

AIRPLANE PARTS AND COVID MASKS: LABOUR COMMUTERS OF NORTH-WESTERN ROMANIA BETWEEN CENTRAL AND EASTERN EUROPEAN “RE-INDUSTRIALISATION” AND THE GLOBAL MARKET

Andreea FERENT¹

ABSTRACT: This article aims to uncover two main features of ‘re-industrialisation’ in Central and Eastern Europe: the reconfiguration of the economic geography in Northwest Romania and the multiple ways in which the Romanian working class is being integrated into the new economy. Post-socialist shifts towards a low-skilled, flexible, and generally insecure economy have underlined the need for cheap, easily disposable labour, and the emergence of the new economic geography has changed the accumulation of capital in the region and the patterns of labour mobility. Despite massive migration, many have continued to work in the region or have combined migration periods with work close to home. This study explores the different mobilities individuals engage in and seeks to understand why some workers choose to stay and live in the region and how the available opportunities for workers aiming to stay in the region influence their prospects. This study traces the patterns of labour commuting and how this is structured by individuals’ strategies and motivations, as well as the social relationships that support this work. The article analyses labour commuting to two major industrial hubs in the region: one which manufactures aerospace components, and one that produces medical textiles. Both companies are foreign-owned and concentrate a significant proportion of the region’s workforce. The micro-dynamics revealed will contribute to understanding the patterns of work in the specific form of re-industrialisation in contemporary Romania.

Keywords: commuters, re-industrialisation, economic geography, regional development

¹ *European University Institute*; andreeamaria.ferent@eui.eu



Introduction

Material Infrastructures and the Human Capital of Re-Industrialisation

During the socialist period, the North-West region in Romania was a pivotal industrial hub that revolved around mining extraction and industrial processing activities, concentrating the labour force of the region and some neighbouring areas. Today, despite the massive trend of national and transnational labour migration, many individuals still work in the region or have opted for a combination of migration and employment close to home. Studies have documented migration processes, as well as macro narratives concerning capitalist transformations in the Central and Eastern European region. But more empirically focused analyses of local phenomena are needed to understand what the current phase of capitalist re-industrialisation brings about in terms of infrastructure and prospects for labour for those workers who seek to stay and make a living in the region.

My research investigates re-industrialisation in Northwest Romania, where a new economic geography has emerged from the previous mining and metallurgy-dominated regime. Since 1989, Baia Mare has undergone a transformation that includes investments in new industries while keeping some traditional industries that are now less active, or even in decline. The economic geography of the region, along with prospects for labour in the current phase of capitalist re-industrialisation, cannot be interpreted only by looking at de-industrialisation and post-industrialisation, as prevalent narratives on the shift to capitalism in CEE. Although images and stories of industrial decline are undeniably commonplace in the region, these overlook the complexities of the emerging economic system. While criticized for its inability to create widespread prosperity and for driving massive migration, CEE capitalism has also set in motion a set of material and human processes leading to a novel and unpredictable economic geography and (Adăscăliței & Guga, 2020; Miszczynski). Industrial workers, most of whom are employed by foreign companies, are susceptible to underqualification even in the long run. Specifically in this area, capital prefers the least expensive labour to the best qualified. Meanwhile, the state lacks the means to invest in skilled labour because the budgetary policies are geared at luring foreign capital (Adăscăliței & Guga, 2020; Ban, 2019). Thus, the conventional emphasis on infrastructure development and industrial zones requires a complementary lens looking at regions as shaped by both previous economic regimes and the realities of the newly formed working class. To address this, my research looks at the two dimensions of economic geography and the new patterns

of commuting, presenting the family relations that sustain work in a difficult economic environment, and grasping the strategies deployed by individuals and communities to safeguard their livelihoods.

In addition to using the economic geography dimension, this study adds a commuter perspective, explicitly focusing on why it makes sense for commuters to remain in the area. By employing qualitative modes of enquiry, I attempt to illuminate their motivations, the social relations developed at work and the family dynamics resulted. My research involves engaging with individuals who are directly impacted by these processes, instead of analysing overarching processes from a distance. By delving into the intricacies of everyday life, I aim to understand their nuanced experiences and narratives. My approach prioritizes first-hand narratives and perspectives, rather than relying solely on a macroscopic lens.

The following questions are raised by this research: why do workers choose to live and work in the area, and what kind of employment prospects are there for those who do? I explore this specifically through the case of labour commuters in the North-Western region of Romania by investigating the patterns of labour commuting, the strategies, and motivations of individuals related to their work and the social and family relationships that facilitate and support this work. The study is focused on two major industrial hubs in the region. These hubs are Universal Alloy Corporation Europe (UACE), which produces aerospace components, and Techtext, which manufactures medical textiles. Both companies are foreign-owned and employ a significant portion of the region's workforce. Various forms of qualitative inquiry form the backbone of my research, including interviews and discussions with workers and commuters, as part of a larger project entitled 'Precarious labour and peripheral housing. The socio-economic practices of Romanian Roma in the context of changing industrial relations and uneven territorial development' developed by Babes-Bolyai University in Cluj-Napoca.

My argument is that the adoption of short-term labour mobility is revealed as a crucial strategy for subsistence in the rural areas of Maramureş. It becomes evident that both employees actively seek, and employers endorse these flexible approaches as mechanisms to sustain low-cost labour. The narratives of the respondents, which I will elaborate on below, serve as concrete examples illustrating this dynamic. These stories underscore the significance of short-term labour mobility not only as a survival strategy for individuals in rural areas but also as a deliberate choice supported by employers seeking to maintain cost-effective labour practices.

This paper begins by discussing the context and historical developments of Romanian re-industrialization and the dynamics specific to the North-Western region. It will then go on to lay out the theoretical dimensions of the research.

The next section is concerned with the fieldwork approach and methodology. I then describe the general industrial profile of the businesses in the area and the ones where most of my respondents are employed. The remaining part presents the findings of the research, focusing on the three aforementioned key themes: the new realities of commuting, family relations that sustain commuting and individual strategies and motivations.

Capitalist Re-Industrialisation and Prospects for Labour

In order to better grasp the drivers of economic processes it is important to understand the past socialist geography of industrial development and the way in which industrial socialism shaped cities, regions, and their respective economies. In the Romanian socialist economy, competition between regions and enterprises was crucial for the accumulation of capital and labour. This resulted in the establishment of formal regulations at intermediate levels to facilitate interactions among workers, company managers, and planners. Additionally, informal networks of workers coexisted with formal structures (Petrovici & Faje, 2019). The increased empowerment and influence of workers can be attributed to the combination of a fragile and overly ambitious Romanian socialist state and the delayed modernization of the economy, which relied heavily on workers to achieve its goals. This phenomenon, as discussed in the works of Cucu (2019) and Grama (2018) highlights how the confluence of an insufficiently strong socialist state and a delayed economic modernization process inadvertently gave workers greater power and agency in shaping the socio-economic landscape.

Furthermore, in order to understand the current re-industrialization and its social consequences, I will first look at the preceding period, characterized by what literature has called 'premature' de-industrialization (Chivu et al., 2017). During the post-socialist period, Eastern Europe experienced a steady decline in population (Neyer et al., 2013) and an aggregate employment, which started in the last years of socialism and continued into the post-socialist period (Mickiewicz, 2013). Migration became more common during this time period. The literature underscores the intricate interplay between industrial transformations, labour migration, demographic changes, and economic challenges within Romania (Chivu et al. 2017, Ban 2014).

In regard to regional development, the decline in overall employment in Romania exhibited regional disparities. Some urban centres and economically advanced counties witnessed higher levels of employment and others experienced significant population and job reductions. The variation was influenced by historical socialist investment strategies. Counties that had received industrial and service investments maintained a larger workforce post-socialism (Bănică et al.,

2017; Chelcea & Druță, 2016; Petrovici et al., 2023). The counties that experienced the most pronounced decline in employment were not those with the highest number of employees during socialism, specifically urban industrial workers. Instead, the most substantial job losses were observed in agricultural-specialized counties, even though they had a smaller labour force (Chivu et al. 2017).

As shown in this section, Romania's transition from socialism to a market-driven economy entails intricate economic and spatial repercussions, which have profound and region-specific implications on individuals' employment strategies.

The Integration of the Maramureș Region into the Global Market

In this section, I will analyse the specific dynamics of the project's case study, Baia Mare, the county capital of Maramureș, in northern-western Romania. The city underwent a notable de-industrialisation phase in the 1990s, followed by a re-industrialisation-driven revival during the 2000s. This region features industrial enterprises that have been seamlessly integrated into global supply networks. It also has a comparatively diminished presence of the precarious tertiary sector found in larger cities across the region, including Romania at large (Földes & Mihaly, current issue). However, despite being considered a success story (Corodescu-Roșca et al., 2023), the industrial labour within the region is characterized by instability, insecure employment, and a dependence on a substantial pool of easily replaceable workers with minimal education and skills, coupled with limited alternative options (as shown by the conclusions of the PRECWORK project). This makes Baia Mare a particularly interesting case to explore.

The former socialist geography of industrial development remains relevant in understanding the processes that unfolded in the next period. An important factor was the erosion of the previously coordinated production envisioned during socialism, connecting interdependent units for tasks like ore movement, metal extraction, and metal processing (Stahl, 1969; Poenaru, 2020). Industrial units were often grouped together or located near suppliers. Post-socialist reforms disrupted this integrated structure, as each unit sought independent operations in the emerging national capitalist market. This transition from integrated autonomy to unit independence was facilitated by governments and it reflected the workers' and managers' desires for autonomy. Privatization further solidified this shift, with companies often welcoming it for worker ownership and capital infusion. However, this segmentation led to economic changes and a prolonged raw materials crisis. The autonomous units prioritized profit, sought high-priced international partners and aimed to secure foreign currency (Földes & Mihaly, current issue).

As a result, in Baia Mare, like in other regions, a large part of the industrial base has been privatized or sold off in this second wave of neo-liberalization. Moreover, economic restructuring is creating real social tragedies: large numbers of unemployment, high poverty rates and urban deprived areas.

Conceptualization: Economic Geography and Commuting Labour

This section situates the two main concepts of this research, namely economic geography and commuting labour, inside the broader debates in the anthropological literature, by exploring how material infrastructures shape regions and the literature regarding workers' motivations for commuting. The economic geography of Romanian 're-industrialisation' is one in which abandoned factories sit alongside new industrial hubs, where old and new roads carry loads of goods and people that used to be carried by rail, and where local authorities are generous in their support for investment but cut back on social services (Baccaro et al., 2022; Jipa-Muşat et al., 2023; Petrovici & Faje, 2019). Anthropological research has long been concerned with the ways in which material infrastructures such as roads, industrial investment, entrepreneurial initiatives, and technology parks, as attempts to 'improve' regions, can foster concentrations of poverty, immobility or marginalisation, and shape local labour needs and the work-related behaviour of the population (Allen et al., 2012). Studies have revealed the enduring influence of material infrastructures, such as electricity grids, heating systems, and roads, alongside Western economic concepts, in shaping novel forms of socio-economic organization within the Russian Federation (Collier, 2011). In Eastern Europe, literature has highlighted the significant transformative power of roadbuilding according to state and societal dynamics (Dalakoglou, 2012, 2017). While exploring critical examinations of the concept of region, these studies challenge conventional ideas of regions as static, bounded entities and propose a more dynamic perspective that considers that regions are socially constructed and shaped by various economic, political, and cultural forces (Boschma, 2004).

As economic landscapes change, so do the opportunities for local communities. In the aftermath of Romania's economic downturn in the 1990s, there was a documented increase in transnational labour migration (Anghel et al., 2017; Anghel & Horváth, 2009; Diminescu, 2009; Sandu et al., 2004; Sandu, 2010; Troc, 2016). Research has already explored the process of migration using the Maramureş region as a case study and observed how migration shaped spaces as well as the life narratives of people (Boar, 2005; Ferent, 2020; Iuga, 2020; Mihali, 2019; Vasilescu, 2012). Among the factors that influenced

significantly work-related behaviours as well as the massive migration during the 'transitional' years (approximately 1990-2009) were poor working conditions, exploitative work programs, delayed payments, and unstable employment (Troc, 2019). However, re-industrialisation is a powerful catalyst capable of transforming regions and revolutionising people's work patterns in a variety of ways. Thus, the multifaceted nature of the process remains underexplored, with most studies focusing solely on labour migration.

This article contributes to the literature on regional developments by inserting the commuting perspective. Throughout this paper, the term 'commuting' will refer to regular travel outside the village anywhere from 6 to 24 hours, as defined by Hugo (1982). Commuting is defined in opposition to circular migration, which involves continuous but temporary absences of more than one day (Hugo, 1982). From a purely economic perspective, commuting and migration are crucial components for establishing a labour market that operates effectively, considering the workers' need to seek out and relocate to regions where relevant job opportunities are available for them (Haas & Osland, 2014).

The decision-making process concerning where to live and what job to take can be interconnected (Haas & Osland, 2014). When commuting is cost-effective, it may encourage people to opt for longer commutes instead of migrating, leading to a situation where decisions about where to live become less intertwined with decisions about where to work (Muellbauer & Cameron, 1998). The feasibility of commuting versus relocating and migrating is contingent upon various factors, such as the costs of commuting, or proximity to home (Haas & Osland, 2014).

The literature around commuting stress (Koslowsky et al., 1995) and its relationship with family dynamics as dimensions of personal well-being points to important factors such as marital status, the presence of children, and family size. Gender differences in motivations for commuting and commuting behaviour are also highlighted in the literature (Albert et al., 2019; Gimenez-Nadal & Molina, 2016; Ignacio Gimenez-Nadal et al., 2018). Considering differentiated household chores and responsibilities, as well as the presence of children, some researchers find a negative relationship between having children and commuting, particularly among women (Gimenez-Nadal and Molina 2016).

The particular context of rural commuters in Maramureş addresses all the dimensions mentioned in the literature. It also enriches the literature on commuting motivations by showing the links between family relations and the way in which the factories in the region shape their working regime. By using various programs such as nurseries or professional schools at the factory, companies employ a strategy of 'familiarism'. The concept originated from what Kalb (1997) termed as 'flexible' familism, a custom initially embraced by worker-peasant

families seeking additional income. This practice was later adopted by nearby factories, involving the availability of ‘disciplined’ daughters to work alongside male family members as required (Kalb, 1997). In the case of Maramureş commuters, they also state their motivations for bringing their family to work at the same factories as them.

Methodology and Fieldwork Approach

The study was undertaken as a component of the broader PRECWORK project at the Babes-Bolyai University in Cluj-Napoca. The primary aim of the project was to explore the marginalization of the Roma community in Romania, particularly focusing on the Baia Mare region, throughout three economic phases: industrialization, deindustrialization, and reindustrialization. Starting in 2020, the project specifically focused on the Baia Mare region due to its significance in illustrating the challenges encountered by Romanian Roma communities amidst the neoliberal transformation in industry and urban development.

Inside the work package focused on the transformations of labour in re-industrialization, we conducted interviews with workers from Baia Mare, analysing the dimensions of racialized labour during re-industrialization, as well as the emergence of the re-proletarianization of Roma workers. While conducting interviews with workers, the theme of commuting workers became recurrent and important in the bigger context of our working package. As a member of the work package, I conducted a total of 25 interviews with factory workers in Baia Mare, including both Roma and non-Roma workers, out of which five were in-depth interviews with commuters from the rural areas of Maramureş, during the period of June to September 2021. During the second period of fieldwork, from March to April 2022, I conducted more informal interviews and discussions with commuters. The study recruited respondents through snowball sampling methods, which allowed access to people from marginalized and rural communities.

As ethnographers conducting fieldwork, we were often seen as outsiders to the communities being investigated. We acknowledge that this outsider status had implications for the dynamics of information sharing, potentially affecting the depth and nature of information shared by the respondents. Although the study has limitations due to the small sample size, it remains valuable as it sheds light on the experiences of workers in the area. It highlights the impact of economic and social processes on individuals, which is often overlooked in the literature. Despite the difficulty in gaining access to populations, the study provides original and valuable insights.

Main Industrial Hubs in the Region and Foreign Capital

The New Economic Geography of North-West Romania

This section unpacks the findings in our work package, illustrating the nature of factory work in the region. Employment varies considerably from one factory to another and, to some extent, from one industry to another. This results in different categories of workers, each characterised by their skill level and role within the production process. The example of Aramis, the largest factory in the region, is important. Aramis has a large and diverse workforce of around 5000 workers. It employs workers with different levels of education and skills, including uneducated or poorly educated Roma, people with disabilities, refugees, and minors aged 16-18 on shorter shifts. The workforce ranges from completely unskilled workers to highly skilled engineers. The company offers predominantly low skilled work and offers extremely strenuous working conditions, which results in a younger workforce. Aramis stands out as the only factory that employs large numbers of un- or low educated Roma workers, performing unskilled labour. The hiring and firing culture in this kind of factory, which employs unskilled labour, is a propensity of the precariousness of this kind of industrial activity.

The results of the working package also show that there is a tendency toward gender segregation deepening on the sector. For example, factories that specialize mainly in textile work or garments employ a more feminised workforce. Furthermore, within this industrial landscape, the network that has formed between factories operates in both formal and informal ways. Formally, there is little cooperation between factories unless they belong to the same group, as they compete for highly skilled workers. Informally, however, the fluid exchange of labour between factories is mediated by human resources and a network of mutual favours between managers. The notion of tacit knowledge which is passed between firms at the regional level has been explored previously in the literature (Boschma, 2017; Boschma et al., 2013). In the Maramureş context, factories in different industries cooperate based on labour complementarity, relying on a flexible workforce, trust-based relationships between managers and workers, and efficient commuting systems created for this purpose.

In this context, industrial work features precariousness and insecurity, relying mainly on a large pool of easily replaceable workers with limited education and skills, often with no alternatives. Workers have low wages and do strenuous physical labour, including night shifts and weekend work. Stability is maintained through bonuses for continued employment. In particular, the

company offers little to no social and job security. In essence, the nature of industrial work reveals an economic landscape rife with insecurity and exploitation that shapes work dynamics and influences individual strategies for survival and advancement.

In what follows, I first describe the two companies where most of the commuters in my research were employed. Then I will bring forward the narratives of the workers concerning their labour conditions and commuting.

Case: Techtex; Semi-Skilled, Semi-Feminized Labour

The Techtex Company belongs to the former Taparo² group. Techtex controls the first medical textile factory with Romanian capital, built in less than 10 months in Cicârlău, a small village 15 km away from the county centre, after an investment of about 25 million euros. It is an interesting case because it completely changed its production profile during the COVID pandemic, specialising in producing COVID-19 masks and concentrating its workforce on producing a record number of sanitary products during the pandemic. The factory started its production process (surgical and protective masks, disposable gowns and overalls, caps and muffs, disposable bed linen, surgical masks, etc.) in March 2021. In 2020, when the company was producing anti-pandemic equipment in a hall in Borcut owned by Taparo, it reported a turnover of more than 109 million lei and a net profit of more than 25 million lei, achieved with 214 employees. So, while production figures soared during the pandemic, the number of employees remained the same.

On the one hand, Techtex is a large factory that concentrates the workforce in and around the small village where it is located. In 2022, the Taparo Group sold several warehouses in Maramureş to the Belgian company WDP and continues to produce there as a tenant. Besides this group, WDP owns another 60 rental properties in Romania, valued at €936 million, according to the group's latest report. Taparo and Techtex, owned three production sites - in Cicârlău (near Baia Mare), in Oşorhei (near Oradea) and in Târgu Lăpuş (in Maramureş county). The Belgian property developer WDP has bought several buildings in Targu Lăpuş and Baia Mare from the furniture manufacturer Taparo and the sanitary textiles supplier Techtex, part of the same group. The space is valued at €16 million and covers more than 32,000 square meters, according to the most recent data released by WDP. Through a sale-and-leaseback agreement, WDP has also leased the purchased premises to Taparo and Techtex for 15-20

² Taparo is a top furniture exporter in Romania, with 3 locations in Maramureş. It's domestically owned and recognized as a major supplier to IKEA. They invest in R&D, developing composite materials to replace traditional wood particle boards (Mihaly & Foeldes, this issue).

years, and the Belgians are planning an expansion on the purchased land (TechTex.ro, 2019). On the other hand, the factory is located in Cicârlău, a small village with a tradition of agricultural activity, 15 km away from Baia Mare, the county capital. As shown in previous sections, the findings of our work package show that the labour force in the region is characterized by different types and categories of workers depending on the industry they work in and depending on the specific factory. While companies such as Aramis or Karelia hire low-skilled labour, and Italsofa or Weidmullen hire more skilled labour, factories such as Techtex concentrate on semi-skilled and feminized labour, with mostly middle-aged women having a medium education level, high school degree at least, and professional qualifications that can be obtained on-site (Precwork, Work Package 4).

Case: UAC; More Skilled-Labour

Universal Alloy Corporation (UAC) is a global aerospace and defence manufacturing company that specializes in the production of advanced aluminium and other structural materials for various industries, with a primary focus on aerospace and defence (Universalalloy.com, 2021). It is a privately held company headquartered in Canton, Georgia, USA and it operates as a subsidiary of Montana Aerospace AG, which is a leading global supplier of highly engineered components for the aerospace and defence industries. It has warehouse facilities in Canton, Anaheim, Romania and Vietnam. The Romanian-based UAC manufactures high-strength, hard alloy extrusions for aircraft structures and precision-engineered products. UAC represents an interesting case of analysis here because of a series of aspects: it is a large American company with one European headquarters in Romania with huge profits, and gains; the big number of employees; the training they provide to high school students that want to work there after graduation and how it transforms family relations in the region.

Located in the small village of Dumbrăvița, UAC brings together workers from nearby villages and the city of Baia Mare. UAC outperformed Aramis, the biggest firm in the county, by over four times in 2018, marking the largest profit ever recorded in the Maramureș economy. Despite having a fiscal value almost four times smaller than Aramis, UAC earned over 17.8 million euros in 2018 from the Dumbrăvița facility, nearly one-third more than the previous year. It achieved this turnover with only about 200 more employees than the previous year's workforce of approximately 1450 employees. In 2016, a second facility was established in Tăuții-Măgherauș, due to its proximity to the airport and to the town of Baia Mare, to provide aerospace components to major industry

players like Airbus, Boeing, and Bombardier. The company is strategically located near the Maramureş International Airport, allowing for easy transportation of their products with direct access to the airport. The profile of the workforce is different from Taparo, the workforce here is more diverse (not feminized) and they hire younger and more skilled workers.

Integration of the Working Class in the New Economy

As I have shown in the previous sections, the factories encompass a workforce characterized by its multidimensionality, comprising individuals from diverse origins including Baia Mare locals, Roma people living in deprived areas of the city and rural commuters. This workforce makes up for at least two big dichotomies: the rural-urban divide and those situated amidst the Roma-non-Roma divide. Each of these groups exhibit different motivations for working in these factories, thereby giving rise to distinct categories of justifications they deploy and different types of experiences. In the following sections, I specifically inquire about the reasons commuters perceive it is more convenient to remain in the region. I explore their motivations, the circumstances in the rural areas of their residence, the absence of opportunities there, and the social relations and family dynamics that arise from their work.

Working Conditions in the Factory

This section reviews the working conditions in the factories, illuminating the character of this work as physically strenuous and oftentimes, combined with flexibility. In the case of rural areas in Maramureş, flexibility, associated with short-term labour mobility, can emerge as a key strategy for subsistence. I argue that these approaches are sought after by employees and endorsed by employers as mechanisms to maintain inexpensive labour. This is shown in respondents' stories illustrated below.

In the interviews the employees reveal a pattern in both the Techtex and UAC cases, since they all mentioned that they learned about the positions from friends or other employees. Both factories are presented as good options for finding work close to home. Given the conditions, finding work in the villages is nearly impossible and migration does not represent an option viable for everyone. Therefore, these companies remain the main hubs for all those who seek to make their living close to home. In the case of UAC, people who work there recommend the factory based on the upsides it has in comparison to the other factories operating in the region. In the interviews, workers considered

the following as work advantages: a good wage, the seriousness of the employers, (which for them means having their wages paid on time), feeling respected by their managers and employers, and receiving the benefits listed in the contract.

UAC workers describe their first experiences with the factory by comparing them with previous experiences, or with experiences of people they know who worked in the other factories in the area:

There are many people from Aramis who have moved from there to airplanes [to the airplane parts factory], it's the same commute, but the conditions are different, (...) before I started working here, I was unemployed, and they called me to interview for Taparo and someone (a friend) told me in advance that you have to have good nerves to work there. Someone explains [the job] to you once and then you're done, if you know, good, if you don't, they move you somewhere else. When I went there [at UAC], and I saw how nicely I was received... I really didn't expect it. I work as a quality inspector, I have to see that there are no defects in the products... but in the beginning, I didn't even know how to hold the machine in my hand (...) and he actually explained to me what I have to do from the beginning, in detail. Three months you have the yellow helmet, you have no responsibility, you just learn and the other employees who are old have to teach you... everyone is nice to you, especially if they see you with the yellow helmet, they try to help you. I've seen that from the first one since I went to the interview that that's how they treat you, nicely, and explain to you in a nice manner (female respondent, 45).

All the respondents from UAC say that it is very different from working at other factories in the area, meaning Aramis and Taparo, because at UAC they have more safety and do not experience the mistreatments they report for the other companies, which is late pay, precarious working conditions, few benefits, adding to the heavy commute.

Qualifying people directly at the workplace is a common approach in this type of factories, as other researchers have demonstrated (Foldes & Mihaly, current issue). The selection process at UAC is described as consisting of an interview, followed by a short mathematics and logic test. After that, one will get a call to confirm the hiring. Workers describe the cleanliness and seeming order in the factory, in terms that would indicate shock:

The first time I was taken on a factory tour I had the impression that I was in another country... very efficient... like in the movies (male respondent, 30).

One worker described in detail how the factory looks like, emphasizing how organized and clean everything is, and comparing it to how one would imagine a factory in Western countries, but not in Romania. At the UAC, respondents

stress the importance of receiving solid training before starting to work. In the case of both firms, employees are qualified in the workplace. Considering the nature of the job and the need to qualify people at the workplace involves intense training before starting to work:

The first time I was hired as a CNC operator, the first 6 months, and right after 2 weeks I started a course: 3 days I was at school, 3 days at work... it felt as kind of a practical training. And after 6 months I took another exam. And if they saw that you could do it, they let you continue (male respondent, 50).

Regarding working conditions, the two factories seem to differ in some significant features, such as pay, benefits, general working conditions and the profile of the workers. At UAC, the workforce is more highly skilled, as opposed to the low-skilled and feminized character of the workforce at TechTex. Due to the profile of the factory, making aeroplane parts requires a sterile environment and strict equipment regulations for the employers. While some workers claim they are always provided with appropriate equipment, others point out that some of the equipment does not meet regulations. These include protection goggles made of a weaker but seemingly good material, which caused many people to have serious eyesight problems after wearing them during work.

After describing such situations, when I asked whether they have a union, some workers say this is not the case:

No...it would be ok if we had... you know how it is... they are ok, but they are still employers. I'm firmly convinced that the American doesn't know what's going on here... or the one from IKEA. They don't know what's going on at Taparo or Aramis... and they don't even care (male respondent, 30).

The nature of the factory's manufacturing process requires high quality to ensure precision in the production of airplane parts, as a worker emphasized '*we're not making tractor parts here*' (same respondent). The substances used sometimes can be toxic, and the labour processes can involve contact with toxic materials and therefore, some people are reluctant to take up those jobs. Discussions with people working in different industries capture this. UAC workers also talk about incidents where the contact with toxic materials resulted in injury for the employees:

Look for example there was a person who got some allergy from aluminium dust and needed hospitalization and they didn't kick her out... they put her on another job after she recovered where she didn't have contact with the dust (female respondent, 45).

The New Realities of Commuting

The respondents mentioned that their commute requires them to work extra hours to match the bus schedule. The bus operates on a fixed schedule, leaving people who work certain shifts with two hours of idle time which they fill by working. At TechTex, employees undertake a significant daily commute, which involves two hours of travel both to and from work. Furthermore, for the day shift, due to the necessity of transportation, the bus is scheduled at a certain hour, and employees are thus 'obligated' to work an additional 2 hours beyond their regular 8-hour workday, resulting in 10-hour workdays. This means that employees are dedicating a total of 4 hours each day to commuting, which is a significant portion of their daily schedule, leaving them with little time to do any house chores or any work after returning home:

Commuting is hard, but if you want to sleep on the road in the morning you can, and when you get back home at maximum you can still cook a meal and the day is done (female respondent, 50).

Numerous employees have reported that they often resort to sleeping during their commute in order to maximize their rest. As a result, when they arrive home, there is limited time left to cook a meal or engage in other personal tasks. The long work hours and demanding commutes have a significant impact on the daily lives of workers. Several employees have said that the commute is both physically and mentally draining, leaving them with little time for personal activities.

Some of the workers who have a car prefer driving to work instead of commuting by bus:

I go by car... I went by minibus too before... by car, it takes almost an hour. I didn't mind the minibus ride but now I go by car because I'm safer. I'm thinking about the pandemic. I don't have much contact with people at work... with the boss and a few colleagues... and it's better that way... that's how I thought about it after the pandemic, now I don't know... (male respondent, 30).

One worker states that the pandemic conditions scared him and that he prefers commuting by personal car. Even though it is an additional expense, some workers prefer to commute using their own car. For this respondent, the commute feels less tiring when he uses his own car, invoking reasons such as not having to interact with people when tired after the workday, and not having to comply with the bus schedule.

Exploring the personal motivations around commuting, workers talk about the possibility of taking unpaid leaves, which allow them to earn extra money by working in construction, woodwork or migrating seasonally. These arrangements result from informal agreements with managers that make use of informal rules to allow workers to work on the side. Although commuting may seem to make it harder to work on the side, in these cases, respondents explain that managers sometimes allow workers to take a longer unpaid leave to work different jobs, in order to retain the factory's workforce.

Other motivations revolve around family relations, the possibility of working at the same place as the spouse and later the possibility of bringing the children to study at the professional school of the factory, as well as the hope that they would/might work in better-paid positions there in the future. The women interviewed emphasized the importance of remaining close to home, close to the children, and not having to migrate.

Family Relations Sustaining Commuting Labour

In the context of rural commuters in Maramureș, there are important links between family relations and the ways in which factories attract workers. I argue companies in Maramureș employ a strategy of 'familiarism' (Kalb, 1997) by attracting the families of the workers to the factory. This is obtained through various programs such as nurseries and professional schools at the factory where employees can enroll their children. Workers develop personal motivations for bringing the children to work at the same place, and the companies capitalize on people's incentive to keep family closer. Families are hired together, which keeps them also more docile (Kalb, 1997) but encourages sustaining social relations as well. In addition, employers encourage social reproduction near the factory by supporting the building of professional schools. In this way, family relations are commuted as a whole.

Various respondents talked about the perceived safety they feel associated with working at the same place with one's spouse: *'I said to myself, if my husband works there, I'll go too, even if we might not end up on the same shift'*. For the employers, various advantages resulting from hiring entire families, such as employing people vetted through personal recommendations, increased the chances of staying longer to work for the factory, and the possibility of enrolling their children in the factory's professional school.

In 2017, UAC partnered with the municipality of Dumbrăvița village to build a professional school in the village, 'where the students can get a professional qualification that UAC needs and have a sure job at UAC after graduating' (Gazeta de Maramureș, 2018). The company offers the students a monthly scholarship, and

the Romanian state offers them another scholarship, which is an economic aspect most parents consider and talk about in the interviews. Workers are keen on enrolling their children in the professional schools, to have them close and to commute together, but mostly for them to have the safety of a well-paid job right after school:

Our son is enrolled in the vocational school at UAC. He wanted to be a mechanic and before 8th grade, he went to the factory to see exactly what his dad does. After he saw it, he liked it a lot and he liked the teachers at school. For example, after finishing vocational school they can work in the factory in any job they want... they don't specifically ask you to work in a specific job, whatever you want.

While the students are enrolled in the professional school, they combine studying with practical work, which means working in the factory under the supervision of prepared workers/teachers. Over the years, the study becomes less intensive, and the practical participation increases to 70% work and 30% study in the last year. Besides gaining labour force, the factory turns also students into commuters, thus shaping family dynamics at the workplace and household as well.

One worker from TechTex stated she encouraged her son to work there also, and the motivations were for him to have a steady job until he can find something he might enjoy more:

One of my sons already works at the factory (in the quality control section) and nah, he likes more or less... He has a higher salary than me because he does also night shifts... it's hard for him too but for now, he stays there until he finds somewhere else.

Strategies Deployed by Individuals and Communities

In the case of the rural commuters in Maramureş, motivations about commuting for work and not migrating permanently are strongly linked to the goal of trying to make a living in the region and remain close to home. The respondents claim to love their home villages and take on these types of jobs to remain close to home, but they are also aware that in their home villages there are no jobs. Their future plans include continuing to work for these factories, as they perceive there are no options for them now in the region. Furthermore, they want to have a secure job for their children, one that pays well and, preferably, allows them to remain close to home. During my interviews, I was struck by the story of a female worker who explained that if you live in any of the villages

around Baia Mare, your options for making a living are limited to either migrating or working in a factory. She described how migration is not a viable option for everyone, as it means being away from family except for holidays, and the work is demanding. On the other hand, working in a factory might allow you to return home to your family at the end of the day but often leaves you too exhausted to even converse with them. In some cases, you may even try to bring your family to work in the same factory to gain more connections with them.

Conclusions

The process of re-industrialisation in Romania does not directly match the expectations of politicians and planners, nor of the population. Literature shows us that incoherences, crises and convulsions marked the Romanian state's inability to re-scale from its semi-peripheral place in the world economy. In Maramureş, a common labour supply strategy employed by many companies in the region involves commuting networks. This approach takes advantage of Romania's deregulated labour relations and relies on workers combining different strategies to derive income, commuting and seasonal migration in some cases. Inside this context, the opportunities of those who have sought to make a living in their home region are limited to employing the strategies of commuting work, or a combination of commuting work and migration or other jobs.

REFERENCES

- Adăscăliței, D., & Guga, Ștefan. (2020). Tensions in the periphery: Dependence and the trajectory of a low-cost productive model in the Central and Eastern European automotive industry. *European Urban and Regional Studies*, 27(1), 18–34. <https://doi.org/10.1177/0969776418795205>
- Albert, J.-F., Casado-Díaz, J. M., & Simón, H. (2019). The commuting behaviour of self-employed workers: Evidence for Spain. *Papers in Regional Science*, 98(6), 2455–2477. <https://doi.org/10.1111/pirs.12469>
- Allen, John, Doreen Massey and Allan Cochrane (1998). *Rethinking the Region*. London, New York: Routledge.
- Allen, J., Charlesworth, J., Cochrane, A., Court, G., Henry, N., Massey, D., & Sarre, P. (2012). *Rethinking the Region: Spaces of Neo-Liberalism*. Routledge.
- Anghel, R., Botezat, A., Coșciug, A., Manafi, I., & Roman, M. (2017). *International Migration, Return Migration, and Their Effects: A Comprehensive Review on the Romanian Case* (SSRN Scholarly Paper 2895293). <https://doi.org/10.2139/ssrn.2895293>

- Anghel, R. G., & Horváth, I. (2009). Introducere. *Sociologia Migrației. Teorii și studii de caz românești*. <https://pub.uni-bielefeld.de/record/1994394>
Available online: <https://www.techtex.ro/companie/> (accessed on 27 July 2023).
Available online: <https://www.universalalloy.com/UAC-Facilities.html> (accessed on 27 July 2023).
Available online: <http://www.gazetademaramures.ro/scoala-profesionala-dumbravita-o-scoala-de-top-intr-o-cladire-ultramoderna-20305> (accessed on 27 July 2023).
- Baccaro, L., Blyth, M., & Pontusson, J. (2022). *Diminishing Returns: The New Politics of Growth and Stagnation*. Oxford University Press.
- Ban, C. (2014). *Ependență și Dezvoltare: Economia Politică a Capitalismului Românesc*. Tact. <https://research.cbs.dk/en/publications/ependen%C5%A3%C4%83-%C5%9Fi-dezvoltare-economia-politic%C4%83-a-capitalismului-rom%C3%A2ne>
- Ban, C. (2019). Dependent development at a crossroads? Romanian capitalism and its contradictions. *West European Politics*, 42(5), 1041–1068.
<https://doi.org/10.1080/01402382.2018.1537045>
- Bănică, A., Istrate, M., & Muntele, I. (2017). Challenges for the Resilience Capacity of Romanian Shrinking Cities. *Sustainability*, 9(12), Article 12.
<https://doi.org/10.3390/su9122289>
- Bohle, D., & Greskovits, B. (2012). Capitalist Diversity on Europe's Periphery. In *Capitalist Diversity on Europe's Periphery*. Cornell University Press.
<https://doi.org/10.7591/9780801465666>
- Boschma, R. (2004). Competitiveness of Regions from an Evolutionary Perspective. *Regional Studies*, 38(9), 1001–1014.
<https://doi.org/10.1080/0034340042000292601>
- Boschma, R. (2017). Relatedness as driver of regional diversification: A research agenda. *Regional Studies*, 51(3), 351–364.
<https://doi.org/10.1080/00343404.2016.1254767>
- Boschma, R., Minondo, A., & Navarro, M. (2013). The Emergence of New Industries at the Regional Level in Spain: A Proximity Approach Based on Product Relatedness. *Economic Geography*, 89(1), 29–51.
<https://doi.org/10.1111/j.1944-8287.2012.01170.x>
- Chelcea, L., & Druță, O. (2016). Zombie socialism and the rise of neoliberalism in post-socialist Central and Eastern Europe. *Eurasian Geography and Economics*, 57(4–5), 521–544. <https://doi.org/10.1080/15387216.2016.1266273>
- Chivu, L., Ciutacu, C., & Georgescu, G. (2017). *Deindustrialization and reindustrialization in Romania*. London, UK: Palgrave Macmillan.
- Collier, S. J. (2011). *Post-Soviet Social: Neoliberalism, Social Modernity, Biopolitics*. Princeton University Press.
- Corodescu-Roșca, E., Hamdouch, A., & Iașu, C. (2023). Innovation in urban governance and economic resilience. The case of two Romanian regional metropolises: Timișoara and Cluj Napoca. *Cities*, 132, 104090.
<https://doi.org/10.1016/j.cities.2022.104090>
- Cucu, A.-S. (2019). Planning Labour: Time and the Foundations of Industrial Socialism in Romania. In *Planning Labour*. Berghahn Books.
<https://doi.org/10.1515/9781789201864>

- CriticAtac. Poenaru Florin (2020). Vot Irelevant. Available at: <https://www.criticatac.ro/vot-irelevant/> (accessed on 27 July 2023).
- Dalakoglou, D. (2012). 'The Road from Capitalism to Capitalism': Infrastructures of (Post)Socialism in Albania. *Mobilities*, 7(4), 571–586. <https://doi.org/10.1080/17450101.2012.718939>
- Dalakoglou, D. (2017). The road: An ethnography of (im)mobility, space, and cross-border infrastructures in the Balkans. In *The road*. Manchester University Press. <https://www.manchesterhive.com/display/9781526109354/9781526109354.xml>
- Diminescu D. (2009). Exercițiul Dificil al Liberei Circulații: O Introducere în Istoria Migrației Recente a Românilor, în *Sociologia Migrației* (coord. Horvath & Anghel), Polirom, Iași.
- Ferenț, A. M. (2020). The mining sector under capitalist transformation: Romanian and Hungarian industrial paradigms. *Journal of Labor and Society*, 23(3), 283–298. <https://doi.org/10.1111/lands.12472>
- Gimenez-Nadal, J. I., & Molina, J. A. (2016). Commuting Time and Household Responsibilities: Evidence Using Propensity Score Matching. *Journal of Regional Science*, 56(2), 332–359. <https://doi.org/10.1111/jors.12243>
- Grama, A. (2018). *Laboring Along: Industrial Workers and the Making of Postwar Romania*. Walter de Gruyter GmbH & Co KG.
- Haas, A., & Osland, L. (2014). Commuting, Migration, Housing and Labour Markets: Complex Interactions. *Urban Studies*, 51(3), 463–476. <https://doi.org/10.1177/0042098013498285>
- Hugo, G. J. (1982). Circular migration in Indonesia. *Population and Development Review*, 59–83.
- Ignacio Gimenez-Nadal, J., Molina, J. A., & Velilla, J. (2018). The commuting behavior of workers in the United States: Differences between the employed and the self-employed. *Journal of Transport Geography*, 66, 19–29. <https://doi.org/10.1016/j.jtrangeo.2017.10.011>
- Jipa-Mușat, I., Prevezer, M., & Campling, L. (2023). Elite agency in the growth of offshore business services in Romania. *Environment and Planning A: Economy and Space*, 0308518X231181126. <https://doi.org/10.1177/0308518X231181126>
- Kideckel, David (2008). *Getting by in Postsocialist Romania: Labor, the Body, and Working Class Culture*. Bloomington: Indiana University Press.
- Koslowsky, M., Kluger, A. N., & Reich, M. (1995). The Commuting Experience. In M. Koslowsky, A. N. Kluger, & M. Reich (Eds.), *Commuting Stress: Causes, Effects, and Methods of Coping* (pp. 1–16). Springer US. https://doi.org/10.1007/978-1-4757-9765-7_1
- Mickiewicz, J. B., Tomasz. (2013). *Unemployment in Transition: Restructuring and Labour Markets in Central Europe*. Routledge. <https://doi.org/10.4324/9781315080130>
- Mihali A. E. (2019). Dinamica antroponimiei în contextul migrației: Borșa, jud. Maramureș, România, DOI: 10.30816/ICONN5/2019/16

- Miszczyński, M. (2020). Mutual dependency: Offshored labour and family organisation in post-socialist Romania. *Organization*, 27(5), 641–659.
<https://doi.org/10.1177/1350508419838690>
- Muellbauer, J., & Cameron, G. (1998). *The Housing Market and Regional Commuting and Migration Choices* (SSRN Scholarly Paper 139293).
<https://papers.ssrn.com/abstract=139293>
- Neyer, G., Andersson, G., & Kulu, H. (2013). The Demography of Europe: Introduction. In G. Neyer, G. Andersson, H. Kulu, L. Bernardi, & C. Bühler (Eds.), *The Demography of Europe* (pp. 1–13). Springer Netherlands.
https://doi.org/10.1007/978-90-481-8978-6_1
- Petrovici, N. (2018). Zona urbană. O Economie Politică a Socialismului Românesc [The urban area. A Political Economy of Romanian Socialism]. Cluj-Napoca: Tact and Presa Universitară Clujeană. Search in.
- Petrovici, N., & Faje, F. (2019). Sociological Approaches to Work in Romania Since 1945. In P. Stewart, J.-P. Durand, & M.-M. Richea (Eds.), *The Palgrave Handbook of the Sociology of Work in Europe* (pp. 347–383). Springer International Publishing.
https://doi.org/10.1007/978-3-319-93206-4_11
- Petrovici, N., Poenaru, F., & Mare, C. (2023). "Exploded urbanism": Processes of peri-urban formation in Romania. *Cities*, 135, 104218.
<https://doi.org/10.1016/j.cities.2023.104218>
- Romei, Valentina. 2016. "Eastern Europe Has the Largest Population Loss in Modern History." *Financial Times*, July 27, 2023.
<https://www.ft.com/content/70813826-0c64-33d3-8a0c-72059ae1b5e3>.
- Troc, G. (2016). Transnational Migration and Post-Socialist Proletarianisation in a Rural Romanian Province. *Studia Universitatis Babes-Bolyai - Studia Europaea*, 61(3), 51–65.
- Troc, G. (2019). Suburbanisation And Middle Class Imaginaires in The Post-Socialist City. A Romanian Case Study. *Studia Universitatis Babes-Bolyai - Sociologia*, 64(1), 89–108.
- Stahl, H. (1969). Organizarea Administrativ-teritoriala. Comentarii sociologice. Editura Stiintifica. București: 1969.
- Sandu, Dumitru (2010), Lumile Sociale ale Migraiei Românesti în Strainatate, Polirom, Bucuresti.
- Sandu D., Ciobanu O., Radu C., Constantinescu M. (2004). A Country Report on Romanian Migration Abroad: Stocks and Flows After 1989, Multicultural Center Prague, www.migrationonline.cz
- Vasilescu I. (2012) Migration dynamics in the natural depression of Maramureș. Impact on the cultural heritage, *Studia Universitatis "Vasile Goldiș", Seria Științele Vieții* Vol. 22, issue 1, 2012, pp. 131-136
- Verdery, K. (1996). What Was Socialism, and What Comes Next? In *What Was Socialism, and What Comes Next?* Princeton University Press.
<https://doi.org/10.1515/9781400821990>