



MEASURING THE LOCALNESS OF HOUSEHOLD EXPENDITURE IN A POST-SOCIALIST RURAL PERIPHERY

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Abstract. In recent years, rural development planning has increasingly focused on the commodification of local resources or the 'localisation of rural economies'. However, there is a lack of research on how local economies work and what is the extent of local expenditure. In our analysis of more than 1,600 receipts collected in one month by 38 research participants from a Czech rural locality of Nejdek, we measure the rate of localness of their expenditures. The results show that only one quarter of expenditure was made in this locality and only 10% in the examined villages. In the case of food, more than half of the expenditure in this category was made in the locality, but more than 80% of it in local supermarkets operated by transnational retailers. Such patterns are given by the specifics of socialist agriculture and post-socialist economic restructuring and significantly reduce the potential for the economic localisation endeavour.

Keywords: Czechia, economic localisation, household spending, rural areas.

Introduction

Representatives of peripheral rural areas in developed countries are in search of ways to stop the outflow of jobs and skilled labour to urban and metropolitan areas. These processes have negative consequences for rural communities, resulting in lower incomes for local residents, entrepreneurs and municipal budgets, and reducing the ability of local people to maintain current levels of civic amenities and community cohesion. On the other hand, metropolitan areas increasingly face the problems of housing availability and affordability, traffic congestion and insufficient capacity of transport infrastructure and public services. Therefore, with the advent of the so-called new or (neo-)endogenous paradigm of rural development (van der Ploeg et al., 2008; Terluin, 2003; Ray, 2006; Galdeano-Gómez et al., 2011; Woods 2011; Gkartzios & Scott, 2014) and its parallel support from the European, national and regional government levels, the need to keep the value in rural places to ensure rural development has been emphasized (Williams, 1996; Moseley, 2003; Woods, 2011).

The processing of agricultural products and their direct sale, or even the so-called (re)localisation of the economy, are the flagships of such thinking (e.g. Moseley, 2003; North, 2010; Fraňková & Johanišová, 2012). Efforts to localise rural economies are also deeply rooted in the alternative economic approaches associated with the transition to low-carbon economy (Barnes, 2015), so-

cial or solidarity economy, which have increasingly penetrated academic and political discourse since the beginning of this millennium (Amin, 2009). Such approaches respond, among other things, to the negative consequences of the ongoing neoliberalisation of Western economies and global economic integration – growing social inequalities at different levels of scale, slow growth or stagnation of the lowest wages (despite global economic growth), which in turn negatively affect well-being and community cohesion (McInroy, 2018).

In Czechia, too, we can observe a growing number of attempts to resist these ‘threats’ of global economic integration. This can be documented by the growing interest in alternative food networks (e.g. Spilková et al., 2016; Hruška et al., 2020) and, the related development of regional food labeling (Kašková & Chromý, 2014; Hruška et al., 2017). More recently, the problems arising from the dependence on global commodity chains resonated strongly in the discussions accompanying the COVID-19 pandemic, especially in connection with food security (see e.g. Millard et al., 2022).

However, despite the growing interest in both academic and popular discourse, we do not know much about how rural economies operate, how money circulates within a given locality or to what extent it leaves it. Although the concept of economic localisation is very often perceived as a recipe for solving rural development problems, the concrete mechanisms of money outflow and retention are very rarely discussed. In addition, there are many theoretical studies focusing on economic localisation from different perspectives, but these are rarely accompanied by an empirical analysis of financial flows (if we exclude quite a broad range of studies on local exchange trading schemes – e.g. Williams, 1996; Aldridge et al., 2003; Lee et al., 2004; North, 2010; North & Weber, 2013).

The aim of this paper is to present the results of our research conducted in a rural periphery of Czechia (the Nejdek locality, consisting of the three municipalities of Nejdek, Pernink and Vysoká Pec). Here we have analysed the geography of local residents’ expenditure and thus their contribution to the localisation of money flows in the given locality. The aim of the paper is therefore to:

1. analyse the extent of local and extra-local money flows (based on places of expenditure, size of settlements, individual groups of goods and services),
2. to identify specific processes influencing economic localisation on the example of food, which is usually considered to have a high localisation potential in rural areas.

In the following theoretical section we discuss, first, the position of this localisation thinking in rural development strategies and approaches and second, the conditions for purchasing in rural areas. Later, we introduce the research area and the methodology of our research. In the empirical part aggregated data on expenditures of local inhabitants and their geography are presented. In the ‘Discussion and conclusions’ section we summarise the results and discuss the causal factors influencing the rate of local economy and the potential of local communities to better control money flows.

Economic localisation and rural retailing

The concept of economic localisation¹ is explicitly or implicitly anchored in current approaches to rural development, defined at the European level by the new rural development paradigm

¹ Although some authors (e.g. Fraňková & Johanišová, 2012, or at the firm level in the economic (industrial) geography literature on clusters and industrial districts – e.g. Guimarães et al., 2007; Nakajima et al., 2012) consider ‘economic localisation’ as a specific concept, in our paper we consider this term rather at the individual level as a general effort to carry out consumption patterns at the local level as much as possible.

(OECD, 2006). Since the 1990s, this rural development paradigm has penetrated the rural development policy discourse in developed countries (Moseley, 2003). Woods (2011) defines its basic principles as: endogenous development, a bottom-up model of rural development policy and an integrated approach. The issue of economic localisation is embedded in each of these principles, as the concept consists of the commodification of local resources by a local community involving a variety of rural development actors.

Fraňková and Johanisová (2012) offer a dual understanding of the concept of economic localisation. Firstly, economic localisation can be understood as a term referring to the activity of local people making efforts to concentrate their economic activities or, secondly, as a political or scientific concept related to the principle of subsidiarity in governance and decision-making (for more on this, see the 'new localism' debate – Marvin & Guy, 1997) and the management of natural resources organised at the level of smaller spatial units (Vergunst, 2002).

Indeed, the valorisation of local resources by local people and initiatives (van der Ploeg et al., 2008; Steiner & Atterton, 2014) is the key challenge for rural development actors (Galdeano-Gómez et al., 2011). Rural localities can increase their wealth by creating new added value based on the commodification of previously unused local assets (Moseley, 2003), or by upgrading existing economic activities (typically the processing of raw agricultural products), which subsequently allows the capture of value in a given locality (Coe & Hess, 2011). These efforts should then be accompanied by more intensive local purchasing (Williams, 1996). Such an upgrading (as a value-adding process) of local resources generates money within the local economy and might replace imported goods and services with locally produced and owned ones. By local purchasing, people, firms and institutions plug some of the leaks in the bucket of the local economy (Newby, 1999; Moseley, 2003), facilitate the local circulation of money (Steiner & Atterton, 2015) and increase the local multiplier (Moseley, 2003).

Economic localisation is very often misunderstood as an attempt to completely cut off local economies from the external money flows (Norberg-Hodge & Mayo, 1996; North, 2009, 2010; Jonas, 2013). However, the concept does not suggest a strict isolation of a given locality, but rather an intensification of social and economic relations at the local level (North, 2010). Second, it is necessary to focus on a better balance between local – national – global patterns of production and consumption, in favour of the former. This means that the diverse needs of local people should be met as much as possible locally (i.e. at the shortest possible distance), and international trade should only be used when certain services or products are not available on the national market (North, 2010).

Unfortunately, only rarely is the debate on economic localisation enriched by insights from economic and business sciences. These sciences analyse the state of rural economies and draw attention to the specificities of rural retailing and especially the problem of rural outshopping. It is a well-known fact that retailers in rural areas are disadvantaged by geographical location or isolation, which can incur additional costs and also reduces the population catchment area (Paddison, 2007). In addition, rural areas face competition from nearby urban areas (Wayland et al., 2003) or even suburban rural areas (Marjanen, 2000), which are newly acquiring retail functions through the process of commercial suburbanization (Sýkora & Ouředníček, 2007). As a result of this competition, retail outlets in rural areas offer a relatively limited assortment of goods and services (Lumpkin et al., 1986; Lennon et al., 2009), which may further exacerbate interest in shopping in urban areas.

In general, a trend of retail concentration can be observed for several decades in the development of the retail network, where the number of regionally significant retail units is increasing

at the expense of those with local significance. This trend has been encouraged or enabled by the increasing mobility of the population and has led to the emergence of the phenomenon of outshopping (Polonsky & Jarratt, 1992, Kunc et al., 2013). Outshopping can be defined as shopping outside of the local shopping area (Polonsky & Jarratt, 1992; Lennon et al., 2009). In the context of rural areas, the term 'local' can be thought of as a village or local administrative unit. Later, this phenomenon was deepened by online-shopping (Lennon et al., 2009). It is also important to stress that outshopping is a multi-faceted process – its degree varies for different types of goods – low ordered goods are demanded more locally than e.g. clothing and gifts (Wayland et al., 2003), and can also vary according to the nature and demographics of the shoppers. For example, Miller et al., (1998) showed that people more than 65 years old shopped more at local retailers than younger generations. The same authors have also found that place attachment as well as the socialization of actors in the local community, plays an important role in the preference for local shopping, which is confirmed by other studies (Lumpkin et al., 1986; Bosworth, 2012).

Last but not least, the desire for local products is especially typical for food (e.g. Skallerud & Wien, 2019; Ditlevsen et al., 2020). The localisation of food production and consumption is supported by research on alternative food networks (Marsden, 2000; Goodman, 2003; Renting et al., 2003; etc.). Despite the positive impacts on rural development and local economies illustrated by the research, there are objective barriers that limit the successful building of viable regional value chains in the agri-food system. On the producers' side, there may be problems associated with limited supply in terms of variety, organizational skills and logistics (Kneafsey et al., 2013). For consumers, it may be a reluctance to pay higher prices and an overall shopping culture based on convenience built by retail chains (McEntee, 2010). Especially in Czechia, with the advent of capitalism, the food market was rapidly dominated by transnational chains – for instance, according to Ratinger et al. (2014) 86% of consumers prefer large shops.

Transnational retail chains are changing and influencing not only the spatial distribution of shopping units, but also the character of the food they sell. Due to the increasing integration of food trade into global value chains and the emphasis on economies of scale, traditional food systems (based on short supply chains with localised production, distribution and consumption) have largely been transformed into modern food systems characterised by globalised networks of many actors involved in different stages of 'long' supply chains and built on the logic of economies of scale (Baker & Friel, 2016). As a result of the subsequent supermarketisation, the number of small and independent retailers has declined significantly, and small farmers have only limited access to conventional food markets (Yarwood, 2023).

On the other hand, the traditional food systems have not disappeared yet – they coexist with modern food systems. For example, supermarkets are increasingly offering food of local origin (Blake et al., 2010; Dunne et al., 2011) as a part of their marketing strategy. Or in the context of Czech rural areas, there is a still vital tradition of food self-provisioning, which is part of the informal food market, where people sell surplus production on the farm, or supply their relatives and neighbours in the form of gifts (Vávra et al., 2021; Jehlička & Daněk, 2017). Thus, the role of food in the local rural market is perhaps more fundamental than we can capture through the lens of the formal market.

Case study area: Nejdek locality, Czechia

For the purposes of our research, we selected the locality of Nejdek in Czechia, which consists of three independent local administrative units – the town of Nejdek and two rural municipalities of Vysoká Pec and Pernink.² The locality is situated on the border with the Free State of Saxony (Germany), in the Krušné hory Mountains, close to the regional centre of Karlovy Vary (approx. 49,000 inhabitants) (Fig. 1). We chose this location for a number of reasons – we were looking for a relatively functionally integrated area that could be considered peripheral both geometrically (in terms of distance from larger urban centres) and socially and economically (rather depopulation tendency, lower educational level and average salary of the local population). We also insisted on having settlements of different population sizes in order to assess how the rate of local expenditure correlates with the public facilities located in a given settlement. Therefore, we included Nejdek (7,838 inhabitants in 2017; ČSÚ, 2019b) as a work and service centre for both villages with 364 (Vysoká Pec) and 632 (Pernink) inhabitants in 2017 (ČSÚ, 2019b).

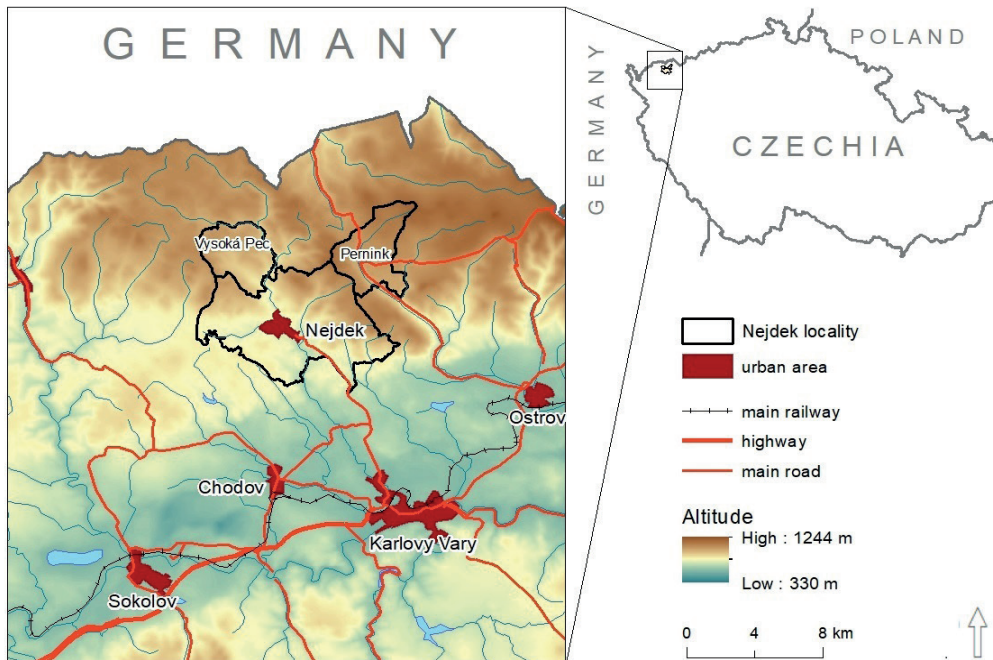


Figure 1. Location of the locality of Nejdek
Source: ArcCR 500 – Version 3.3, own elaboration.

Regarding the basic characteristics of the Nejdek locality from the demand side – the superior Karlovy Vary Region (NUTS 3 self-governing region) reported the lowest average salary among other Czech regions and we expect an even lower average salary in the Nejdek locality due to its less productive economy. As for the share of people in bankruptcy, in 2016 in Nejdek and Pernink this

² Further in the text we use the term ‘locality’ as a spatial term clustering all three municipalities. If the name of the town Nejdek is used, then only the town itself is meant. Both rural municipalities Pernink and Vysoká Pec consist of only one rural settlement each, so we will refer to them as ‘villages’ in the rest of the text.

value was higher than the national average, similarly the unemployment rate was higher or equal to the national average (Table 1). Lower rates of unemployment in the locality could be given by the German automotive company WITTE plant in Nejdek, which employed about two thousand people in 2016.

Table 1. Basic economic indicators for the Nejdek locality in comparison to superior administrative units in 2016

Area	Average salary	Percentage of people in insolvency	Unemployment rate
Nejdek	no data	13.8%	4.6%
Pernink	no data	20.1%	3.9%
Vysoká Pec	no data	6.3%	5.4%
Karlovy Vary Region (NUTS 3)	25,642 CZK (950 EUR)	15.8%	5.4%
Czechia (total)	29,491 CZK (1,092 EUR)	7.9%	3.9%

Source: ČSÚ (2019a), Mapa exekucí (2019), MPSV (2023).

Focusing on the supply side of the local economy (the presence of services in the locality), it is not surprising that the smallest municipality, Vysoká Pec, had only few facilities in 2016 – there was only one restaurant, one grocery store, one internet provider and one car repair shop. The relatively tourist-oriented Pernink had three restaurants or bars, two ski slopes with accompanying services, a local grocery store, a national chain grocery store and a petrol station. The town of Nejdek offered a range of services typical of towns of this size, including two supermarkets of Dutch and German retail chains, a fitness centre, an ice-hockey stadium and an internet provider. There were no farms in the locality offering food products for end consumers. Selected municipalities also provided municipal services in the areas of housing, education (kindergartens and primary schools in Pernink and Nejdek, a secondary school in Nejdek) and social services (nursing homes in Pernink and Nejdek, an institute for the disabled in Vysoká Pec).

Methodology

The research participants were selected according to their place of residence (one of the three municipalities mentioned in the previous section). We worked with 20 people from Nejdek and ten people from Pernink and Vysoká Pec each. The research participants represented their households and collected expenditure data for each family member. During the research, two participants (from Nejdek and Pernink) ended their cooperation, so the total number of research participants was 38.

Regarding the characteristics of the households in terms of their size, the age of their members and their economic activity, we tried to maintain the representativeness of the research sample in relation to the general characteristics of the locality or the Karlovy Vary Region. Due to the high sensitivity of the expenditure data, the research participants were found among the group of relatives and friends of the authors. This is the reason why the representativeness of the data is less sufficient for some social groups. In Vysoká Pec, for example, we haven't found any research participants of retirement age. In general, however, the selection of households in Nejdek was not far from the average structure of this area or the Karlovy Vary Region. There are some differences in the size of the households (lower number of household members, but with a higher proportion of economically active persons at the expense of retired persons) – see Table 2.

Table 2. Representativeness of the research sample in terms of economic activity (in relation to the Karlovy Vary Region) and age of household members (in relation to the Nejdek locality) in 2017

Household members (economic activity)	Nejdek locality – research sample		Karlovy Vary Region (ČSÚ, 2018)
	in total	average household	average household
In total:	72	1.89	2.29
- employed	58	1.53	1.09
- dependent children	9	0.24	0.51
- retired and unemployed	5	0.13	0.53
Household members (age groups, %)	Nejdek locality		
	research sample	in total (ČSÚ, 2019c)	
In total:	100.0	100.0	
- 0-14 years	12.5	13.9	
- 15-64 years	80.6	66.1	
- 65 and more	6.9	20.0	

Source: ČSÚ (2018, 2019c), own calculations.

The data collection took place between November 2016 and January 2017. Research participants were asked to record their household expenditures for 30 days. This was done either by collecting received receipts or by the diary method in case research participants did not receive receipts (e.g. bank transfers) or lost them. In the end, the authors received 1,648 receipts and diaries from 38 research participants.

The data were then analysed. In order to maintain the anonymity of the data, each participant (household) was coded, as were their receipts or diary entries. These data were then transformed into a database. We recorded the participants' place of residence, the place of each expenditure (if available, for online payments the location of the receiving company was used), and the individual items were sorted into ten categories (Table 3). We used the Czech version of the international standard COICOP (Classification of Individual Consumption by Purpose – ČSÚ, 2017). However, for our purposes we transformed this standardisation in order to unify categories that had a higher potential for spatial (de)concentration or because some expenditures were poorly represented in the locality of Nejdek (e.g. expenditures for education, social services and postal services). As a result, in contrast to CZ-COICOP with 12 expenditure categories, we have only ten expenditure categories.

In order to assess the potential rate of localisation of expenditure and to replace, at least in part, the local multiplier index, it was necessary to classify expenditure according to the location and nature of a recipient company or institution. Companies were classified according to the size of their actual or potential markets. Similarly to Burnett (2008), local businesses were characterised as those with a single location, operating at a local level and usually owned by one or more people from the same locality. Regional enterprises had more outlets, but these were mostly located in the Karlovy Vary Region or its immediate vicinity. National companies operated at a national level with their headquarters outside the town and the Karlovy Vary Region – their branches or operations were located across Czechia and they were able to direct money flows from the locality of Nejdek to their main headquarters (usually located in Prague). Similarly, branches of global companies located in Czechia transferred money abroad via their Czech headquarters or without.

Table 3. Categorisation of individual expenditure (in the 'Description' column, only items purchased by research participants are included)

Category of the expenditure (short label in the text)	Description
Banking products (<i>Banking products</i>)	Insurance; credit payments (consumption, mortgages etc.)
Housing (<i>Housing</i>)	Rentals; water, electricity, gas and other fuels; non-routine household maintenance
Furnishings, household equipment, household maintenance and chemist's (<i>Furnishings</i>)	Furniture and furnishings; household appliances; glassware, tableware and household utensils; tools and utensils for house and garden; chemist's for personal hygiene, cosmetics
Individual and public transport (<i>Transport</i>)	Fuels, maintenance and repairs, spare parts and accessories; public transport
Clothing and footwear (<i>Clothing</i>)	Clothing and footwear
Food, beverages, tobacco (<i>Food, beverages, tobacco</i>)	Food, alcoholic and non-alcoholic beverages, tobacco products
Catering, recreation and culture (<i>Catering, recreation and culture</i>)	Catering services (in school and work canteens, restaurants and bars); sport activities (skiing, ice-skating, swimming, fitness); organised and unorganised hobbies; galleries; recreational items (books, toys, sport equipment, music instruments)
Telecommunication (<i>Telecommunication</i>)	Mobile phone operation, internet access provision services
Health (<i>Health</i>)	Medical products and health services
Miscellaneous goods and services; unidentified items (<i>Miscellaneous</i>)	Hairdressing, other expenditures (not classified elsewhere) and unidentified expenditures (their purpose was not found by authors)

Our methodology has some limitations – it doesn't cover expenditures which were typically not on monthly basis and are paid only a few times a year (typically payments for solid fuels such as wood or coal for heating, which are usually bought before the heating season; season tickets; payments for organised hobbies, etc.). Due to the research period, the structure of items purchased was influenced by Christmas-related shopping. We asked research participants to mark expenditure on items intended as Christmas gifts. As this category accounted for only 3% of total expenditure, we did not separate it out as a special category, but instead included all items in the corresponding categories mentioned in the Table 3. In many studies of economic localisation, the local multiplier is estimated in order to study the circulation of money in a place. As we have only covered the first moment of the financial transaction of money circulation (i.e. between the research participants and sellers), we are not able to follow the subsequent money flows. However, some ideas about the locality of the money cycle can be derived from the classification of expenditures according to the character of the receiving firm or institution (local, regional, national and global, see 'Results' section) and the place of expenditure.

Results

During the research period, the research participants spent about 928 thousand CZK (EUR 37 thousand). Of this amount, 54% was spent by residents of Nejdek and the rest by residents of both

villages. 21% of the money was spent in the category of Food, beverages, tobacco³ and about 17% was spent on both Banking products and Housing. A detailed analysis of the expenditure is shown in Figure 2.

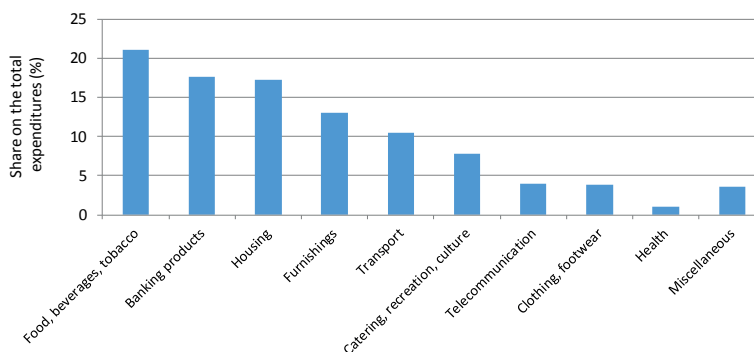


Figure 2. Structure of expenditure of research participants from the Nejdek locality
Source: authors.

How do the expenses stay in the locality?

A quarter of the expenditure was spent by our research participants in Nejdek, confirming its role as the local service centre. However, only 18% of the total expenditure from both villages went there, mostly for Food, beverages and tobacco (34% of the expenditure, mainly in local supermarkets), 30% for items in the category of Transport and 29% for services in the field of Catering, recreation, culture (mainly catering in company canteens). The tendency to spend locally was significantly related to the nature of the goods and services – the local dimension of expenditure was high for fast-moving consumer goods (FMCG) and simple services (expenditure in restaurants and bars). Overall, the population of the Nejdek locality spent here 55% of their expenditure on Food, beverages, tobacco; 40% on Catering, recreation, culture; one third on items in the Health and Transport category (usually on fuel bought at local petrol stations, repairs and tickets for public transport provided by a local bus company).

The rate of localness of the research participants' expenditures is sinking with the population size of their place of residence. Focusing on both villages, only 10% of expenditures (EUR 1.7 thousand) were spent here by locals – mostly in the category Catering, recreation, culture and Food, beverages, tobacco (Fig. 3). As far as Food, beverages and tobacco are concerned, in Pernink there are two grocery stores – outlets of national retail chains. Vysoká Pec has a local grocery store. However, the residents of both villages preferred to shop in supermarkets in Nejdek or in the regional centres of Karlovy Vary and Ostrov – they only made minor purchases in local grocery stores. In Pernink, the category Catering, recreation, culture was dominated by spending on ski passes, while the remaining expenditure was spent in local pubs and restaurants. Other expenditure in both villages was in the local car repair shop, petrol stations and for services of the local internet provider. The very low expenditure in the Housing category was caused by the fact that most respondents lived in their own family houses and used their own water resources or bought the fuel for heating before the start of the survey period.

³ Within this category, tobacco accounted for only 2% of spending.

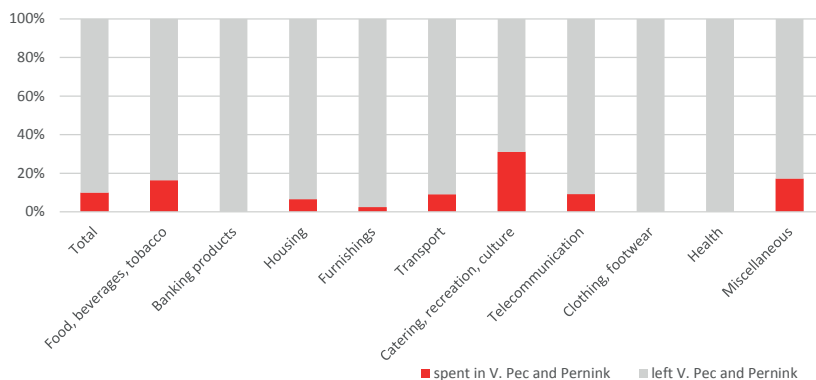


Figure 3. Structure of total expenditure spent by research participants in and outside their place of residence – Vysoká Pec and Pernink
Source: authors.

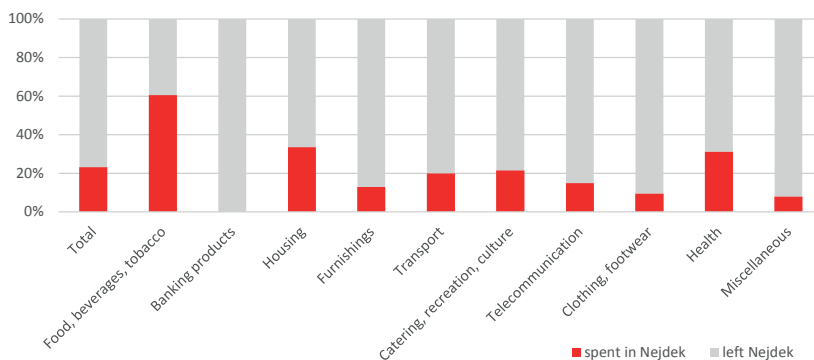


Figure 4. Structure of total expenditure spent by research participants in and outside their place of residence – Nejdek
Source: authors.

Due to the larger population of Nejdek and the corresponding shopping facilities, more expenditure was spent locally in this town than in both villages. The inhabitants of Nejdek spent 23% of their expenditure (about EUR 4.6 thousand) in their own town, mostly in the category of Food, beverages and tobacco (61% in both local grocery stores and outlets of global retail chains), Housing (33%) and Health (31%) (Fig. 4). In the Housing category, the localisation of expenditure was supported by the municipal water treatment plant – payments for water supply therefore flew in the municipal company. Similarly, a large proportion of rent payments remain local as some of the dwellings are under the control of the local housing cooperative. Some other expenditure remained local as payments were made to the local bus company, petrol stations, restaurants, fast food outlets, school and workplace canteens or fitness centres and ice rink.

How do the expenses leave the locality?

Based on the flows of money between different places, there were not many channels through which money left the Nejdek locality, either physically (through direct expenditure in a given place) or virtually (through e-shopping, e-banking and other tools of e-commerce). Most of it went to higher-level urban centres (Fig. 5).

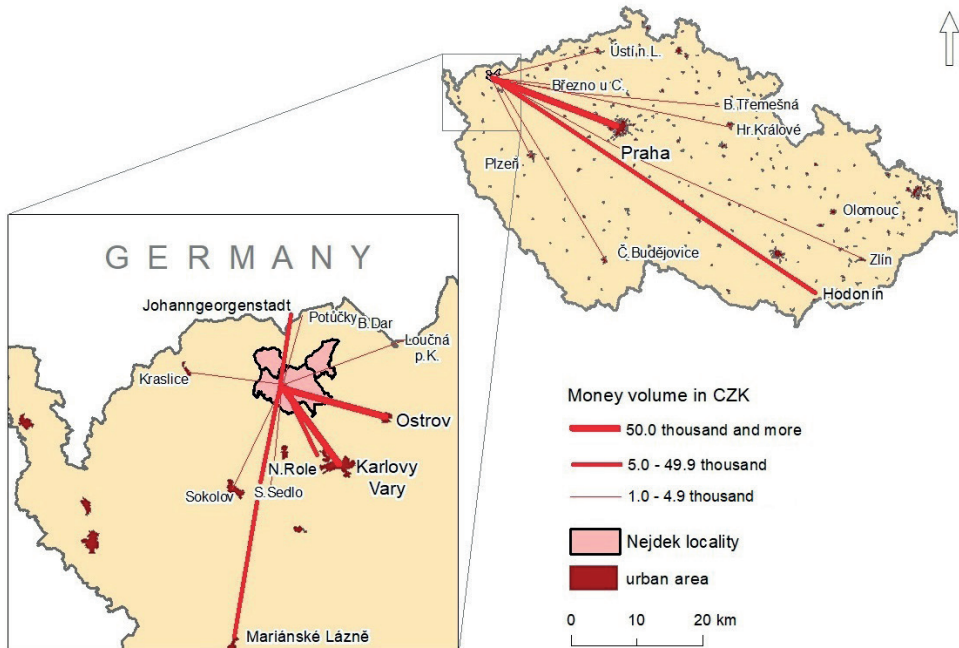


Figure 5. Main money flows out of the Nejdek locality
Source: ArcČR 500 – Version 3.3, own elaboration.

In our analysis, we considered the following spatial units – the regional capital Karlovy Vary as a commuting centre for work and services and Prague as the national capital and the seat of many national and multinational companies. In order to complete the spatial coverage, we added the following spatial units: the Nejdek locality, the Karlovy Vary Region (without the Nejdek locality and Karlovy Vary city), Czechia (without the entire Karlovy Vary Region and Prague) and other countries. Items for which it was not possible to identify the corresponding place of expenditure were included in the category Other.

In general, Karlovy Vary, as the closest centre for commuting to work and services, received 24% of the expenditure, mostly in the categories of Furnishings. A large part of the expenditure here was in the category of Food, beverages and tobacco – this is partly the result of intensive commuting to the regional capital, as the research participants did their shopping (usually in local outlets of global retail chains) on their way back home.

However, the largest share of expenditure – one third of the total – went to the capital, Prague. This is particularly true in the category of Banking products – almost all expenditures on loans, mortgages and insurance payments were transferred via e-banking to the Prague-based headquarters of banks and insurance companies, which were often transnational corporations. A significant proportion of expenditure left the local area via the category of Telecommunications (mainly monthly payments for mobile phone subscriptions) and Housing (payments for gas and energy).

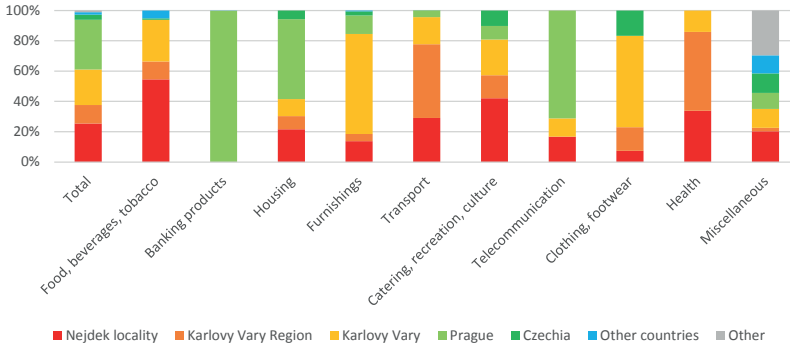


Figure 6. Share of total expenditure by place of expenditure and location of beneficiaries
Source: authors.

Other expenditures were not much structured along the settlement hierarchy. In the rest of the Karlovy Vary Region, people spent their money on FMCG, fuel, catering and health services and medicines. Due to the border location of Nejdek, one might expect a higher proportion of spending to be directed towards Germany, but only 2% of expenditure was registered there (in supermarkets in the German border town of Johannegeorgenstadt).

Measuring local multiplier effect – double local expenditure

As mentioned in the methodology section, in our research we only tracked the first transaction of money from our research participants to a beneficiary company or institution. Therefore, we are not able to identify further transactions going from the beneficiaries further and thus count the value of the local multiplier. However, some conclusions can be drawn from the analysis of the geographical scope of the recipient companies and institutions and their headquarters. Here we can assume that the more is spent with local firms in the locality (let us call it *double-local expenditure*), the higher is the value of the local multiplier.

Based on the classification of the receiving companies and institutions (local and regional, national, global), only a quarter of the expenditure was spent with local and regional companies, 16% with national companies and 57% with global companies (usually via their Czech headquarters in Prague) (Fig. 7).

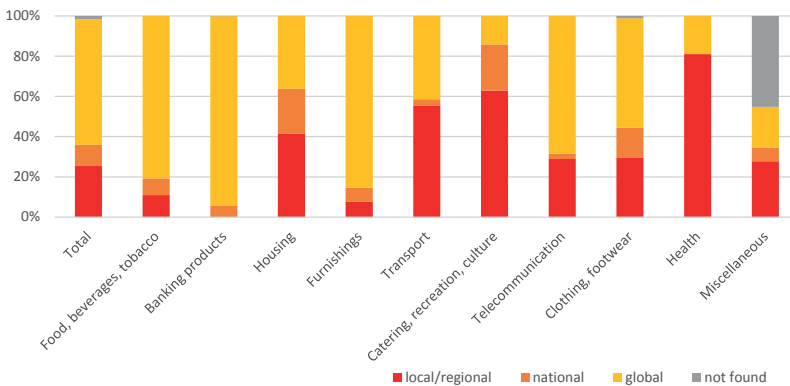


Figure 7. Structure of expenditure according to the geographical scope of the receiving companies and institutions
Source: authors.

Thus, regarding the percentage, there was no difference between expenditure in the Nejdek locality and expenditure in local enterprises (which we have defined in terms of potential market size rather than location). However, if we combine both and look at the total amount of double-local spending in the locality, the figure is only 13% (Fig. 8).

Not surprisingly, the most 'globalised' category of expenditures was that of Banking products – only 2% of expenditures in this category moved to a Czech company. Similarly, 69% of expenditures on telecommunication services flew in global companies, with the exception of payments to local internet providers.

The Czech FMCG market has been significantly globalised since the mid-1990s, so despite frequent shopping in or near the town of Nejdek, expenditures in the categories of Food, beverages, tobacco, Furniture, Clothing are dominated by foreign retail chains. In the case of the Food, beverages and tobacco category, only 11% was spent with local shopkeepers and 8% with Czech national retail chains. Again, if we combine spending with local businesses in the locality, the value of double-local spending in this category is only 9% (Fig. 8).

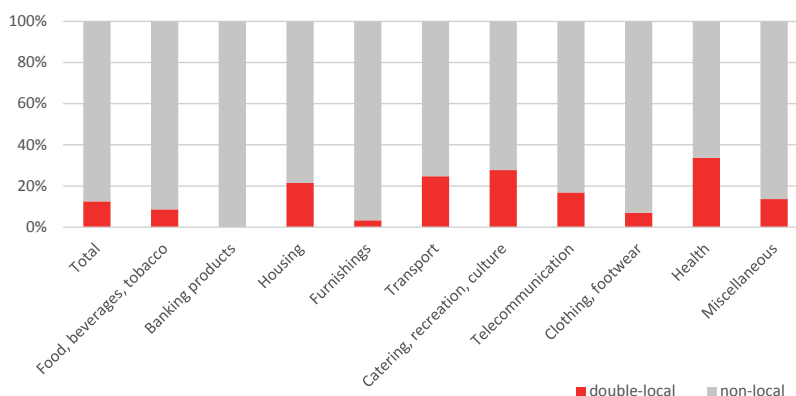


Figure 8. Share of expenditure in enterprises and institutions of local character in the Nejdek locality (double-local expenditure)
Source: authors.

Higher rates of localisation and double-local spending were observed in the categories of Catering, recreation, culture, Transport, Housing and Health. In the first category, research participants spent their income in local restaurants, cafés, fast food outlets and sports facilities. The 'global' share within this category was represented by expenditure on sports equipment in transnational retail chains. The high proportion of spending in local businesses in the Transport category was due to spending in local petrol stations or local public transport services and car repair shops. The 'localness' of the Housing category was determined by payments for municipal services.

Discussion and conclusions

The results of our research show that the economy of the Nejdek locality can hardly be described as 'local'. Only about a quarter of the expenditure was spent locally, if we consider only the examined villages with the less developed service infrastructure it was even less. The highest proportion of money flows left the locality via virtual banking transactions. This represents the most global-

ized spending category given by the strong control of the Czech banking sector by multinational companies (Blažek & Bečicová, 2016).

High levels of outshopping could be clearly demonstrated on the example of food, which is traditionally and also through the lens of endogenous approaches to rural development perceived as a product with high potential for local economic development (Donaher & Lynes, 2016; Olson, 2019). Although the inhabitants of Nejdek spent more than half of their expenditure in the Food, beverages and tobacco category in their town, only 11% of it was spent in local grocery stores, 8% in national retail chains and the rest in outlets of global retail chains. In addition, we did not record any spending on food at a local on-farm shop, simply because there are no such farmers in the locality. Even outside the locality, no transaction was made in similar shops.

This situation is illustrative of the current potential of Czech rural areas for economic localisation – due to the extensive development of the productivist mode of agriculture from the beginning of the socialist period and the following specialisation and concentration of agricultural production, there are now only a few farmers engaged in direct marketing of their own products (Hruška et al., 2020). Moreover, the Czech retail sector has been strongly globalised since the 1990s (Szczyrba et al., 2007; Kunc et al., 2013), so the current constellation of the Czech agri-food sector is not suitable for the growth of economic localisation. And this won't be changed by the infiltration of local food into the outlets of transnational retail chains in Czechia (here, it is particularly demonstrated by refrigerators displaying beer bottles produced by craft breweries). This could be perceived as 'local washing' (Paredis, 2020) rather than an important trend symbolising a change in the shopping habits of Czech customers towards more 'localised' ways of shopping.

On the other hand, it would be interesting to compare the extent of 'local' food shopping in other spatial rural contexts with wealthier population and larger number of small family farms better integrated into a given locality. Additionally, in the Czech and post-socialist context a higher level of food self-provisioning (Vávra et al., 2021) must be considered when interpreting the results of local food shopping and consumption as the food going through the food self-provisioning channels and its following exchange enters neither local formal economies nor analysis of this kind.

The above economic changes may be applied to the national economy as a whole. The logic of economies of scale and agglomeration economies has led to the spatial concentration of economic activity, resulting in the desertification of local economies (the decline of rural services and jobs). Such a constellation then increases the outshopping process, as there are few opportunities to spend money locally. In addition, existing local service providers are unable to compete with cheaper services offered by transnational corporations in urban areas. Moreover, this problem is exacerbated by the lower wages in peripheral rural areas and the resulting lower demand for local products. In such circumstances, local services are used only in 'emergencies' or by less mobile groups of local people.

There is no sign that the onward march of global capitalism will be halted any time soon. Since we conducted our research (in 2017), some municipal or regional public enterprises have been fully or partially privatised by Czech or transnational capital (a regional water management company established by some municipalities and covering the studied area was partially taken over by a French transnational company). The same could be said of former Czech companies operating in the region – some of them moved their headquarters abroad to tax havens (e.g. a national drug-store chain based in Cyprus or a regional energy provider bought by a company with Czech management but based in the Netherlands). In this way, local and even national actors are increasingly losing control over their resources, a process that runs counter to the notion of a local economy (Marvin & Guy, 1997). As a result, despite the need to promote local economies, privatisation

and globalisation tendencies dominate over localisation tendencies.

From this point of view, today's rural areas are far from isolated from external influences. This is the reality of rural areas since the end of the 'cottage industry'. Such a transformation has destroyed 'communities of place' (Vergunst, 2002), and people commuting to nearby towns not only disrupt the boundaries of the 'local' but also the local economy as they combine commuting to work with shopping in regional urban centres and transnational retail chains. This lack of coherence in local communities not only threatens the localisation of value flows within the community, but also complicates the governance of localisation efforts, as 'communities of place' do not overlap with 'communities of interest' (Marvin & Guy, 1997).

On the other hand, the prospects for rural areas in this respect may have changed under the impact of the COVID-19 pandemic, which led to increased demands from employees for home-working and, to some extent, tolerance of homeworking by employers. Our paper has shown that a large proportion of external expenditure is associated with commuting to work. Thus, there is a higher likelihood of local expenditure by homeworkers - several studies have already pointed to this fact (Stockdale et al., 2000; Bosworth & Venhorst, 2018).

Anyway, any discussion of economic localisation should therefore be freed from idyllic notions of rural settlements as isolated villages with a well-developed network of small agricultural and craft enterprises producing for local people and market. Although there are many widely accepted tools and approaches supporting both formal and informal economic localisation – e.g. local/regional branding, local exchange trading systems, diverse selling and distribution forms shortening the way from producer to customer (see e.g. Leach, 2013), their efficiency is only seldom measured and evaluated. On the other hand, there are old ways of contributing to the localisation of economic flows, such as, as we have noted, communal housing and water infrastructure, which are somehow neglected and their control transferred to the ownership of external actors. Therefore, there is a need for better integration of rural studies or discussions on economic localisation with economic and business sciences. In any case, localisation efforts to strengthen the economies of particular places should be based on and adapted to the specific constellation of the local economic milieu. In doing so, rural development actors should not only focus on 'trendy' ways of strengthening local economies, but also be aware of current and very often more efficient assets on which to build and promote local economies.

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