomers' integration through the brokers who bring migrants to companies; these brokers select the most potential candidates for the job, explain the tasks, and translate the instructions for the new employees.

In informal work contexts, intermediations are often the basis for a hierarchiation among workers; exemplarily, 'caporalato' (an Italian word to indicate an illegal system of recruitment in South Italy) is a phenomenon evolved from an intermediary task to a terrain for enhancing the intangible resources that migrant workers can boost on other migrant

workers. In fact, the more the system of recruitment is informal and exploitative, the more informal intermediation is an element of vital importance for the functioning of the labour market itself and for the hierarchization of the workforce. Results from studies on the Italian agricultural sector have demonstrated the existence and the pervasiveness of this system (Perrotta & Sacchetto, 2014; Lo Cascio & Perrotta, 2019).

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## Migrant Workers' Integration in the Organizations

The next step after the recruitment is the fostering of the new workers' integration within the organizational structure. Favouring the correct integration of newcomers can involve the implementation of new practices, as well as the modification of organization functioning, or even the creation of new services. The most common issue across all countries is the language barrier. Companies have found a broad range of solutions: they range from the easiest, such as the creation of special informative materials in workers' mother tongue or with the use of videos, images, and apps to explain tasks (Gilli & Membretti, 2021; Hansson et al., 2021; Kordel, Weidinger & Güller-Frey, 2021), addressing employees to local organizations with language and professional courses (Gilli & Membretti, 2021; Gruber et al., 2021; Hansson et al., 2021; Krasteva, 2021;) to the more complex solutions as the involvement of facilitators and mentors (Hansson et al., 2021; Kordel, Weidinger & Güller-Frey, 2021).

In other cases, the employers ask workers to avoid the use of their native languages while they are at the working places to force them to practice the national language (Gilli & Membretti, 2021; Hansson et al., 2021). An informal solution is the use of one employee as

translator for other compatriots (Caputo et al., 2021b). To overcome the language barriers, certain companies can choose to employ migrant workers only for simple and standardised procedures but this, as results from Italy indicate, can cause another obstacle: these workers cannot have a professional growth and risk not to have the possibility for professional development (Gilli & Membretti, 2021).

On the opposite, TCN migrants who speak the host country native language (e.g. people from South America in Spain) have a quicker integration into organizations (Lardiés-Bosque & del Olmo Vicén, 2021). The integration can also be facilitated by the modification of the physical working space: in Spain, certain companies have created dedicated spaces to favour socialization, integration and training of the new workers (*ibid*). These areas can have diverse functionalities such as a multi-faith room where workers from diverse religion confessions can have a place where to pray; other forms of dedicated space can be rooms for coffee-break where companies can also host activities for socialization and language courses.

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## Favouring Integration within the Existing Workforce

Introductory courses can favour newcomer workers' cultural integration. This can help migrant workers to comprehend the functioning of companies and their working task, as well these can be useful moments for employers to understand new employees' needs and demands about their integration. Furthermore, in certain countries (e.g. Germany and Spain) the national and regional authorities offer resources and support to companies in leading the integration process providing training for diversity management and funds for

overcoming language barriers (Kordel, Weidinger & Güller-Frey, 2021; Lardiés-Bosque & del Olmo Vicén, 2021).

Even collaborations among companies can be a resource, as in the case of Bulgaria where businesses that employ refugees share their experiences in dedicated forums and can learn from each other's knowledge (Krasteva, 2021). Certain companies consider also very important the *management of tensions* that can arise among workers due to cultural diversities; many Austrian businesses have put in charge certain managers to deal with these issues and pacify conflicts (Gruber et al., 2021).

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## Flexibility and Changes in the Organizational Functioning

A communality that emerges among the integration processes in the diverse countries is the flexibility that enterprises develop to accomplish migrants' needs. A business develops 'strategic flexibility' in response to environmental uncertainties, which can become source of change; although the strategic flexibility is usually associated with outcomes of financial performance, this can also lead to consolidate an appropriate organizational structure (Brozovic, 2018).

These organizational changes are a hybrid between formal modifications of the working process and informal support that employers and managers provide to newcomers. Informally, this flexibility can appear as managers' inclination to receive workers' suggestions and listen to their needs (Gruber et al., 2021); exemplary, access to kindergarten for kids or comprehension of their religious duties, e.g. halal food for Muslims.

Particular attention with flexible hours can be dedicated to Islamic believers during the fasting days of Ramadan (Lardiés-Bosque & del Olmo Vicén, 2021). Flexibility can occur in *planning holidays* to allow foreign workers to return to their native countries (Gruber et al., 2021; Lardiés-Bosque & del Olmo Vicén, 2021).

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## Support with External Issues

The facilitation of migrant workers' process of integration passes also through support in searching for an accommodation where the employee, and in some cases their family, can live (Caputo et al., 2021b; Kordel, Weidinger & Güller-Frey, 2021; Krasteva, 2021; Gruber et al., 2021). This particular assistance reflects the difficulty to find an available and affordable home in remote areas. In certain cases, regions have fewer accommodations available, therefore firms have to consider also this aspect when they open new positions. In Spain, certain companies have organized their own transport service to help those workers who do not have a car, which is fundamental in remote areas (Lardiés-Bosque & del Olmo Vicén, 2021).

These aspects probably demonstrate more than other the necessity to implement innovative solution by companies to make migrant workers' settlement easier and with less problems and obstacles. Accommodation and mobility represent two of the main spatial issues in the remote areas. Accessibility to resources and mobility to work places are important factors in the creation of well-being and social sustainability (Camarero & Oliva, 2019); therefore, recognizing this issues embedded in the physical geospatial structure of remote is an important step toward migrant workers' right integration. Alongside, housing



can become an issue in those remote areas that base their local economy also on tourism (Perlik & Membretti, 2018); consequently, employers have to be also able to indicate or provide possible solutions for accommodation to new workers who immigrate in the area. Furthermore, it can result in assistance with the official documents for work or residence permits, as well as other administrative obligations (Caputo et al., 2021b; Gruber et al., 2021). These can also lead to create local networks with other organizations and local authorities for having dedicated channels to access services; certain companies also offer kindergarten to their employees (Gruber et al., 2021).

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## Covid-19 Effects on Organization Functioning

Contrast of Covid-19 pandemic has had huge impact on these firms and has forced them to adapt their structure and staff members to the new dispositions for contrasting the virus spreading. Certain Austrian businesses have assisted their foreign employees in the understanding of these new obligations; they have also perceived the distress caused by the impossibilities to go back to their families in the countries of origin (Gruber et al., 2021). Moreover, travelling restrictions have made more difficult for workers to travel to locations where these firms are based making the recruitment more complex (Caputo et al., 2021b; Rauhut et al., 2021).

As pointed by various sources from the fieldworks, interviewees present a perception of remoteness as an obstacle for their businesses; the long distance from urban areas can result as a limitation because rural and mountain territories do not offer equal services, accommodation, and facilities. This perspective is overturned in relation to the

pandemic; findings from the reports show how this critical conditions have also triggered innovation in migrant-owned businesses (explain in the section ‘Migrant-owned Enterprises in Rural and Mountain Areas’). Furthermore, other residents’ stable presence caused by lockdowns have increased the revenues for the retail shops in rural and mountain areas; the impossibility to go to urban areas forced locals to buy directly from local small retail shops closer (Blumenthal & Lund, 2021).

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## Migrants’ Skills in the Working Process

A further step in the process of integration is the assessment and recognition of migrants’ working skills; in front of the limitation of legal acceptance of foreign qualifications, companies can make an effort to valorise these skills as far as they can do legally (Gruber et al., 2021). Migrants might be holder of important working skills and know-how that can enhance the quality of the production, as well as an entire local sector. This is the case of a Turkish region that has witnessed the integration of Syrian refugees, mostly from a zone of Syria with an important textile production tradition, contributing to the enhancement of the regional economy with qualified workers and new enterprises in the clothing sector (Akay & Doğan Yenisey, 2021).

Nevertheless, in many cases, foreign workers in the examined enterprises have to occupy positions that do not match their level of education and qualification just to have a job or because there is not a legal recognition of qualifications from their native countries (Gilli & Membretti, 2021; Lardiés-Bosque & del Olmo Vicén, 2021).

Migrants can also be source of innovation for the enterprises; they can provide services or client assistance in multiple languages expanding the plethora of customers; as well, they can also bring their international networks of contacts into the firms, particularly in the tourism sector (Kordel, Weidinger & Güller-Frey, 2021; Rauhut et al., 2021). There is also a case in the Austrian construction sector where a migrant has convinced companies in their native country to invest in the hosting region (Gruber et al., 2021). Enterprises can also take direct advantage from migrant workers' presence as this can reflect their attitude of being companies with either an international identity (Gruber et al., 2021; Rauhut et al., 2021) or an attention to equity in ethnic diversity (Gilli & Membretti, 2021).

## Migrant-owned Enterprises in Rural and Mountain Areas

In this section, we will explore the innovations resulting from migrants' agency and empowerment and their benefits for the local community. This is the case notably of migrant-owned enterprises. According to MATILDE findings, they contribute to enrich the local market offer with new products and services, as well as, key changes in the production systems. In various countries there is evidence that migrants can bring new products to satisfy compatriots and natives' requests; these novelties are mostly in the food area, both in the retail and restauration (Blumenthal & Lund, 2021; Akay & Doğan Yenisey, 2021; Rauhut et al., 2021). In both the Finnish and Norwegian regions, migrant-owners of take-away

restaurants have been the first to bring the delivery service there and this had proved to be a vital solution to keep the business alive during lockdowns (Blumenthal & Lund, 2021; Rauhut et al., 2021).

A further interesting innovation is the use of store credit in Syrian shops based in the Turkish MATILDE region under analysis; findings show that this is a practice that Syrian entrepreneurs have adopted in their small retail shops to help both their ethnic community and locals (Akay & Doğan Yenisey, 2021). Another important service to enhance the diversification of the market is translations from foreign to local language. Migrants help with their knowledge of other languages; in this case, the Covid-19 pandemic has accelerated the process of digitalization, whereby, these services can now easily overcome the barrier of remoteness and access wider markets (Gruber et al., 2021).

Along with these concrete innovations, it is interesting to observe particularities such as the case of a self-employed migrant who has been the first to introduce the idea of sustainability in business in the Finnish region where s/he lives (Rauhut et al., 2021). Migrant-owned businesses can also function as a form of social integration for other newcomer workers employing them. Support to migrants for starting up new businesses can arrive from various sources: in Carinthia - an Austrian region where certain selected businesses are located - the local chamber of commerce provides mentorship and consultancy (Gruber et al., 2021). In the Scottish Outer Hebrides, along with the *Business Gate Away* - a service from the local council that provides business related support also to newcomers - various actors of the local community supported the creation of migrant-owned business. A fishing and transformation company has supported two of its

employees in starting up their fishing business. This has allowed the migrant to develop their own business idea, bring in the UK other member of their family. Furthermore, the first company has had also a direct benefit; as main supplier of this firm, the migrant fisherman has increased their volume of fish for transformation. This has determined a consistent economic growth for the firm (Caputo et al., 2021b).

Generally, results indicate migrants' considerable participation in enhancing the local economic wealth with their businesses: they provide new job positions, for both locals and other migrants, as well as they contribute with investment and tax revenues. Nevertheless, we should consider that in certain cases these migrant-owned businesses mostly serve their ethnic communities and do not look at the general market generating niches that do not favour their social integration (Akay & Doğan Yenisey, 2021; Lardiés-Bosque & del Olmo Vicén, 2021). Despite this possible closure to a wider market, the presence of migrant-owned businesses demonstrates an adaptation to the selected rural and mountain areas; migrants find market niches where they can develop their ideas. According to Vitores, Fernández, and Caro (2020), migrants might go for this solution as a response to the absence of other opportunities and make a forced decision to open their own business to survive.

# Social Enterprises in Migrants’ Economic Integration Processes

About the role of social enterprises, they have proved to be capable actors for developing rural areas because they prioritize the social mission over the profit maximization, are focused on sustainable development, and enhance a more social and solidarity economy (Steiner & Teasdale, 2019; Calo et al., 2020; Bianchi, 2021; Olmedo, Twuijver & O’Shaughnessy, 2021).

This accomplishment of a social mission is realized through the assistance of the more fragile migrants in entering the local job market, in this sense, these organizations can be seen as ‘work integration social enterprises’ (WISEs) (Spear & Bidet, 2005; Defourny & Nyssens, 2006; Borzaga, Fazzi & Galera, 2016). Usually, social enterprises function as a safety place where subjects can receive help in learning the language, deal with administrative documents, and learn working skill before they are ready to enter autonomously the market (Barraket, 2014). Results explain the fundamental role of social enterprises in the process of refugees and asylum seekers’ integration in various countries (Austria, Bulgaria, Germany, Turkey).

WISEs do not assess people based on their existing working skills, they firstly work on their empowerment. As results from Austria confirm, the first entering step is the assistance with learning the local language and the comprehension of their working potentials (Gruber et al., 2021). Looking at the wider category of migrants, in many of the

selected countries (Bulgaria, Finland, Germany, and Turkey) WISEs dedicate their effort to help them in the same way creating a dedicated process of integration that simultaneously works on language, working skills, and legal recognition (Akay & Doğan Yenisey, 2021; Hansson et al., 2021; Krasteva, 2021; Kordel, Weidinger & Güller-Frey, 2021; Rauhut et al., 2021).

To fulfil their goals of integration, even WISEs have adjusted their functioning process to new tasks: WISEs can develop networks with local authorities to better assist their employees and dedicated time and efforts to assess each migrant's case (Gruber et al., 2021; Krasteva, 2021). WISE can also develop collaborations with for-profit businesses to enhance their volume of revenue and let them become more aware of WISEs social impact (Krasteva, 2021).

Within the contexts where they operate, social enterprises can generate an impact on external subjects influencing them with their mission, values, and actions (Mazzei, 2017; Roundy, 2017); therefore, social enterprises act as facilitators of migrants' social integration because they provide resources to favour their entering the socio-economic context. This important work of social enterprises is fundamental to favour the integration of migrants, consequently, it is key that governments provide legal recognition to these organizations helping them to achieve their social mission. As a counterproof of this evidence, in Turkey, where the absence of policies for recognising social enterprises forces activists to use the non-profit legal form to organize their activities, the direct employment of any kind of workers is a problem because NGOs are not supposed to have workers in the local policymakers' conception (Akay & Doğan Yenisey, 2021). Legal or policy recognition is also

a fundamental step; this can bring fiscal benefits and help to alleviate certain market pressures (Tracey, Phillips & Jarvis, 2011).

## General Remarks on Migrants' Impact on Local Firms

Results from the MATILDE regions show a variety of changes and innovations brought by migrants' arrival in these areas. Generally, local firms play a salient role in favouring newcomers' integration, firstly in the working spaces, and then also in the external environment. This is a necessary step to keep these workers on the territories, which present difficulties such as mobility and possibilities to find accommodation.

Migrants themselves have also developed self-reliant solutions to adapt their economic conditions to the rural and mountain areas starting-up their own businesses; findings show that these have proved to be innovators (e.g. funding mechanism or the use of credit) and they diversify the market by bringing new products and services in the areas.

Finally, social enterprises in MATILDE regions act as facilitators of migrants' social integration because they provide resources to favour their entering the socio-economic context.



# 3. Community and territorial impact of TCNs' economic participation in the MATILDE regions

Throughout their participation to the local economy in the MATILDE regions, migrants impact the local community and territory and intertwine with them. “Foreign immigrants represent one of the clearer indicators of the concrete and multidimensional relationship between rural/remote/mountainous regions and the globalized world, in terms of demographic impact, labor force contribution and socio-cultural change connected to the arrival and settling of newcomers (Perlik and Membretti 2019). In this section, we explore how TCNs participation in the local economy generated a wide range of territorial impacts in the MATILDE regions focusing in particular on how rurality and remoteness affect the way migrant employment and self-employment participate in the development of links or interaction with the local community and territory. Moreover, we discuss the changes that migrants' entrepreneurship has provoked in term notably of their perception by both the locals and the migrants' themselves.

The cross-examination of the TCNs' community and territorial impact in the MATILDE country reports highlights some communalities in terms of notably: provision of workforce for existing enterprises; effect of migrants' employment on social cohesion; contribution of migrants' entrepreneurship to the continuity of the local economic sectors; and the active role of migrant entrepreneurship for social integration and to enhance a positive perception of migration.

## The provision of workforce for existing enterprises

Migrants' contribution as labour force for existing enterprises is to be understood in the context of the depopulation trends – both from natural and migratory origin – that concern many MATILDE regions (see Kordel & Membretti, 2020) and/or as economical labour availability, notably in sectors and position that have low attr2020activity for the rest of the population. This trend has been described in most countries from different perspectives.

In the Austrian regions of Carinthia and Vorarlberg, migrant workforce – skilled and highly skilled as well as in routine occupation – is a decisive factor for larger international companies to remain competitive as well as for family enterprises who have relied on migrant workforce already since decades (Gruber et al., 2021). In the Bulgarian region of Haskovo, where labour migration is absent it was highlighted that migrants, and specifically refugees, were employed as cheap labour force (Krasteva et al., 2021). Regarding the

Finnish regions of Ostrobothnia and North Karelia, it has been highlighted a mismatch between unemployed labour force's required skills and employment opportunities and consequent labour shortage. TCNs are more likely to contribute to unqualified jobs compared to the native labour force and tend – just as the latter – to move away from the rural and peripheral regions of North Karelia and Ostrobothnia to places with more opportunities, reinforcing and even exacerbating the labour shortage in the region (Rauhut et al., 2021). The German region of Bavaria is characterised by an ageing rural society and by the out-migration of young people and TCNs are needed notably in labour-intensive sectors that are lowly attractive for Germans and EU migrants (agriculture, manufacturing industry and the service sector) because of the hard work or irregular working hours. Due to their lacking knowledge of the German labour market and social networks, TCNs are willing to accept the precarious working conditions and, thus, facilitated that businesses and work places could remain on-site.

The contribution of TCNs workforce to existing enterprises, however, is hampered by legal barriers (migrants lacking legal knowledge about staying and work permits, the bureaucracy associated to legal issues), mobility challenges in accessing the workplace, shortage of housing availability, negative attitude of colleagues and customers, e.g. due to the (feared) negative attitude of customers, it was found that foreigners often had to work 'behind the scene' (Kordel, Weidinger & Güller-Frey, 2021). In Italy, in the studied regions and enterprises, the migrant workforce seems to fill positions considered not socially desirable among Italians, the labour supply appears to be a relevant pull factor for settling, particularly in South Tyrol (Gilli & Membretti, 2021).

In Spain, TCNs occupy low-paid, seasonal and precarious jobs, such as in the agricultural sector. In these sectors the wide job offer is linked notably to the dissipation of native labour force for other sectors with better working conditions and a change in the way of production with larger farms that frequently ceased to be family-run, and therefore need to hire salaried workers to guarantee the best output (Lardiés-Bosque & Del Olmo-Vicén, 2021). In rural Sweden, international migration is perceived as one of the remedies to labour market vacancies, while the native-born population with increasing pace leave rural areas of Sweden to live in urban areas, foreign-born immigrants – part of them from other Nordic countries – move to the countryside and contribute to rejuvenating the population structure (Hansson et al., 2021).

In Turkey, Syrians were granted the temporary protection status (TPS) in 2014. To access to the labour market, they need to obtain a work permit. In Bursa region, Syrians registered were about 180.000 while the number of work permit less than 9.000. However, the seasonal agriculture and live-stock work are exempted from the work permit requirement. This is confirmed in the region of Karacabey, where Syrians are employed in the fields during the summer while Afghans, most of whom are irregular migrants, are recruited as shepherds in the husbandries and work informally. (Akay & Doğan Yenisey, 2021).

Finally, in the United Kingdom, in the region of the Outer Hebrides, in the context of outmigration of native working age population for education and better work opportunities, migrant workforce is needed to allow the sustainability of essential local economic sectors. In the fishing and tourism industries, migrant workers are notably EU

nationals and returning or seasonal EU migrants to be employed in fishing (while settled migrants are employed in the fish processing) and hospitality. Brexit made impossible to hire new EU migrants to many enterprises, bringing a significant change in the workforce availability and in migration patterns of EU citizens. Brexit outcomes will be better observable in the next future (Caputo et al., 2021b). The national reports point to the impact of the migrant labour workforce in the rural regions being visible notably on four domains.

Firstly, we could appreciate how migrant labour force allows the continuity of local enterprises and contribute to avoid the loss of local economic activities both in terms of offshoring and of ending of their activity (as discussed notably in the German, Austrian, Spanish and British reports). In-migration seems to reduce of offshoring (see Alvarez & Tresa, 2020), in relation to the presence of Eastern European workers in Western Europe) or the end of the economic activities by providing (cheap) labour force. The rising demand for low-wage migrant labour in rural Europe has been previously discussed by the literature notably in relation to the food sector (Rye & Scott, 2018). It is important to notice here that the migration trajectory (Snel, Bilgili & Staring, 2021) can continue further and as in the Finnish case it can follow the same direction from rural to urban than the native out-migration fluxes, hence reinforcing the effects of the labour shortage (Rauhut et al., 2021).

Secondly, migrants seem to have a complementary role in the workforce to natives as they tend to fill positions considered not socially desirable (Gilli & Membretti, 2021) or as their presence emerges in sectors that have been deserted by natives because of a change in the production system (Lardiés-Bosque & Del Olmo-Vicén, 2021) or as in labour-intensive sectors and low paid positions.

Thirdly, and strongly related to the first two points, those regional-based analysis referred to various forms of exploitation, such as the employment of a worker in an irregular situation under ‘particularly exploitative working conditions’. This means working conditions ‘where there is a striking disproportion compared with the terms of employment of legally employed workers which, for example, affects workers’ health and safety, and which offends against human dignity’ (Article 2, EU Employer Sanctions Directive, in European Union Agency for Fundamental Rights 2015, p. 12).

In the studied regions, it took many forms: employment of workers in legal precarious conditions (Krasteva et al., 2021), informal labour and migrants paying for employers’ costs in order to get a formal job (Akay & Doğan Yenisey, 2021), irregular working hours (Kordel, Weidinger & Güller-Frey, 2021), flexible working hours in relation to the work availability (Caputo et al., 2021b), working under their qualification level (Kordel, Weidinger & Güller-Frey, 2021), temporary and unstable positions (Lardiés-Bosque & Del Olmo-Vicén, 2021). Housing can contribute as well to migrant workforce exploitation, e.g. in the case corporate housing offered to TCNs is overpriced and cut directly from their salaries (Kordel, Weidinger & Güller-Frey, 2021) or when informal housing in the workplace is offered as for the adaptation of the vessels as dormitory for the seasonal fishermen in northern regions (Caputo et al., 2021b).

Fourthly and finally, the availability of workforce as well its exposure to exploitation are related to national and local policies. At national level, migration policies affect the possibility for local companies to recruit migrant workers with important effects on local economic sector (Caputo et al., 2021) and on the workers’ exposure to different forms of

exploitation (see notably Akay & Doğan Yenisey 2021; Caputo et al. 2021b; Kordel, Weidinger & Güller-Frey, 2021; Lardiés-Bosque & Del Olmo-Vicén, 2021). At local level, issues like housing and mobility when not addressed increase migrants' exposure to exploitation (Caputo et al., 2021b; Lardiés-Bosque & Del Olmo-Vicén, 2021) and limit their possibility of labour integration with effects on the availability of the workforce for the local companies (Kordel, Weidinger & Güller-Frey, 2021).

## TCNs employment and entrepreneurship impact on social cohesion

We explore here to what extent the employment of TCNs has an impact on the social cohesion of the studied regions, given that the workplace provides an encounter space where it is possible to explore norms, values and practises, and build relationships.

The role of enterprises as a place where to share norms and values among different actors is discussed by the Austrian report, in terms of the assimilation of TCNs to 'traditional values' expected by the employers. Those values concern the attitude toward work – a high willingness to work and satisfying performance, sufficient learning capacities, few absences, punctuality, diligence, reliability – as well as cooperation and high personal efforts in learning German (Gruber et al. 2021). In the Finnish region of North Karelia, in a

pluralist approach, companies and their immigrant workers create tolerance and positive relations (Rauhut et al., 2021).

Labour integration emerged as a ‘functional factor’ for integration (Kearns & Whitley, 2015), as a precursor to integration (Fyvie et al., 2003) and as means towards integration (Ager & Strang, 2004). Accordingly, a link between labour integration and social inclusion has been found in the studied regions. In the Italian regions – South Tyrol and Turin – while migrants arrive in a specific area mainly through family strategies or because of the migration process, i.e. being included in a reception project for asylum seekers and refugees, the work dimension is the key factor to remain in the area. Social inclusion is achieved through labour integration: *‘I had a small world and this one has widened, because I feel accepted and valued for the work I do’* (Gilli & Membretti, 2021).

On an opposite perspective, the Bulgarian Harmanli region, among migrants arrived to join their family, social inclusion seems the path to labour integration and not vice versa: the access to the labour market takes place relatively quickly and easily because of the partner network (Krasteva, 2021). In the Norwegian region of Innlandet, businesses that are owned by migrant entrepreneurs or that employ migrants creates everyday arenas where migrants and non-migrants can interact, get to know each other, and build relationships. The size of the local community and certain types of work (like working in the service industry) help achieving integration. Similarly, social enterprises where migrants are volunteers or employees, have a similar function: they create social arenas for people to meet and interact, which, according to the organizations foster inclusion and mutual



understanding, combat stereotypes, and contribute to change people's attitudes (Blumenthal & Lund, 2021).

In the German regions, the impact of employment on social inclusion was related to the categories of workers and the condition of work: on the one side, foreign nurses were regularly seeing their co-workers for leisure, while, on the other side, TCNs who did not have legal access to the labour market suffered from lacking contact opportunities and showed a slowed process of language acquisition. TCNs' private contact with colleagues was scarce. Eventually, the lack of community integration was considered a reason why many single TCN workers recruited from abroad opted to leave (Kordel, Weidinger & Güller-Frey, 2021). The German analysis is mirrored in the British regions. Here, being in the workplace, often among fellow nationals, for long working hours and during the weekend does constitute a barrier to social inclusion for some categories of workers, notably factory workers and fishermen. The challenge of long working hours and no rest day to favour social inclusion has been highlighted also in relation to migrant entrepreneurs in Germany (Kordel, Weidinger & Güller-Frey, 2021) and to migrant workers in the Spanish Aragon region (Lardiés-Bosque & Del Olmo-Vicén, 2021).

Social inclusion through labour integration – when it occurs – has effects outside the workspace, increasing the interaction between locals and newcomers (Rauhut et al., 2021). In the Spanish region of Aragon, the changes in the companies due to the immigrant presence encourages the development of integration mechanisms that are exported to the daily life of the town, improving social cohesion (Lardiés-Bosque & Del Olmo-Vicén, 2021). In Sweden, rurality seems an important element in the inclusion of migrant workers as

employment in small town seems to bring significant opportunities for socialisation, connectedness with others: e.g. shops are ‘hubs’ for the local community and there TCNs have personal connections with managers making the work environment feeling safer. Furthermore, TCN workers (as well as entrepreneurs) benefit from support networks and information contacts when it comes to enter the labour market as well as operating business (Hansson et al., 2021).

Among the impact of TCNs entrepreneurship in the local community four aspects have been more frequently discussed in MATILDE regions.

Firstly, the presence of TCNs as well as their specific demand for certain products – e.g. ethnic and religiously allowed food – opens niches in the market and diversifies local economies as described in most MATILDE regions and/or they potentially revived certain economic sectors, e.g. services (barber shops), fishing, etc. (Akay & Doğan Yenisey 2021; Blumenthal & Lund 2021; Caputo et al. 2021b; Krasteva, 2021, Kordel, Weidinger & Güller-Frey, 2021).

Secondly, TCNs entrepreneurship creates physical space for encounter. An encounter is a gathering of members of one or more groups, (physically) present and engaged in some activity, its temporality is defined by the actors (Goffman, 1961). Encounters can be described as an interaction and interconnection process that reflects the composite social relationships. Urban spaces for encounter and their role in strengthening local interethnic coexistence has been largely explored in the urban context (Hall, 2015) but seems understudied in the rural regions. The role of migrants’

entrepreneurship as space for encounter was analysed notably in Austria, Finland, Germany, Spain, Norway and the United Kingdom. In those countries' regions, the enterprises owned by migrants act as social arenas where people from different nationalities come together, meet, and develop bonds with impact on the wider community (Blumenthal & Lund, 2021).

Thirdly, and related to the previous point, those enterprises/spaces of encounter allow the sharing of cultural traits – e.g. by selling food of their country of origin's cuisine – as described in Bulgaria, Finland, Germany, Norway and the United Kingdom. Sharing cultural traits of their country of origin with the local community as well as of personal biographies has effects in terms of multiculturalism, (Blumenthal & Lund, 2021) and increased awareness for cultural and religious aspects of TCNs (Kordel, Weidinger & Güller-Frey, 2021). In Norway, migrant companies based on or related to their own culture can function as cultural 'door openers' as they contribute to increase cultural understanding in the local community (Blumenthal & Lund, 2021).

Finally, the creation of migrant enterprises brought in many regions a change in the perception of a specific migrant group or of migrants in general, by providing insight into other cultural practices and value systems and contributing to combating misconceptions and negative stereotypes, e.g. in the United Kingdom the local Syrian refugees and their economic activities in traditional sectors had an important impact in terms of perceptions of this migrant group (Caputo et al., 2021b).

Nevertheless, in the German regions a less positive description emerges of the impact of migrant enterprises as the low demand for products or services in rural areas –

where apart locals are generally still hesitant and lack knowledge about TCNs' products – made the TCN entrepreneur especially vulnerable toward the COVID-19 pandemic.

## Territorial impact from TCNs participation in the local economy

TCNs participation in the local economy generated a wide range territorial impacts in the MATILDE regions. In some regions it emerged how the presence of refugees and migrants and their employment in enterprises and social enterprises boosted local business in the sphere of trade, services, real estate. In Bulgaria, the transitional character of refugee migration limits their impact while amenity migrants help revitalising villages, boosting the local economies by renovating houses and increasing the consumption of goods and services, and repopulating depopulated areas (Krasteva, 2021). In the Italian regions of South Tyrol and the Metropolitan City of Turin, the territorial impact was considered also according to the relationship that migrants established with the territory. Migrants declare to appreciate their actual place of residence that is very close to their place of work, in most cases: simpler lifestyle of rural and mountain localities is generally valued as well as a certain absence of social tensions. However, among both the foreign respondents in both regions there seems to be little territorial awareness (Gilli & Membretti, 2021).

Two main challenges emerged in many regions that can hamper migrants' relation to the rural territory: the access to housing and mobility. In Spain for example, in small villages there is little supply of accommodation, this stock is in bad condition, and the access to rent and property are very complicated. The lack of demographic generational change with old people dying and no young people living in rural areas implies the abandonment and decay of the houses. In addition, the heirs want to keep the estate, which is their roots, and for that reason, they usually neither sell nor rent it. This makes access to housing very challenging for migrants (Lardiés-Bosque & Del Olmo-Vicén, 2021).

In the Scottish Outer Hebrides, the lack of affordable housing is determined by the destination of 40% of the housing to the tourism industry, the impact on the local market of (pre)pension urbanite British migrants that increased the prices of the housing, and by the desire of native out-migrants to keep their family estates. Lack of housing impact settled migrants, who can ask for social rented houses, but notably seasonal migrants who live in informal accommodation like fishing vessels (Caputo et al., 2021b).

As regards everyday mobility, it is widely explored by the literature how intersectionality (Hopkins, 2017) impacts it (Reid-Musson, 2018). Intersectionality offers a theoretical framework to holistically consider how migrants' multiple identities (ethnicity, sexual orientation, gender, religion), the type of migration, and their socio-economic conditions affect their mobility. In MATILDE regions it emerged that the possibility of commuting to the workplace is specifically relevant in a rural context as it limited the opportunities for TCNs. Also we could see that this issue has been addressed by some companies, notably in Germany (Kordel, Weidinger & Güller-Frey, 2021); it is a determinant

of TCNs spatial pattern for example in the Italian South Tyrol where the actual place of residence is very close to the workplace (Gilli & Membretti, 2021) or in the Scottish one where the island nature of the territory makes commuting particularly time consuming (Caputo et al., 2021b). In the Scottish as well in the Austrian regions, the lack of housing and mobility has been identified as a key challenge that limits the availability of migrant workforce.

## 4. Conclusion

Despite certain differences among the various MATILDE regions, findings point to communalities and depict similar economic dynamics. The analysis of these empirical elements can answer the two research questions that lead our research (a) what is migrants' economic impact on European rural and mountain areas? And (b) Does immigration provoke innovations in firms and changes in communities in these areas? In MATILDE regions migrants contribute to maintain alive local economies, to enlarge the offer in local markets, and their presence trigger innovations. Nevertheless, this analysis also found that while contributing to sustain local economies migrants often experience exploitation under various forms: notably poor legal work conditions and informal work, long working hours and intensive labour, low wages, informal housing in the workplace.

These findings need to be put in dialogue with existing theories on rural and mountain development. Considering the relevant role that new theories on rurality have achieved in the last three decades (Long & Van Der Ploeg, 1994; Ray, 1999; Bosworth et al., 2016), it is necessary to intertwine the analysis of this report with the existing conceptualization of new development of rural and mountain areas to update and improve the understanding of socio-economic dynamics in the idea of a new endogenous development of rural and mountain areas. This concept has reached a considerable position in the sociological debate. Rural and mountain areas have gone through a process of renaissance (see

MATILDE Manifesto : The Renaissance of Remote Places<sup>6</sup>) and new attention thanks to dynamics of re-location and micro-scale development with new and sustainable approaches (Pallarès-Blanch, Prados Velasco & Pujol, 2014; Perlik & Membretti, 2018; Olmedo, Twuijver & O'Shaughnessy, 2021).

Findings from the cross-country analysis add new insights to the idea of endogenous development underlining how this has to be more interrelated with exogenous dynamics such as national policy frameworks, among those immigration policies. As main conclusion, the report stresses the importance to recognize that the development of rural areas is deeply bonded also to macro-level factors such as the global migration fluxes that are influenced by national political decisions (Rye & Scott, 2018). Exemplarily, Brexit has a considerable impact on the in-migration of non-British workforce in rural Scotland such as EU citizens – whose fluxes increased since the beginning of the 2000s importantly contributing to the sustainability of the local economy – that need to regularise their position in order to stay or come back (if they are returning migrants).

Moreover, to add further difficulties, EU citizens' arrival from 2021 is regulated by the British Points-based System that significantly reduces the possibility for rural small and medium enterprises to hire them. Another macro-level element is the fact that the migration is a multi-faceted social phenomenon that has various economic impacts on these areas. As findings show, the migrant trajectory play an important role in determining

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<sup>6</sup> MATILDE Manifesto with will be developed as a collective volume that will be published in the very next months, under the coordination of Andrea Membretti (UEF, MATILDE Scientific Head), Anna Krasteva (NBU) and Thomas Dax (BAB). Please read the Manifesto's 10 Theses at <https://matilde-migration.eu/blog/matilde-manifesto-the-renaissance-of-remote-places/>



their economic impact, such as migrants from diverse countries and with different socio-economic conditions impact diversely on the territories.

The next section presents an overview on the main findings from the analysis; then, final remarks and conclusions point out the contribution of this research to the debate on migrants' economic impacts and effects on rural and mountain areas' foundational economy.

## Main results

Migration is a consolidated reality in MATILDE regions; local firms have now the capacities to attract workforce in these territories using the internet or relying on migrants' personal connections with other compatriots. Furthermore, the de-population process, which continues to be a constant trend in some of those regions, has left thousands job positions vacant; local economies need new workforce to fill in the gap left by the abandonment of these territories by the younger people who move to cities in search opportunities.

As a main consequence, local firms implement diverse solutions and forms of adaptation to let the process of integration for these migrant workers be easier. Firms in rural and mountain areas are now more connected with the rest of the world thanks to the internet and international networks that local firms can either create or be part of and that can facilitate recruitment and business. The implementation of solutions to facilitate the mobility, accommodation, and legal status of the migrant workforce witnesses the

necessity of these firms to maintain these people in their territories. Along with these changes, firms have to face other issues that normally characterise the integrational process such as language barrier and cultural differences. In this case, solutions can range from basic precautions (translation of working tasks in migrants' language) to more structured solutions such as the creation of dedicated spaces and resources for integration (managers in charge of dealing with this process) with a spillover effect on the larger rural communities.

Migration can also determine the presence of many migrant-owned businesses. Rural areas in particular represent spaces where competition is smaller than in urban areas, therefore they may be suitable for migrants to start a new activity. Moreover, the depopulation process gives migrants the opportunity to resume or continue the activity of local enterprises in traditional sectors left by natives. Migrants' firms operate in various fields, particularly in food, retail and technology sectors. Furthermore, we could see how TCN enterprises open niches in the market and diversify local economies and potentially revived certain economic sectors; they create a physical space for encounter or social arenas where people from different nationalities come together, meet, and develop bonds; and increase awareness for migrants cultural and religious traits (e.g. by selling food of their country of origin) with effects in terms of multiculturalism.

All these elements related to migrant enterprises brought in many regions a change in the perception of a specific migrant group or of migrants in general, by providing insight into other cultural practices and value systems and contributing to combating misconceptions and negative stereotypes. Social enterprises have also a fundamental role

because they contribute to integrate migrant economically and socially providing them with adequate working skills, language competences, and support with the bureaucracy.

Generally, social enterprises function as influencer of their socio-economic contexts putting under discussion assumptions through the hybridization of business practices and social objectives. In this way, social enterprises can support the local sustainable development stressing the importance of helping migrants, refugees, and asylum seekers in finding their position in local job markets and their social role in communities.

## Final Remarks and Conclusions

This research expands knowledge about the phenomenon of migration to rural and mountain areas and the consequent development from an economic perspective. As stated in the introduction, the MATILDE project WP4 aims to assess migrants' economic impact in the foundational economy of rural and mountain areas. Results stress the impacts and effects that migrant have had on various European areas in ten different regions and shed the light on new aspects of this phenomenon.

The inputs of new people and resources in the territories help to contrast, but not to reverse, processes of de-population and depletion (Hedberg & Haandrikman, 2014). In MATILDE regions, migrants' economic impact is materialized both through the filling in of job positions left by locals - caused by ageing population and out-migration of young residents - and by the increase of local businesses - which guarantee services and goods

in the foundational economy. Furthermore, generating wealth and job positions through both innovation in existing firms and starting-up of new businesses allow migrants to remain in these territories ensuring an adequate level of population to maintain active local services such as medical assistance, transportation and schools.

Although the key economic role of migration is demonstrated, it is fundamental to exemplify the complexity of this multi-faceted phenomenon (Kasimis & Papadopoulos, 2005; Aure, Førde & Magnussen, 2018; Perlik & Membretti, 2018). As previously said migrants' trajectory is crucial to understand their economic impact, therefore we will discuss here the impact of two categories of migrants, highly represented in MATILDE region, the seasonal and labour-intense workers with basic knowledge of local language, and the high-educated and skilled migrants with good fluency of local language.

Migrants with higher levels of working skills, education, and knowledge of natives' languages can occupy positions with higher wages and a better social prestige or also not to work at all. These are mostly part of a phenomenon of counter-urbanization which can have significant economic effects on local economies, particularly in the real estate markets, because it introduces economic agents with more financial resources thus able to acquire a wider share of local houses (Mayer & Meili, 2016; Somunu, Okuyucu & Öncü, 2019; Stockdale & MacLeod, 2013).

Low-skilled migrants fill in the gaps in local job markets left by locals because either these positions do not have social prestige or good wage or because of a shortage of residents in the working age. These are the workers in the most fragile conditions because

they have more difficulties in integrating themselves in the local economic systems. Main barriers are the language, cultural diversities, and legal recognition of their educational certificate and working skills; this determines a forced marginalization of migrants into sectors and jobs with lower salaries, social prestige and sometimes more precarious working conditions.

As Gkartzios and Ziebarth (2016) underline, international migrant workers in rural areas might suffer conditions of segregation, subsidiarity and disadvantage - particularly in finding accommodation - caused by their fragile working conditions. Albeit these barriers and limits cannot be solely addressed by local firms, local economic agents can lobby to require further public support in assisting the migrants' integration; indeed, the re-population of rural and mountain areas have to consider also these contextual necessities to improve a more suitable local development plan (Glass et al., 2020). Furthermore, we could see how the presence of those low paid workers in intensive-labour sectors allow the continuity of the activity in the rural areas and avoiding the out-sourcing, meaning that for local firms the presence of this fragile workers responds to their structural necessity to find cheap labour force.

Concluding, diverse categories of migrant produce diverse economic effects on territories (Pallarès-Blanch, Prados Velasco & Pujol, 2014; Rye & Scott, 2018; Somunu, Okuyucu & Öncü, 2019); consequently, diverse economic profile contribute also to locate them in diverse social positions in the community (Aure, Førde & Magnussen, 2018). This is the framework in which Covid-19 pandemic have hit ; as Sissons, Tiwasing, and Ferreira (2021) explain, workers in FE have worked continuously more than others during the

lockdowns but they have had more concerns about the impact of their work on health of themselves and their families.

This demonstrates the vital function of foundational economy and the central role that migrants have in these areas. Findings show how their presence have favoured the continuation of fundamental economic activities in rural and mountain areas which have ensured livelihood, services, and goods to local residents. Moreover, many migrant-owned businesses have improved their services and functioning during the pandemic to respond to locals' needs. Indeed, many local businesses in various MATILDE areas have survived thanks to their capacity to develop new strategies to overcome lockdown difficulties.

Moreover, the findings from the ten countries confirm the growing economic role of migrant-owned businesses already underlined by scientific literature (Kasimis, Papadopoulos & Pappas, 2010; Barth & Zalkat, 2021). As Bosworth and Atterton (2012) explain, migrant entrepreneurs can be resources to the betterment of local economy and generate 'spin-off benefits' for staff members, suppliers and the wider local economy. Furthermore, migrant entrepreneurs are able to maintain extra-territorial networks which can benefit the local economies (ibid.); findings confirm this aspect and stress the strategic role that the internet and new technologies have been having in enhancing capacities of these businesses.

Furthermore, the more migrant-owned businesses are integrated into local communities and economies larger is the impact they can have (Deller, Kures & Conroy, 2019). Findings are in line with this assumption because those that refer to their ethnic

communities do not look at the general market and remain in small economic niches while others that expand their pool of customers to other ethnic groups and natives have more changes to grow. Moreover, migrant-owned businesses expand the local market offer with new products and innovative services with a multicultural spill-over effect. Therefore, the migrant entrepreneurs' economic impact must be included in the conceptualization of rural and mountain areas development.

Adopting the indication proposed by Gkartzios and Lowe (2019) to develop a more reflective approach to rural development, we have to consider the intertwining of endogenous and exogenous factors. Subjects involved in planning future strategies for rural and mountain areas (e.g. policy makers and practitioners at any level) have to recognize the value of these influxes and consider the fact that even if these might be remote areas, global dynamics can influence them. Local control of economic dynamics is fundamental but it has to embrace also 'extra-local' factors for local development (Bosworth et al., 2016). Above all, national migration policies appear as one of the main external factors. These have to consider more the needs of these territories in the management of in-migration influxes. Along with these, overall control on migration has also to prevent the various forms of exploitation present in many European rural and mountain areas. Furthermore, to enhance remote and rural regions' attractiveness and favour migrants' permanent or long-term settlement, local and national policies need to address migrant workers' essential needs particularly in terms of housing and mobility as well as build supporting frameworks for migrants' entrepreneurship.

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Migration Impact Assessment to Enhance  
Integration and Local Development in  
European Rural and Mountain Regions

# Comparative report on TCNs' economic impact and entrepreneurship

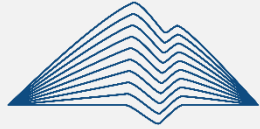
**Quantitative analysis**

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**MATILDE**

Migration ImpAct assessment To Enhance  
Integration and Local Development in  
European rural and mountain regions

# **D4.4 Comparative report on TCNs' economic impact and entrepreneurship**

## **Quantitative analysis**



**Call:** H2020-SC6-MIGRATION-2019

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H2020-EU.3.6.1.2. Trusted organisations, practices, services and policies that are necessary to build resilient, inclusive, participatory, open and creative societies in Europe, in particular taking into account migration, integration and demographic change

**Deliverable 4.4**

Comparative report on TCNs economic impact and entrepreneurship

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# 1. Introduction

The question in how far migration impacts the host country in the wider sense has been discussed in economic and political science literature for decades. As for an economic analysis in the narrower sense, several channels of influence of migration on a host country's economy and society have been identified. According to the aims of the Matilde project, this deliverable focuses on a selected set of dimensions and migration of Third Country Nationals (TCNs), a heterogeneous and multifaceted group of people who arrive from non-EU countries, in detail “Any person who is not a citizen of the European Union within the meaning of Art. 20(1) of TFEU and who is not a person enjoying the European Union right to free movement, as defined in Art. 2(5) of the Regulation (EU) 2016/399 (Schengen Borders Code)” The dimensions as covered by the subsequent description and analysis are in detail as follows:



**a) National and regional labor markets**



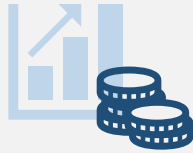
**b) Productivity and innovation inside organizations and companies**



**c) Fiscal systems**



#### **d) Development of entrepreneurship and social entrepreneurship**



#### **e) Economic growth**

The deliverable at hand firstly provides an overview about the interlinks between the dimensions as discussed on contemporary scholarly literature. Secondly, it provides a literature review about the impact of migration on the single dimensions. Furthermore, a comparative report – complementing the quantitative statistical briefs (WP4.2.) as well as the qualitative comparative analysis (WP4.3.) on the MATILDE regions allows to draw conclusions on the between-differences (MATILDE regions vs. the rest of the EU regions) and the within-difference (within the MATILDE consortium) concerning the quantitative economic effects of migration.

## 2. Links between economic growth, employment, productivity, innovation, entrepreneurship and the fiscal system

As can be drawn from economic literature, economic growth to a large extent depends on employment, productivity, entrepreneurship and innovation (or innovativeness) in different sectors. Thus, the dimensions as identified cannot be perceived as mutually exclusive but display connected links as shown in figure 1.

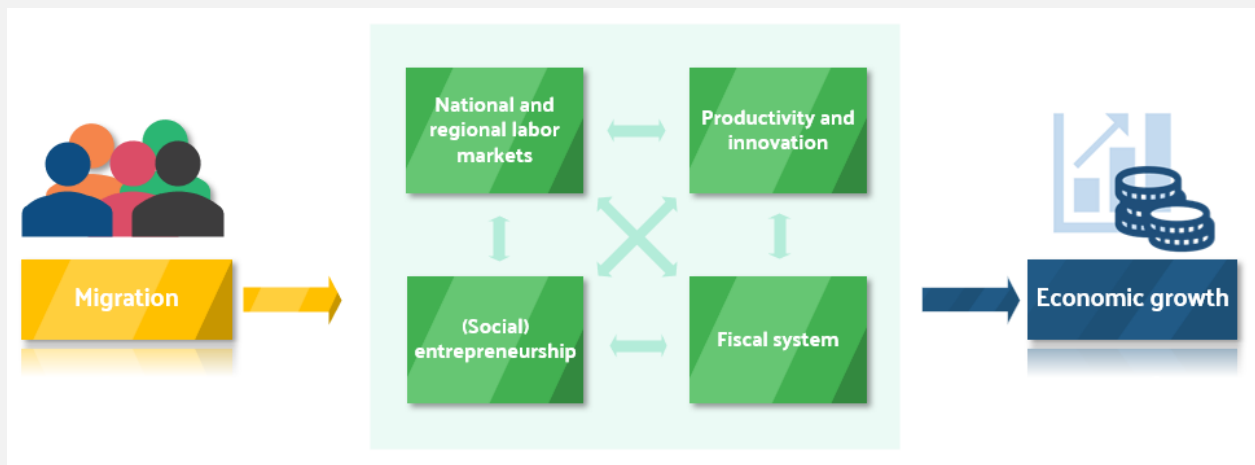


Figure 1: Model of links between the MATILDE dimensions

The link between innovation, entrepreneurship and economic performance has been discussed in economic theory and the respective literature for several decades (see e.g. Acs 2006; Freeman 1996, 2002; Porter 1990; Verspagen 2006). Following these approaches, a significant amount of economic growth can be attributed to technological change, caused

e.g. by investments in research and development (R&D) or more indirectly by spillover effects (Helpman 2004). The introduction of a new production function or the new combination of production factors seem to have a bigger impact on economic growth than the sheer accumulation of capital. Consequently, innovation can be understood as an important driving force of economic development, as it fosters competitiveness, productivity and the creation of new jobs (OECD 2012). Thus, “Nations fail today because their extractive economic institutions do not create the incentives needed for people to save, invest, and innovate” (Acemoglu and Robinson 2013, p. 366).

Overall, innovation performance of an economic entity is not only caused by formal research and development expenditures, but also by a variety of other factors linked to the flow and diffusion of knowledge and the regulatory framework of a country (Freeman and Soete 1997; Lundvall 1999). These factors can be understood as an interplay of different political and economic institutions. Acemoglu and Robinson call sufficiently centralized and pluralistic political institutions “inclusive political institutions”, and political institutions which are primarily decentralized and exclusive “extractive political institutions” (2013, pp. 70 and 75). Inclusive political institutions ensure democracy, support and are supported by inclusive economic institutions that allow for free media. Inclusive economic institutions set incentives for innovation through ensuring property rights and equal opportunities, upholding contracts and allowing “creative destruction” through market entry of new businesses with new products or business models. In contrast to these effects, extractive political institutions do not set suitable incentives for innovation as they primarily extract income and wealth from society to enrich small powerful elites, maintaining a status quo instead of nudging change in the sense of innovation (Acemoglu and Robinson 2013).

Most growth economists probably agree on the notion that human capital is one of the decisive factors in explaining why some countries became rich and others remained poor in the past two centuries (Lucas 2002; Hanushek and Woessmann 2008; Jones and Romer 2010; Galor 2011; Acemoglu et al. 2014; Gennaioli et al. 2013).

There is still dissent with regard to the channels through which human capital fosters economic growth, though. On the one hand, human capital is interpreted as an independent factor of production which increases productivity for a given level of technology (Lucas 1988; Mankiw et al. 1992). On the other hand, human capital is seen as an input in the innovation process and therefore as a complement to technology (Benhabib and Spiegel 1994; Nelson and Phelps 1966). According to this view, higher levels of human capital lead to the generation or diffusion of new technologies or to a more efficient adoption of a given technology, thereby shifting the frontier of the production-possibility set rightwards or outwards. The effect of human capital on growth involves multiple channels, (im-)migration of third country nationals (TCNs) could be one of them. An increase in human capital directly affects economic growth by enhancing labor productivity. At the same time, human capital is an important input into research and development (R&D) and therefore increases labor productivity indirectly by accelerating technological change. In addition, different types of human capital such as basic and higher education or training on-the-job might play different roles in both production and innovation activities.

In this context, the role of the (social) entrepreneur is of relevance (e.g. Schumpeter 2006). In short, “entrepreneurs create new businesses, and new businesses in turn create jobs, intensify competition, and may even increase productivity through technological change. High measured levels of entrepreneurship will thus translate directly into high levels of economic growth” (Acs 2006, p. 97; see also Thomas & Mueller 2000; Van Praag & Versloot 2007), with entrepreneurial behaviour and entrepreneurial thinking leading to more productive, innovative, competitive, creative and flexible economies (Doğan 2016). Overall, these factors are not only associated with economic growth, but also impact the fiscal systems in the respective economy, in particular when it comes to the necessity of transfer payments, or governmental income through taxes.



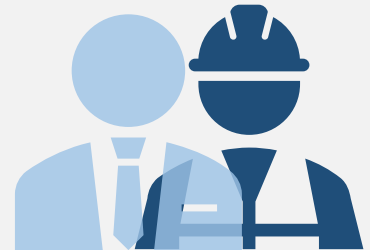
# 3. The impact of migration on the different dimensions based on researched literature

As delineated, the different dimensions of economic performance cannot be perceived as mutually exclusive, but are correlated or linked to each other. This has to be taken into consideration interpreting the findings of the following analyses, even if most studies focus on only one or two of the dimensions as dependent variables. For a detailed overview of the references discussed in the following subsections, see Chapter 7, where the literature review along with the most important key information about each publication is listed in tabular form.

In regard to the regional context, a variety of studies focus on the different dimensions as discussed above. All studies have in common that they treat migration as the independent variable, the dimensions as delineated as dependent variables. Thus, migration – defined and measured in different ways – is understood as a factor impacting economic growth, the employment situation, productivity, entrepreneurship and innovation or innovativeness, as well as the fiscal situation of an entity.

# a) National and regional labor markets

Public debate in the context of migration usually focuses on the effects of immigration on the labor market conditions of the native population. The labor market conditions of interest are usually wage levels, employment and unemployment. This section analyzes both theoretical relationships and empirical results of past migration flows.



The economic effects of immigration strongly depend on the substitutability or complementarity between foreign and domestic labor. Assuming that the domestic labor force has the same characteristics as the foreign labor force - i.e. that it is perfectly substitutable - an increase in labor supply through immigration leads to a reduction in the employment of domestic labor, resulting in a decrease in wages. If wages cannot adjust immediately, there is an unemployment effect in addition to the wage and displacement effect. In the case that migrant workers and native workers are in a complementary relationship the inflow of foreign labor leads to an increased demand for domestic labor and, as a result, wages and employment increase, respectively (Zimmermann and Bauer, 1999).

In reality, migrants will neither fully replace nor fully complement labor force, resulting in distributional effects: Native workers who are in a substitution relationship with migrants lose, while workers that are affected in a complementary sense gain. In this context, obviously the qualification structure of foreign workers plays a decisive role: The distributional situation improves in the case of immigration of qualified workforce, as this increases the competitive pressure between domestic and foreign qualified workers and thus lowers their wages. Low-skilled domestic workers, on the other hand, will be in greater demand as a result of the influx of highly skilled workers, which will have a positive impact

on their wage rates (Bock-Schappelwein et al., 2008). Following the general understanding of Gross Domestic Product (GDP), also indirect effects of immigration on the labor market can be modeled, as the increase in population to increased consumption and therewith consumer spending, which in turn leads to an increase in labor demand. The increased demand for labor has a positive effect on the domestic labor market through higher wages and employment. Decisive for the size of the indirect labor demand effect is, among other factors, the planned duration of the stay and the skill structure of immigration (Bauer, 2000 online).

Education, training and skills represent a critical factor for the impact that migration might have on the labor market. Providing education to people with immigrant background may have proportionally higher costs than for people without migration background. This is especially of relevance for TCN. First, they tend to carry experiences and face environments comparatively less conducive to skills development. Moreover, they may have a need to acquire elements of human capital, in particular host country language proficiency or cultural knowledge, which natives basically inherit without a specific investment. Additional resources may also be needed in order to manage the linguistic or cultural diversity in the classroom. On the other hand, making progress on educational attainment of people with immigrant background could yield a range of economic benefits.

First, higher education may especially be a source of lasting per capita growth due to knowledge spill-overs – scrutinizing this effect, changes in total factor productivity due to higher education levels are larger than the gains in individual productivity for single productivity. Yet even in the absence of such a lasting spill-over effect on aggregate economic output, a knowledge lift among immigrants may push the economy onto the path toward a new equilibrium, along with substantial gains in terms of economic output rise. Second, upskilling of migrants may benefit natives, in particular the low-skilled who may especially suffer from competitive pressure if migrant workers are crowded in low paid jobs.

Third, policies improving education of migrants may generate positive net fiscal returns. On the one hand, tax revenues and social security contributions become larger, as individuals' employment rates and taxable income are positively associated with their educational attainment. On the other hand, better educated people tend to rely less on social transfers, especially those transfers associated with unemployment and low income, and to make less intensive use of certain government services, like active labor market policies, public health care or law enforcement. As individuals' net contribution to the government budget generally improves by level of education, upskilling is associated with the potential of lower tax rates, which in turn may lead to smaller deadweight loss associated with the need to finance governmental activity. A positive balance of social economic benefits and costs constitutes a case for government investment in education of migrants. This policy would lead to additional spending of public resources in the short run, but unfolding economic returns would allow recover the initial costs in a longer term.

Analyzing empirical evidence against the backdrop of the theoretically derivable effects, e.g. Longhi et al. (2008) show that immigration has a very small effect on wages, employment and unemployment. Although the effects are very small on average across all workers and often not statistically significant, a closer look at the data shows that mainly established foreign and immobile workers are affected by immigration. This result underpins that low-skilled immigrants predominantly compete with previous low-skilled immigrants as well as low-skilled citizens of the reporting country in the labor market and supports the claim that immigration increases the competitive pressure in the case of low flexibility on the labor market. Zimmermann and Bauer (2002) and Borjas (1999) also come to similar conclusions, showing immigration has in most cases not led to harmful effects for the national economy of the host country. Nonetheless, as already stated by Becker (1964), the educational level has a significant influence on the professional career and the risk of unemployment of human beings, including nationals and immigrants.

In addition to the above-mentioned individual consequences, educational poverty is also expected to have societal effects and macroeconomic follow-up costs, which will further intensify in the course of advancing demographic change. A declining labor force potential coupled with a rising average age of the working and resident population as well as a declining share of young people will lead to (further) challenges not only in the labor market but also in the social security systems (e.g. health care and pension systems) and in maintaining the infrastructure and services of general interest especially in rural areas.

There have nevertheless also been findings suggesting that migration has a negative impact on the labor market. In 2018 for example, a research team around Treyz und Evangelakis published a prospective study using a REMI PI+ macroeconomic policy analysis model to demonstrate what would happen if net migration to the US were to cease. They found in the absence of immigration, total U.S. employment would peak in 2019, and the U.S. GDP and labor force would decline by 20% through 2060.

## b) Productivity and innovation inside organizations and companies

While knowledge and skills generally are essential production factors, they are becoming increasingly relevant - in terms of competitiveness and productivity - in a (globalized) economy characterized by structural change toward a service and information and communication technology (ICT) sector, as these developments lead to the displacement of the low-skilled. For people with a lack of education, sustainable integration into the employment system becomes significantly more difficult (cf. Steiner, 2011), change processes on the supply side



as well as the demand side (see Giesecke et al., 2010) increasingly marginalize low-skilled workers and further worsen their already below-average employment opportunities or increase the risks of labor market marginalization (marginal employment) and/or exclusion (unemployment or labor market inactivity). These findings are also reflected by findings from the Matilde-Project: e.g. for Austria, there is evidence that individuals with a migration background are often found in low-skilled jobs. This can be explained by two factors, first, their qualifications are often not recognized in Austria, as they are perceived of not meeting national standards, and/or the process of nostrification is too complex and time-consuming (see MATILDE Project Deliverable 4.3 10 Country Reports on Economic Impact).

Several studies analyze the potential impact of migration on productivity and innovation in this regard. Aleksynska and Tritah (2015) examined the heterogeneity of immigrants, host countries' income and productivity ranging from 1960 to 2005 for 20 selected OECD countries. The aggregate results show that immigrants have a positive effect on income acting mainly through total factor productivity (TFP). However, contrasting income effects are found across different age groups, whereas a higher share of immigrants among the youth has a negative impact on aggregate income, while a higher share of immigrants among prime-aged workers has a positive effect.

Looking closer at the EU27 at NUTS2 level, Huber and Tondl (2012) found that migration had no significant impact on regional unemployment in the EU, but affected both GDP per capita and productivity. A one percentage point increase in immigration to immigration regions increased GDP per capita by about 0.02 % and productivity by about 0.03 %. An increase by 0.44 % for GDP per capita and 0.20 % for productivity could be observed in the long run.

Nonetheless, there is mixed evidence, as investigating the EU27 from 1995 to 2007, Huber et al. (2010) found different results. There is some evidence for a significant effect of migrant labor at the industry level across Europe, which differs for “rest of the world” and EU migrants. With the former displaying some evidence of a positive effect, whilst the EU shows

if anything, a negative impact on productivity and its growth. However, this appears largely insignificant when considering the potential endogeneity within the production function estimates. Nevertheless, there is some evidence to suggest that the implementation of more selective immigration policies causes workers in “the rest of the world” to yield a positive effect, which stands in contrast with the indifferent findings in relation to EU migrants.

The negative outcomes are further discussed by Kangasniemi et al. (2012), who examined the economic impact of migration on Spain and the UK in the timeframe of 1996 to 2005 and found that migration caused a negative contribution to labor productivity growth in Spain and a negative but negligible contribution in the UK.

## c) Fiscal system

Also, fiscal systems are severely affected by migration, as a state or a region will incur costs as well as benefits from the integration of immigrants. These potential costs include education and accommodation costs, social benefits and administrative expenses. Benefits of migration may arise from tax contributions and social security contributions. While these contributions have to be paid by all citizens, depending on the level of earnings which, they are highly dependent on the level of education and training that determines earning.



This theoretical relationship can be underpinned by empirical studies that have a deeper look on the questions if the costs outweigh the benefits, or vice versa. As a comparative analysis on the fiscal impact of immigration in selected OECD demonstrates, the net benefits of migration are mostly positive, although strong fluctuations are observed in this respect. Negative net returns are attributed, among other things, to the relatively high

age of immigrants (Germany, France), downturns in the business cycle (Ireland) and the relatively low share in the total population (Estonia, Czech Republic, Slovakia, Poland). With regard to the level of net returns to immigrants, labor market integration is considered fundamental. This is particularly true for countries that have a well-developed welfare system. Nonetheless, the fiscal impact of immigration is described as small or insignificant for most countries. This is because, on average, migrants contribute less in the form of taxes and contributions than nationals, but at the same time have only limited access to the social or welfare system (OECD, 2013).

These results are essentially in line with those of the study by Mayr (2005) that focuses on the fiscal contributions of different population groups, depending on their country of birth (nationals and non-nationals) and gender (male and female) in Austria. The projection of net contributions shows that those of male and female nationals are similar to those of foreigners. Over the entire life cycle, however, the absolute net amount of foreigners is lower than that of nationals, although foreigners claim fewer transfer benefits. Thus, the study, which looks at the long-term impact of immigrants and their descendants on the government budget shows that the contribution to the public budget is greater than the transfers received. This is especially true for immigrants who have a similar or even higher level of education than the native population. Nonetheless, in particular the fiscal effects are hard to compare, as there is a high level of variety between countries when it comes to taxes, but also social benefits. E.g. Berger et al. (2016) examined with a prospective (2010-2060) econometric model cross-country differences in the contribution of future migration to old-age financing in Austria, Germany, the United Kingdom and Poland. They found that public finance contribution of migration, performed with different models, are not comparable across countries. Future projected immigration flows are equivalent to 14.3 percentage points' labor income taxes in Austria, 7.3 points in Germany, 6.2 points in the UK and 1.7 points in Poland in 2060.



Thus, the question arises if future immigration to a country with a large public sector might alleviate the increasing burden on the public welfare system due to an ageing population. Ekberg (2011) attempts to answer this question in the context of Sweden for the years up until 2050. He found that the positive net contribution to the public sector from the additional population is rather small, even with good integration into the labor market. The reason is that future immigration will increase the size of the population and thereby raise not only revenue from taxation but also public expenses. The yearly positive/negative net contribution effect is less than 1% of GDP for most of the years. More considerable net fiscal effects would require a much higher and probably unrealistic level of future immigration.

This perspective is further supported by Hansen et al. (2015) who examined the financial sustainability of the Danish welfare system using a dynamic computable general equilibrium model. Their main conclusion is that immigrants from wealthier countries cause a positive fiscal impact, while immigrants from poorer countries have a considerably negative one. The negative effect is caused by both, weak labor market performance and early retirement in combination with the universal Danish welfare schemes.

Alcidi and Gros (2019) further investigated inner European migration and its effect on public finances. The authors found that mobile workers abroad can make a significant contribution to the GDP of their host countries and that the incomes of mobile citizens abroad can be of considerable benefit to those who stayed at home. The negative impact caused by an erosion of the tax base through emigration is mitigated by lower expenditure needs and additional VAT revenues on the expenditure financed by remittances. States which struggle the most to enhance the quality of the life of their citizens, through effective public spending and provision of high-quality public goods may experience the largest outflows of workers.

Lastly and Wildasin (2008) investigated the tradeoff many west European countries face in the foreseeable future between an ageing population and (im)migration due to

fertility rates below the replacement rate. They found that skilled and unskilled workers affect redistributive fiscal systems of advanced economies as net contributors and net beneficiaries, respectively.

## d) Development of entrepreneurship and social entrepreneurship

As delineated above, the close links between innovativeness, entrepreneurship and economic growth brings entrepreneurship to the fore when it comes to future growth. This includes not only entrepreneurship in service delivery and production, but also what can be understood as “social innovation”, innovation that creates societal added value, meeting societal needs. Thus, European countries harbor high expectations that entrepreneurs will contribute to economic growth in the face of future challenges, supporting entrepreneurial activities and social innovation by national measures as well as measures on the EU level. Nonetheless, research in this field is relatively scarce when it comes to the influence of immigration on (social) entrepreneurship. Moreover, the existing literature does not fully support the high political hopes related to (social) entrepreneurship.

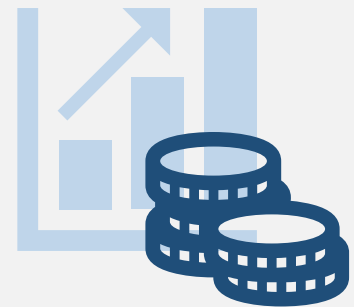


Naudé (2016) argues that these expectations may be disappointed because (i) entrepreneurship promotion is a last-resort policy, (ii) entrepreneurs are being overestimated, and (iii) entrepreneurs are too often allowed to dominate policy-making. He further argues that small businesses are limited in their ability to create jobs, they are not raising labor productivity and immigrant-entrepreneurs are not productively assimilated. Big businesses are largely a legacy of the past and resorting more and more to lobbying.

In his literature review, Kerr (2013) further explains that we still know very little about return migration of workers engaged in innovation and entrepreneurship, except that it is rapidly growing in importance. The overall effect migration has on the home country however, remains unclear. The author overall concludes, as many others have, that immigration has been essential for the United States' leadership in innovation and entrepreneurship.

## e) Economic growth

The interconnectedness of the economic dimensions described so far becomes clear once again taking into consideration their impact on economic growth, usually measured in terms of Gross Domestic Product (GDP). This indicator in many studies represents the end of a chain of influences and processes.



Hofer and Weyerstraß (2016) examined the development of potential output in Austria using a A-LMM macro model for the time period of 2005 to 2015 and found a 1.1 percentage points increase per year on average with a contribution of foreign labor of 0.4 percentage points. It can therefore be concluded, that migration provides an opportunity to counteract the negative economic consequences of ageing.

Ekrame Boubtane et al. (2016) investigated the impact of migration on economic growth in the OECD countries for a longer period of time, from 1986 to 2006. They found a positive impact of migrants' human capital on GDP per capita and that, secondly, a permanent increase in migration flows creates a positive effect on productivity growth. However, the growth impact of immigration is a small one, even in countries that have highly selective migration policies.

A study by d'Albis et al. (2019) shows that the macroeconomic and fiscal consequences of international migration are positive for OECD countries in the years 1980 to 2015. Their findings demonstrate that international migration produces a demographic dividend by increasing the share of the workforce within the population. Migration shocks increase GDP per capita through a positive effect on both the ratio of working-age to total population and the employment rate. International migration also improves the fiscal balance by reducing the per capita transfers paid by the government and the per capita old age public spending.

In 2017 Bove and Elia published a study which investigated the extent to which cultural diversity affects economic growth in the timeframe from 1960 to 2010 and whether this relation depends on the level of development of a country using a Herfindahl-Hirschman concentration index. They found migration and diversity have a distinct positive impact on real GDP per capita and that the effect of diversity seems to be more consistent in developing countries.

In the context of Malaysia, Ismail and Yuliyusman (2014) examined the impact of foreign labor on economic growth using panel data from three sectors: manufacturing, services, and construction while utilizing a Vector Error Correction Model (VECM). The results show skilled and semi-skilled foreign labor has a positive and significant impact on the output growth in both the short run and the long run. However, the study finds that the unskilled foreign labor adversely affects output growth in both the short and the long run.

As many high income countries face the same challenges that are attributed to demographic change, Muysken and Ziesemer (2013) found that even temporary immigration to the Netherlands may help to alleviate the ageing problem through a positive long-term contribution to employment, wages and GDP per capita as long as the immigrants are able to participate in the labor force in tandem with the native population. On the other hand,

Poot (2008) argues, there is empirical evidence that population ageing reduces regional competitiveness, while immigration – particularly of entrepreneurs and highly skilled workers to metropolitan areas – enhances competitiveness. However, while immigration can slow down ageing, the levels needed to halt this are unrealistically high and, moreover, when such levels are not sustained, ageing may even accelerate subsequently.

Economic growth is rarely limited to isolated regions, yet the impact of migration on rural areas is of particular interest to the MATILDE project. A case study comparing Iceland, Greenland, Norway, Sweden, Finland, Denmark and Faroe Islands in 2017 done by Greve Harbo et al. found that immigration and subsequent successful integration can be vital to rural towns and regions facing population decline, ageing population and labor shortages. Many peripheral regions experience a net influx of international migrants following a long period of internal out-migration. Integration and long-term inclusion of immigrants is a regional growth potential, not only a social welfare issue. Immigrants need a home and a job, but also a social network to feel at home and thereby a desire to stay – especially in rural areas. Local languages are difficult but necessary to learn for long-term social inclusion and easy access to training is essential. Employing a local integration coordinator showed to be an effective way to improve integration and job matching. However, integration measures need to be tailored to include the whole family and cater to individual needs of men and women, children and unaccompanied minors.

# 4. Comparative analysis between MATILDE regions and other European areas

Building on the presentation of the literature, the picture to be drawn is very differentiated, as for many indicators, there is no clear-cut effect of migration, in particular in country comparison. Another fact is relevant at this point: MATILDE focuses on TNCs, while many studies do not differentiate between TNCs and other kinds of migration (as this is only relevant for the European Union). Thus, additional analyses based on the MATILDE statistical briefings (MATILDE project, 2021) as well as on a comprehensive data collection on several indicators from throughout the EU (and Turkey, where accessible) are presented in the further course.

Different types of quantitative analysis, using the data as displayed below (Source: Eurostat), were conducted. As can be drawn from table 1, the indicators in the data set reflect the MATILDE dimensions scrutinized theoretically, taking into consideration data availability limitations on the regional level for the countries and regions under scrutiny. Nonetheless, the indicators as identified at least can be seen as suitable stand-ins, or proxies, for the different economic dimensions.

Abbreviation	Name	Unit
bd_hgnace2_r3	Business demography and high growth enterprise by NACE Rev. 2 and NUTS 3 regions	Birth rate: number of enterprise births in the reference period (t) divided by the number of

		enterprises active in t - percentage
edat_lfs_9912	Population by educational attainment level, sex, age and country of birth (%)	Percentage
hlth_rs_bdsrg	Hospital beds by NUTS 2 regions	Number
hlth_rs_bdsrg/100k	Hospital beds by NUTS 2 regions	Per hundred thousand inhabitants
isoc_r_iacc_h	Households with access to the internet at home	Percentage of households
lfst_r_lfe2emprc	Employment rates by sex, age, educational attainment level, country of birth and NUTS 2 regions	Percentage
hrst_st_rcat_active	HRST by category and NUTS 2 regions	Percentage of active population
hrst_st_rcat_total	HRST by category and NUTS 2 regions	Percentage of total population
rd_e_gerdreg_euro_inh	Intramural R&D expenditure (GERD) by sectors of performance and NUTS 2 regions	Euro per inhabitant
rd_e_gerdreg_GDP	Intramural R&D expenditure (GERD) by sectors of performance and NUTS 2 regions	Percentage of gross domestic product (GDP)
tgs00062	Physicians or doctors by NUTS 2 regions	Per hundred thousand inhabitants
tran_r_net_motor	Road, rail and navigable inland waterways networks by NUTS 2 regions	Kilometre
tran_r_net_canals	Road, rail and navigable inland waterways networks by NUTS 2 regions	Kilometre
edat_lfse_04	Population by educational attainment level, sex and NUTS 2 regions (%)	Percentage
tgs00036	Primary income of private households by NUTS 2 regions [tgs00036]	Purchasing power standard (PPS) per inhabitant
lfst_r_lfur2gan	Unemployment rates by sex, age, citizenship and NUTS 2 regions	Percentage
lfst_r_lfu3rt	Unemployment rates by sex, age and NUTS 2 regions (%)	Percentage
lfst_r_lfsd2pwn_15plus	Population by sex, age, citizenship, labour status and NUTS 2 regions	Thousand

lfst_r_lfsd2pwn_15 64	Population by sex, age, citizenship, labour status and NUTS 2 regions	Thousand
lfst_r_lfsd2pwn_15 74	Population by sex, age, citizenship, labour status and NUTS 2 regions	Thousand
LFST_R_LFSD2P WN_15PLUS_PCT	Population by sex, age, citizenship, labour status and NUTS 2 regions	Percentage

**Table 1: Indicators**

Testing the MATILDE regions comparatively using econometric techniques, the newly-constructed data set was used. The construction of the data set was part of the WP4, it comprises data from EUROSTAT (<https://ec.europa.eu/eurostat/de/>) as well as specific variables that were created for the econometric analysis. These variables are dummy variables that have the value “1” once a specific characteristic is in place, and the value “0” otherwise. The data comprises the years from 2009 to 2018.

As the nature of the data allows for the application of different econometric techniques, a multi-level approach was chosen for the analysis, including tests for group differences, correlations, and regression analysis that were conducted using Excel (Office 365) and SPSS (Version 27).

As a first step, we investigated if there are significant differences between MATILDE regions and the rest of the regions of the EU. The following indicators have been tested for group differences – the zero hypothesis is in all cases that there is no difference between MATILDE regions and other regions of the European Union.

Indicator	Sig. <sup>a,b</sup>	Outcome
BD_HGNACE2_R3	,000	reject
EDAT_LFS_9912	. <sup>c</sup>	No result/missing data
HLTH_RS_BDSRG	,001	reject
HLTH_RS_BDSRG_100K	,110	accept
ISOC_R_IACC_H	,478	accept



LFST_R_LFE2EMPRC	,000	reject
HRST_ST_RCAT_ACTIVE	,000	reject
HRST_ST_RCAT_TOTAL	,000	reject
RD_E_GERDREG_EURO_INH	,000	reject
RD_E_GERDREG_GDP	,001	reject
TGS00062.	,003	reject
TRAN_R_NET_MOTOR	,009	reject
TRAN_R_NET_CANALS	,301	accept
EDAT_LFSE_04	,041	reject
TGS00036	, <sup>c</sup>	No result/missing data
LFST_R_LFUR2GAN.	,354	accept
LFST_R_LFU3RT	,000	reject
LFST_R_LFSD2PWN_15PLUS	,669	accept
LFST_R_LFSD2PWN_1564	,606	accept
LFST_R_LFSD2PWN_1574	,670	acceptt
LFST_R_LFSD2PWN_15PLUS_PCT	,000	reject

**Table 2: Group differences**

Analyzing the MATILDE regions versus the rest of regions in the EU (Mann-Whitney-U-Test for independent samples), as can be drawn from table 2, there is no general difference: while some indicators display significant group differences, others do not. Thus, MATILDE regions are not different from the EU average as for some economic and socio-economic characteristics, but for others. Surely these findings do not explain the reasons for the differences as given, but, based on the qualitative analysis and the respective literature, it is plausible to assume that at least some differences have their origin in the mountainous and rural nature of the MATILDE regions.

# 5. Comparative analysis within the MATILDE regions

Looking at the MATILDE countries comparatively, while there is much common ground in terms of the economic impact of migration in rural areas, it should be noted that there are also notable regional differences, which is why at first a broader look at the country level (NUTS0) is taken, followed by selected results of the MATILDE case study regions (NUTS2). Examining the share of foreign nationals among the total population in 2020, Austria (16.7%) and Germany (12.5%) stand out as the countries with the highest share, while Turkey (1.8%) and Bulgaria (1.5%) have the lowest shares (see Figure 2). However, while in Austria (8.0%) and Germany (7.1%), almost half or even more of the foreign nationals are third-country nationals, in Turkey (1.6%) and Bulgaria (1.3%) the majority of the foreign nationals are third-country nationals. Differences can also be observed between the Nordic countries, as Norway and Sweden have a relatively high share of foreign nationals in the total population, 11.3% (4.1% of whom are TCNs) and 9.1% (5.6% of whom are TCNs), respectively, while Finland reports only 4.8% (3.0% TCNs).

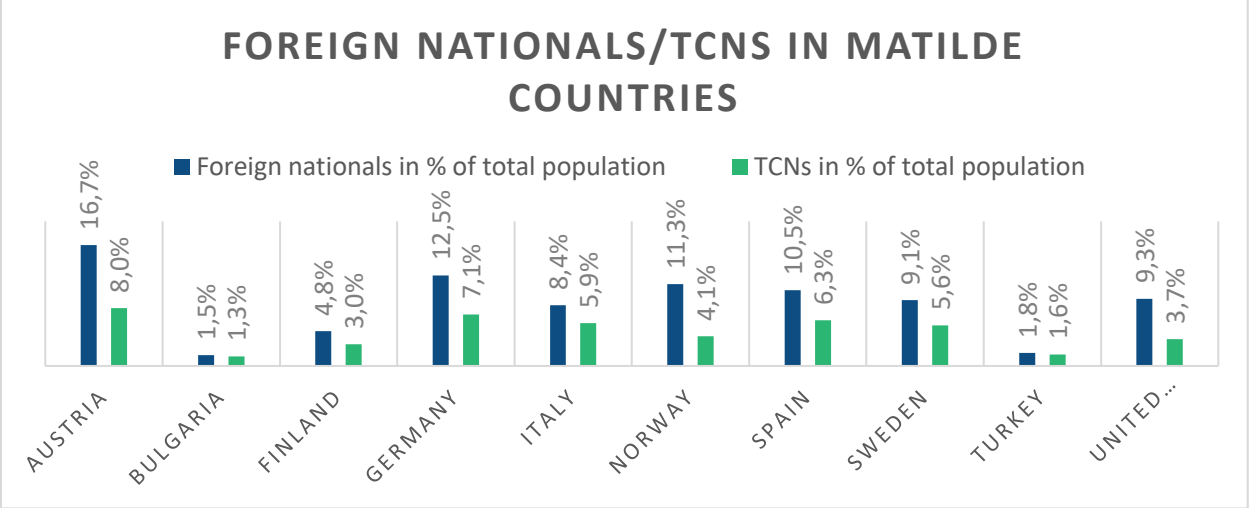


Figure 2: Foreign nationals /TCNs in MATILDE countries

In some cases, it is precisely that proportion of foreign nationals and ongoing migration that contributed the most to population growth and will do so in the future as predicted by forecasts for some countries. While this is particularly true for Germany, since population growth has been strongly influenced by immigration, but is now predicted to decline in the future, Austria and Spain, both of which are predicted to experience future population growth until 2040, are heavily dependent on immigration. However, the situation is different for both countries with regard to the working-age population (individuals aged 15 to 64), which is still expected to decline in the future (Spain by -6.2%, Austria by -4.7%). The United Kingdom, whose population growth to date has also been strongly supported by immigration, is facing an increase in both the total population and the working-age population in the future. The countries Sweden and Turkey, take a special position, as future population growth (and increase of working-age individuals) is not predicted to be shaped by immigration. Norway is predicted to grow in total and working-age population, immigration however being one of the driving forces to support the increase in working-age population. All other countries surveyed, namely Bulgaria, Finland and Italy, face an overall population decline by 2040, though substantial regional differences can be observed in all cases and will be discussed in further detail when examining the MATILDE case study regions.

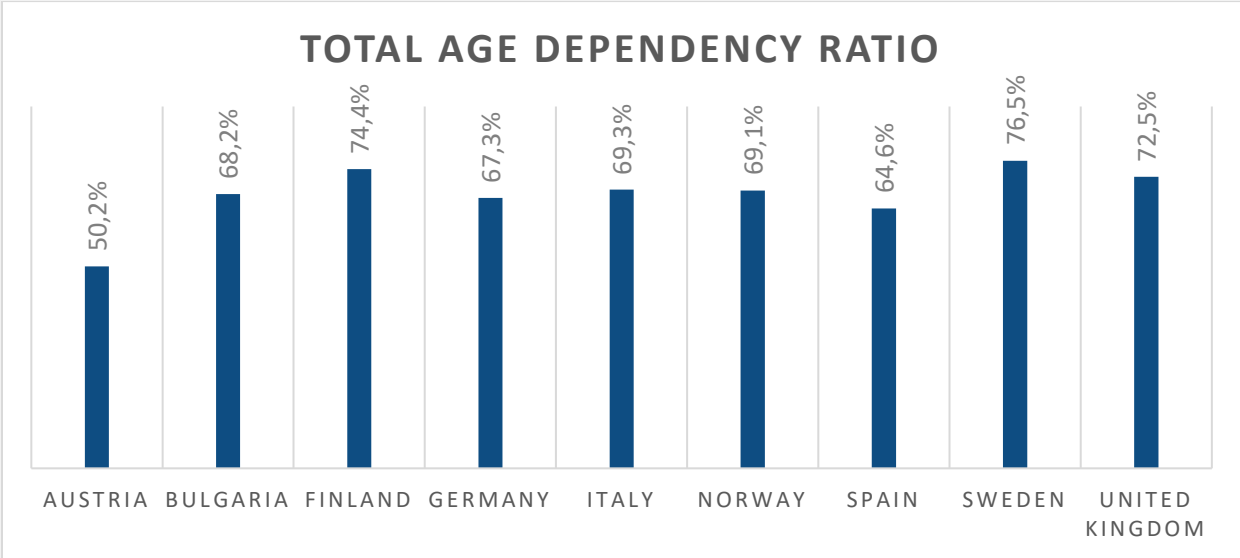


Figure 3: Total age dependency ratio (no data available for Turkey)

The total-age dependency ratio (see Figure 3) is a measure of the age structure of the population. It relates the number of individuals who are likely to be “dependent” on the support of others for their daily living – the young (up to 19 years old) and the elderly (65 plus years old) – to the number of those individuals who are, being working age from 20 to 64 years old, capable of providing this support. Higher ratios indicate a greater level of dependency on the working-age population and might have negative effects on the fiscal system depending on the social security system. A country comparison shows that Austria has the lowest value at 50.2% and Sweden the highest at 76.5%. For Turkey, no comparable data has been available.

The next indicator to be examined in more detail and again of relevance for the labour market but also innovation and entrepreneurship is that of education and training. A common feature of all the statistical briefings in this respect is that in all the countries studied, individuals with a tertiary education have, on average, the highest income, while those with a primary education have the lowest. However, looking at the tertiary education levels in more detail, differences can be found (see Figure 4). While in all countries the total tertiary education level is very close to and slightly above that of the domestic population in 2020, except for Bulgaria and Sweden, where it is minimally below, the United Kingdom is clearly the exception. Not only is the tertiary education level of the domestic population slightly lower than that of the total population, TCNs have the highest level of tertiary education compared to both the rest of the population and residents from other countries. For Turkey, no data was available with regard to the difference between the domestic population and TCNs. Nevertheless, together with Italy and Bulgaria they show rather low levels of tertiary education.

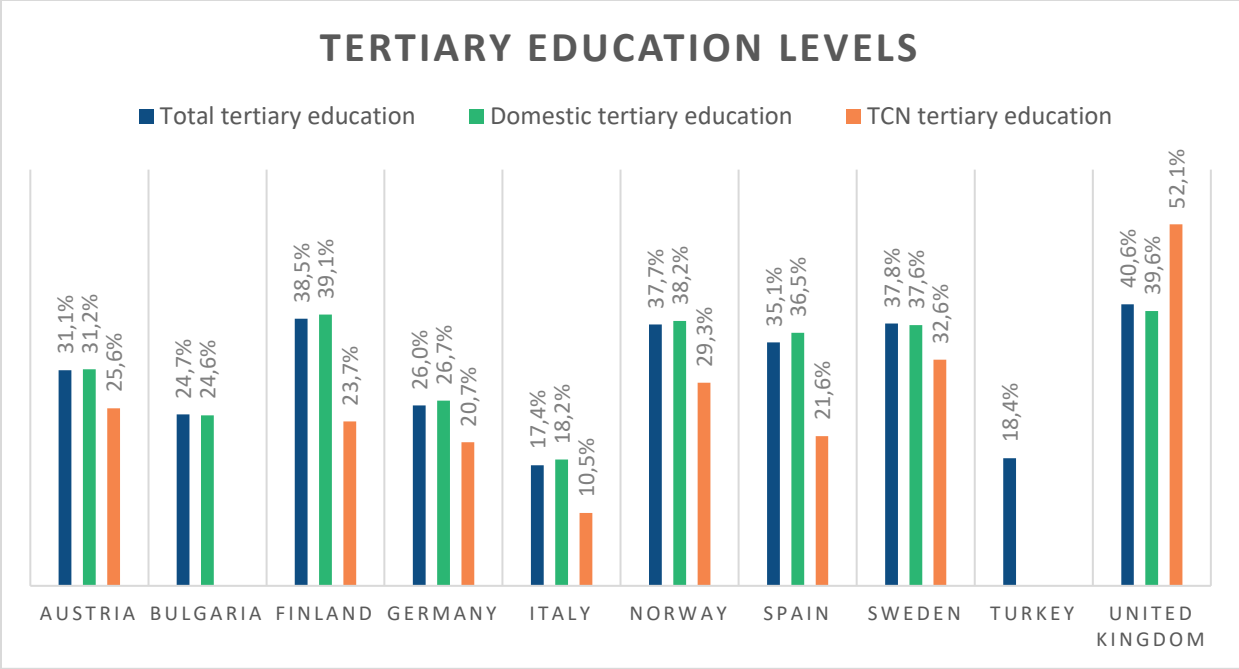


Figure 4: Tertiary education levels: total/domestic population/TCNs

The United Kingdom presents another exception in terms of geographic distribution. When subdivided into cities, towns and suburbs, and rural areas, urban and densely populated areas are consistently those with the highest number of individuals educated up to tertiary level. This is not the case, however, in the United Kingdom, where the difference between the area categories is not only small, but rural areas even have higher tertiary education levels (40,8%) than towns and suburbs (38,8%, see Figure 5).

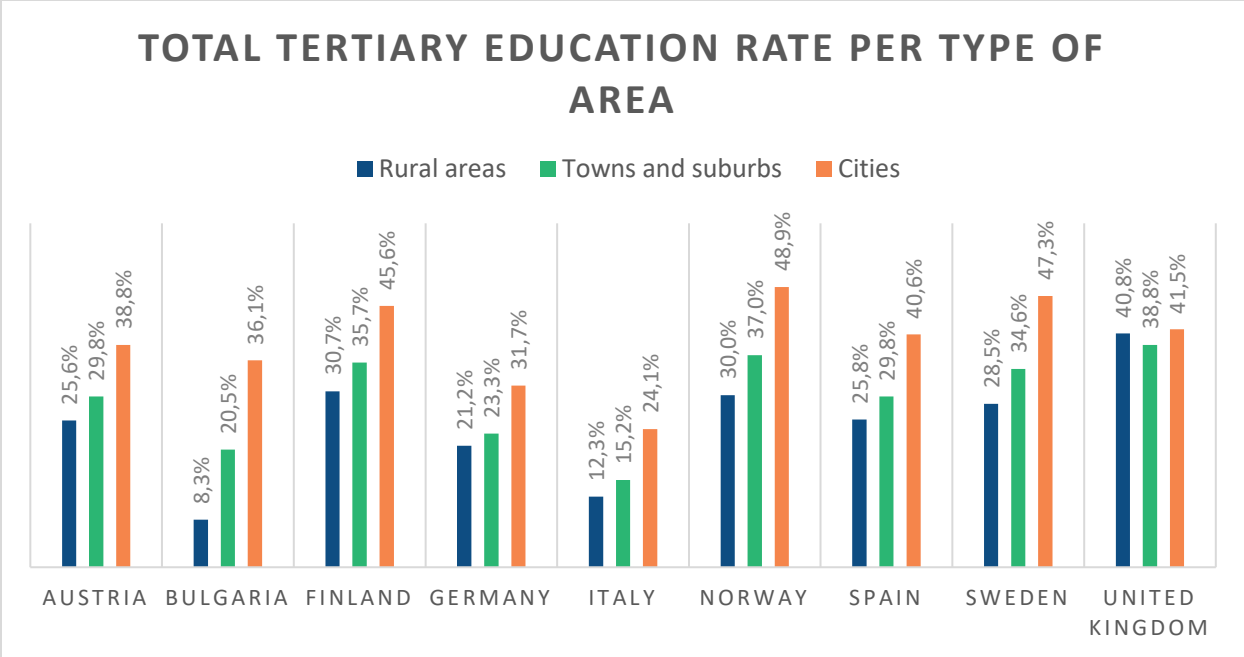


Figure 5: Total tertiary education rate per type of area: rural areas/towns and suburbs/cities (no data available for Turkey)

Another striking finding is the difference between tertiary education levels in rural areas (8.3%) and urban areas (36.1%) in Bulgaria. Again, for Turkey there was no data available on this aspect. Nevertheless, a different aspect, in which only Turkey differs from the countries studied, is that of the relationship between education and unemployment. Except for Turkey, in all the other countries, the probability of being affected by unemployment is lowest among those who have a tertiary education attainment, and those who have only primary education are most likely to be affected by unemployment. In Turkey, the picture is completely different, as those with primary education are least likely to be affected by unemployment and those with secondary education are most likely to be affected (see Figure 6).

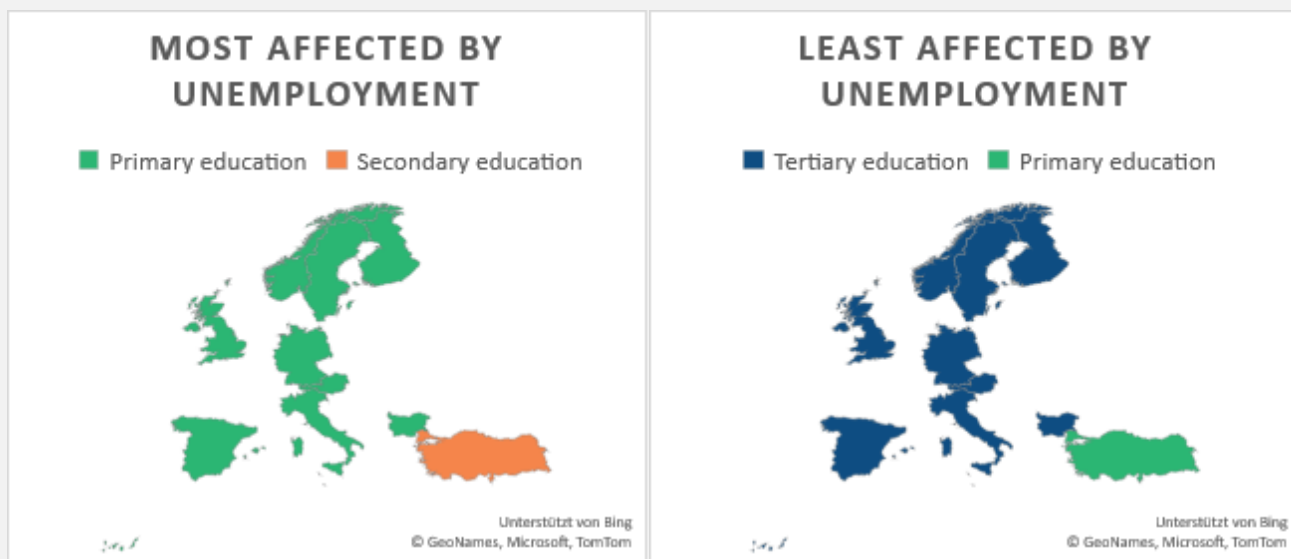


Figure 6: Most and least affected by unemployment related to education level

An important group in terms of education is that of “early leavers from education and training”. This population group refers to persons aged 18 to 24 who have completed a lower secondary education and are not involved in further education or training. From a fiscal point of view, this specific group is of particular relevance as they are more likely to be (long-term) unemployed, and, thus causing costs for the economy. As can be observed in Figure 7, in 2019 Sweden (6.5%), Finland (7.3%) and Austria (7.8%) show the lowest numbers, Germany (10.3%) and the United Kingdom (10.9%) are in the middle range, while Italy (13.5%), Bulgaria (13.9%) and Spain (17.3%) exhibit comparatively high values. Turkey, however, is at the top of this comparison with 28.7%.

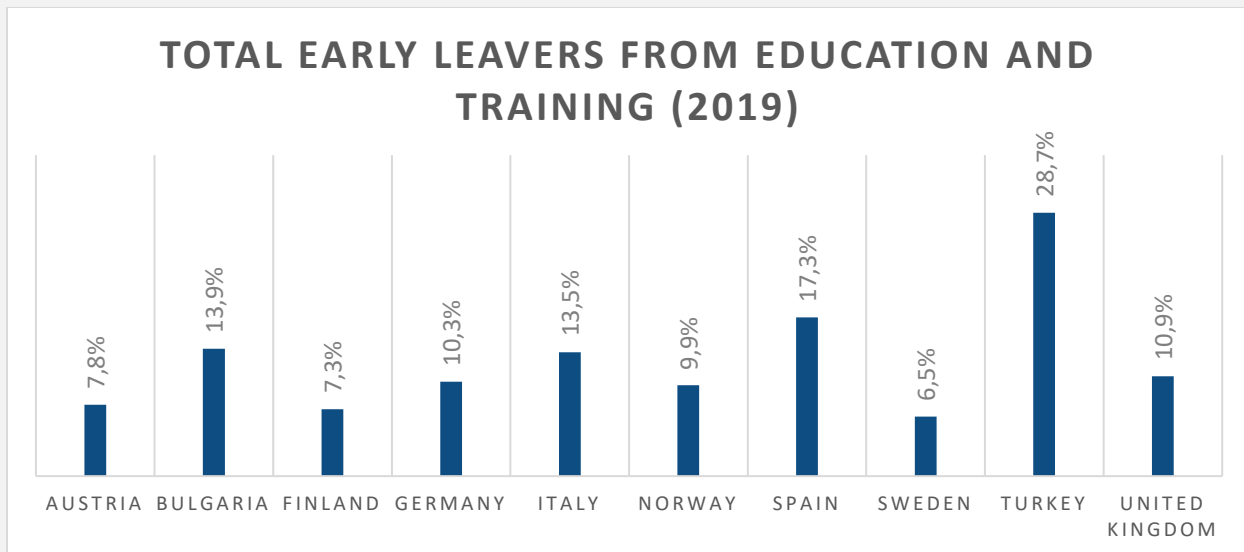


Figure 7: Total early leavers from education and training

A closer look at the differences between urban and rural areas in all the examined countries reveals a very similar picture: rural areas are generally more affected by unemployment, lower education levels of the inhabitants and a general population decline or stagnation. Although a few exceptions show that even the selected MATILDE case study regions, albeit all more rural, show differences among themselves.

While for most countries it is true that rural areas are particularly affected by negative demographic and economic developments, as it is clear for example in the analysis of Spain, which speaks of "two Spains", the urbanized and populated one (which includes the Mediterranean coast and islands) and on the other side the "empty interior", there are also special cases, such as that of the MATILDE region of Bolzano, Italy. Without immigration, all Italian NUTS 2 regions would have suffered from a downturn in working-age population, with the exception of Bolzano, which is also the only Italian region predicted to grow in terms of working-age population up to 2040 by an estimated plus of 2,73%.

The opposite is shown by some other MATILDE regions. The United Kingdom, which is predicted to grow in population and labor force potential by 2040, is also affected by those regional differences, as the MATILDE region of Scotland is predicted to experience a decline in working-age population of up to -4.0%. The situation is similar in the MATILDE region of



Carinthia, the southernmost province of Austria, which is predicted to experience the sharpest population decline out of all Austrian provinces by 2040, although nationwide growth is projected. Only the two largest cities, Villach and Klagenfurt, are expected to grow. Similarly, in Norway, where the working-age population is expected to increase, numbers in the MATILDE region of Innlandet are predicted to decrease by -2.69%, again showing the difficult conditions of rural areas.

Applying correlation and regression analysis – that indicate for links between different variables, with correlation analysis just displaying a general link, while regression analysis displaying causal links between a dependent and one or more independent variables – the following picture can be drawn:

Overall, some statistically significant correlations between the percentage of TCNs in a region and other variables could be detected. As to be expected, some of these links are positive, some negative. E.g. there is a negative correlation between TCNs and business demography and high growth enterprise by NACE Rev. 2 and NUTS 3 regions (birth rate: number of enterprise births in the reference period (t) divided by the number of enterprises active in t – percentage). A positive correlation could be detected between TCNs and primary income of private households by NUTS 2 regions (purchasing power standard (PPS) per inhabitant), even if due to missing data the effect for income could not be disentangled for MATILDE regions and other regions. One interesting finding is that the link between employment rates and TCNs is negative for MATILDE regions, but small but positive for all EU regions – while the root causes of this fact cannot be detected by the econometric techniques applied, it is plausible to assume that the educational levels of TCNs are relevant in this context.

Based on the theoretical delineations and the correlation analysis, applying different regression models, some significant links could be found. We pooled the data, estimating simple linear regressions for the pooled sample for all EU regions and where possible for MATILDE regions only. Furthermore, we applied linear models on a part of the data set only to check for robustness – in these cases the data set was filtered so that only selected years

were included in the analysis. Moreover, we tested non-linear models (generalized linear models with a log-link) to check for a better fit of the distribution of the data. While the strength of the coefficient varies slightly depending on the data source and the models applied in detail, the results remain robust. As to be expected theoretically and drawing to the correlation analysis, a negative influence of the percentage of TCNs in the overall population can be detected on firm births, the influence on income is positive, as well as the impact on educational level. As for the unemployment rate, concerning the MATILDE regions, there is a negative link between the percentage of TNCs and the employment rate, but the effect stays insignificant – unemployment decreases once the number of TCNs increases. For the overall EU sample, this effect is smaller, but also negative, and significant. While the root causes for this difference cannot be detected by an analysis of this kind, it is plausible to assume that reasons may lay in the education level of the migrants as discussed above.

## 6. Conclusion

According to the overall aim of MATILDE, the report at hand investigates the link between TCN migration and the economy with a view on quantitative characteristics. Some important issues came to the fore doing this that may provide not only space for further research, inter alia in the MATILDE project itself, but also may be relevant for policy maker on the regional, national or EU level.

Generally spoken, the MATILDE regions to some extent are typical for the European Union (as in many indicators there is no statistically significant difference between the MATILDE regions and other regions of the EU); as for these indicators, MATILDE regions can be understood as stand-ins for regions all over the EU. In other cases, there are statistically significant differences between MATILDE regions and other regions. While the origin of the differences e.g. in infrastructure, unemployment rates, or educational level, cannot be detected by the analytical techniques applied, it is plausible that they may be caused by the rural and mountainous nature of the MATILDE regions.

Beyond this “between-difference”, there is some “within-difference”: while for some indicators the impact of migration seems to be very similar amongst the MATILDE regions (e.g. high relevance for population increase, as delineated above), for some indicators there are significant differences (e.g. educational attainment level of TCNs in different MATILDE regions). Thus, a unique and homogenous impact of TCN migration on the economic dimensions in the MATILDE regions cannot be found.

Nonetheless, TCN migration matters. Scrutinizing the country analysis as well as the analysis of the data set created for the econometric analyses, we find that the effect of migration is overall ambiguous, influencing some indicators positively, some negatively. E.g., while a negative influence can be detected on firm births and employment, the influence on income is positive.

While these findings are somewhat restricted by the nature of the data (that determines the analytical techniques), some important implications have to be highlighted. First and foremost, there is no homogeneous approach possible towards TCN migration, as the effects differ between regions (within the MATILDE sample, but also between MATILDE regions and non-MATILDE regions), and related to the single dimensions. Thus, policies addressing TCN needs have to reflect this diversity – not necessarily on the national level, but for regions that display similar effects, joint and transnational policy approaches may be suitable. Furthermore, more research combining qualitative and quantitative techniques may fill the knowledge gaps that could be detected, analyzing the impact of TCN migration comparatively. Lastly, the data on regional level is still limited. To fill these gaps may be an important long-term goal of the EU.

## 7. Literature review

The following section presents a tabular representation of the publications discussed in Chapter 3 and its subchapters, and provides a brief overview of the content and other key information of each source.

Author	Title	Aim/Subject	Examined timeframe	Published in
Alcidi, Cinzia; Gros, Daniel	EU Mobile Workers: A challenge to public finances?	Analyses recent trends in labor mobility within the EU and considers the challenges it generates in sending countries.	2007-2017; 2015-2030	2019
Aleksynska, Mariya; Tritah, Ahmed	The Heterogeneity of Immigrants, Host Countries' Income and Productivity: A Channel Accounting Approach	Examines the changes in distribution of immigrants in order to assess their contribution to income of destination countries.	1960-2005	2015
Aleksynska, Mariya; Tritah, Ahmed	Immigration, Income and Productivity of Host Countries: a Channel Accounting Approach	Examines whether immigration has been one of the sources of cross-country income and productivity differences.	1960-2005	2009
Al-Masri, Ahmed; Curran, Kevin	Migration from the Arab Spring Countries to Europe: Causes and Consequences	Attempts to identify the causes and consequences of immigration from Arab Spring countries	2010-2019	2019
Bellini, Elena; Ottaviano; Gianmarco I.P.; Pinelli, Dino; Prarolo, Giovanni	Cultural Diversity and Economic Performance: Evidence from European Regions	Examines the relationship between diversity and productivity in Europe and if cultural diversity may affect both production and consumption through positive or negative externalities.	1961-2006	2012
Berger, Johannes; Davoine, Thomas; Schuster, Philip; Strohner, Ludwig	Cross-country differences in the contribution of future migration to old-age financing	Examines if and how a continuous flow of immigrants reduces the old-age dependency ratio and improves financing.	2010-2060	2016

Bock, Bettina B.	Rural Marginalisation and the Role of Social Innovation; A Turn Towards Nexogenous Development and Rural Reconnection	Examines whether social innovation may help to effectively fight rural marginalization, why that could be the case and what conditions have to be met in order to achieve that.		2015
Boubtane, Ekrame; Dumont, Jean-Christophe; Rault, Christophe	Immigration and Economic Growth in the OECD Countries 1986-2006	Investigates the impact of migration on economic growth for 22 OECD countries distinguished by native and foreign-born population and skill level.	1986-2006	2016
Bove, Vincenzo; Elia, Leandro	Migration, Diversity, and Economic Growth	Investigates the extent to which cultural diversity affects economic growth and whether this relation depends on the level of development of a country.	1960-2010	2017
Brixy, Udo; Sternberg, Rolf; Vorderwülbecke, Arne	Global Entrepreneurship Monitor 2012: Unternehmensgründungen durch Migranten	Addresses the question of whether migrants are more likely to found a business than natives.	2002-2013	2013
Brunow, Stephan; Stockinger, Bastian	Establishments' and Regions' Cultural Diversity as a Source of Innovation: Evidence from Germany	Investigates the relationship between cultural diversity and innovation in German business establishments.	2001-2009	2013
Burholt, Vanessa; Dobbs, Christine	Research on rural ageing: Where have we got to and where are we going in Europe?	Examines the extent to which rural studies conducted in Europe have addressed the phenomenon of rural ageing.	1999-2010	2012
Caviggioli, Federico; Jensen, Paul; Scellato, Giuseppe	Highly skilled migrants and technological diversification in the US and Europe	Investigates the impact of highly skilled migrants on the evolution of the technological portfolios.	1991-2010	2020
Coleman, David	The demographic effects of international migration in Europe	Studies international migration as the dominant factor determining the size, rate of change, and composition of most European countries.	1960-2007	2008

Coleman, David	Does Europe Need Immigrants? Population and Work Force Projections	Investigates if immigration is needed to offset low fertility rates.	1960-2007	1992
Croitoru, Alin	An insight into the nature of the relationship between migration and entrepreneurship	Examines if the experience of migration be seen as a stimulating factor for entrepreneurial behaviors?		2013
d'Albis, Hippolyte; Boubtane, Ekrame; Coulibaly, Dramane	Immigration and public finances in OECD countries	Shows the positive macroeconomic and fiscal consequences of international migration in OECD countries.	1980-2015	2019
Deller, Steven; Kures, Matt; Conroy, Tessa	Rural entrepreneurship and migration	Examines migrants' impact on start-up activity in rural US areas.	1990-2000	2019
Démurger, Sylvie; Xu, Hui	Return Migrants: The Rise of New Entrepreneurs in Rural China	Researches the impact of return migrants' self-employment decisions.	2008	2011
Docquier, Frederic; Machado, Joel; Sekkat, Khalid	Efficiency Gains from Liberalizing Labor Mobility	Quantifies the effect of a complete liberalization of cross-border migration on the world GDP and its distribution across regions.		2015
Doran, Justin; Jordan, Declan	Decomposing European NUTS2 regional inequality from 1980 to 2009: national and European policy implications	Analyses income inequality and provides insight into the dynamics of regional and national cohesion among the EU-14 countries studied.	1980-2009	2013
Ekberg, Jan	Will Future Immigration to Sweden Make it Easier to Finance the Welfare System?	Examines if future immigration to a country with a large public sector alleviates the increasing burden on the public welfare system due to an ageing population.	-2050	2011
Erny, Matthias	Geldzahlungen von Migrantinnen und Migranten und ihre Wirkung im Herkunftsland: Eine	Examines cash payments (remittances) by migrants and their impact on countries of origin, as remittances exceed both direct	2009-2012	2013

	Betrachtung im Lichte der Trans Area Studies	investment and development aid in many developing countries and are therefore central to their economic development.		
Frank Hansen, Marianne; Schultz-Nielsen, Marie Louise; Tranaes, Torben	The Impact of Immigrants on Public Finances: A Forecast Analysis for Denmark	Examines the potential of immigration to strengthen financial sustainability.	-2050	2015
Gagliardi, Luisa	Does skilled migration foster innovative performance? Evidence from British local areas	Researches the effect of an increase in the stock of human capital due to skilled immigration on the innovative performance of recipient economies.	1997-2010	2015
Galera, Giulia; Giannetto, Leila; Membretti, Andrea; Noya, Antonella	Integration of Migrants, Refugees and Asylum Seekers in Remote Areas with Declining Populations	Examines whether immigration can operate as a counter-process of depopulation and economic recession.	2017	2018
Grafeneder-Weissteiner, Theresa; Prettnner, Klaus; Sudekum, Jens	Three Pillars of Urbanization: Migration, Aging, and Growth	Explains rising per capita GDP, increasing life expectancy and an ever-greater share of the population living in cities within a regional innovation-driven economic growth model with labor mobility and a demographic structure of overlapping generations.	1960-2013	2020
Greve Harbo, Lisbeth; Heleniak, Timothy; Ström Hildestrand, Asa	From migrants to workers: Regional and local practices on integration of labour migrants and refugees in rural areas in the Nordic countries	Investigates what regional and local practices foster the integration of labor migrants and refugees in rural areas in Nordic countries.	2016	2017
Guillaume, Marois; Bélanger, Alain; Lutz, Wolfgang	Population aging, migration, and productivity in Europe	Shows that negative economic consequences of population aging can be mitigated by changes in migration and labor-force participation.		2020



Hofer, Helmut; Weyerstrass, Klaus	Der Beitrag der Migration zum Wachstumspotenzial der osterreichischen Wirtschaft. (Migration–Impact on Potential Output in Austria. With English summary.)	Explores the production capacity with focus on foreign labor force.	2005-2015	2016
Hormiga, Ester; Bolivar-Cruz, Alicia	The relationship between the migration experience and risk perception: A factor in the decision to become an entrepreneur	Examines the proposition that the migration experience influences perceptions of risk and, as such, the 'migrant condition' is a factor in explaining relatively high rates of entrepreneurship among immigrants in many host countries.	2009	2012
Huber, Peter; Landesmann, Michael; Robinson, Catherine; Stehrer, Robert; Hierländer, Robert; Iara, Anna; O'Mahony, Mary; Nowotny, Klaus; Penq, Fei	Migration, Skills and Productivity	Quantifies the importance of migration for the labor market and productivity and provides an overview of the extent and the potential effects of high-skilled migration to the EU27.	1995-2007	2010
Huber, Peter; Tondl, Gabriele	Migration and regional convergence in the European Union	Observes migration and regional convergence in the European Union.	200-2007	2012
Ismail, Rahmah; Yuliyusman, Ferayuliani	Foreign Labour on Malaysian Growth	Investigates the impact of foreign labor on Malaysian economic growth using panel data from three sectors: manufacturing, services and construction.	1990-2010	2014
Kangasniemi, Mari; Mas, Matilde; Robinson, Catherine; Serrano, Lorenzo	The Economic Impact of Migration: Productivity Analysis for Spain and the UK	Explores the direct economic consequences of immigration on host nations' productivity performance at a sectoral level.	1996-2005	2012

Kasimis, Charalambos	Migrants in the Rural Economies of Greece and Southern Europe	Researches the impact of migrants in rural areas regarding the agricultural sector.	2000-2006	2005
Kerr, William R.	U.S. high-skilled immigration, innovation, and entrepreneurship: empirical approaches and evidence	Observes high-skilled immigrants and their importance for U.S. innovation and entrepreneurship. Immigrants account for roughly a quarter of U.S. workers in these fields, and they have a similar contribution in terms of output measures like patents or firm starts.		2013
Kwan, Fung; Zhang, Yang; Zhuo, Shuaihe	Labour reallocation, productivity growth and dualism: The case of China	Identifies the role of labor reallocation to the growth of total factor productivity (TFP) in China.	1980-2014	2018
Labrianidis, Lois	The Future of Europe's Rural Peripheries	Explore the question of whether entrepreneurship in the countryside could act as an engine for rural development and enable rural locales to re-invent themselves.		2004
Lübben, Ingo	Migration und Rücküberweisungen in Thailand - eine Analyse der Zusammenhänge unter besonderer Berücksichtigung des Konsum- und Investitionsverhaltens ländlicher Haushalte	Investigates remittances of migrants to their region of origin in Thailand in order to disclose the connection between remittances and a consumption-oriented or investment-oriented behavior in migrants' households.	2007	2009
Lundmark, Linda; Ednarsson, Marcus; Karlsson, Svante	International Migration, Self-employment and Restructuring through Tourism in Sparsely Populated Areas	Investigates self-employment in tourism among foreign-born people in rural Sweden. The questions addressed in this paper are: what is the magnitude of self-employment, and what types of business do in-migrants run in rural areas?	2010	2014

Muysken, J; Zieseemer, T. H. W.	A permanent effect of immigration on economic growth	Shows that immigration can help to lessen the burden of ageing for the welfare states of most Western economies.	1973-2009	2013
Muysken, Ioan; Zieseemer, Thomas	The Effect of Immigration on Economic Growth in an Ageing Economy	Develops a macroeconomic model which deals with the effect of both ageing and immigration on economic growth, through home-biased capital accumulation.	1973-2009	2014
Nadler, Robert	Should I stay or should I go? International migrants in the rural town of Zittau (Saxony) and their potential impact on rural development	Series of qualitative interviews with international migrants in the small rural town of Zittau and its surrounding villages in Eastern Saxony.		2012
Naudé, Wim	Is European Entrepreneurship in Crisis?	Addresses the question of whether expectations that entrepreneurs will significantly boost the economy in Europe are justified.		2016
Naudé, Wim; Spiegel, Melissa; Marchand, Katrin	Migration, entrepreneurship and development: critical questions	Explores whether immigrants are more entrepreneurial than natives, whether remittances finance entrepreneurship in the home country, and the extent to which migration affects development.	2004-2016	2017
Niebuhr, Annekatriin	Migration and innovation: does cultural diversity matter for regional R&D activity	Investigates the significance of cultural diversity of the workforce on innovation output for a cross-section of German regions.	2004-2006	2006
Nienaber, Birte; Roos, Ursula	Globalising Rural Areas: International Migrants in Rural Germany	Investigates how international migrants support the development of a “globalized countryside”.	2010	2016
Oomen, Jaap	High Skilled Migration, Innovation and Regional Diversification in Europe	Aims to analyze the effects of high skilled migration as an extra-regional knowledge source on regional innovation and regional diversification.	2001-2012	2019

Ozgen, Ceren; Nijkamp, Peter; Poot, Jacques	Immigration and Innovation in European Regions	Measures the impact of the size, skills, and diversity of immigration on the innovativeness of host regions. Innovation outcomes are measured by means of the number of patent applications per million inhabitants.	1991-1995; 2001-2005	2011
Ozgen, Ceren; Nijkamp, Peter; Poot, Jacques	The impact of cultural diversity on firm innovation: evidence from Dutch micro-data	Shows that migration studies have demonstrated positive economic impacts of cultural diversity on productivity and innovation at the regional level, but the impacts at firm level are less well known.	2000-2002	2013
Pato, Lúcia	Entrepreneurship and innovation towards rural development - evidence from a peripheral area in Portugal	Researches the role of rural entrepreneurship towards rural development of an inland and mountainous area in Portugal.		2020
Patuzzi, Liam; Benton, Meghan; Embiricos, Alexandra	Social Innovation for Refugee Inclusion - From bright spots to system change	Researches social innovations that possess the potential to spread and scale.	2015-2019	2019
Perlik, Manfred; Membretti, Andrea	Migration by Necessity and by Force to Mountain Areas: An Opportunity for Social Innovation	Explores migration from the perspective of regional development, taking into account the currently prevailing goals of economic competitiveness and local self-interest. Furthermore, focuses on the Alps, a region in which rural areas are losing economic, demographic, and decision-making power due to outmigration.	1994-2018	2018
Poot, Jacques	Demographic change and regional competitiveness: the effects of immigration and ageing	Focuses on the impact of population ageing and immigration on aspects of regional competitiveness such as innovation, entrepreneurship and productivity.		2008

Preston, Ian	The Effect of Immigration on Public Finances	Aims to provide a thorough conceptual survey, pointing out the complexities of a full understanding and the relevance of indirect effects and covering both static perspectives and longer run dynamic issues.		2014
Rye, Johan Fredrik; Scott, Sam	International labour migration and food production in rural Europe: a review of evidence	Takes stock of the literature and identifies seven key issues associated with low-wage labor migration, contemporary food production, and rural change.	1990-2018	2018
Treyz, Frederick; Evangelakis, Peter	Immigration and United States Economic Growth	Explores the scenario of what would happen if net migration to the U.S. were to cease.	2018-2060	2018
Vasco, Cristian	Migration, Remittances and Entrepreneurship: The Case of Rural Ecuador	Analyzes the impact of migration and remittances on the likelihood of rural households owning a business.	2005-2006	2013
Wahba, Jackline; Zenou, Yves	Out of Sight, Out of Mind: Migration, Entrepreneurship and Social Capital	Investigates whether return migrants are more likely to become entrepreneurs than non-migrants.		2012
Wassink, Joshua	International Migration Experience and Entrepreneurship: Evidence from Mexico	Investigates the effect of international migration experience on entrepreneurship in sending areas.	1975-2017	2020
Wildasin, David E.	Public Finance in an Era of Global Demographic Change: Fertility Busts, Migration Booms, and Public Policy	Observes future challenges, such as the policy tradeoff between population aging and (im)migration due to fertility rates below the replacement rate of West European countries.	2007	2008
Yu, Li; Artz, Georgeanne M.	Migration and rural entrepreneurship	Investigates entrepreneurship of migrants and their location choice in an attempt to draw connections between migration and economic development, with a special focus on	1982-2006	2009

the role of business formation in  
rural development.

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