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Molnár, Ernő and Lengyel, István Máté

University of Debrecen

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## Understanding the Changing Geography of Labour-Intensive Industries from a GPN Perspective: Case Study of the Hungarian Leather and Footwear Sector

**Ernő Molnár**

University of Debrecen  
E-mail:  
erno.molnar@unideb.hu

**István Máté Lengyel**

University of Debrecen  
E-mail:  
pityihun@hotmail.com

Labour-intensive industries have declined in the East Central European economy after the beginning of the millennium. Given this deterioration, significant employers are vanishing from rural areas, leaving behind serious employment problems in regions which are less capable of resilient restructuring. This article examines this shrinkage from a geographical aspect in the context of the Hungarian leather and footwear industry. This study focuses on the interpretation and explanation of the spatial differentiation that accompanies this shrinking process. The aim of this paper is to reveal the influencing factors that stand in the background of spatially uneven development. The analysis – embedded in the theoretical framework of global production networks – is based on the corporate database of the Hungarian Central Statistical Office and invokes the experience of interviews carried out with representatives of industrial actors as well. In addition to an understanding of spatial processes, the intention of the authors was to investigate the issues to be addressed in certain locations and under what conditions the long-standing industrial culture related to the sector can be preserved.

### Keywords:

global production networks,  
labour-intensive industries,  
leather and footwear industry

### Introduction

Whereas the labour-intensive leather and footwear sector is a *globally growing industry*, it has experienced a *spectacular decline in Hungary* and in most countries of East Central Europe. The shrinkage is coupled with a *structural change* that is clearly visible in the footwear sector. Because of the disappearing cost advantages, mass production based on large subsidiaries and subcontractors faced fewer possibilities after the turn of the Millennium. In contrast, the small series production of own brand products for

special niche markets that appreciates the role of creativity, innovation, and flexibility, is gaining in importance (Cseh et al. 2002, Laki 2005, Molnár 2013). The tendencies can be explained by the *intermediate position* of the region between the leather and footwear centres of developed economies that concentrate the strategic functions of global production, and the cost-efficient mass production locations within developing economies that acquire increasing competencies in the international division of labour (Bertram 2005, Schamp 2005, Schmitz 2006).

During the socialist period, the leather production and footwear industry had *different geographical patterns* based on its various location factors. The first sector, primarily located on raw materials and industrial traditions, was *relatively concentrated*, whereas the second factor, as a tool to industrialize the rural space using a cheap labour force, disengaged from agriculture spread *almost throughout the country* (Barta 2002, Kiss 2010). A common feature of the industry's development after the change in regime is the *spatially uneven shrinking process*, the *description* and *explanation* of which is the main objective of this study using the recent theory of global production networks. The *strongly internationalized character* of the sector validates the application of the concept and explains the spatial division of labour during a period of globalization. The examination provides experiences which can be *generalized for a broader set of labour-intensive industries*. Formerly large employers face mostly similar challenges in Europe and in regions characterized by different labour-intensive industries with an intermediate position within the international division of labour of these sectors (for example, in East Central Europe – Scott 2006, Roukova et al. 2008, Crestanello–Tattara 2011, Cutrini 2011).

This article consists of three structural units. The first section, based on a literature research and review, briefly presents the *global production network (GPN) concept* that emphasizes the elements that are relevant to explaining spatially uneven sectoral development within a national economy. The second part, based on enterprise data of the Hungarian Central Statistical Office, concentrates on the *description of spatial dynamics*. The examined years of 1998 and 2013 may be initially justified by the fact that, within this time interval, the decline and structural change after the turn of the Millennium (considered a major milestone) can be examined. Secondly, the relatively homogenous enterprise data available for 1998 at the earliest and (at least for the authors) for 2013 at the latest are also important. The aim of the third unit, using primary information collected through semi-structured interviews by enterprises and organizations, is the *explanation of spatial dynamics*. This study investigates the issue of the extent to which the experience of the empirical research underpins the observations for reasons of uneven regional development, which can be deduced from the theoretical concept.

## Spatiality in the theory of global production networks

According to the concept, *GPNs* are mostly globally organized systems of interconnected functions and operations related to enterprises and institutions, in which framework the production, distribution, and consumption of goods and services are realized. (1) On the one hand, *GPNs* are *existing economic structures*: from UNCTAD estimations, 80 per cent of international trade is arranged through *GPNs*. Some people consider these organizations (or organized settings) as the backbone of the global economy. (2) On the other hand, the *GPN* as a *theoretical construction* is rooted in prior research on global value chains and the activities of the Manchester School of Economic Geography. The aim of the concept is to explain the spatial economic disparities of the contemporary economy. The concept integrates the *approach of global value chains* and emphasizes the importance of external connections and the *theories of new regionalism* (industrial districts, clusters), which discuss the role of local factors in regional development (Coe et al. 2004, Coe–Hess 2011, Yeung–Coe 2015).

What is essential in terms of the present examination is the fact that the *GPN* theory *exceeds and goes beyond the GCC and GVC approaches*, which formerly attempted to interpret the spatial economic processes of globalization and its impact on spatial development. The latter are considered inappropriate for explaining geographical changes at the subnational level because of their static character (classification of already evolved systems based on their functional mechanisms), and their insensitivity to the effects and impacts prevailing at various spatial levels (Cséfalvay 2004, Gereffi et al. 2005, Yeung–Coe 2015). Contrary to these approaches, the ‘original’ *GPN* theory already included the *regional assets*, which draws attention to the role of such factors (e.g. cooperative firms, potential suppliers, qualified labour force, special infrastructure) in shaping *GPNs*. *GPNs* are regarded as local from the aspect of the global economy, but otherwise prevail at *different spatial levels* (not only at supranational levels and nation-state levels but also at subnational spatial levels). The *GPN* perspective also gives place as participants for *different institutions* (supranational organizations, government actors, industrial organizations, trade unions, non-governmental organizations). The theory describes the spatiality of different economic activities and their regional development effects as a *result of the strategic coupling of GPNs and regional economies*. The locations can be differentiated by the quality of their milieus; however, their advantages can truly be utilized if these (slowly transforming) regional assets meet the (rapidly changing) strategic needs of *GPNs* (Coe et al. 2004, Coe–Hess 2011).

On the basis of the revised and refined (dynamic) version of the *GPN* theory (‘*GPN 2.0*’), the emergence and development of *GPNs* can be traced back to *three motives as drivers* (cost-capability ratio, market development, and financial discipline) *that generally prevail in capitalist economic conditions*. These drivers can generate four basic

types of corporate strategies (internalization or intrafirm coordination, interfirm control, interfirm partnership, and extrafirm bargaining) in environments *characterized by different inherent risks* (economic, regulatory, environmental, product, and labour risks) (Yeung–Coe 2015). The spatial aspect emerges in the concept in the following manner: the drivers and risks that determine corporate strategies can indicate *geographical differences* which can be interpreted at diverse spatial levels and which exhibit *unique combinations* even with respect to a single subnational region. According to the theory, even actors of the same industry or that function in the same regional (or national) economy might have different corporate strategies (Yeung–Coe 2015) which determine the subsequent spatial development of transnational organizational processes.

Among the factors that determine corporate strategies, the highest level of direct regional (subnational) definiteness can be witnessed in the case of the cost–capability ratio. Production costs (for instance, the cost of labour) can present remarkable differences within a national economy. According to the theory, the *development of capabilities* might be a possible answer for and solution to increasing costs. The *source of competences* necessary for advancement is to be sought *largely in the local economic environment*, where the concentration of sector-specific knowledge, skills, and expertise (economies of scale), and the possibility of cooperation and learning from each other (economies of scope) may be given (Coe–Hess 2011, Yeung–Coe 2015). The dimensions of *industrial upgrading* that generate higher local value-added activities represent one of the most popular research fields in the literature underlying the research on the GPN theory (Humphrey–Schmitz 2002, Kaplinsky 2004, Gereffi–Humphrey–Sturgeon 2005, Schamp 2008). However, *it would be a mistake to solely trace back the explanation of spatial differences at the subnational level to the cost–capability ratio* because different market conditions, diverse financial disciplines, and various risks stand behind companies exploiting local opportunities. Therefore, in the current examination which focused on the cost–capability ratio, the authors also refer to these situations in which this factor *per se* is not sufficient for explaining spatial differences at the subnational level.

### **Spatial dynamics of the Hungarian leather and footwear industry**

Drawing on the experience of former examinations carried out by the authors related to the industry (Molnár 2013) and by relying on the new fundamentals of the GPN theory as introduced in the previous section, this research focuses on the *cost–capability ratio*. This ratio indicates the strongest direct spatial embedment when examining the development of the leather and footwear industry within the national economy. According to the theory, the two options for achieving a lower cost–capability ratio – regarded as desirable to enhance competitiveness – might generate different spatial

development processes. (1) The cost reduction path assumes a biased *shift of labour-intensive industries to peripheral regions* that provide an inexpensive labour force. (2) In contrast, the development of capabilities results in an *increasing appreciation of industrial concentrations* which represent a higher probability of providing qualitative location factors, qualified labour, and special inputs.

It is highly recommended that *small and micro enterprises* (5 to 49 employees) and *large and medium-size enterprises* (50 employees or more) be distinguished when analysing the database. This step is justified by the presumable *difference between the activity structures* of the two entrepreneurial groups. The manufacturing of higher value-added, locally based own brand products might even play an exclusive role within the activities of smaller firms, whereas larger-scale employment is a feature of subsidiaries of foreign companies, or of domestic companies which carry out toll manufacturing for foreign companies. This fact basically indicates the predominance of productive functions, even if the company implemented an outstanding upgrade and/or also appeared on the market by introducing its own brand of products in addition to the toll manufacturing segment. In our interpretation, the different activity structure refers to the possibility of increasing the appreciation of different location factors. In contrast, corporations representing different company sizes are influenced by diverse *capitalist drivers and the risks prevailing in different geographical scales*.

As the *framework for a spatial examination*, the administrative units of the *districts* that correspond approximately to the order of magnitude of a functional urban area were used. In this way, the research facilitates a more refined picture of the geography of the sector than an examination based on the level of much larger and more heterogeneous counties. The data used in this research stem from the *enterprise database of CSO Hungary (Cég-Kód-Tár)* for the years 1998 and 2013. All firms in the leather and footwear industry *employing at least five individuals* were considered in the analysis. The reasons for neglecting smaller actors were dual: (1) we found it important to harmonize this examination with the available county-level employment statistics based on the data of such enterprises, and (2) we assumed that the data of larger enterprises that provided the majority of the sector's performance are more reliable than those of more frequently changing micro enterprises. Because firms are registered by their headquarters' location at the settlement level, we aggregated them according to the units of the territorial administration system in effect in 2015.

As a *general tendency*, there is a *shrinking process* of actively functioning firms for all company sizes and spatial categories. The *stock of enterprises* showed significant *fluctuations*. Among the active firms that employ at least five people, only approximately 14% of the actors which existed in 1998 also functioned in 2013. Enterprises that had larger average employment shrank and declined in higher number than expanding and new enterprises (Tables 2–4). Total enterprise decline was 55%, whereas within a restructuring process, the overall share of small and micro enterprises increased from 66% (1998) to 73% (2013). There was also a *decline in the*

*number of locations* of the sector between 1998 (98 districts) and 2013 (56 districts). The spatial concentration of the sector declined moderately, thus reducing the spatial concentration of micro and small enterprises, coupled with a *growing spatial concentration of medium- and large-scale enterprises*.

(1) On the basis of the *level of economic development of the districts*, a *dichotomy* can be perceived in the spatial tendencies. Approximately half of the total number of enterprises was located in the *developed areas outside Budapest*, primarily because of the importance of certain county seat-centred districts traditionally concentrated in the sector. The capital city plays an important role in the geography of micro and small firms (in the enterprise stock of 2013, the share of new entrants to the market since 1998 was the highest in Budapest, suggesting the emergence of new, creative players), whereas medium-size and large actors engaged rather in mass production were situated to a greater extent in rural districts with medium or low development. Between the two examined years, the *developed and the most backward districts increased their weight*: the former with respect to small and micro enterprises, and the latter with respect to large and medium-size enterprises (Table 1). The enterprises seemed more stable outside Budapest, whereas growing companies – considering both number of firms and average company size – primarily overcompensated the shrinking ones in the developed and backward districts. Although the new entrants did not supplement the eliminated ones in either case, the two categories were closest to each other in the developed and backward districts in terms of number of firms and average company size (Table 2).

Table 1

**Distribution of leather and footwear enterprises in 1998 and 2013  
according to the development categories of the districts  
based on 1998 estimated per capita GDP data**

(%)

	Budapest	Developed districts	Medium-level districts	Undeveloped districts	Total
Small and micro enterprises (1998)	26	45	15	14	100
Small and micro enterprises (2013)	22	51	12	15	100
<i>Large and medium-size enterprises (1998)</i>	<i>11</i>	<i>47</i>	<i>27</i>	<i>16</i>	<i>100</i>
<i>Large and medium-size enterprises (2013)</i>	<i>0</i>	<i>47</i>	<i>31</i>	<i>22</i>	<i>100</i>
<b>Enterprises total (1998)</b>	<b>21</b>	<b>46</b>	<b>19</b>	<b>15</b>	<b>100</b>
<b>Enterprises total (2013)</b>	<b>16</b>	<b>50</b>	<b>17</b>	<b>17</b>	<b>100</b>

Development level was defined based on the aggregated data of a settlement's economic power: in addition to Budapest, the 174 districts were categorized into three groups with equal number of members (58-58-58) using 1998 data.

\* The GDP estimation on a district level was based on the calculation of 'settlement's economic power' according to the method described by Lócsei–Nemes Nagy 2003 (also referred to by Péntzes 2014). After a settlement-level disaggregation of county GDP data on the basis of the number of registered enterprises, local tax income, and taxable revenues, a district-level summarization of the generated settlement data was fulfilled.

Source: data of HCSO, Hungarian State Treasury, Tax and Financial Control Authority.

Table 2

**Dynamics of leather and footwear enterprises between 1998 and 2013  
according to the development categories of the districts based on firms'  
employment categories**

	Budapest	Deve- loped districts	Medium- level districts	Undeve- loped districts	Total
Existing firms in both years (in percentage of the 1998 number)	5	15	21	18	14
<i>Shrinking firms (%)</i>	0	36	33	10	28
<i>Stagnating firms (%)</i>	25	28	47	60	39
<i>Expanding firms (%)</i>	75	36	20	30	33
Average employment of shrinking enterprises (1998, capita)	0	113	290	75	169
Average employment of stagnating enterprises (1998, capita)	8	107	75	103	85
Average employment of expanding enterprises (2013, capita)	28	156	142	112	125
<i>Number of firms fell out (in percentage of 1998)</i>	95	85	79	82	86
<i>Number of firms newly entered (in percentage of 1998)</i>	31	35	19	35	31
Average employment of enterprises fell out (1998, capita)	58	93	100	59	81
Average employment of enterprises newly entered (2013, capita)	17	61	30	56	47
<b>Total number of enterprises (2013, in percentage of 1998)</b>	<b>36</b>	<b>50</b>	<b>40</b>	<b>53</b>	<b>45</b>

Development level was defined based on the aggregated data of a settlement's economic power: in addition to Budapest, the 174 districts were categorized into three groups with equal number of members (58-58-58) using 1998 data.

*Source:* data of HCSO, Hungarian State Treasury, Tax and Financial Control Authority.

(2) On the basis of *the industrial concentrations of the districts*, dual tendencies also prevailed. In both years, approximately half of all firms were located in high concentration districts. In particular, medium-size and large actors were situated in the key areas of the sector. Within the examined period, *micro and small enterprises* shifted to *low concentration districts*, whereas *medium-size and large players* were more concentrated *in the key districts* of the sector (Table 3). The *relative stability of industrial concentration* is reflected in the largest proportion of the former companies remaining active in these regions. In addition, among these 'survivor' companies, far more were expanding and stagnating than shrinking. The size of the shrinking firms is smaller than the national average, whereas this indicator is larger than the national average for stagnating and expanding agents. The proportion of eliminated firms lagged behind the national average only in these areas, and the average company size of the new entrants



was the largest in this case. What is in favour of *deconcentration* is the point that the proportion and average company size of the new entrants approximated the most respective values of the eliminated companies in low-concentration regions (Table 4).

Despite the disappearance of its large and medium-size companies, given its several existing enterprises, Budapest can be classified as a '*hot spot*' of the *Hungarian leather and footwear industry*. In the eastern part of Hungary's districts of Nyíregyháza and Szolnok, the Transdanubian region's districts of Pécs and Szombathely stand out from the developed rural districts containing notable industrial concentrations, which are substantial in terms of spatial patterns and industry restructuring (the former districts are more stable, whereas the latter ones lost their weight to a greater extent). Given the dynamics of small and micro enterprises, some developed districts which are of marginal relevance in terms of the industry can exhibit even an absolute increase, typically around the capital city (Budakeszi, Szentendre) and regions affected by tourism (Hajdúszoboszló, Kőszeg). The relatively stable industrial concentrations of the less developed rural area districts of Bonyhád and Szigetvár can be highlighted in the Transdanubian region, whereas the districts of Csenger and Kiskunfélegyháza in the eastern part of Hungary can be underlined. The losses in the role of Kecskemét and Gyomaendrőd and the expansion of the districts of Kunszentmárton and Mezőcsát – among the most backward and underdeveloped districts – largely contributed to the industry's shift towards the periphery and areas representing lower concentrations (Figures 1–2).

Table 3

**Distribution of leather and footwear enterprises in 1998 and 2013  
according to sectoral concentration categories of the microregions  
based on 1998 data**

(%)

	Budapest	High concentration districts	Medium concentration districts	Low concentration districts	Total
Small and micro enterprises (1998)	26	43	21	10	100
Small and micro enterprises (2013)	22	43	19	16	100
<i>Large and medium-size enterprises (1998)</i>	<i>11</i>	<i>60</i>	<i>29</i>	<i>0</i>	<i>100</i>
<i>Large and medium-size enterprises (2013)</i>	<i>0</i>	<i>73</i>	<i>27</i>	<i>0</i>	<i>100</i>
<b>Enterprises total (1998)</b>	<b>21</b>	<b>49</b>	<b>24</b>	<b>6</b>	<b>100</b>
<b>Enterprises total (2013)</b>	<b>16</b>	<b>51</b>	<b>21</b>	<b>12</b>	<b>100</b>

'High concentration' means at least four enterprises and one medium-size / large firm, 'medium concentration' indicates at least two enterprises or one medium-size / large firm, 'low concentration' means one micro / small enterprise.

*Source:* enterprise data of HCSO Hungary.

Table 4

**Dynamics of leather and footwear enterprises between 1998 and 2013  
according to the concentration categories of the microregions  
based on firms' employment categories**

	Budapest	High concentration districts	Medium concentration districts	Low concentration districts	Total
Existing firms in both years (in percentage of the number in 1998)	5	19	12	13	14
<i>Shrinking firms (%)</i>	0	28	45	0	28
<i>Stagnating firms (%)</i>	25	36	36	100	39
<i>Expanding firms (%)</i>	75	36	18	0	33
Average employment of shrinking enterprises (1998, capita)	0	150	209	0	169
Average employment of stagnating enterprises (1998, capita)	8	106	78	28	85
Average employment of expanding enterprises (2013, capita)	28	130	238	0	125
<i>Number of firms fell out (in percentage of 1998)</i>	95	81	88	88	86
<i>Number of firms newly entered (in percentage of 1998)</i>	31	27	28	71	31
Average employment of enterprises fell out (1998, capita)	58	112	59	26	81
Average employment of enterprises newly entered (2013, capita)	17	74	43	16	47
<b>Total number of enterprises (2013, in percentage of 1998)</b>	<b>36</b>	<b>47</b>	<b>40</b>	<b>83</b>	<b>45</b>

'High concentration' means at least four enterprises and one medium-size / large firm, 'medium concentration' means at least two enterprises or one medium-size / large firm, 'low concentration' means one micro / small enterprise.

*Source:* enterprise data of HCSO Hungary

Figure 1

**Large and medium-size as well as small and micro enterprises  
in the leather and footwear industry, 1998**

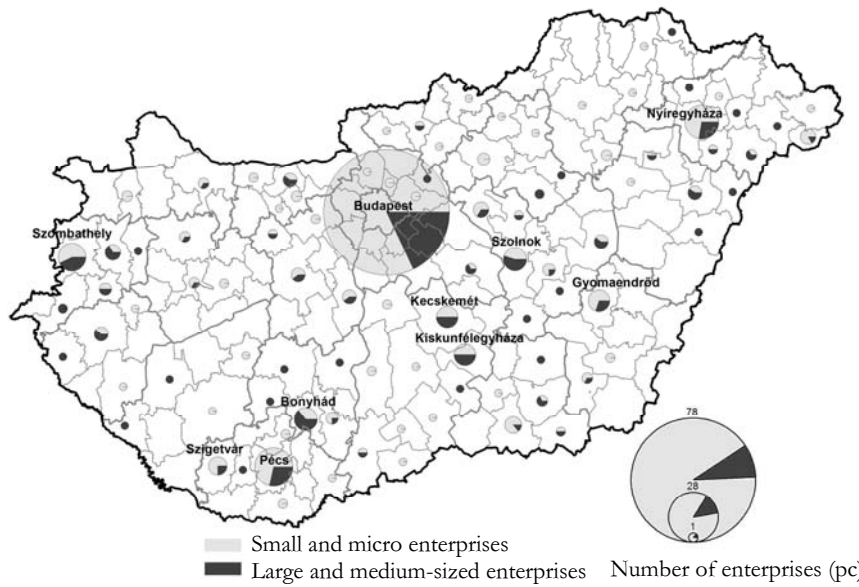
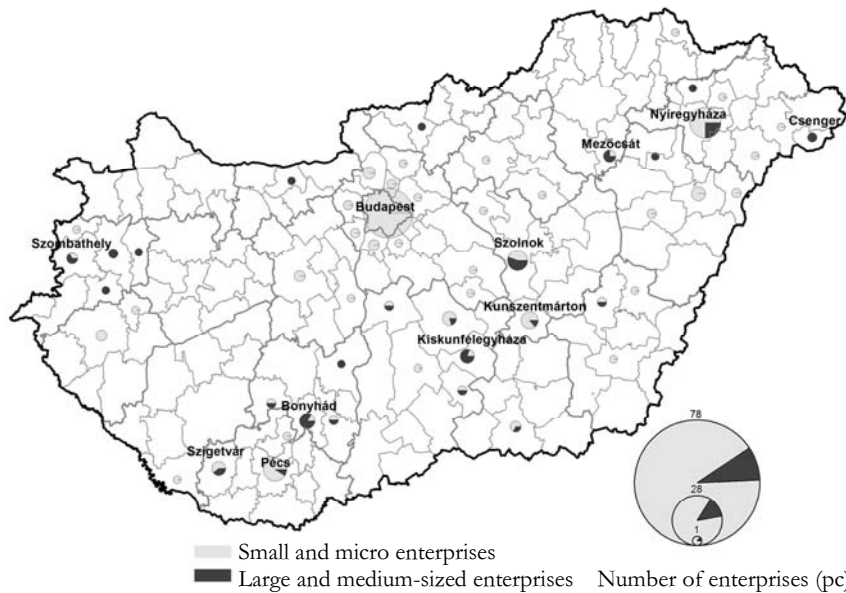


Figure 2

**Large and medium-size as well as small and micro enterprises  
in the leather and footwear industry, 2013**



The dichotomy of the spatial tendencies previously outlined (significant weight and relative stability of more developed regions and industrial concentrations; increasing appreciation of the most backward districts and regions outside the industrial concentrations) implies the *parallel and simultaneous prevalence of qualitative criteria and cost-efficiency considerations*.

### **Explanation of spatial development tendencies**

According to the authors' experience, the geography of the leather and footwear industry was heavily influenced by the successful salvaging of the capabilities that prevailed before the regime change. By the turn of the Millennium, the *knowledge base and network of relationships accumulated in the socialist period* in the significant centres of the industry strongly affected its positions. Enterprises in these centres were already integrated into GPNs before the regime change given west-oriented toll manufacturing – having a foundation predominantly in westerly toll manufacturing substantially facilitated their restructuring after the regime change. In the socialist period, the principal company was also searching for industrial partners on basis of the existence and *availability of adequate (technological) competences*. This selection process resulted in, for example, the cooperation of Adidas and the Tisza Shoe Factory in vulcanized technology, and the developments of the Kiskun Shoe Factory were also affected by the needs of the principal company. In those days, when the eastern markets collapsed and the domestic markets were shrinking, *connection to GPNs was crucial* for companies. Foreign direct investments mainly turned up in these centres as owners, typically on the basis of former toll manufacturing relationships.

The *emergence of toll manufacturing and foreign capital* was essential not only to compensate the lost markets but also because it was relevant to finance production, which proved to be an invincible barrier for several enterprises – especially in the midst of the inflationary conditions and bank interest rates of the 1990s. In terms of the subsistence of industrial actors and the differentiated survival of their inherited knowledge, the role of the *institutional side* should not be underestimated in the medium of economic policy, which was generally insensitive towards problems of light industry. For example, actors representing Tisza Shoe Factory managed to lobby for a debt consolidation programme for the company and succeeded in allocating reorganization funds and ownership loans. Primarily, they argued over the firm's considerable weight in employment. The transformation of the company, which remained in state ownership for the longest period, was in line with the principle of maintaining its functionality. The trade union also had a substantive effect on its privatization.

*Upgrading* the 'survivor' actors within GPNs constituted fundamental importance both before and after the turn of the Millennium. The process is considered to be in the *common interest* of western companies intending to relocate an increasing

proportion of their production to more cost-efficient locations, and to Hungarian actors as well who were eager to utilize their capacities and increase their revenues. Thus, efforts that aimed to reduce the cost–capability ratio can be witnessed from both sides of the actors, that is, the sector was able to achieve stability in regions which were the most capable of realizing this upgrading process. In relation to the principal companies and their subcontractors, the case of *interfirm control* prevailed characteristically. This phenomenon is demonstrated by the fact that raw material management remained in the hands of the principle company and production is implemented in accordance with submitted specifications. Moreover, process engineers (technologists) delegated from the parent states to Hungarian shoe manufacturers serve as spectacular evidence. In many cases, the *internalization of relationships* occurred, which entailed that the Hungarian location became a subsidiary of the principal company. Partly risk-mitigation considerations (in the case of Salamander, the fear of bankruptcy, and the termination of the Tisza Shoe Company) and, supposedly, the intention to increase the significance of the location in question within the company (Berkemann concentrated its production in Kiskunfélegyháza; Legero and then Lorenz concentrated their production in Martfű) stood in the background of this process.

In the long run, no clearly visible difference exists between the effects and *impacts of the two management models* (interfirm control, internalization) on the upgrading process. The shifting towards manufacturing *various products* targeting higher-quality segments by using *multiple product technologies* and *more efficient work organization* is observed in both cases. In several cases, the principal company also fostered its partner in the advancement of production efficiency and in replacing amortized equipment through investments in machinery that aimed to take the place of manual labour and increase the capability to manufacture new products. The *functions* of the domestic locations within the GPNs expanded to the *entire production process* and, in many cases, *went beyond that* (most often in the fields of model-shoe manufacturing and logistics). The factory of the German-interested Berkemann in Kiskunfélegyháza appears exceptional because this location, as the production centre of the group serves managerial tasks related to development, raw material procurement, and production management for other sites operating in the region and provides marketing functions covering numerous countries in the region (however, the company's upheaval is underpinned by personal factors which are regarded as firm-specific features).

During the great secession wave witnessed in the footwear industry after the turn of the Millennium, it became evident that the *chances of retaining the Hungarian production* mainly *depended on the products and their markets*. That is, contrary to the previous period, not the national differences in the cost–capability ratio, but companies' external (mainly market) definiteness matter in shaping the spatial pattern of the industry. Principally, the manufacturing of higher-priced, smaller series products competing in the fields of quality and flexibility remained in Hungary. This selection process had a

differentiating effect on the spatial dynamics of the industry. The *different market orientations and competitive corporate strategies* of the foreign principal companies (dominant cost reduction vs. quality and market resilience, combined with lean production) stand in the background of the different development paths of the deteriorating footwear manufacturing of Szombathely and the more stable sector of Kiskunfélegyháza. Moreover, the examples of Legero (gradual degradation of production in Martfű) and Lorenz (at the same time sustained concentration of production to Martfű) indicate that corporate strategies may vary concerning one and the same location. As Hungarian production became costly, the *success of the upgrading strategy* – and, hence, the role of the industry's traditional centres – became *questionable*. Given cost-efficiency considerations, significant amounts of toll manufacturing orders left the country and several subsidiaries were terminated. In some cases, Hungarian enterprises started outsourcing their activities to toll manufacturers located beyond the borders of Hungary, indicating at the same time that *not the domestic backward regions constituted the next stage of relocation*. We can talk about only two or three districts (Kunszentmárton, Mezőcsát) for which their increasing appreciation cannot entirely be detached from the antecedents.

The diminishing Hungarian production sheds light on the *long-term unsustainability of corporate strategies based on toll manufacturing*, which was only very temporarily remedied by the establishment of multi-way relationships. Although higher stability of toll manufacturing and even the partial retrieval of previously lost orders can be experienced in the field of qualitative products, *manufacturing of own brand products* increasingly came to the forefront in the spirit of capability enhancements. The attempts of the domestic shoe manufacturers to introduce own brand products target the *medium- and higher-priced special niche markets*; however, these tenors are also influenced by actors' professional experience and technological constraints. The most remarkable strategic directions are based on small series and flexible production and are typically aimed at such market segments for which competition from competitor agents in mass production prevails to a lesser extent. The authors of this article have little knowledge about the geography of own brand product manufacturing, and investigations concerning this field are currently in progress.

The *stability of the industrial concentrations* is supported and facilitated by other potential benefits in addition to inherited skills and competencies. For the purpose of flexible capacity utilization and cost reduction, domestic toll manufacturers and own brand product manufacturers, as well as subsidiaries of foreign companies, take the advantage of *partial outsourcing of upper leather production*, which is regarded as the most labour-intensive phase of footwear manufacturing. Because this process partly lies on the logic of geographical proximity, it has a positive effect on the stability of industrial players located relatively close to each other. This coexistence offers other opportunities: the *common supply of raw material* or *leasing out of modern machinery for each other* constitutes another example of cooperation. The collaborations are mostly based

on personal relations and trust: more firms had the same roots in the socialist period and most of the actors know each other. *Some greenfield investments* (mostly automotive suppliers such as Eagle Ottawa, Eissmann Automotive, and Seton) which played their role in the renewal of the previously almost entirely liquidated leather industry were located in the surroundings of the traditional centres of the leather and footwear industry (perhaps not in such a manner completely independent from the antecedents), hence *increasing the stability of the industrial concentrations* (Molnár–Lengyel 2015).

Although *industrial concentrations* may offer *more favourable conditions* for businesses to stabilize their situation and to realize and accomplish the process of upgrading, the authors *do not intend to overrate and overemphasize their significance* for several reasons. (1) On the one hand, the *qualitative labour shortages* and the efforts to restart vocational training, which was stopped in many locations, suggest that the professional knowledge and ‘industrial milieu’ underlying the former upgrading process is being heavily eroded today because of the aging of older generations of technicians. (2) On the other hand, the traditionally weak *background of related industries* – apart from a few exceptions – *almost completely disappeared* after the regime change. This statement can be applied to the manufacture of raw and accessory materials (particularly leathers and soles or treads) that are indispensable to the footwear industry. This industry was destroyed partly because of *shrinkage* and by producers’ *integration into GPNs* and the internationalization of their procurements. The industry was also ruined in part by *other reasons* related to a transformation crisis and legal harmonization with the EU. The previously described ascertainment is valid for the manufacture of machines and tools for the leather and footwear industry as well.

The *increasing appreciation of developed regions – formerly marginal in terms of the industry* – can hardly be explained by cost advantages and sector-specific qualitative location factors. The dynamics of urban agglomeration characterized by a growing population, as well as the performance of districts significantly affected by tourism can be more or less traced back to *market reasons*. The role of this factor is assumed to stand in the background of the outstanding dynamics of firms located in Budapest and might serve as an explanation for the urban concentration of certain specific segments (such as the orthopaedic footwear industry).

To summarize the research experience, before the turn of the Millennium, in an industrial environment featured by *increased interest towards Hungarian production*, the domestic spatial structure of the sector was determined by the *success of integration into GPNs* just as by the capabilities and local differences of upgrading. Subsequently, as *domestic production became costly*, the *external (mainly market) definiteness of foreign companies* became increasingly dominant in shaping the spatial processes. The attempts of domestic companies to *establish own brand products* (and production networks) and mostly not to compensate for losses can be interpreted as responses to their exclusion from GPNs.

## Summary

In the case study, the authors attempted to *explain the spatially uneven development of a shrinking labour-intensive industrial sector* – the Hungarian leather and footwear industry – within the *conceptual framework of the GPN 2.0 theory*. On the one hand, the organizational manner and the spatially well-fragmented (structured) international character of the industry enabled the examination; moreover, improvements in the theory integrating spatial and dynamic aspects also underpinned the experimentation. The capitalist drivers and risks that determine corporate strategies and influence the development of GPNs, primarily in the case of the *cost-capability ratio*, can assist in discovering such regional elements which might serve as explanations for the uneven spatial development at a subnational level. As the spatial pattern of the two types of strategic options, including capability enhancement and cost reduction, aimed to achieve a lower cost–capability ratio (as the key to competitiveness), the possibility of the increasing appreciation of *industrial concentrations* (providing qualitative location factors) and – as an alternative option – the growing appreciation of *underdeveloped peripheries* (allowing more cost-efficient production) can be assumed.

The findings of the investigations proved the *parallel and simultaneous existence* of the two processes. On the one hand, this existence is regarded as the result of the *structural transformation* of the sector, namely the coexistence of mass production and own brand product development frequently manifested within one and the same company. On the other hand, the *'homogenization' of regional capabilities* is considered typical: industrial concentrations increasingly lose their sector-specific advantages and, at the same time, the domestic periphery does not constitute a real alternative in terms of cost efficiency. Thirdly, the *local differences in the costs and capabilities* increasingly became of *secondary importance* for the international actors. Domestic locations can only function as alternatives for each other in such product segments, for which the relatively expensive Hungarian production does not mean an insurmountable competitive disadvantage given its market position. Resolving the issue of in which locations the *preservation and survival of this heritage arising from the industrial culture* appears most realistic requires further in-depth examinations.

Last but not least, the authors leave three remarks in connection with the GPN theory. (1) The problems which arose during the empirical examination indicate that, although the *spatial approach applicable to the subnational level* appeared in the GPN theory, this field of the concept requires more thorough and detailed elaboration. (2) The example of the leather and footwear industry exemplifies the concept that *integration into GPNs cannot be regarded as a one-way process*: deeper engagement in the circumstances and impacts that emerge when exiting the system require more attention. (3) A morale related to the findings of the paper is that *capabilities inherited from the past have a notable impact on present economic activities*, thus proposing and underpinning the junction between the theoretical approaches of evolutionary economic geography and the GPN theory.



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