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"Labour shortage in Hungary?
A search for explanation of the multidimensional process
of labour market developments"

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Abbreviations

ÉTOSZ	=	Trade Union Advisory
EU	=	European Union
FDI	=	Foreign Direct Investment
GVCs	=	Global Value Chains
HCT	=	Human Capital Theory
IMF	=	International Monetary Fund
LMI	=	Labour market information
MNC(s), Multis	=	Multinational Corporation
NGTT	=	National Economic and Social Council of Hungary
SMB(s)	=	Small and Medium-Sized Enterprise(s)/Business(es)
TNC(s)	=	Transnational Corporation(s)
VDSZ	=	Federation of Chemical Workers of Hungary
VKF	=	Consultation Forum of The Government and Private Sector
VoC	=	Varieties of Capitalism
ULC	=	Unit Labour Costs

1. Introduction

Labour shortage has become an everyday experience in Hungary due to massive emigration to Western European countries. Walking down the streets of Budapest or in the underground one can spot several calls for new employees, and one can also feel the labour shortage in highly busy supermarkets in the city centre, during rush hours when cues are going until the end of shops. The problem is not only economic; there are growing tensions regarding the topic in the political arena and in society against Hungarians who went abroad and having income from Western-European countries. The primary reason for moving abroad is low wages. Thus, the current situation of workers shortage is a phenomenon linked to emigration.

Empirical evidence available on labour shortage is limited because of the controversies in the issue and difficulties in the identification of labour market shortages due to the absence of vacancy measures. Because of the lack of available material about Hungarian labour market shortage, this study seeks to fill that part of the gap and provide an explanation of the multidimensional process of Hungarian labour market developments and labour shortage. For the framework of this study, the approach of labour market information was chosen which goes beyond the economic definition of shortage and examines the phenomenon in the Hungarian economic context by calling attention to the importance of qualitative data (Barnow et al. 2013:4-6). Labour market is only a sub-level of national economy defined by decisions of labour market actors: government, employers and trade unions. Furthermore, national economies are embedded in international markets, external factors define national labour market developments (Borjas 2013, Healy et al. 2011, Köllő et al. 2017, Zerche 2000).

The goal of the study is to investigate an originally economic phenomenon from a broader perspective highlighting that economic phenomena are rooted in the complex cultural, political and social context of a country. Thus, a more complex and multidimensional approach will be applied (Brozova 2016, Ehrenberg/Smith 2003, Greenwood 2016, Mankiw 2011). This research aims to discover macroeconomic consistency while being conducted as a micro-level empirical analysis deriving from local knowledge and experiences (Paulsen/Toutkoushian 2006:6).

This study expands the theoretical framework of traditional labour economics by alternative approaches like geo-economics and dependent capitalist development, meanwhile taking into consideration the specific historical and political characteristics of Hungary within the Central and Eastern European region. In regional development studies, there is a growing body of literature dealing with inequalities between Eastern and Western Europe such as theories of centre-periphery models, dual economy, geo-economics, dependent capitalist development and self-reliance (Bohle/Greskovits 2012, Delteil/Kirov 2016, Gál/Schmidt 2017, Hudson 2016, Seers 1983). According to these, Hungary and the whole CEE region takes place in the international division of labour as semi-periphery. Research has shown that "underdevelopment"/ "backlog" is not simply a time factor; physical and territorial aspects of the asymmetry are even more relevant. Furthermore, regionality has a particular effect on labour demand: the historical heritage from socialism has had a great impact on the establishment of the regulatory framework for employment, infrastructure conditions and policy. More explicitly, on labour markets, work and industrial relations. This particular characteristic of the region has been further complicated by the accession to the EU – the so-called "Eastern laboratory". Because of this reason, the enlarged EU is showing a socio-economic heterogeneity (Delteil/Kirov 2016:1-2).

On the basis thereof, the following research questions were addressed: Whether labour market shortage can be discussed as an existing problem in Hungary? If yes, What macroeconomic, historical, social and political changes did labour union representatives observe in the Hungarian labour market that could lead to the labour shortage?

In an attempt to answer the research questions, in addition to primary and secondary literature, new data was generated by conducted interviews with representatives of labour unions. The interviews revealed valuable qualitative insight into the labour market situation because of the experience, special expertise and intense contact of the interview partners with this field (Denzin/Lincoln 2000:6). The conduction of this research would not have been possible without the support of the team of the Federation of Chemical Workers of Hungary (VDSZ). Being an Intern at the VDSZ provided with the insight into the work and functioning of labour unions and helped to find the most suitable candidates for the interviews.

This study is organised into six chapters. Following the introduction, the second chapter deals with the review of related theories and concepts to the research. The third chapter introduces the relevant literature in the context of historical pattern of economic development in the CEE region, labour market shortage, Hungary's integration into the world economy, the impacts of membership in the EU and current labour market measurements. This is followed by the research chapters. The fourth and fifth chapters outline the methodology, research questions and covers the most important findings of the research including the interviews. Perceptions of labour union representatives and their standpoint about the strategies of labour market agents are outlined in a historical overview backdated to the transition, leading through Hungary's membership in the European Union. In the fifth chapter, findings of interviews will be discussed in thematised form. In the last chapter, main findings of the analysis will be reconsidered and recommendations for further research outlined.

This study seeks an explanation of the multidimensional process of Hungarian labour market developments to understand labour market shortage in Hungary, through the presentation of evidence, perception and understanding of labour unions. It is expected that this research will contribute to - based on qualitative labour market information - a greater understanding of labour market shortages and, more specifically, of the Hungarian labour market.

2. Theoretical Background

The international division of labour dates to times of capitalism and colonialism when the global free market economy was born. In capitalism, the focus of world production is export and expansion of productive systems. Inter-state relations are arising by production and accumulation processes in the world economy, creating a hierarchical structure between countries of centre, periphery and semi-periphery to which national economies are ranked according to their national infrastructure and position in the international division of labour.

Globalization of markets constrained the power of nation-state by limiting governmental interventions. The regulatory role of state was to provide companies with freedom for free trade. Therefore, globalisation symbolises unrestricted investments, deregulation of markets, privatisation of state-owned enterprises and free banking. The competition between different actors of market results in an unstable relationship between exports and imports on markets determining the behaviour of major economic powers (Pintér 2002; Heilbroner/Thurow 1996; Török 2014; Vámosi 2013).

Modern states of the 20th century defined themselves as societies of capitalism and employment, in which labour had a central position in satisfying people's needs. Labour unions aimed at eliminating the social exclusion of individuals or groups. However, structural changes modified the paradigm of work from Fordism to Gatesism soon; production was based in the following on innovations and quality work. The aim of production was not any more to satisfy people's needs but to raise them. Therefore, a highly selective economic system was established (Csoba 2010:33).

Today, the era of "Fourth Industrial Revolution" brings radical changes in political, social and environmental conditions. Division of labour ceased to exist as the central element of maintaining social order; the classic era of labour as a knowledge carrier has come to an end. Nevertheless, politicians are still promoting full employment (Korea Labour Review 2017:9).

Since previous economic discussions were mainly focusing on aspects of development and associated challenges for labour from a very economic point of view, this contribution aims to understand how economic policy in a global context can restructure the labour market and skill requirements. The aim of this study is to provide a deep understanding of labour market shortage in Hungary. This chapter presents relevant theories of labour economics.

2.1. Understanding Labour Markets

Labour is a combination of mental and physical activity aiming an economic objective. A labour market is a place where labour supply and labour demand meet, and therefore it differs from any markets of goods or money (Zerche 2000:2). Quality of employment has a high impact on overall economic productivity, and it is influenced by income distribution, the economic impact of labour unions, allocation of working time, hiring and firing decisions of firms, labour market discrimination, determinants of unemployment and investment in human capital (Borjas 2013:11). Market dynamics and labour services, exchanged for wages by suppliers and demanders, is analysed by labour economics describing the complex interaction between the various labour market agents. Primary factors influencing labour market outcomes such as legislative interventions, unions and collective bargaining and market structures are prices (wage, wage differentials) and quantities (employment and unemployment). Labour economics aims to analyse the determinants of various dimensions of labour supply and labour demand and to understand the motivation of various actors for their behaviour on the labour market. The primary decision-makers are households or individuals (forming the labour supply), firms and employers (representing labour demand) and the government. (Ehrenberg/Smith 2003, Mankiw 2011, Sowell 2015, Tschopp 2012).

Aside from economic factors, sociological constraints, family and community ties also have a high impact on labour mobility, jobs and wages. Legislative constraints regulate employment standards, human rights and anti-discrimination by setting rules on health and safety of workers (Tschopp 2012:15).

Labour markets can be analysed from the microeconomic and macroeconomic point of view. The microeconomic standpoint studies the role of individuals and organisations and their decision-making process in the labour market. The macroeconomic approach investigates the performance of a state or national economy, the interrelations between different markets and their influences on macro variables like employment levels, participation rates, aggregate income and gross domestic product (GDP) (Paulsen/Toutkoushian 2006:6).

Neoclassical Economics

The concept of neoclassical economics was developed by the leading thinkers of the 20th century in Europe who aimed at analysing power relations between industrialists and workers inspired by the growing strength of trade unions from the end of the 19th century (Borjas 2013, Ehrenberg/Smith 2003, Mankiw 2011, Sowell 2015). According to the classical theory, economies are self-regulating; thus, they do not require any external interventions. GDP level of a country is obtained by full employment and in case of imbalances in the natural level of real GDP, self-adjustment mechanisms correct market failures. Moreover, prices, wages and interest rates are flexible (CliffsNotes 2016). According to the flexibility thesis, labour markets are always in equilibrium (Wolff/ Resnick 2012).

While thinkers of the 19th century like David Ricardo (1772-1823), Thomas Robert Malthus (1766-1834) or John Stuart Mill (1806-1873) argued that profit is only residual and economic efficiency can be only achieved by income equality, representatives of neoclassical theory – Walras (1834-1910), Marshall (1842-1924) and Pareto (1848-1923) - disproved this belief. Pareto introduced the concept of economic efficiency and defined profit by the level of marginal productivity of capital. The new term of marginal product to the wage replaced residual. Accordingly, any additional employee will be hired until the value of the marginal product is higher than the wage of workers; therefore, wage of workers is determined by the marginal productivity of labour (Meyer/Solt).

Neoclassical theory is based on the principles of marginalism; partial competitive labour market with market supply and demand are derived from marginal labour product. "Smith's "invisible hand" effectively distributes work tasks based on the values of their marginal products and cleans labour markets to the last sweep" (Brozova 2016:542). The neo-classical approach to labour markets is a competitive model based on statements like perfect competition, homogeneity of workers, perfect information and mobility of labour. More specifically, neo-classical approach describes the wage competition model, according to which there is an instant competition between employees for better-paid jobs that in the long run lowers advantages of jobs and decreases wages and vice versa. If many people quit their jobs, employers are forced to raise wages to attract the labour force. This process is circular and continues until advantages and disadvantages balance each other. If conditions of employment are similar, wages tend to equalise.

The neoclassic theory is based on the four principles of methodological individualism, rationality, equilibrium and the importance of price mechanism (Ibid.).

The first principle of neoclassical theory is the maximising behaviour of economic agents. According to methodological individualism, all economic phenomena are to be explained by the characteristics and the behaviour of individuals. Accordingly, to understand how labour market operates; first, individuals' behaviour and their influence on the economy must be analysed. The starting point of analysis is based on the fundamental characteristics of individual economic agents that only changes in case of impacts of exogenous factors. Due to their maximising behaviour, individuals and firms act in their own best interests. The model of neoclassical economics believes in a perfectly competitive labour market: players have perfect information about market conditions and economic circumstances. The competitive behaviour on the market determines that market wage is given, only a single actor cannot influence the market wage. Therefore, the quantity of labour is determined by agent's supply and demand curves. Homogeneity of workers contributes to wage equalisation (Tschopp 2012:6-7).

The second principle is substitution. The quantity dimension consists an extensive margin, where employees can allocate their time between different activities, mainly between work and leisure. The quality dimension includes the effort of workers and their education. On the demand side, firms can decide how much labour they hire, what wages they pay, the hours of work needed for production, when to lay-off workers and further employment conditions. The government instead has an outsider role by setting rules in the labour market in forms of social security contributions, workers compensation and social benefits. The government's task is limited to establishing the environment in which employees and employers interact. Accordingly, labour market processes are mainly dependent on the actors' behaviour (Borjas 2013:87).

The competitive theory of labour emphasises the importance of harmonious behaviour between the different labour market actors (EconomicsOnline). Neoclassical theory assumes that individual behaviour is rational because individuals are self-interested and therefore, they aim to maximise their pleasure and profit, based on their assumptions whether it is possible to achieve their selected goals (Wolff/Resnick 2012:286). Accordingly, the neoclassic paradigm is deriving from a deep distrust of institutions.

The third principle is that labour market is always in equilibrium; therefore, labour markets are flexible-price markets in which wages move to equilibrium levels and produce adjustment mechanisms in labour supply. According to the principle of equilibrium, there are situations which cannot be influenced by individuals' behaviour; wages are adjusted by supply and demand unless external forces change it (EconomicsOnline).

The fourth principle is the importance of the price mechanisms. More specifically, the interaction between economic agents takes place exclusively through the price system. Labour market actors behave exclusively based on their information about wages. Neoclassic theory furthermore argues that wages provide all labour market agents with the necessary information to make decisions (perfect information) (Ibid.).

The purest form of neoclassical theory is represented by the competitive equilibrium, based on the previously mentioned four main principles and the additional features – competition and agents' knowledge. Competitive general equilibrium theory examines how economic agents interact in a decentralised market economy and how an orderly outcome can be reached that is economically efficient. That combines the principle of equilibrium and "that nobody's welfare can be improved without making things worse for someone else" – Pareto efficiency (OpenLearn). Critics, however, often argue that equilibrium is not attractive to be analysed but the dynamic process of disequilibrium. Another argument is that equilibrium might be achieved by changes in external conditions. Path dependence approaches argue that economic processes are influenced by past happenings, and therefore, each economy has different and particular characteristics that can only be understood by analysing past development processes (Delteil/Kirov 2016:1).

Human Capital Theory (HCT)

Initially, the concept of HCT was a contribution of Theodore Schultz and Gary Becker based on the critical assumption that treating human beings as commodity or machinery could lead to the justification for slavery (Tan 2014:412).

Human Capital Theory within the school of competitive market theories illuminates the importance of skills and knowledge of labour force. Apart from economic factors, productivity is defined by the level of education, training and personal skills of employees that enable a more productive work. The theory also highlights that the structure of earnings depends on costs of fore- and ongoing investments in human capital like education and training. Education and training of workers are based on the concept of "rate of return" (Dickens/Lang 1992:23). Investments in education might be seen as a rational choice, taking into consideration the principle of methodological individualism. Humans aimed to maximise their interests by investing in education hoping in higher wages in return. Therefore, the human capital theory argues that investments in the education of individuals contribute to the higher productivity and earnings of individuals and additionally, to the economic growth of a country.

Institutionalist School of Thought and New Institutional Economics

Persisting unemployment in the 1960s, however, gave rise to critical voices regarding the neoclassical theory that emphasised market imperfections, imperfect and asymmetric information (OpenLearn a). The economic situation had also affected household production including various aspects of family decisions, women's participation on the labour market, women's decisions over housework or labour market and gender wage gap (Brozova 2016:544).

Critical voices claim neoclassical model to be unrealistic and false because of the oversimplification of the labour market phenomenon and call attention to deficiencies in the theory - imperfect information, asymmetric information, transactions costs, uncertainty and risk – that result market imperfections. Moreover, it is highlighted that neoclassical approach is exclusively based on quantitative data and variables, mathematical and statistical technics. Institutions were often not included in the analysis despite their power on the labour market, over labour supply and demand. Therefore, the main critic addressed by the institutional school of thought is that focusing on the behaviour of individuals and formation of prices on the labour market, neglects institutions, rules of entrepreneurship and social infrastructure.

Institutionalist approach argues that social relations and characteristics of the exchanged goods and services influence prices and "co-ordinate" a market. Therefore, habits, trust, values and cultural norms must also be analysed to understand people's behaviour. Furthermore, past and present actions influence economic agent's decisions (path dependency). According to institutionalist theory, individuals' behaviour is not driven by a conscious effort to maximise their profit, but it rather is the outcome of previous experiences where they successfully adapted to expectations from the environment. Furthermore, it is argued that goals of individuals are not unique; their goals are produced by the economy. There is, however, an altruistic approach that argues that humans' behaviours might also be shaped by habits, desires, obligation or the concern for others (OpenLearn b).

Institutionalist theories call attention to the growing role of institutions and their influence on labour market outcomes like wages or labour allocation that are central elements of neoclassical theory. The principle of a marginal product in labour economics emphasises the importance of individual decisions. While in the concept of "invisible hands" by A. Smith institutions were seen as instruments of limitation of the free market, current institutional approach gained a prominent position in modern labour market economics and argued for the necessity of institutional interventions (Brozova 2016:541-542). The institutional school of thought is an alternative model to understand economic issues from an alternative perspective. Theories of institutional economics are often opposed to the neoclassical approach since these rejects at least one or more of the four core features of the neoclassical school of thought and the focus of interest is extended by values, habits, cultural norms while explaining economic phenomenon's. The individuals' embeddedness in society is a crucial element that influences their economic behaviour.

Institutionalist theories emphasise that a significant amount of bargaining power is concentrated on the demand side since employers possess both quantity and quality of capital, technique and management; therefore, employers/owners have an overall influence on workers' productivity (Greenwood 2016:410).

Institutionalist theory contradicts the model of the competitive market according to which workers move from markets with excess supply to those where demand prevails. Institutionalists emphasise "the limits of competition, the flow of information, transferability of skills and worker's willingness to commute to work. Institutions implement rules, standards, directives and regulations, which artificially define the dimensions of the labour market" (Brozova 2016:544). Institutions might create barriers for accessing the labour market by limiting entries into professions dividing labour market into multiple markets (Ibid. 545).

The new institutionalist approach, however, returns to the neoclassical theory and makes – aside from price mechanism – equilibrium, methodological individualism and rationality to its core features. Economic institutions are often seen as the outcome of transaction costs, strategic behaviour of economic agents and imperfect information in the economy. In focus are behaviour, rules and regulations of corporations and trade unions that result in labour market imperfection, limited information and unequal opportunities. Accordingly, competitive markets never occur in reality. While neo-classicists argue the harmfulness of labour market interventions, neo-institutionalists, on the contrary, call attention to their importance by questioning people's rationality (Ankarloo 2002:12).

Dual Labour Markets / Segmentation Theory

Segmentation theory was a huge breakthrough from neoclassical economics, from the 1950s ongoing (Glen 1976:1216). Dual labour market theory emphasises the importance of formal and informal rules, the power of institutions. According to these theories, labour markets are not mutually competing but are divided into different economic segments. Segmentation theory was often applied as an alternative theory to human capital theory in the 1970s to understand how labour markets function. According to the explanation of Dickens and Lang, segmented labour market theory describes that labour market is “being made is several distinct segments with different rules for wage determination and employment policies” (Dickens/Lang 1992:7). Segments in the labour market are often related to wage determination mechanisms in the primary and secondary sector; therefore, segmentation theory can usefully describe income distribution within a society and calls attention to the limited mobility among sectors of the economy and race discrimination (Ibid. 9-10).

Dual labour market models explain that highly skilled labour force is employed in the primary market with market power and high-profit margin, while some workers can only attain a workplace with lower wages and fewer opportunities for advancing their social position and bargaining power. Workers are often selected based on a non-economic characteristic that allows wage discrimination (Greenwood 2016:409). It was a critical development in economic history that institutionalist issued labour market discrimination since it was wholly omitted from the neoclassical paradigm.

In contrast to the competitive labour market approach, segmentation theory claims that labour market is not one competitive market, but it consists of a series of interconnected markets; therefore, labour markets have multiple employment segments. It means that wages often do not correspond to the market price for labour. Wages do not result from adjustment processes but bargaining. Segmentation theory calls attention to deficiencies in neoclassical theory: it explains the inequality of opportunity and the persistence of poverty in modern economies. It calls attention furthermore to immobility of labour as a contradiction to the neoclassical theory since workers might be trapped in a secondary sector of the economy (Cain 1976:1218).

In contrast to Human Capital theory that highlights the importance of human capital endowments reflected in revenue products, segmentation theory points out that subjective factors have an influence on accessing to jobs. Therefore, education might be essential but not sufficient for employees to apply for a job.

A labour market is segmented if it consists of submarkets formed by different groups with differing employment and rewarding opportunities. Although society should ensure its members' mobility, certain positions are only hardly accessible for some employees. In most cases, low employment chances are due to lack of education and mobility. According to the segmentation theory, inequalities and hierarchy are inherent features of the job structure that often result in unemployment, under-employment, discrimination and preserve income inequality and poverty. Therefore, based on human dimensions like age, race and gender, workers might be differentiated and put into "bad" segments of the economy (Sengenberger 1978:11).

The concept of internal labour markets describes the rules developed within each company and the concept of "ports of entry and exit" explains how employees from secondary markets are excluded from the primary market where positions are given to those who are already part of the system. However, ports of entry provide also connections of internal labour markets with the outside world (Diaz-Perez 1993).

Regulating Labour Markets?

Keynesian theory questioned the classical statement of the natural level of real GDP. According to Keynesian theorists, market mechanisms by themselves will not result in economic growth, and thus, they will fail to provide equality for everyone. This is why they argue in favour of state intervention to correct market failures, especially in the form of fiscal politics. Accordingly, central distribution of production factors might reduce inequalities (Rechnitzer/Smahó 2006:24) (cf. Wolff/Resnick 2012).

Dependent on their bargaining power of market agents, supply and demand of labour in the market change both in quantity and quality dimension. Labour measures the work done by humans. The neoclassical theory suggested that power of individual economic actors is small compared to the environment; therefore, their acts have little consequences. Newest approaches, however, argue that individuals eventually have a significant influence on prices in the market. The importance of environment, social and economic institutions of society are also highlighted.

The supply side is formed by workers who often form labour unions to compensate the disadvantages resulting from inelastic demand. Labour protection, labour time reduction and regulation of working conditions are aimed to ensure worker's rights and avoid over-exploitation. The demand side is represented by employers, firms. An employment contract is carried out on their initiative. Labour market equilibrium would mean that supply and demand are matched, and prices are stable, however, in reality, information is unequally distributed, favouring demand-side. This also has a significant influence on the negotiation of employment contracts and price formation process (Zerche 2000:2). It is believed that workers want to maximise their well-being, while firms want to maximise their profit. However, labour market transactions and economic exchange between workers and firms are mostly limited by governmental regulations (Borjas 2013:1).

Labour market regulation aims to ensure the best possible working conditions by setting minimum standards for wages, labour protection, participation and social security to provide the best possible working conditions. Labour market policy's goal is the optimal allocation of essential factors of labour to foster short-term balancing of supply and demand, in other words, equalisation policy. At the same time, labour market policy aims to stimulate the aggregate demand for labour and aggregate supply of labour in a long-run to create high levels of employment, optimally full employment. Perfect market transparency is impossible to realise, favouring demand side. Therefore, it is the task of social politics to increase market transparency to strengthen market awareness of employees. Market transparency contributes to the higher mobility of employees. However, this latest highly depends on inter-industry wage differences. (Borjas 2013:46).

Wages determination is presented in three models in neoclassic: equilibrium model of demand and supply, competitive wage determination, and human capital theory in which there is a considerable correlation between earnings and education of employees. Imperfections in these models are discussed by the institutionalist school of thought and the Keynesian theory investigating how aggregate factor might influence the general level of real wages (Greenwood 2016:407).

Wages have a vital role in the reduction of fluctuation, costs of selection and training of new employees. Wages of efficiency also contribute to attracting more qualified candidates, motivating them and minimising the propensity for leaving a job. It should be highlighted that "The efficiency wage, even if it is higher than equilibrium, is a wage maximising the profit of the company. The productivity of the employee rises more than the costs on him or her. The company, therefore, has no reason to reduce the wage, because the productivity of the employees would decline. If the company reduced the wage, the savings on costs would be lower than the loss from the reduced productivity and the profit of the company would decrease" (Brozova 2016:547-548). Unemployment also has a significant influence on the efficiency of wage. In regions where unemployment is high, wages are lower than in regions where unemployment is low, and therefore wages are higher. Thus, workers in regions with high unemployment are forced to work at lower wages.

Working conditions are essential to improve employee's productivity (Galgóczi 2017:6). It is believed that a non-regulated market can cause lousy working conditions. However, it is not good either if the labour market is overregulated. Employees and employers compete each other and employment conditions are the result of their negotiation. In principle, the state can directly or indirectly influence the working conditions and particularly the wages by establishing a minimum wage, equality rules or freezing wages. The labour market is needed to be regulated in its structure because freedom of choice cannot ever guarantee equality between employers and employees. Since, employers possess means of production and employment contracts, the relationship between employers and employees can never be equal. Regulatory policy is required to distribute economic yield that results from the production between capitalists and workers since the employer is in a stronger position than employee (Borjas 2013:50-51). Institutionalist approach to wages combine elements of social-ethical – prices cannot adequately describe all issues regarding work and payment, (political - bargaining power of agents, and technical - productivity) and workers' reward is more inherent in the job than in the individual's performance (Greenwood 2016:406-407).

Efficiency wage theory highlights the liaisons between wages and productivity and emphasises that labour productivity does not only depend on workers' skills and characteristics but also on the reward they receive. Therefore, wages are an essential instrument in avoiding unemployment: "If the firm invests in screening, hiring or training new workers, it may want to pay a premium wage to protect this investment. Both the discipline and the work-retention efficiency wage models are subject to the criticism that firms can deter shirking or quits more profitably by having newly hired workers post a bond" (Dickens/Lang 1992:16).

Recruiting models highlight the importance of wages for firms if they want to reduce the expected length of a vacancy since their maintenance is very costly. Furthermore, if these jobs are not offered, unemployment might rise. Unions are often not well seen by employers because these can contribute to wage raise. However, even the threat of workers collective may achieve wage raise without unions (Ibid. 18).

2.2. Migration, Labour Markets and Brain Drain

Traditional migration means the relocation of people from one place to another, and it is a historically widespread feature of human existence. As Bartram states, "International migration is the movement of people to another country, leading to temporary or permanent resettlement;

in the aggregate, it commonly raises questions about national identities and social membership" (Bartram et al. 2014:4). Apart from international migration, migratory movements within national borders have to be remarked: "[…] from one area to another within the same country. In many countries, internal migration (e.g. from one city to another) is quite common. In developing countries, it consists mainly of movement from rural to urban areas" (Ibid. 88). Contemporary studies question the applicability of the old concept of migration within the European context since European residents do not leave their country permanently. People are willing to go abroad or to also migrate on a short-term, e.g. in forms of seasonal employment or commuting across national borders (Wiesböck et al. 2016:1713).

Migration is an immanent feature of the modern global world, and it has also formed Europe's history especially after 1989/90 that resulted in the internalisation of the market economy in the ex-communist bloc. Regular and irregular immigration has dramatically increased in the last two decades as a result of welfare decrease, labour recommodification, de-familiarisation and the subsequent commodification of care experienced in European societies. Migration has become a tool to overcome the ageing of populations; women's growing labour force participation aimed satisfying needs in childcare and residential care for older people (Papadopoulos 2012:34). "International migration is linked to underlying features of global politics, particularly to inequalities between richer and poorer countries as well as the effects of factors such as political repression and conflict" (Geddes/Scholten 2016:5).

Previously, international migration was often described as people's movement across state borders that lead to a permanent settlement resulting in the economic, social and cultural integration of migrants into the receiving country and fewer ties to the migrant's home country. There are different reasons for people's movement, e.g. it can be institutionally driven, or it might be arbitrary or time-specific – short or long-term - decision. Hence, movement of people does not necessarily result in their settlement; one might move "back and forth between sending and receiving countries" (Geddes/Scholten 2016:6). Therefore, new approaches argue that new migration movements are rather short-term or temporary such as transnational migration, cross-border commuting, seasonal migration, circular migration and retirement migration (Verwiebe et al. 2014:131). Globalization facilitates processes of emigration in a way that while migrants get integrated into the destination country, they do not necessarily have to renounce their "belonging" feeling to their homeland. Subsequently, migrants live transnational life over more than one nation-state. Transnational lives are a result of the weak position of nation states that created supranational bureaucracies that followed in a shift from national to international state

(Carmel/Cerami 2011:5). Transnational labour markets fulfil a bridge role between sending and receiving countries and contribute to the realisation of job opportunities, higher income returns and social mobility for transnational migrants. Furthermore, transnational labour market does not "force" labourers to choose between their home and host countries (Verwiebe et al. 2017:252).

The neo-classical theory presented inequalities of income, wealth in the sending country and maximisation of income on long-term as primary reasons for people's relocation. However, "this does not mean that international migration or EU free movement is subjected to simple push-pull pressures as migrants move for economic reasons from poor countries to richer ones. In addition to relative inequalities of income and wealth, other factors include […] economic, political, social, demographic and environmental" (Geddes/Scholten 2016:6). Migration processes are a result of complex decision-making processes in which beside of economic factor social networks and the social, familial and cultural context play also a great role (Verwiebe et al. 2014:129). Moreover, new studies illustrate reasons for migration are temporary like the following, "The main idea behind this process is to generate a 'win–win–win' situation, namely benefits for receiving countries by meeting labour market shortages, for sending countries through guaranteeing remittances for development and for migrants by offering employment and control over the use of their wages" (Wiesböck et al. 2016:1713). Accordingly, migration was developed and adopted by centre regions of Europe to overcome high skilled worker shortage by recruiting professionals from "peripheral" countries of Europe or from countries outside Europe to overcome market deficiencies at the home country (Papadopoulos 2012:34). Furthermore, based on the dual labour market theory it could also be argued that there is a liaison between immigration and structural labour market requirements due to differences in wages between primary and secondary segments of the labour market (Wiesböck et al. 2016:1713).

Following the logic of dual markets, the concept of brain drain must be discussed: "Brain drain refers to the loss of highly trained people through emigration, primarily from developing countries. Conversely, brain drain refers to the gain or immigration of highly trained people to developed countries from developing ones". In the process of brain drain developed countries are seen as winners, "gaining needed human capital to work in booming science and technology industries" (Bartram et al. 2014:23). According to Wolburg's definition, the phenomenon of brain drain could be described as following: "According to these characteristics one differentiates between permanent and temporary migration, low and high-income countries and skilled (or qualified) and unskilled (or unqualified) migration. Brain drain is usually defined as the permanent emigration of highly skilled manpower from poor to rich countries. Since the word 'drain' implied an irreversible loss of qualified labour and knowledge, one could come to the conclusion that such a loss occurs only if highly qualified migration is from low-income to high-income countries" (Wolburg 2001:23).

Return migration might balance the brain-drain tendency and is often believed to be the remedy for labour market shortages in the national economy: "The return of migrants to their country of origin – sometimes as a fulfilment of original intentions, sometimes as a consequence of revised intentions. Far from being the opposite or reversal of 'outward' migration, it has much in common with outward migration" (Bartram et al. 2014:121).

2.3. Labour market shortages

Currently, labour market shortage is a well-known phenomenon and widely used term in Hungary. According to Köllő et al., "the widespread use of the expression labour shortage is a post-socialist tradition because the transition period resulted in a never before seen resource-hungry economy and overdemand" (Köllő et al. 2017:48).

However, describing the phenomenon is not easy since no consensual definition would explain the term (Grabowska-Lusinska 2010:189). "The term labor shortage has no universally agreed upon definition. It sometimes refers to a shortfall in the total number of individuals in the labor force, and sometimes denotes the possible mismatch between workers and jobs in the economy" (Barnow et al. 2013:4). Demographic factors might influence labour market situation such as baby boomers to reach the retirement age (Ratkó generation in Hungary) (Köllő et al. 2017:49). According to another definition formulated by Blank-Stigler (1957), labour shortage exists if politics reveals that the available labour is not sufficient to reach critical social goals. Labour market shortage might also be a result of labour market overregulation by governments.

Following the fundamental principle of classical economics, labour market shortages are nothing else but results of disequilibrium of supply and demand on the labour market, in other words, the supply of labour does not coincide with employer's demand. According to Zerche, the labour market is characterised by short- and medium-term, cyclical fluctuations. Cycles result from significant external disturbances which affect supply and demand side. Especially export-oriented economy's labour markets are vulnerable to external shocks like the economic crisis during the transition period (Zerche 2000:36). Labour shortages imply a disequilibrium situation in which the demand for labour by employers was in surplus of the supply of available workers at a ruling wage: "A situation in which a (low-wage) employer is not willing to pay the wage required to eliminate the shortage of workers should not be regarded as a true labour shortage. […] in order to recruit extra workers, the employer must raise wages, a situation which may well suggest to the employer that a labour shortage exists, when in reality supply and demand are in balance " (Healy et al. 2011:3). Based on the literature of market-economy, discussing labour shortage is useless as economic actors are rational: they do not pay for any product that is priced too high. Labour market shortage is a natural phenomenon that means labour demand is impossible to meet temporarily.

The phenomenon of the labour shortage is used carefully in scientific research because of the inaccessibility and the lack of exact definition of the problem. This research, however, proposes that labour shortage is an existing social fact with severe social and economic consequences (as per Durkheim). Therefore, “it is important to go beyond the economic definition of shortage” (Barnow et al. 2013:6).

Critics argue that neoclassic model of the economy is somewhat narrow sided because it despises the social and human side of the economy. Representatives of endogenous growth like Paul Romer, Robert Lucas, M.P. Todaro and Ros argue that exogenous models do not analyse immanent factors such as human capital, high trust-environment, innovation skill, the ability to take innovations, institutional structure, political environment, corruption, entrepreneurial willingness. Institutional economics approaches to understand economic relations as part of the evolutionary process and the role of institutions, social norms and habits, and traditions in shaping economic behaviour (Pogátsa 2015:10-11). Accordingly, markets are the result of complex interaction of various institutions. Institutional economics can help understanding the motivation of economic actors, the role of the state and politics in national economic growth.

Wages play a significant role in workers' motivation as they have a direct impact on workers' decision of whether they are ready to provide their services at a certain price. However, the situation gets worse if actors react too late. Barnow et al. suggests that measuring labour shortage is possible by analysing employers’ recruiting efforts in forms of for example advertisements, expansion of recruiting area, use of agencies, bonus payment to employees, increase use of overtime, reduction of minimum qualifications for jobs, restructuring of work, workers training, offering better working conditions, bonuses, improvement of pay and fringe benefits, contract out work and turn down work (Barnow et al. 2013:5). Alternatively, the concept of “social demand shortage” formulated by Arrow and Caprow frames the situation when market produces less than the society would like. Despite the fact that tight labour market situation entry requirements for specific occupations might increase since in such situation, professional workers are required the most (Ibid. 6).

2.4. Core-periphery models

Catching up processes, forms of development are often explained by the world system theory, anti-systematic movement and dependency theory that divides the world into core, semi-periphery and periphery countries. World-system theory argues that global division of labour is based on capital-intensive production that requires intensive labour force and raw material. The number of natural resources will determine a country's position in the international division of labour. The most important representatives of these theories are Giovanni Arrighi (1937-2009), Immanuel Wallerstein (1930-), Samir Amin (1931-) and Andre Gunder Frank (1929-2005).

Social exchange and economic processes have a significant influence on economic development, and these are always resulting from the dynamics between global and national processes (Arrighi/Piselli 1987:677). The theories highlight the disadvantaged position of semi-peripheral countries because of their lack of resources. It is also believed that central and peripheral regions earned their position mainly in the industrial revolution. Underdevelopment or backlog are often referred to as time-factors. However, territorial characteristic and determination of these processes should also be highlighted. The division between West and East is a centuries-old tradition: even though the rise of the capitalist world economy dates back to the 16th century, it only took roots in Eastern Europe in the 19th century (Éber 2015:147-149).

Centre-periphery models aim at calling attention to inequalities stemming from economic processes and ignored human needs (Streeten 1981:195). Capitalist development never takes place evenly over space and time, thus different regions are affected differently by crises (Hadjimichalis/Hudson 2014:209). According to the centre-periphery model, capital accumulation and expansion is only possible by the annihilation of space by time; thus, centre regions annexes periphery regions. Accumulation of capital requires growing labour markets;

capital is often concentrated at places where production activities take place. Therefore, capital is often spatially concentrated (Jelinek et al. 2013:103-104).

Development is the result of the composition of capital, labour force and technology. The distribution of these factors is often unequal due to historical, geographical, social and environmental conditions (Rechnitzer/Smahó 2006:6). Furthermore, a nation’s success in the international division of labour is highly dependent on educational, institutional and political arrangements (Streeten 1981:205).

Galtung furthermore subdivides the already existing categories of centre and periphery. It is argued that dependency relationships do not only exist on the international level but also on the national one. Both the national and international subsystem of centre and periphery are integrated into one coherent network of dependence that is transnational (Naustdalsli 1977:204). Galtung also argues that inequalities in the current division of labour are the result of imperialism that means the power of structural violence of central regions over peripheral regions. Furthermore, subregions of centre and periphery are also creating an imperialist system as they connect to each other (Galtung 1971:83).

Dickens and Lang call attention to the liaisons between dual economy and dual labour market. According to the theory of dual economy, firms are either part of the Core or the Periphery. Accordingly, core firms mainly offer primary employment and have substantial monopoly power on the labour market with high labour productivity, capital, more considerable employment than other companies and higher wages (segmentation theory). Usually, core companies are related to industries of construction, mining, manufacturing, transportation, utilities and fire. While industries of agriculture, textiles, retail trade usually are belonging to the Periphery (Dickens/Lang 1992:13-14).

2.5. New Approaches to Economic Challenges

New economic approaches to the functioning of global markets highlight that economic value is always culturally created and constructed, therefore the economy is both culturally and politically sensitive (Hudson 2016:39). Theories of geo-economics or geographical economics investigate the dependent-market economy models and its geographic and economic features, problems of capital accumulation, features of post-socialist transition, geo-economics features of the externally managed and financed integration of CEE into the world-economy and the EU

(Gál/Schmidt 2016:75). While the traditional economic discourse studied economic processes from a somewhat standardised point of view, in geo-economics, territorial aspects of economic development are involved in the analysis highlighting that economic development might be unequally distributed between the different regions thereby creating dependent relations between them.

Geopolitical understanding of development processes can contribute to the understanding of internal and external development processes while placing the unit of analysis into a global context. While after the transition it was believed that dependency relation came to an end with the termination of the Soviet Bloc, it soon turned out that it was only replaced by a new dependence from Western Europe. Accordingly, critical approaches originated in the world-system theory and in the postcolonial approach aim to develop a global geopolitical framework of understanding of the EU, in other words, the economic sociology of flexible global production (Böröcz/Mahua 2005, Éber 2015).

Path dependency theory argues that "the weight and structuring power of the past" is still present in the present economic and social structure of a country, defining roles and relations of labour market actors rooting back to their past positions (Delteil/Kirov 2016:1-2). Hunek and Geary emphasise the path-dependent process of transition and argue that the "institutional heritage" of the former economic system survived the "otherwise systematic change" and was transformed into new employment practices. They write the following: "Transition – in part at least – is a path-dependent process, in the sense that long-established social mechanisms tend to reproduce themselves in changed circumstances. As such, the emerging institutional solutions are often embedded in the rationality of the pre-transition institutional arrangements" (Hunek/Geary 2016:63). Accordingly, pre-transition institutional arrangement and former institutions are maintained by economic relations and powerful elites that still have considerable influence on governmental decisions. This is an exciting point to highlight, as currently, the Hungarian government aims to create a new Hungarian elite that might be a threat to the private sector and MNCs.

The frameworks of Europeanization and Variety, Diversity of Capitalisms (VoC) by Hall and Soskice (2001) are to explain the economic and social transformation of CEE countries. The two theoretical approaches aim to analyse long-term lags in growth, catching up processes, social development and territorial imbalances of Eastern regions compared to Western Europe and to analyse direct and indirect EU regulations on institutional and political levels in the member-states (Bafoil 2016:23).

It is believed that converging or diverging processes within the EU are mainly dependent on the strategies of actors. Since the 2000s a new approach for the understanding of Europeanization processes emerged under the name of “dependent capitalism” addressing questions of external dependencies of CEECs. Furthermore, dependent development has different influence on different regions based on their role in the division of labour. Delteil and Kirov argue the following: "FDI inflows have accentuated the inherited economic segmentation of the host countries in two cumulative ways. By concentrating in dynamic urban areas or industrial districts, FDI has been highly conducive of "agglomeration effects", i.e. the spatial concentration of productive assets and wealth in well-endowed regions, at the expense of more peripheral and poorly-endowed areas. This spatial divide has been reinforced by domestic policies, through the creation of "special economic zones" and technology-based "clusters" (dominated by foreign companies), special tax regimes and relevant public investment in infrastructure" (Delteil/Kirov 2016:11). Foreign investments hinder governments' room to manoeuvre since foreign investors follow their interests if the technology transfer is not harmonised with national goals (Seers 1983:82).

According to the concept of segmented capitalism in Hungary, ex-socialist countries are not homogenous; there are vast differences between national economics even within the CEECs. The concept developed by Martin (2008) presents that difference between countries can be further divided into differences between actors and practices. Thus, the analysis must include firms and in particular in the CEEC regions MNCs and FDI as these played a significant role in the implementation of financial assets and newest technologies. Furthermore, soft technologies like work organisation design and managerial practices helped the integration of CEE region into global markets through Global Value Chains (GVCs) (Makó/Illéssy 2016:77-78).

It has to be also highlighted that varieties of capitalism are different between core and periphery regions of Europe: "[…] most of the new economic and political institutions were not yet in place when the post-socialist economies became exposed to global pressures. Therefore, their emergence and consolidation have been much more influenced by international and transnational factors and actors than was usual in the Western cases" (Bohle/Greskovits 2012:11). It is believed that the aim of transformation process was "one of the principal tasks of the transition to capitalism has been to break the resistance of the working class" (Bafoil 2016:25). In other words, to silence local voices. As Bafoil argues: "In companies taken over by foreign investors, however, new technologies triggered the immediate, drastic elimination of skills that were previously critical to these industries, particularly the sorts of informal skills necessitated under economic conditions dominated by “shortages”" (Ibid. 31).

Martin developed four main models to interpret the post-socialist transformation and to complement the VoC framework: the ‘liberal market model’, the ‘coordinated market model’, ‘associative capitalism’ or ‘heterarchy’ and the ‘old left model of neo-colonialism’ in which it will also be analysed whether MNCs contribute to the economic modernization of the country and whether they have long-term relations with small and medium-sized national enterprises. According, to Martin's categorisation, CEECs development could be described the best as a neo-colonial capitalist periphery in Europe. In case of Hungary, this meant a radical shift from manufacturing to service industry while there have not been many changes regarding work and knowledge development (Makó/Illéssy 2016:93).

3. Review of Related Research

After having outlined the theoretical background of this research, the goal of this chapter is to understand external conditions and internal mechanisms that influenced Hungarian economic, demographic and political framework conditions for Hungarian labour market.

The traditional labour market has changed due to the structural transformation from centrally planned economy to free markets resulting in the birth of thousands of new small ventures, the dissolution of prominent organisations and the rapid growth of the number of firms and self-employment. Unemployment emerged on the labour market as a new phenomenon that has not been experienced before (Keleti 1994:70). The joint to the EU and the 2008 economic crisis brought unstable employment conditions, stagnating wages and high unemployment again. As a result, migratory waves towards Western Europe swept over Hungary with the Free Movement of Labour. Currently, Hungarian economic is shocked by the growing shortage of labour.

Local, national, regional and international distribution of jobs is a real concern in the globalised world. While working places are mostly offered and implemented in developing countries, the owners of companies and employers are remaining located in developed countries. Local jobs turned to be part of the global competition; however, not all local members can catch up with global processes. Advanced technologies could easily make jobs moving from developed to developing countries because of reduced transaction costs in the latter. Structure of world trade is hierarchal: job providers from developed countries have power over those in developing countries. The survival of employers in developing countries are firmly attached to the reputation of employers and firms; capitalism and world trade still have a somewhat feudalistic character than meritocratic in these regions (Kanat et al. 2015:2-3).

A culturally, socially and politically sensitive approach will be the guide in presenting Hungarian and international literature about Hungary's position within the global economy and in relation to Western Europe.

3.1. Historical patterns of economic development

It was long believed that socialist modernisation during the communism in Eastern Europe - on the semi-periphery of the world system - was an alternative to Western capitalism because of the seemingly isolated position of the region in the world economy. However, this portrayal is misleading; the model of socialist modernisation was eventually constructed within the capitalist world economy (Éber 2015:147-149). CEECs has always had an exceptional transitional role between East and West. Due to the region's strong relations to the centre in the 19th and 20th centuries, there have been many attempts for catching up to the "developed world" by industrialisation processes, inflows and accumulation of capital. The three main periods of catching up processes are dated to the Austro-Hungarian Empire, the socialist planned economy in the period of 1950-70 and the model of foreign direct investment beginning after the transition period (Gál/Schmidt 2017:78).

The transition to the free markets was accompanied by full of hopes and the belief to modernisation and development. It was believed that representative democracy in the region's countries would turn into coherent, legitimate and democratic political authorities. The new capitalist system was built centrally through a top-down mechanism, not considering the specific political, economic and geopolitical history of the region (Barta et al. 2005, Kornai 2008). The accession to the European Union and the North Atlantic Treaty Organisation (NATO) were meant to strengthen the region's external stability and to foster sustainable development both in the ex-communist countries and in whole Europe. As a part of that institutional and organisational features of the state socialist system were removed because these were seen as barriers in democratisation processes by Western European standards. The convergence toward Western European was expected from international trade promoted by neo-liberals and the EU (Böröcz 2012:22).

The development of the region shows a diverse picture: after the opening to the free market in the middle of the 1990s the regions suffered a new wave of financial and economic shocks, but these helped to paw way of transformation to transnational capitalist regimes (Bohle/Greskovits 2012:3). After the transformation from a command to a market economy, spatial segregation and a deep crisis with the collapse of Eastern markets begun. The already weak position of the region was further acerbated after the joint to the EU: "the neoliberal economic transformation allowed foreign capital to conquer Eastern European markets and to integrate their captured cheap production lines into the ‘hub & spoke' West-East economic relations" (Gál/Schmidt 2017:78-79).

Economic development of CEE countries was based on export-oriented productive system and industrialisation. Today, it is well-known that transition took place in a somewhat unlucky period; the global capitalist system went through a new phase of capitalist accumulation and overaccumulation. A crisis arose in which the profitability and investments from the productive sector were shifted to the financial sector (Becker et al. 2016:41). As a result, in ex-communist countries, development was stimulated through financial channels resulting in growing external dependencies from foreign capital. Financial sectors in developing countries were brought mostly under control of foreign banks. Thus, this era is named as dependent financialization.

An export-oriented industrialisation strategy was developed in ex-soviet countries, "the latecomers in the capitalist world economy", urging their integration into global market chains. Industrial development was financed through IMF loans under the supervision of Western Europe that resulted in enormous influence of the latest over the region's economic development without providing a solid basis for self-reliance. Furthermore, the growing dependence on foreign capital strongly curtailed the productive capability of the region. The national production sector of the "manufacturing miracles" Visegrád countries got destroyed by foreign-owned export sectors (Ibid. 41).

The region's economic development model was based on FDI instead of domestic savings. Therefore, it is often labelled as dependent capitalism model. Corporate governance became under the rule of Western European, American and far Eastern transnational companies. CEE region's successful integration into the international economy was due to the high level of investments by multinational companies that discovered the possibility for relatively cheap labour and raw material endowments in the region: "CEECs are characterized as ‘segmented' political economies where MNCs play a central economic role but prefer to accept the institutional and legal environments as given" (Drahokoupil/Jepsen 2017:42). It is often argued that it has paved the way for Eastern Europe's deplorable role within the European Union: manufacturer and exporter to Western European countries and consumer of Western European products. The semi-peripheral position of the region is because of economic relations with both core and peripheral regions.

The transformation and EU integration model created a very vulnerable position of the CEECs in the world economy due to strong external dependency, hampering accumulation of financial, human and social capital. Because of high dependency on external capital, self-reliant development and the creation of well-capitalised domestic enterprises were not supported in the region (Gál/Schmidt 2016:89). Research found that economic growth and development was significant between 1990 and 2003, however after 2008 the development of CEE region produced only the half of the Western GDP per capita level: "the development gap between the so-called ‘old' and ‘new' members states of the EU have not narrowed, but in fact has increased since the early 20th century" (Gál/Schmidt 2017:78). Therefore, Eastern European development tendencies demonstrate divergence from Western European countries (Schreiner 2008:89).

3.2. Hungary’s integration into the world economy

The change from a centrally planned economy to a free market economy resulted in extremely high unemployment rates in Hungary because of growing regional disparities and social segregation after the decline of previous industrial sectors such as agriculture, food products, beverages, tobacco, textile industry and chemical industry. Hungary's semi-peripheral development is not nation-specific but the result of global structural changes and cross-border mobility that radically narrowed nation-state policies (Éber et al. 2014:12). Despite the high expectations the transition period and the accession to the EU contributed to the reconceptualization of Hungary's semi-peripheral position in the world economy.

Hungary first received a chance for catching up after the transition and then again at the beginning of the 2000s preparing for the accession to the EU. However, it soon turned out that this try failed and was further strengthened by the outbreak of the economic crisis in 2008. Catching up to the Western life standards became available only for national elites creating an even more difficult situation for the majority society.

Structural changes in economy and politics have affected Hungarian regions differently that resulting growing disparities both in social and in geographic terms. While in the centre and border regions of Hungary, industrialisation, infrastructure development and technological innovation became engines of development, other regions lagged behind. Geographic location, therefore, determines people's mobility (Jelinek et al. 2013:450). Summarizing, disparities between Hungarian regions are a result of globalisation processes on ex-socialist countries that created a distorted version of capitalism. The system change from communism to capitalism resulted in a premature welfare state on the periphery of Europe (Ibid. 450). "After 1991, Hungary became part of the 'grey zone' formed between a stable West and a crisis-ridden ‘East’" (Enyedi 2005:19).

Some research pointed out that FDI based capitalism aimed to attract multinational companies to foster economic development instead of creating a knowledge-based and self-reliant economic model. After the transition, social and economic turns were expected to be inflicted by outside sources. Therefore, the state's economic influence was systematically reduced (Gál/Schmidt 2016:75).

Low labour costs and the relatively central geographic position of the Hungary has been the key to attract FDI in competition to global market actors. Therefore, transnational corporations implemented highly mechanised production processes that did not require the high qualification of labour. To avoid high expenses, they decreased the value of production. Moreover, transnational corporations were supported to the disadvantage of local production; local businesses and small and middle scale enterprises were given a subordinated position compared to transnational companies. Thus, the transition period did not help to accumulate national capital. Böröcz in his study sets up the following prognosis: "Given that the national industry inherited from the state socialist period was dismantled through the privatisation process only to be recast as predominantly foreign-owned and assembly plant type and given the endemic unavailability of indigenous capital for domestic industry, the highest value-added operations in industrial production in the Hungarian economy are controlled by foreign capital" (Böröcz 2012:25).

Economic development was believed to be achieved through foreign investments. Thus, the national elite failed to function as the head of development. The Hungarian transformation is often labelled as "capitalism without capitalists" or "capitalist without capitalism" because "marketization outpaced the creation of a private propertied class" in which "new capitalists" expropriated state property "without capitalism" (Bohle/Greskovits 2012:9). This resulted from the lack of institutional background that was necessary to boost capitalist development (Ibid.). In the 1990s, crony capitalism and oligarchs' expansion was typical for the region that was followed by the import of foreign investments. Wages and taxes were shaped in favour of investors to attract FDI into the region, and the rights and bargaining power of labour unions have been curtailed (Pogátsa 2015:11-12).

After the 2004 accession, Hungary's GDP shrank under the EU average and was lower than in the last years of the communist era. This stagnating tendency was then hit by 2008/2009 economic crisis. Disorders in the economic development of Hungary emerged after the economic crisis combined with disappointment in political parties, institutions, democracy and economy. The 2008/2009 crisis resulted in unliveable conditions for many Hungarian families since the conventional monetary system left severe debts behind including the foreign currency loan burden. Labour markets became unstable and Hungarian welfare state model was challenged (Tóth et al. 2012:138). In 2008, Western Europe's GDP per capita was two and a half times higher than Hungary's. Moreover, salaries became even less competitive and had irreversible consequences for those with foreign currency loan burden (Ibid.).

Even though the economic crisis of 2008 is over, Europe still finds itself in a healing process. The crisis impacted European regions differently, however economic growth all over the eurozone was stagnant. The gap between consumer wages and salaries opened up. About 4 million people are living under the minimum subsistence level in Hungary. Critics call attention to the fact that needs and expectations of society were not fulfilled by the accession to the EU since the quality of life in Eastern European regions diverging from those in Western Europe. Despite advancing and growing productivity rates, labour costs did not accelerate (Galgóczi 2017, Myant 2016).

Summarizing, Hungary ‘s subordinate position in global economy dates back to its membership in the Soviet Bloc. After the fall of communism, there were many hopes that Hungary could reposition itself in the world economy. However, it soon turned out that the transition did not bring an end to the dependency relationship. The growing influence of Western Europe was already noticeable during the communist era in the region and became even more dominant after the Eastern enlargement of the EU. As a consequence, significant economic and industrial sectors have been damaged (Böröcz/Mahua 2005:160). Because of large-scale redundancies, many professions lost their nobility and popularity. Especially those related to hard physical activity were no longer well appreciated. Workplaces were abolished, and unemployment grew when capital-intensive industry ceased to exist because of high levels of imports. Changes in internal and external demand facilitated shifts between different sectors (Becker et al. 2016:41). The proportion between agriculture, industry and services has been changed in favour of Western European counterparts; Hungarian markets were made to manufacture low-value-added products due to cheap production costs and cheap labour force (Pogátsa 2015a:45).

3.3. Immigration and Freedom of Movement

Migration has always been an inherent feature of the globalised world and has always been part of European history (Barta et al. 2005, Blaskó et al. 2016, Carmel/Cerami, 2011, Gellérné/Szigeti 2005, Papadopoulos 2012). The end of communism resulted in the integration of Eastern European countries into the world economy and even stronger cooperation within Europe. Since then, migration rates have been continuously growing. The rate of both regular and irregular immigration increased until such an extent that it urges the redefinition of national political economies and cooperation between European countries (Papadopoulos 2012:24).

Migration levels overall in the CEE countries has increased after the collapse of the Soviet Union and called for a tighter relationship between the CEECs and the EU because of the fear of large-scale migration flows from the ex-communist countries towards the EU (Wiesböck et al. 2016:1713). Closer to the accession, requirements regarding migration and border security became even stricter: "Access to the EU labour market and free movement within Europe was, of course, a key reason for these countries to join the EU and a tangible benefit of membership for citizens of these countries" (Geddes/Scholten 2016:197). After the implementation of EU requirements on migration and border security, Central and Eastern European countries ratified access to free movement rights (Ibid. 195). Because many Western European countries found threatened their domestic labour market and national labour force by the possible influx of migrant labour from Eastern and Central Europe, specific regulations were made to avoid massive immigration. Firstly, restrictions were made for two years to work migration from Central and Eastern European countries with the possibility to extend it with further three and then again two years (de la Rica et al. 2013).

The Eastern enlargement of the EU meant full involvement of new member states in the political and economic system of the Union and cooperation for development between the member states. The 2000 Lisbon strategy was designed to make the EU as one of the most competitive and dynamic knowledge-based economies in the world by embracing full employment (European Parliament 2000). However, this rectification instead resulted in inequalities due to vast differences between Western and Eastern Europe regarding welfare conditions, democratic values and economic development. Accordingly, labour migration is a result of the divergence of economic development and living standards between East and West Europe.

After the removal of regulatory restraints of emigration, the number of emigrants immediately rose (Mau/Verwiebe 2010:453). The demographic and social composition of emigrants like age, education, previous labour status and experience, influences labour market processes in the country of origin. Emigration of educated and young people is a loss of human capital to the country they leave and has negative consequences at least on a short-term basis on economic growth (Pogátsa 2015a:45). Critics state that the accession is responsible for labour shortages in Eastern European countries as they see a correlation between the Freedom of Movement (that enabled free travel and eased conditions of employment within the EU) and brain drain from Eastern European countries (Kaczmarczyk 2010:171).

It is often argued that the accession was used as a temporary remedy to balance the lack of workplaces and to resolve problems in social welfare in Eastern European markets that suffered from regional inequalities and unemployment even years after the transition. Thus, labour migrants from Eastern Europe alleviate specific labour shortages while causing in their home countries gaps in labour employment. In literature, it is often referred to as "Eastern laboratory" (Delteil/Kirov 2016:1-2).

The idea of the Free Movement of workers within the EU labour market aimed at minimising labour inefficiencies and unemployment. Therefore, an employee can move from his home country to another member state to find a job if he/she is unemployed in his/her home country. According to European laws, a migrant worker from all member states must be equally treated while he is employed in another EU member state (Barnard 2013:278). The equal treatment of EU citizens also includes tax advantages and social benefits, and the right to vocational training in the receiving country (Butt et al. 1999:8). Furthermore, all administrative obstacles are to be eliminated while relocating from a member state to another and therefore residents of all member states become European citizens regardless of their national belonging (Eur-lex 2013).

Migratory movements

During the communist era Hungary was a mainly migrant-receiving country, similarly to East Germany but because of intra-regional differences of CEE migration from the region cannot be portrayed as homogenous. Countries of the former Soviet Bloc were the main destinations since these were less expensive and less risky (compared to oversees) to relocate to. However, the horizon of migrants extended soon after the transition regarding the destination. Migration movements of the region took new directions because of reduced expenses, fewer barriers to culture and language learning, "In addition, the transition and activation of market forces in the region gave rise to the emergence of various regional ‘growth poles' of the economy. These economic differences were amplified by diversity in the pace and course of transition strategies adopted by individual CEE countries and the accompanying political conditions. All this strongly influenced the movements of CEE populations and ultimately led to a new migration space in the region” (Black et al. 2010:8-9). Nevertheless, aside from rising interest and motivation of migrants it was also inevitable that some Western EU countries eased their restrictions for migration: "access to travel in the Schengen Area, the introduction or extension of special employment programmes and a tacit tolerance of irregular residence or clandestine work by Eastern Europeans" (Ibid. 9). Inward migration in Hungary was significant in the decades after the transition in 1989 due to the immigration of ethnic Hungarians from neighbouring countries. While ten years ago in the centre of discussion was low (outward) migration rates and lack of willingness to mobility, currently the focus of interest is high emigration rates towards Western Europe. However, only those areas could attract foreign labour which were also centres of FDI and low-end production for multinational companies (Pogátsa 2015a:45).

It could be stated that the migration potential in Hungary increased by 2000s compared to the 1990s. Between 2012 and 2014 there was instead a decline however by 2015 emigration rates doubled and although it declined again in 2016, the fluctuation remained between 13 and 16 percent (Sik/Szeitl 2016:56). Currently, emigration from Hungary reaches 0,2 percent on an annual basis, and thus Hungary belongs to the countries with medium-intensity outmigration. Primary destinations are Austria, Germany and the United Kingdom. Hungarian dispersion directly after the joint to the EU was insignificant but showed a continuous increase since 2007 and reached its peak in 2015. Trends of migration changed due to the crisis in 2007-2008 and its consequences, "the reforms with inevitable cuts in the second half of the 2000s, as well as the measures of the ruling government since 2010" (Hárs 2016:45). The opening of labour markets in 2011 shows a significant increase in outward labour migration: “a strong flow of labour migrations began” (Ibid. 40). According to some critics, it is not the question of why people migrate from Eastern Europe, but instead, why only just so few due to the economic, political and social instability of CEECs. They state that only restrictive immigration policies of Western European countries prevented immigration from happening (Black et al. 2010:7).

Not only long-term migration but cross-border commuting makes the Hungarian labour market situation worse. Austria and Vienna have become the most important destination for labour migrant from Hungary after 2004 (Verwiebe et al. 2017: 262). The most significant group of migrants is young people in their twenties and thirties who move without their family (Verwiebe et al. 2014:130). Regarding the education level of migrants, it could be stated that migrants with low educational background are few, the number of migrants with higher qualification are high and are overrepresented compared to their number in Hungary (Pogátsa 2015a:47).

The most important driver is low and inhuman wages and better possibilities in more developed EU countries. There is a liaison between emigration/migration potential and age, human and network capital and property ownership. Young and male migrants are most likely to migrate. Studies find that migration potential significantly decreases if a person is from an urban area, has home ownership and supports the governing party (Fidesz). Furthermore, short-term migration is more plausible from Budapest, Western Transdanubia and Northern Great plain regions. People with Roma ethnic background and leftish or radical right-wing political point of view are more willing to migrate (Sik/Szeitl 2016:57-58).

Division of labour within the EU

Migration flows from East Europe to West Europe is often understood as an indirect consequence of the political and economic transformation of post-communist countries during the process of European integration: "In the period after the regime change, a large proportion of emigration from Eastern European countries took place within Europe, and this has especially been the case since the EU's enlargement. Therefore, it is probably not too flawed to limit the analysis of outmigration in the post-regime-change period to East-West migration flows within the EU […] Between 2000 and 2015 the EU was the main destination of outmigration, and overall, the share of EU nationals increased by 20-30 percent in the emigrant population" (Hárs 2016:41).

Since democratisation and economic reforms also meant political instability, labour migration became a coping strategy for low skilled workers. Harmonization between East and West Europe meant the spread of consumerism, the emergence of new markets with the hope of economic growth both in Eastern and Western Europe. Thus, labour migration from East to West became an intrinsic part of common markets (Black et al. 2010:19). Migratory movements only accelerated after the joint to the EU: "There was a rapid increase from each country after EU accession. While the proportion of Eastern Europeans living in Western Europe appeared to be around 1-2 percent of the national populations according to statistics in 2004, this share increased in nearly all countries after 2004" (Hárs 2016:43).

The main reason for outmigration in all new EU member states was lack of employment, bad employment conditions and country-specific social and political characteristics. Hárs argues the following: "The structure of the economy transformed during the regime change and masses of jobs disappeared. Unemployment was high, and employment prospects were unfavourable in most of the EU-8 countries during the first half of the 2000s. Outmigration quickly ensued in the context of high unemployment (…) and the opportunities created by the free movements of labour and virtually unlimited labour demand in receiving countries" (Ibid., 46).

Positive impacts meant that the accession resulted in the convergence of economic growth per capita between Western and Eastern regions of Europe and labour market conditions have also been developed in all member states. As required, employment rates have significantly grown, however, unemployment rates were decreasing to the extent that labour shortages become the new problem. Statistics show that labour market performance was higher and more successful between the years 2004 and 2006 than those in Western Europe and causing a decrease in unemployment rates. It has to be emphasised that each member states even within Eastern European regions have different developments because of their unique social and economic characteristics. For example, while other Eastern European countries showed a downward trend in long-term unemployment, in Hungary it was growing, which could be attributed to the bad labour market situation of Roma community (Schreiner 2008:83).

According to some critics, the EU created a particular migration industry. It could be said that the current migratory system favours the well-educated since they have the skill to adapt to globally integrated and expanding labour markets. High-skilled professionals are to improve economic competitiveness and growth through relocation. Thus, it could be concluded that the current migration system is highly selective because its logic is based on the belief that human resource skills are not else but national economic resources (Csedő 2010:89). Despite the growing number of employed and falling unemployment, regional differences are more severe than ever. Soon it became the scope of research how the EU accession influences the newly joined member countries' labour market and whether there is a correlation between migration in the aftermath of the EU enlargement, labour shortages and wage pressure in the Central-European region.

3.4. Labour shortage as a regional problem

Measuring employment trends, labour shortages and skill gaps in Central and Eastern European countries have its traditions since the transition from centrally controlled to an open and market-oriented economic, political and social system (Hoffmann/Chernyshev 1994:21).

According to a Bloomberg analysis, current labour market shortages in the region are due to low salaries that are resulting from the unequal relationship between Eastern and Western Europe. CEECs became suppliers of labour force to Western Europe. The article states: "The main cause for optimism is productivity. While wage increases are currently outstripping efficiency gains, the opposite has been the case for much of the region's transition from communism. Average labour costs in the European Union's 10 eastern members were about a quarter of Germany's at the end of 2016. Productivity, on the other hand, was two-thirds that of Europe's biggest economy, according to Bloomberg calculations based on Eurostat data" (Simon 2017). In other words, the current economic situation is a result of the Eastern European cheap-labour model which aimed to attract foreign investors. Wages in the CEE region showed a growing tendency from the 1990s until the 2008 crisis. Since then, wages are stagnating despite the significant productivity reserve in CEE (Galgóczi 2017:4).

It was long believed that low wages are the result of the low efficiency of unskilled workers in the CEE region. However, new research illustrates that productivity is not exclusively determined by labour. Even though the quality of labour in Eastern Europe is not different from Western Europe, payment of workers is much lower in the CEE region (Pogátsa 2015:6). Galgóczi argues the following, "wage developments in central and eastern Europe (CEE) over the past twenty years (…) shows that wages are not only low compared to western Europe but, as demonstrated by a number of variables, also tend to be lower than what the economic potential of these countries would allow for" (Galgóczi 2017:4).

Low wages were believed to be the result of low productivity; however, this supposition has lately become questioned. According to the concept of "efficiency wages" (Galgóczi 2017:7, originally by Shapiro and Stiglitz, 1984), wages can also influence productivity by offering higher salaries to motivate the labour force. Therefore, the relation between wages and productivity are not straightforward but rather depends on the rational choice of employers. Galgóczi argues that low wages for the region are unfair because they tend to present work in CEE as less valuable when the comparison is wrong. Therefore, critics argue that the lack of market economy and management know-how in the region have to be considered when discussing productivity and wages. Galgóczi states the following, "Pre-crisis wage convergence came under pressure, not so much as an effect of the crisis itself developing in 2009, but more as a result of the subsequently applied austerity policies in the European Union and the macroeconomic surveillance mechanism within the European Semester that placed constraints on wages. (…) 'one size fits all' approach of EU crisis management had its answer ready: CEE countries had a competitiveness problem due to persistent unit labour cost increases and their wages need to be cut" (Ibid. 16). Consequently, Eastern European wages were kept low by EU regulations.

Similarly to Galgóczi's point of view, Myant argues that production efficiency and payment of workers must be discussed from a new perspective. According to him, low wages are not the consequence but the causes of low measured productivity. Low wages harm the competitiveness of exports in the CEECs. Low unit labour costs (ULC) are a result of a wrong measurement method of productivity by the European Commission. He argues that the belief, low wages reflect low productivity; therefore, wages should only increase if productivity increases, is wrong. Economic growth in CEE region was based on outsourcing and inward investment by multinational companies. Accordingly, unit labour costs cannot be an indicator of productivity (Myant 2016:5). Myant also calls attention to the fact that lower ULC cannot contribute to higher productivity since it reduces domestic demand because of lower import. If unit labour costs would grow, then consumption would also be higher (Ibid., 10). Galgóczi also concludes that low wage "limits growth prospects by keeping domestic demand under pressure, and (…) it keeps the region locked into a subordinated and dependent role that is based on low value-added assembly and supplier activities without any future prospects" (Galgóczi 2017:22).

Because of the growing inequalities between the member states, critical voices are continuously arising about the functioning of the European Union (Böröcz/Mahua 2005, Mau/Verwiebe 2010). In the focus of interest is the entity of the EU that does not have any executive apparatus and the monopoly over the use of legitim violence. Thus, it is not a state according to the Weberian definition. However, it is also more than a customs union or an intergovernmental organisation (Böröcz/Mahua 2005:155). Böröcz and Mahua argue that EU enlargement forced the newly joining members to give up on their sovereignty to a foreign authority (EU) resulting in an asymmetric relationship, benefiting the members differently both in economic and geopolitical terms. For example, the free movement of capital in the EU-based agribusinesses destroyed East European agricultural lands. The implementation of the EU principals was especially harmful in East Europe because of the socialist history of the region. The authors write the following: "The recent transformation of the economies of the EU's former state-socialist neighbours provides a particularly good illustration for the creation of this kind of dependence not only through foreign direct investment, trade and technological means, but also by way of the forced transfer of regulations, the systematic influencing of economic policy, as well as legislation on military, border policing, educational, health and other social issues […]" (Ibid. 160).

The joint to the EU meant an even stronger dependence on finance capital from Western Europe. Dependencies from the socialist system were converted into trade and investment dependence from the EU, transforming the Eastern European region into an "export-oriented, second-tier service and manufacturing sites, with their collapsed state-socialist industries reconstructed almost exclusively by foreign capital, under spectacular tax breaks", producing primarily for EU markets. Because of the state-socialist history of the region and the new linkage to the EU resulted in a unique system of external relationship described as a dual dependency in the period preceding transition (Ibid. 161).

Therefore, processes of EU economic integration and EU regulation are often seen as ambivalent since it contributes to the divergence of newly joined members from old member states. The division between Eastern and Western part of Europe and the difference between territories and institutional frameworks are often used in competition. Despite the various attempts to harmonise labour and social norms between the member states, there are still diverging tendencies. It is also argued that the 2008 crisis shed a bad light over European integration because there is no institutional unity between the member states; thus, it is politically weak. Furthermore, the crisis led to the questioning of CEECs economic and social convergence because of their strong dependence on the external capital. Adverse effects of the economic crisis are often seen as a result of economic integration without social and political integration (Galgóczi 2009:6).

The reason for the unequal conditions for labour within European regions is fictitious: even if the work is identical in East and West Europe, or even if CEECs' productivity is higher, work will not be valued in the same way. Accordingly, an international comparison can be wrong because "productivity, even if it represents exactly the same activity, can be measured as lower in one country because costs are lower; in other words, because wages are lower" (Myant 2016:20). According to Pogátsa, Hungarian wages are low because of low-value-added production processes. After the transition, low value-added production activities were implemented in Eastern Europe since these would not be rentable with prices in Western Europe. Therefore, after the joint to the EU, the free flow of capital resulted that only low value-added production flew into Eastern Europe. Pogátsa writes that while in Eastern Europe the low value-added production is typical, in Western Europe only the high value-added production is endemic, thereby creating competition and growing gap between wages and living standards between Eastern and Western regions of Europe. Accordingly, the Eastern European FDI dependent competitive state also becomes a low value-added production type of economy. High value-added production activities result in more efficiency and productivity, generating a faster increase in wages, while low value-added production results in low wages. Therefore, the inequality of wages between Western and Eastern Europe derives from the nature of production processes. Pogátsa concludes that this model only results in more dependency and instead of convergence, Eastern European standards diverge from those in Western Europe (Pogátsa 2015:17-18).

Currently, labour shortage has become an overall problem in the Central- and Eastern-European region, because of the high competition between Hungary and other Central and Eastern European countries Western European countries. Because of the region's historically dependent position in the European capitalist system rooting back to the communist era, the vulnerability of Central or Eastern European countries regarding the topic of employment has only increased since they joined the EU (Black et al. 2010:9). Thus, it could be argued that the EU enlargement contributed to the tightening of labour markets because of the emigration from Eastern and Central European labour markets (Bohle/Greskovits 2012; Böröcz 2012; Gál/Schmidt 2016; Weissenbacher 2015).

Industrial relations

After having analysed the specific characteristic of the region's development and integration into the global market economy, it could be said that industrial relations have been mainly cultivated by foreign investors. Bafoil argues the following: "industrial relations in the region first began to develop in large firms taken over by multinationals. They were primarily due to the requirements of Western professional organizations, which had no intention of seeing Central Europe become a site for experimenting with "social dumping" within the EU. This was particularly true of German companies and labour organizations, which supported the establishment of powerful systems of industrial relations” (Bafoil 2016:31). However, Bafoil also calls attention to the differences between the investors: "At the extreme opposite of this co-management approach (Mitbestimmung), some Asian investors (Kia or Hyundai, although not Toyota) reportedly installed uncooperative management that imposed rigorous work rules"(Ibid.).

One the one hand, transnational companies, have contributed to the attainment of high levels of norms and culture of working standards. On the other hand, employment conditions were seriously harmed while the implementation of service-based activities did not take into account the local characteristic of regions, “Foreign investors often arrived bringing with their own suppliers, leaving only the simplest local tasks to local employees. Regional value chains, (where they exist) thus became vulnerable due to volatile types of investments because investors could so quickly and easily abandon projects" (Ibid. 32). To boost economic development faster "special economic zones" were created because of their high access to qualified labour, long-standing industrial base and high unemployment rates. Budapest proved to be one of them because of the excellent transportation infrastructure, but still, it remained a zone of dependency because of the lack of investments in R&D sector that remained in parent companies in the West (Ibid. 34).

Hungary was proclaimed to be a so-called boom country, and it was believed to be the most market-ready economy in Eastern Europe. However, Hungary's level of GDP sunk than grow despite the integration to global markets and accession to the EU. Böröcz argues the following: "The privatisation of the erstwhile socialist state's property and the dominance of western Europe-based capital in assembly plant manufacturing has meant high import content for exports and weak wage and subcontracting effects for the local economy" (Böröcz 2012:22). Böröcz argues that Hungary's subordinate position in the global division of labour is a result of activities of multinational companies. In the international division of labour, Hungary functions as a "special economic zone" (SEZ), mainly in the service of the EU (SEZ for EU based capital) (Ibid., 24). As a result of dependent capitalist development, 2000s labour markets went through a problematic transition because of low wages; precarious work instrumentalised social dialogue, and labour emigration (Delteil/Kirov 2016:1).

It must be nevertheless highlighted that despite the many concerns, low wage-based competitiveness has never been a regional strategy but rather a result of historical development processes (Galgóczi 2017:5). It influenced the establishment of firms because low wages meant a comparative advantage compared to the prices in their home countries (Myant 2016:21). Furthermore, while MNCs make their profit with a country's national resources, the reward for labour is realised in the parent company. Thus, those governmental measurements that privilege important strategies from the foreign firm are incredibly harmful to the national economy (Streeten 1981:200).

Another important aspect to be highlighted is that changes in economic structure hindered the work of labour unions. During the period between 2004 and 2014, trade unions lost many of their powers and lost their prestige that immobilised. Bafoil states the following, the previously existing social dialogue between labour market actors: "1. A desire to discredit the former labour unions; 2. The refusal of collective commitments after 1990; 3. An abrupt shift to an individualistic ideology, reinforced by massive decentralisation of private management, and 4. A prolonged, two-decades-long economic crisis" (Bafoil 2016:30).

As a consequence of their neglected position, labour unions could not counteract economic interests. It is well known that in countries, where there are stronger labour unions, wage bargaining has more prominent achievements. However, in countries where trade union rights are not granted, and their financialization is low, the central government has the power of wage regulations (Pogátsa 2015:15).

3.5. Economic, demographic and political framework conditions for employment

The Hungarian Labour Market Yearbook that has been launched since 2000 aims at presenting the main characteristics of Hungarian employment policy in each year. In 2011 and 2012 Hungarian employment rates were still below the pre-crisis level. Due to the high number of unemployed, the government has launched the program of public works programme to prevent further unemployment by not letting the already unemployed exit the labour market. Regional disparities within the country have further worsened the development of employment. Even central and Transdanubian regions that showed higher economic activity have been harshly hit by the economic crisis. The growing unemployment rate in the regions could have only been stabilised by the previously mentioned public works programme. That also resulted in wage adjustments: dynamics of gross wages slowed down, wages and non-salary benefits had to be cut in the public sector (Fazekas et al. 2013:8-9).

The employment rate in Hungary reached 63,9% in 2015 in the population of age 15-64 which meant an increase of 9 percentage point compared to the rate in 2010, close to the European average (Blaskó/Fazekas 2016:9). It is believed that today's Hungarian employment rate of 4 million 352 thousand employed has been the highest since 1992 when the survey started. Nevertheless, the downsizing of the number of employed in the public sector has begun in 2017. Innovations and structural reforms in employment were introduced in the form of a new unemployment benefit scheme, the expansion of eligibility for public works programmes and the substantial restriction on the early exit from the labour market. Despite the growing number of employees, unemployment rates still stagnate. The changes in unemployment rates are mostly due to the public work program that is believed to be the most extensive labour market programme in the country. However, employment programme is criticised because it does not help disabled jobseekers to find a job (Ibid. 13). Other active labour market programmes are primarily financed from EU money.

The minimum wage increased by 5,7 percent in 2016. The increment of the minimum wage and the guaranteed minimum wage in 2017 is believed to be outcomes of high emigrations rates. Public employment wage has been increased due to the high competition in finding and then maintaining the qualified personnel. Furthermore, employers have received reduced fares in tax and social security systems in forms of reduction of the health contribution, the social contribution tax and further tax incentives along with the establishment of a new cafeteria system: "Gross earnings increased by more than 4% in 2015, and the nominal wage reached 245 thousand HUF. […] Since there were no changes to the rates of income tax and social security contributions, net earnings and gross earnings increased at the same rate, which - together with a 99,9% consumer price index – resulted in a 4,2% increase in real earnings" (Ibid.).

Internal consumption has increased because of improving labour market conditions and wage increase. The investment performance of the small-scale business has decreased, but labour productivity is still below the level before the crisis. Hungarian GDP has shown a 2 % growth compared to the previous year; however, it is still the lowest value of Visegrád countries. Studies highlight that economic growth is the result of financial support from outside sources: "due to an accelerated usage of EU funds, the strong economic performance of our main European partners and low oil prices […] About two-thirds of the foreign trade surplus in linked to services, especially to tourism, transportation and to a lesser extent to computing and information technology" (Bakó/Lakatos 2016:17). While Hungarian economy is still highly dependent on external factors, the sustainability of economic growth and social welfare is in question: "The domestic engine of economic recovery was industry and services on the production side, and exports, in addition to the rise in consumption, on the use side. However, disadvantaged groups and those living exclusively on social welfare and public works do not benefit from increased consumption. Nor was the significant gap in incomes and consumption reduced in 2015. Since such a high influx of EU funds is not to be expected in the long run, the maintenance of growth will become a challenge" (Ibid.).

National economic policy keeps the inflation rate and the purchasing power low because once consumption expands inflation grows, and that would mean that wages must be raised too. Accordingly, wages are manipulated through the inflation policy. However, when consumption expands taxation rates also grows and state revenues too. Minimum wage should be equivalent with minimum subsistence however its calculation was stopped by the government, and currently, labour unions pay extra to get information about it. The current protectionist and renationalisation policy not only denied powers of labour unions but also of employers since they mean competition for the state. Critical voices arose regarding the growing size of shadow economy (Ágh et al. 2016).

Average retirement age increased to 65 and early withdrawal from the labour market has been strictly limited, early retirement schemes have been terminated. Decreasing population, natural fluctuation, significant retirement rate and emigration have worsened the situation. The number of vacant posts has reached its highest point in 2017, and there is a growing demand of labour force from employer's side according to the Public Employment Service (Fazekas/Köllő 2017:9-10).

As it was already mentioned previously, the most prominent challenge in the labour market is the lack of qualified workers. The situation has been worsened by regional inequalities because of barriers in mobility of employees and emigration to Western European countries that offer more attractive wages. Labour shortage has become an overall problem in Hungary due to the lack of well-trained professionals and labour force in general. In the face of Hungarian labour market shortage, there is a fierce competition between the different labour market actors. The situation is more difficult since Hungarian labour market does not only suffer from the lack of labour force but also from the surplus of employees: unemployment rates are still high because most unemployed people have inappropriate qualifications, are illiterate or unschooled. The aforementioned measurements and reforms were not able to reduce the negative impacts of current labour market shortages (Bakó/Lakatos 2016:18).

As it was previously argued, Hungary takes up a marginal position in the international division of labour that also influences the share of wages. Centralization processes harmed the bargaining power of labour unions. Furthermore, the current employment policy does not capture global processes but continues with an isolated policy. Due to the historical context of economic development, the government provides support for multinational companies, while the majority of workers, around 3 million out of 4, are employed in small or middle-scale enterprises. Therefore, creating difficulties in employment circumstances. Employment opportunities were already limited after the crisis; the new Labour Code was submitted by the Fidesz government to encourage employment. Furthermore, a new consultation forum between the government and private sector actors (VKF) and the National Economic and Social Council of Hungary (NGTT) had been set up while previous institutions that aimed to integrate both private and public sectors interest were abolished. That also resulted that many trade unions in the public sector were closed down and their establishment in small-scale enterprises was made impossible. Currently, the Hungarian Chamber of Commerce and Industry is responsible for the organisation of economic relations, the empowerment of economic development and interests.

While governmental supports only stimulate investments of transnational companies, small and middle size enterprises got into a more difficult situation that also influences employment conditions. Most of the cases they do not support trade unions and collective bargaining agreements. After the 2008 crisis, the government aimed to establish different employment incentives that also put downward pressure on wages that were still not re-established even though the crisis is long over. Part of the protectionist policy was the centralisation of financial institutions, the central coordination of education and the vocational school system that is under the control of Ministry of Economic Affairs and current schools were handed over to the Catholic church (Ágh et al. 2016:8). It is believed that professionalism disappeared from the current system since current measurements aim to build up central coordination in all social segments, there is no sustainable development strategy behind. The lack of structural reforms, the unstable regulatory and tax system contribute to difficulties in the labour market (Ibid.). The seemingly positive results were mainly outcomes of state interventions, a higher labour demand of business and a particular understanding of unemployment by the government. However, critics call attention to the harmful consequences of the introduced public work program as it seems to result in a segregated labour market. The number of people in public work programs grew to the level of those hired in the public sector (Blaskó/Fazekas 2016:10). Compiling, the taxing system with high incentives, public-work programs endeavouring unskilled and low paid work, and limited access of Roma and rural population to the labour market are still significant problems (Ágh et al. 2016:6).

Bargaining power of labour unions has also grown because of the appearance of labour shortage and skill mismatch in the region. The Hungarian society reached a psychological threshold: the current situation cannot get any worse. Because of this reason strikes take place in different sectors, workers raise their voice; thus, it is believed that there is a higher possibility for them to enforce their interests. Hungarian trade unions have been vulnerable since the transition as they lost legitimacy, mobilising power and influence over public policies. The continuity of trade unions' work has been challenged by economic restructurings and political changes. Processes of privatisation resulted in the internationalisation and segmentation of economy. At the beginning of the 2000s, the pre-accession time with downsizing processes has contributed to their current position on the labour market. Trade unions can hardly establish themselves in private and small and medium-sized enterprises because of lack of economic and financial resources. However, the current situation has awakened new counter-movements that call attention to externalities of wage increment policies by the government. It is argued that current policy measurements are squeezing wages instead of increasing them. Therefore, creating a wage gap between low- and high-qualified workers. Even though the granted wage minimum was raised by 25%, it only brought benefits for those who newly entered the labour market, forgetting about long-standing employees. Furthermore, the wage minimum is not calculated according to the minimum subsistence level, resulting in the phenomenon of "working poor"(Székely 2017).

4. Research Questions

Classical economics states that labour market shortages are results of disequilibrium of supply and demand on the labour market. Therefore, one of the central questions of the research is whether Hungarian labour market shortage can be interpreted as an actual labour shortage. More specifically, if employers do not raise wages, can current labour market situation in Hungary be regarded as real labour shortage? (Healy et al., 2011:3).

Considering, the specific historical development of Hungary, it is expected that the neoclassical economic approach will not be enough to demonstrate whether there is labour market shortage. Therefore, supplementary research questions that go beyond the economic definition of shortage were formulated. The aim is to discover what macroeconomic, historical, social and political changes could lead to the labour shortage in Hungary.

Based on the work of Barnow et al. (2013), this research is guided by the assumption that labour market situation is highly dependent on the actors' decision and their interaction. Therefore, it was inevitable for the study to analyse strategies of labour market actors backdated to the transition. Research questions are rooted in the assumption that measuring labour market shortage is possible by analysing employer's actions such as increased use of overtime, reduction of minimum qualifications for jobs, restructuring of work, workers training, offering better working conditions, bonuses, improvement of pay and fringe benefits, contract out work and turn down work. As Barnow et al. argued, if employers make any/some of the following steps (considering them as variables), that evidence labour shortage, then labour shortage is a real problem (Barnow et al. 2013:5).

Considering the highly regulated nature of the Hungarian labour market, government and labour unions are key participants in the current labour market situation and play a crucial role in causing labour market shortage. Based on the institutionalist school, it is argued that behaviour of economic agents might cause labour market imperfections. After the change from centrally planned market economy to capitalism, the government and immense majority of employers ignored Hungarian trade unions. However, because of tight labour markets, negative development dynamics might contribute to the re-emergence of the central role of Hungarian trade unions and the growth of their bargaining power (Brozova 2016:545). It is also expected, that there are differences between labour unions of the private and public sector. More specifically, labour unions of the private sector have more leverage than unions in the private sector.

Considering that demographic factors might influence labour market situation, it is assumed that emigration, influencing the demographic balance in the country, might be a cause for labour market shortage in Hungary (Köllő et al. 2017:49). As the literature revealed, there is a correlation between emigration to Western European countries and the current labour market situation: migratory movements would not be possible without the Freedom of Movement. Therefore, it is expected that the accession to the European Union has accelerated the occurrence of the labour shortage. As Barnard argues the Freedom of Movement was established to minimise labour inefficiencies and unemployment within the EU (Barnard 2013:278).

Furthermore, low wages and insufficient employment conditions are also responsible for high numbers of emigration (from the perspective of the national economy). While the neo-classical theory argued that relative inequalities of income, wealth in the sending country and maximisation of income on long-term are primary reasons for people's relocation, current research emphasise that cultural and social conditions might be the actual cause. It is often argued that emigration is not an outcome of individual and rational decisions, but it is a must in the specific migration industry that the EU created to attract highly skilled workers from peripheral regions of the EU (Csedő 2010; Geddes/Scholten, 2016 and Papadopoulos 2012).

Therefore, considering the previous arguments, the analytical framework of labour market shortage migration and mobility will be discussed using the theories of geo-economics and dependent capitalist development.

As the literature illustrated, low wages in Hungary and Eastern Europe are results of low-value-added production that is due to the regional division between Eastern and Western Europe (Bohle/Greskovits 2012, Böröcz 2012, Gál/Schmidt 2016, Weissenbacher 2015). Concerning the concept of Dickens and Lang, dual economies - the division between Core and Periphery, between East and West – are resulting in dual labour markets. In core economies, wages are higher with higher labour productivity, capital and employment. Therefore, the study will investigate whether low wages in Hungary are the result of low productivity in the country (Dickens/Lang 1992:13-14) (cf. Galgóczi 2017, Myant 2016).

It is furthermore assumed that historically determined labour market characteristics were crucial for the emergence of labour market shortage. This research aims to analyse the connection between labour shortage and the country's dependent historical development. Low wages and low-value-added production are presumed to be long-term outcomes of Hungary's semi-peripheral position in the world division of labour and the lack of knowledge-based economy. This study investigates whether low wages in the region were a strategy to attract foreign investments and endeavours, and if production processes would be shifted to peripheral areas because of labour market shortage.

5. Steps of the Research Process and Results

This qualitative study investigates the phenomenon of labour shortage in Hungary experienced by representatives of labour unions. The complexity of labour market often remains undiscovered because many studies have a somewhat limited focus as they mainly originate from economic concepts like labour demand and labour supply. Alternatively, they are based on survey data that is often incomplete.

While quantitative methods are conventional in labour market analysis, qualitative methods are often neglected. This research analysis past and present structures and trends of the Hungarian labour market based on expert interviews with representatives of labour unions, as local actors *"from the inside"* (Miles/Huberman 1994:56). The analysis was given the framework of qualitative labour market information (LMI) that highlights labour market require experts' knowledge. This research is based on the assumption that representatives of trade unions could provide the most reliable LMI. Governmental measurements are also in focus since they play a critical role in ensuring labour market flexibility and employment security (Woods 2007:1).

During the conduction of interviews, I followed the rules of qualitative research to produce systematic and verifiable knowledge while remaining objective (Froschauer/Luegner 2003:17). The interview partners took part in the discussion voluntarily, and they were assured that everything had been said during the interviews will be treated confidentially. In order not to harm the rights and welfare of the interview partners, the interviews were anonymised (Nachmias/Nachmias 1987:77-78).

The analysis aims to enlighten the phenomenon of labour shortage from a different point of view that otherwise could not have been measured in terms of quantity, amount, intensity or frequency. This research was conducted with open-mindedness, trying to fill a gap in the economic explanation about labour shortage by generating qualitative data. The composition of the research material is heterogeneous to ensure the validity of the research. The results of the research cannot be generalised or to be considered complete.

5.1. Sample

The interviews were conducted between November 2017 and January 2018 during my internship at the VDSZ. Representatives of labour unions were the key informants embodying transfer of specialised knowledge. This research could not have taken place without the help of the team of VDSZ that played the role of gate-keeper and helped to collect interviewees for this research. It also ensured that the asked interview partners would be able to provide useful research material.

The interviews are a combination of semi-structured and expert interviews. Information about the interviewed persons will not be presented since the focus of interest was not their individual stories but their experiences as group members in a given institutional and organisational decision-making structure (Meuser/Nagel 1991:444).

The following research objects were chosen for the semi-structured interviews: 1. to investigate the perceptions of labour unions regarding the current labour market situation; 2. to discover the strategies of labour market actors backdating to the transition period; 3. to study whether there is a relationship between labour shortage and labour market actors' behaviour; and 4. to evaluate social policy implications of the interviews.

For the research 17 interviews were conducted with representatives of labour unions from the following fields: Anita (private sector) and Erzsébet (public sector) from the pharmaceutical industry, Tamás from the gas industry (public), Ágnes from trade and tourism industry (private), Katalin from the public service sector (public), Antónia from the poultry industry (private), Ancsa from the paper industry (private), István from the food industry (private), Antal from social service (public), Tihamér from the fertilizer industry (private), Gábor from the firefighters (public), Attila from the metal industry (public). Ildikó lawyer, Zoltán and Richárd secretaries (representatives) of the VDSZ; and Dániel and Ákos presidents of VDSZ (I do not make any difference between the president and vice-president to keep their anonymity). The interviews took approximately 30-60 minutes and were held in private. Except for the interviews held with Richard and the two presidents of the VDSZ that were conducted as unstructured preliminary interviews that lasted about two hours and were undertaken to clarify the main issues. According to the interviews with Richárd, Dániel and Ákos, the main issues for the research were the role of labour unions, structural changes in the Hungarian economy, foreign capital, the education of labour force, governmental measurements and the quality of production processes. The issues raised during the preliminary interviews were then selected for the final interviews, and all the 17 conducted interviews were integrated into the analysis and conclusion.

The perception of representatives of labour unions in public and private sector appeared to be different that is important to be highlighted. Their standpoint regarding employment, working conditions, wages, bargaining power and employers were different from those in the public sector, that, in general, was argued to be worse. However, all agreed that current measurements do not consider the importance of labour unions and that there is a need for more cooperation between all labour market actors.

The sample aimed to follow representatives irrespectively from their personal characteristic, however, an emphasis was given to the industrial sectors in which they worked. The interviewees were informed about the background and purpose of this research by being previously contacted by the team of VDSZ.

5.2. Method

Qualitative interviews were applied to study the perspective of labour unions about the Hungarian labour market as a primary source of data collection. Although labour shortage is originally an economic phenomenon, this research aimed to get a new insight into the current situation by considering it as a more complex - social, economic and political – perspective. Thus, qualitative research was needed to provide with the possibility of creating interdisciplinary, transdisciplinary research to have a multiparadigmatic focus on this very complex issue. A multimethod approach joining both macro and micro data is legitim to combine empirical and positive perspective for the interpretative understanding of the experience of labour unions representatives (Denzin/Lincoln 2000:7).

The approach of Labour Market Information calls attention to the importance of qualitative data and the fact that labour markets are strongly dependent on decisions of labour market actors (Woods/O'Leary 2007:5) (cf. Borjas 2013:87).

The interviews were analysed based on the thematic content analysis after Mayring (Kohlbacher 2006, Larcher 2010). An interview guide was developed to compare the results and helped to meet the requirements of qualitative method. The interview questions have been formulated based on preliminary interviews and literature. The following topics were identified as areas of concern: 1. The Role of Collective Bargaining; 2. Type of Work (value added aspects); 3. Differences in Production Processes and Forms of Employment in Parent Companies and in their Subsidiaries; 4. Human Capital and Quality of Labour; 5. Communication with the Different Labour Market Agents; 6. FDI Inflow and Changes in Productivity and Investment; 7. Wage Politics and 8. Obstacles to Competitiveness and Technology.

After having collected the data, before the analysis the following steps were made: transcription of interviews, organization of all the data, giving codes to the first set of fields, notes drawn from interviews, identification of similar phrases, relationship between variables, patterns, themes, distinction of differences between subgroups and common sequences, identification of these patterns and processes, commonalities and differences.

The transcription of data provided with the possibility to get familiar with the interviews. Only the most relevant and thematically compatible parts of the interviews were transcribed. Non-verbal or paralinguistic elements were neglected from the analysis as it is not required in case of expert interviews. However, it was taken care of the reproduction and retelling of the opinions, judgements, observations and interpretations of the interview partners (Meuser/Nagel 1991:455). Only parts of the interviews have been translated into English. The rest I complied and added to the analysis only if those held relevant information.

The qualitative content analysis provided the useful categorisation of previous and current changes on the Hungarian labour market. The analysis of the interviews was motivated both by research question and broader theoretical assumptions. Accordingly, interview questions were created based on the semi-structured model and questions were kept opened in order to integrate the interview partners' standpoint into the analysis by objectively viewing at them (Denzin/Lincoln 2000:5-6).

Coding of interviews was made according to the axial coding method based on the outlined concepts and categories (Biddix 2009). The coding of interviews happened manually (Saldana 2008:22).

5.3. Findings

This chapter attempts to answer the research questions that have been set (Babbie 2005:323). Table 1 provides the major results of the axial coding analysis of the 17 interview transcripts (Aulls 2004:316). After having reread the identified codes, five major categories and 49 subordinate categories have also been identified in accordance with the theoretical background and reviewed literature. The major categories are Emigration and Fluctuation, Employment conditions, Regional differences, Production processes and Labour Market Strategies (Miles/Huberman 1994:55-56). It should be furthermore highlighted that all major categories indicated to one meta-category that was structural changes in the economy. Accordingly, the development of labour market has always been dependent from politico-economic changes namely the transformation in 1989, the preparation to and the joint to the EU in 2004, the economic crisis in 2008, and the governmental change in 2010. In addition to that, the last chapter of analysis will investigate the phenomenon of the labour shortage.

Table 1. Major Categories Influencing Labour Shortage in Hungary

Major categories	***Associated concepts***
Emigration and fluctuation	**Insufficient Wages and Unequal Distribution of Wages,** Fluctuation, Unemployment, **Systematic Devaluation of Occupational prestige,** Extinction of Traditional Jobs, Hierarchy of Jobs and Lack of Mobility, Demography, Aging Society, Globalization
Employment conditions	**Stagnating Wages,** Overwork, Recruitment, Temporary Agency Workers, High Responsibilities and Requirements, Ownership, Black Employment, Seasonal work, Pension system and Physical Exhaustion
Production processes	**Low-value-added production and Technological Development**, Foreign Investments, Plants, Exodus, Multinational corporations, Small and Middle Scale Enterprises, Quality of Production, Environmental regulations, Competition, Digitalization, Capital import, Expensive production
Regional differences	**Division of Labour between East and West,** Underdevelopment**,** Transportation, Infrastructure, Social gap and Inequalities
Labour Market Strategies	**Lack of Tripartism**, Lack of unity, Lack of members, Strike, “Bribing”, Centralization, Vocational Programs, Strategic Partnerships, Bargaining, Labour Code, Taxation, Nationalization, Recruitment

5.3.1. Emigration and fluctuation

One of the principal categories that was referred by all participants was emigration and fluctuation. According to their description labour shortage has been strongly influenced by emigration to Western European countries and fluctuation between different sectors. The literature illustrated that there is a correlation between the 2004 accession to the European Union and labour market shortage in many Central- and East European countries. The number of emigrants started to proliferate once restrictions on employment were removed in old EU member countries providing higher living standards and incomes (Black et al. 2010, Hárs 2016). This chapter aims at discovering to what extent is emigration and fluctuation are outcomes of external factors contra endogenous national processes.

Insufficient Wages and Unequal Wages Distribution

Low and stagnating wages in Hungary, according to the interviewees, are the result of employers' strategy to avoid additional expenses of increment of wages: due to the high competition between them, employers put downward pressure on wages. Therefore, low wages are the result of employer's maximising behaviour (cf. Wolff/Resnick 2012:286), (cf. Tschopp 2012:6). Small companies avoid paying the sum required because they often do not have enough income.

During the interviews, low wages were often mentioned as a cause for emigration and fluctuation of the labour force. However, there is still no considerable change:

> "Wages have always been a problem, and it is challenging to achieve a salary rise from the employer. So currently, in this sector, the workers earn only the 60% of the national average salary despite the many rumours that tourism is on the top as it has never been before" (Ágnes).

The difference is unusually large between the private and public sector; the public sector is exceptionally underfinanced. In the private sector people do not make a move if they are offered a salary rise under 180 Euros, while in public sector people are willing to move already for 60 Euros (Anita). However, public servants seem to be an exception; the government launched a career path model with higher salaries for policemen. They started the program in 2005 which meant receiving 30% of salary increase for the first time and additionally, there was a 5% increase yearly. However, the salary structure is not perfect, those employees who reached the 50% salary increase in 2015 did not receive more wage increase.

Currently, it seems that it was a huge mistake not to appreciate workers' hands in their fields because currently, employers are flailing around to find quality labour force as many workers felt encouraged to leave and to change carriers due to insufficient wages and high responsibilities. Therefore, many people are forced to quit their professions if they are rewarded better in another sector (cf. Dickens/Lang 1992:23) (cf. Greenwood 2016:406):

> "a person who works in a nursing home thinks twice whether he stays in the sector with non-stop time schedules and overwork because it is a hard-physical job. First, they go to the healthcare sector if they also have healthcare qualification. However, the real threat is if they go to work in the Tesco or Auchan […] even after 20 years of employment relation. For example, a highly respected care worker from the area of Győr found a job in the industrial park of Audi. She changed her work for one on the production line because according to her, the job is more comfortable and unlikely to the nursing home it is family-friendly, and her salary is significantly higher" (Antal).
>
> "it happened recently, that one middle manager quit the job after 20 years of work because he did not cope with the pressure and working requirements from his superiors. People rather leave and search for a new working place".

Therefore, fluctuation became the second most important cause of labour shortage that in certain sectors has dangerous consequences (Fazekas/Köllő, 2017:9):

> „the fluctuation within the country also contributes to the labour shortage. The lost labour force cannot be replaced that fast because it takes about 3-5 years that a newcomer can work autonomously. In this area, seconds could mean life or death" (Gábor).

While before professions had their maintaining power, nowadays they seem to be less attractive to young people because they often require hard physical capacity and flexibility. Furthermore, hard physical jobs are not compensated, in the last 20 years there has not been any significant wage increment in these sectors (cf. Brozova 2016:547). For example, Attila told the following:

> "young people do not choose the offered organisation of working time. I totally understand them. They rather go partying, and they take maximum two shifts. Asking them to work also at the weekend is impossible without offering them more salary. When I started to work at the company, the salary was 50% higher than the average salary in the city. Today we cannot say the same".

Moreover, because of insufficient wages people are forced to work in professions which they do not find personally satisfying, or that would correspond to their qualification:

> „ […] a whole traffic police department demobilised […] from a county's main captaincy because one of them found a new job opportunity for all of them. They did not have to do anything special but washing containers at plant protection machines. Moreover, then they said how much they earned, and everyone from the head department to the sergeant could say about himself that he earns two or three times more […] and these were skilled workers not people with primary school education" (Gábor).

Some companies have managed to maintain the labour force only because of their good reputation. However, nowadays only the excellent repute of firms will not be helpful since workers are willing to change their working places for a little higher wage. Therefore, some companies are forced to raise their wages to preserve their high prestige and to avoid loss-making activities that would result from the low motivation of workers in this fierce competition with other companies (cf. Brozova 2016:547),

> "the employer only starts to pay when he is in need. […] But when it is not necessary - he still finds a skilled worker for the price he would originally offer - he is not going to pay more. However, now because of the labour shortage, employers started to work on restructuring wages, and they are forced to pay skilled workers because they realised: if they do not do it, another firm will do" (István).

For example, Attila told that at their company, salary increase was given almost to the 70% of the workers that eased fluctuation in the sector and filled empty vacancies. He said that this measurement proved the fact that wage increase is a crucial factor in preserving the company's competitiveness, keeping people employed and attracting new labour force.

Production processes cannot stop, employers cannot lose their physical labour stock. However, the higher demand for physical workers on the labour market is still not visible in the wage structure or has negative consequences:

> "a huge decrease in the number of workers could have been experienced. Wages, salaries are depressed. People have never been paid well enough in the food industry. However, the last year brought significant changes. The minimum wage of skilled workers has been raised to approx. 600 Euros from 1st of January and this decompressed a little the salary structure. However, at the same time, it squeezed the wages from below, so wage differences disappeared and almost everybody is employed for the minimum wage" (István).

Ágnes complained that the current situation resulted that in summer there were shops which could not even open. However, employers are still not willing to pay higher salaries:

> "[…] employers still dare not to pay the last salary of the workers in August, excusing themselves with other expenses […]. So, we could say that employers did not change their attitude about wages in the last 10 years since the economic crisis rolled in […] they still believe that it will not last long, so they do not reach into their pockets as much as they should. If the cook says that he leaves, then they raise his salary maybe by 70 or 100 Euros, but it does not mean that they will raise the salary of the rest of the employees. So, they only open their wallets in critical moments".

Wage levels are also depending on global markets; Anita enlightened the problem from a different point of view (Böröcz 2012:22):

> "no, it does not depend on the state, we are private, we are a joint stock company. However, the slogan is that we manufacture such pharmaceutical products that could be produced by anyone. Moreover, lately, China and India are on the rise - constantly developing in the last years - and they do not have such restrictions or environmental regulations as we have […] so they can produce the same medicines, active substances, ingredients much cheaper than us. The competition on the global market is huge and technological development is constant, but we face further restrictions since production takes place where it is cheaper".

Accordingly, development of wages is mainly dependent on employer’s decision (cf. Borjas 2013:87) (cf. Zerche 2000:2).

It was argued during the interviews that it is a misbelief that cost of labour is the central part of a company's expenses and that it would be harmful in the search for profit:

> „when they start to negotiate the competitiveness of a company they always start to discuss that labour costs are huge. But it should be noted that in our company, wages are only 8-10% of the total costs […] While if we take a look at wages in Western Europe the same value is about 10 and 20 %, in the processing industry it is even higher, but the production is also high-value-added" (Tihamér).

Interview partners highlighted the differences between production processes within the EU and the East-West gap between wages. Because of low wages, there are growing tensions in the Hungarian population. Wages are in the role of preserving social equality. However, still, wages in Hungary are below an optimal level that is losing maintaining power on labour force (Dickens/Lang, 1992:16).

Currently, governmental interventions have become unavoidable in the labour market situation because of scarce labour resources (Brozova 2016:547-548). Wages are to reduce social inequalities. The current wage increase is a fundamental measurement, even if it has only a little impact in reality. Pay and fringe benefits have been improved. However, wages are so low that it cannot compensate foregone earnings of families (Barnow et al. 2013:5) (cf. Bakó/Lakatos 2016:17). As part of the governmental measurements, mothers' reintegration into the labour market is strongly promoted. Construction of child-care institutes at the working places are supported by the state, so women do not have to choose between having children or a career. For example, Erzsébet told the following:

> „they have their own kindergarten and furthermore child-care centres are being constructed in order to overcome the current labour force problem, so mothers can return to the world of work".

However, the family program of government often faces critics because it also hinders wage raise. Wage policy is overlapping with the nationalistic program of the government:

> „we should not be that proud of supporting families […] with the family improvement support (CSOK) […] or the family tax benefit. Maybe we would not need so many benefits if "dual-earner" families would have enough income and could maintain their families without any governmental support" (Erzsébet).

A wage cap due to previous economic shocks does not allow salaries to rise significantly. Thus, the current wage increase is equivalent with wage dispersion, pay scales are unfair. High wages contribute to tax evasion (Ágh et al. 2016:6-8). However, it is also believed that the Hungarian state as the main employer in the country does not want to deal with the "negative" consequences of such measurements: "Increasing profits are the most important factor for the shareholder, and here, the biggest shareholder is the Hungarian State” (Erzsébet).

Like the studies of Delteil/Kirov 2016, Galgóczi 2017, Myant 2016, the research confirms that low wages are the result of long-term historical processes rooted in socialism when wages were meagre and could only be raised systematically.

Salaries have not been raised as much as the situation would require, similarly as it was argued by Galgóczi (2017). However, what could not have been foreseen was that globalization processes will open the doors not only for employers that could freely shift their production processes from one country to another but also for labour who found solution in outward migration against the hugely disproportionate distribution of wages and cold-hearted employment conditions (cf. Wiesböck et al. 2016:1713).

Hierarchy of Jobs and Lack of Mobility

Hierarchy of work is another obstacle to the mobility of labour that especially discourages young and skilled workers. Restructuring in the public sector and the introduction of public work programs resulted that many professions lost their flexibility and mobility (Ágh et al. 2016, Blaskó/Fazekas 2016, Fazekas et al. 2013, Greenwood 2016):

> "today public workers take the jobs from public servants […]. However, today they employ public workers to save costs also within the sector, and nobody wants to fill the empty vacancies with ordinary workers with legal status" (Public Service, Katalin).

Changes in state administration have also contributed to a considerable loss of prestige of certain professions.

The interview partners argued that even during the socialism workers had more chances to mobilise themselves. For example, a so-called black train operated between Szabolcs-Szatmár-

Bereg county and Budapest, so active commuting was made possible for the workers (Ákos). Today, due to bad infrastructural circumstances once a worker becomes mobile,

“it becomes so mobile that it does not even stop within the national borders” (Tihamér). It also turned out that wages do have a particular gender-specific character which means that women usually work in higher positions requiring high-level qualification and language knowledge. Men usually work in the production sector. The basis of division of labour between women and men is however not only attributed to their qualification, but it is often a compulsion: Hungary manufactures low value-added products, and their production requires strong physical performance (cf. Galgóczi 2017, Myant 2016, Pogátsa 2015).

The mobility of labour in Hungary is hardly possible. However, workers learnt to deal with the problem as the Freedom of Movement eased their migration towards other European countries. If the capability of mobility of Hungarian people were less dependent on the infrastructure and facilities of the region, labour market shortages would be easier to overcome. Labour force could be mobilised to regions where they could be recruited for professions in deficit (Borjas, 2013, Jelinek et al. 2013, Papadopoulos 2012).

Based on the theories of institutional economics, current labour market shortage can be interpreted as a result of a severe market policy that believed for a long time that trained labour could be bought from the market with the necessary education and experience. Furthermore, results present that labour market developments were strongly influenced by the extinction of traditional jobs and the systematic devaluation of occupational shortage. The fluctuation between different services and sectors creates extra costs for employers and result in competition between them. According to the representatives of labour unions, the fluctuation is one of the main reasons for labour shortage as it was stated in the texts of Sik and Szeitl (2016) and Fazekas and Köllő (2017).

Systematic Devaluation of Occupational Prestige

Training programs were abolished slowly after the transition period when state-owned companies became privatised. Currently, professionals with years-long experience are about to go on pension. Current vocational programs – due to their short duration - cannot provide students with the appropriate skills and knowledge:

> "young people cannot acquire the same knowledge than those who learned 20-25 years ago. So, we had an outstanding vocational program before, to which the new vocational school system cannot be compared in the absence of professional knowledge" (Tihamér).

> „we can only fire people according to a given number of employees and the main problem is that if a skilled labour force leaves, it is not sure that we will find another skilled worker to its place. This can cause problems mainly in the manufacturing of chemical base materials" (Erzsébet).

Companies believed that they would buy the professionals they need from the market, but this model does not work this way; knowledge transference requires quality time and investment:

> "Previously, companies had their workshops where they trained skilled workers that took a long time. This is not a profession which can be learned in half a year because the environment in the classroom is very sterile, so it has nothing to do with reality" (Tamás).

Accordingly, low qualification of workers might harm effectivity and productivity of work.

Beside of the harmful measurements after the transition period, reorganisation of schools and school closures started during the MSZP (2002-2010) government. The result is the lack of highly-skilled professionals in specific industries in which skilled workers are inevitable for having the work well done (cf. Pogátsa 2015a:45). Because during the privatisation period there was a massive supply of labour force, employers stopped their training programs.

In certain occupations, it was even natural that the whole family worked in the same production. The prestige of jobs was also harmed by not appreciating the work of elder people leading to harmful consequences for the knowledge transfer between generations.

Old-fashioned employment regulations became a hurdle in the popularity of certain professions. For example, Gábor told the following:

> „There are too many requirements for us, for example, integrity. This means that if a young colleague wants to marry, first they check his bride-to-be, who she is and what she is doing. Also, it could potentially happen that they say to the colleague that if he wants to work with us, he cannot marry that girl because her father was a criminal…".

In gas industry, due to public utility cuts, the profession lost its popularity among the population. Tamás called it as a moral attack against professionals because this program was launched by the government promoting an anti-transnational corporations campaign. Tamás mentioned that they often face accusations that is sometimes even physically manifested:

> "it once happened to a colleague that he was spit while he was welding a pipe in the pit. Alternatively, people were shouting filthy thieves or hirelings (bérenc) as we were serving the interest of multis. So, the colleagues experienced brutal assaults and of course after that you do not want your child to follow this path".

Comparing research results with HCT, it could be said that in Hungary highly educated labour force is not rewarded better than low-skilled workers, or even if they are rewarded more it is not a significant difference, creating tensions between employees (Dickens/Lang 1992:23). Employees who are working for the same company over years or labour force with higher education and qualification are not rewarded more than newcomers. It is very often argued that raising the minimum wage has only negative consequences for the wage structure as a whole because it does not allow any differentiation between high-skilled and low-skilled, physical and intellectual work and the length of work that causes tension in society (VDSZ 2017). Furthermore, research presented that many workers are forced to work in fields that do not correspond to their professional qualifications because the market is less regulated by supply and demand than by a highly centralised politics. The reason lies within employers' mentality who still think that they can find any labour force on the labour market that would replace the loss of workers even if they do not have the necessary qualification for the position. Thus, profit and capital interest still have priority in decision-making processes (the result of the interviews).

It was also emphasised that not even mechanisation or technological development was able to make some professions more attractive because of the substantial requirements of physical activity and strength. Accordingly, digitalisation is also not an option:

> "poultry industry is not an attractive profession; it has never been. Not even mechanisation or the fact that work is much easier than 30 or 40 years ago when there were no modern machines. It was a "curiosum" when a new production line from the Netherlands was installed" (Antónia).
>
> "so, I believe where there is worked with raw materials, where there are chemical processes it cannot be digitalised, so it will not ease the situation. Maybe certain things could be automatized, but there is still more need for the workforce" (Anita).

Insufficient education and work opportunities have worsened development of the Hungarian labour market and economic structure. Poor qualification of the labour force has become lately a hurdle in production processes that coincides with the shortfall in the total number of individuals in the labour force (Köllő et al. 2017:49). Older generations leave the labour market, but newcomers do not possess the same qualities. Thus, some companies started to realise their training programs especially for people with high-level qualification but also, they started a new vocational training program to improve skills of their labour force.

Another reason is that those workers who become mobile do not stop within the borders of Hungary due to the vast regional differences and bad infrastructural conditions that are often demotivating for getting employed since travel expenses are often higher than salaries. As it was argued in the literature, transnational migration enables the realisation of better job opportunities, higher income returns and social mobility for migrants. This statement is represented in analysis results (cf. Carmel/Cerami 2011, Verwiebe et al. 2017).

In 2011, the government established public work programmes to overcome long-term unemployment. Quite like the studies of Ágh et al. 2016, Blaskó/Fazekas 2016 and Fazekas et al. 2013, interviewees stated that the introduction of public-work programs however created a second economy in the country because of the difficulties for the participants to return to the primary sector of the labour market (cf. Cain 1976:1218) (cf. Diaz-Perez 1993). Wages in the second economy are very low that only fits low qualified workers. According, to the interview partners, there should be much more invested in the fields of equality and work protection and information dissemination (cf. Dickens/Lang 1992, Greenwood 2016, Sengenberger 1978).

It needs to be furthermore highlighted that labour migration is not a homogeneous process within Hungary due to regional disparities (Delteil/Kirov 2016:1-2). People from more developed regions go abroad in order improve a little on their personal circumstances. However, people from the least developed regions are forced to leave the country because of existential reasons. Therefore, it could be argued that migration processes and capability of mobility of people are firmly connected to the unequal distribution of capital within Hungary, and thus labour migration is a highly selective process (Jelinek et al. 2013:103).

5.3.2. Employment conditions

Second-most emphasis was given to employment conditions that can be analysed both as a cause and consequence of current labour shortage.

Even though different measurements have been implemented to ease the conditions for employment, it is often not successful and does not lead to higher employment rates. Recruitment of workers was supported by the government in the form of public work programs; employees are moved to the sector where there is a need to overcome labour shortage. However, often without the necessary behavioural and cultural qualification. Furthermore, reorganisation of the labour force in the public sector is not easy because retraining programs with a short period of education typically do not work. It also became clear that the state is Hungary's biggest employer and it is in power over supply and demand. A critical finding of the research is that specific governmental measurements like the implementation of public work programs or the restructuring of the supervision of social services can influence the supply and demand of the labour force in a way that main losses are covered. The state can stimulate down-sizing in one sector, filling the gap in another one (Borjas 2013:11).

Due to the tight labour market, the pressure on workers regarding wages and working conditions are getting higher. The current situation forces overwork and new strategies from employment side:

> "Overtime hours, no early time pension, average salary: it is not more than any worker's in McDonald's or a shop-keeper in the supermarket apart from military jurisdiction, constant overwork, permanent supervision from the directorate, constant controlling and the control of controlling of controlling of controlling…" (Gábor).

Beside of economic factors, environmental conditions in the workplace are main motivational factors. For example, Ágnes told that achieving higher wages have always been a problem, however:

> "many other things do not cost a thing, but still make qualified labour force leave".

Furthermore, workers suffer from the lack of appreciation*:*

> "do you know what the employer says if someone resigns after 20 something year? I am sorry that you could not keep up with the tempo. The poor worker who has been working so hard passionately, for 20 something years. If somebody said me this, I would start to cry. This is how they respect a person. Even if they do not respect his job, they should respect this poor human-being who is contributing to the firm's success for many years" (Antónia).

It is believed that working conditions in SMBs are much worse than in TNCs like they do not pay for sick leave or holidays. However, TNCs are often not much better. The interview partners said that TNCs are willing to treat the employees worse in Hungary than in their home countries because of downward pressure from the parent company on the local management (Drahokoupil/Jepsen 2017, Makó/Illéssy 2016).

It often happens that employers try to avoid the law. For example, in trade and tourism or poultry industry they rewrite the employment contract:

> "they even try to reshape the labour law and employ black-and-grey to avoid paying the officially raised minimum wage. So, they rewrite the employment contract to 4 hours while in reality, the worker is employed in 12 hours. "Payments under the table" will not be counted in his pension or sickness leave, so he was working for nothing during many years" (Ágnes).

Antónia also complained about the appalling working conditions in their sector despite low wages:

> "they do not do anything against it like changing working conditions or paying a little more. The organisation of work has not changed either. People often start to work at 6 in the morning without knowing when they will leave in the evening. There is no program-like and foreseeable planning. […] Some people start to work at 2 p.m., but they must arrive two hours before the work starts so they can take part in closing the shift... Or there was an employer who said that he does not pay any allowances for shift work from 2 p.m. until 10 p.m. while between 6 p.m. and 10 p.m. it is compulsory. He excused himself that the first shift does not precede the second significantly. However, this cannot last long…" (Antónia).

Employers still find excuses not to mark working conditions better, and that is also ensured because of the lack of governmental measurements:

> "since no one would supervise it, or even if there is an inspector who would notice that something was not performed, there are no sanctions. Employers ignore regulations. For example, a skilled worker should be paid the guaranteed wage minimum, thus 600 Euros. But it is easier to pay approx. 460 Euros, so they declassify him to a position where they can pay him less" (Antónia).

Furthermore, differences within Europe also influence employment conditions and production processes and mainly the standpoint of employers. Tihamér said the following:

> „the owner's standpoint is that a similar plant in Norway can run with 360 people while we are 700 people. But it does not mean that we are too many because the structure of a Western European company is different taking into account service, maintenance, accounting. This technical stuff is more specifically organised on the foreign market".

Apart from higher salaries, Western European countries are attractive because they also offer better of working places, better health care and social welfare system, generally said health and safety at work and in daily activity, in one-word better employment conditions. Therefore, the Freedom of Movement became the cornerstone of brain drain from Eastern European countries (Bartram et al. 2014, Carmel/Cerami 2011, Geddes/Scholten 2016, Verwiebe et al. 2017, Wolburg 2001).

Recruitment

Due to the high competition between employers on the labour market and the lack of skilled workers that already hinders production processes, employers are forced to develop new strategies to recruit new labour force. For example, the promotion has recently become very important. While before there were long lines of employees, today employers have to work hard to find suitable labour force. Therefore, firms hire recruitment companies to improve their marketing and communication strategy. This result confirms Barnow et al.'s assumption regarding recruiting efforts in forms of advertisements, expansion of recruiting area (Barnow et al. 2013:5).

While previously, it was a typical strategy of companies to attract labour force from another company by offering them a little higher salary, currently, this possibility is mainly finished. Alternatively, workers recommend their friends or acquaintances for the job in exchange for a specific reward:

> "I do not even know, but maybe it was one and a half year ago when one […] company paid a bonus to the workers if they could bring someone to work. So maybe formally employers cooperate and promise that they do not do it. Meanwhile, they are still competing" (Anita).

> "there was a kind of recruitment too […] that our workers bring here another person to work […], and I am also on the opinion that it is much cheaper to reward […] employees for example with 150 or 300 Euros if they bring someone. Because obviously if someone recommends someone for the job, then this person is sure that the recommended person is worth it, is not lazy and won't leave the job. It is much cheaper than hiring a head-hunter company" (Ancsa).

In public services sector, recruitment was not a problem before, since every colleague could recommend their friends or acquaintances based on their opinion of the person. That system worked well, and they have never had a problem with the labour stock, but currently, it is complicated to find suitable candidates. Currently, jobs that require both physical and mental health do no attract young people, or people fall through when it comes to net of responsibility, physical and psychological conditions. For example, Gábor said that because of these reasons they are forced to recruit people by themselves. However, it usually is without any result:

> "it happened that a journalist came to ask us, but we said that he should see himself because he did not want to believe us. There was recruitment the day after […]. So, he went there and all together they were 3 people. When they announced that the training takes 6 months and they pay only 100 or 200 Euros per month, one of them immediately stood up and left. The other guy only stayed because he wanted to become a firefighter and he had his parents support so he could afford himself to stay".

> "Currently, in one of the factory, they wanted to employ 25 people because the current stuff cannot cope with the job neither physically, nor mentally. They have too much of extra work. They wanted to hire 25 people, and only 3 said that they would try to work. But I am not so sure that they will stay long, so we will have to tilt at windmills again, because people get nervous, physically exhausted, so the workforce rather goes on sick leave and accepts to receive only 60% of his salary […] But since employers still see that they can select between workers they are not willing to pay more for this job, to their employees" (Antónia).

Employers expanded their recruiting area because previous recruiting methods proved to be insufficient. However, while Barnow et al. argue that bonuses, improvement of pay and fringe benefits for employees who bring in workers are a direct result of labour shortage, research results illustrated that this recruiting method has been traditionally used, and while before it worked, currently, it is not a solution (Barnow et al. 2013:5). Accordingly, research result slightly differs from the theoretical assumption. Due to the high competition with other employers on the labour market, and because previously tried and tested methods fail to help the situation, new strategies are being developed in order the find the required labour force (Barnow et al. 2013:5). For example, HR management of companies initiates cooperation between each other since fluctuation of labour force generates extra costs (contracting, training and maintaining the workforce) (cf. Brozova 2016:547-548).

Hiring foreign workers

Even though it is rejected in the political discourse, there is a high number of foreign workers who are working on the Hungarian labour market. Due to the current labour shortage, the source of employment became foreign employees especially from neighbour countries like Ukraine or Romania. The government has even launched a settlement program for them that accelerates the bureaucratic procedure. They receive the minimum wage and are provided with accommodation and transportation; thus, Hungarian workers often find themselves at a competitive disadvantage (Ákos).

Overall in the country, it is not popular to hire foreign workers, first because Hungarian society has a homophobe attitude towards them and because of the language barrier (according to the interviewees). In some sectors, language knowledge is a crucial element of the work, because not even one word can be misunderstood:

> "We are struggling with the labour shortage, and it cannot be helped. There was a conference 3 weeks ago with employers together, and it was discussed that they could bring Ukrainian workers just like as they brought them into the construction industry. Well, maybe it works in the construction industry where there is a work manager who translates what and how to do, but here to employ a translator including accommodation, food and repatriation would cost much more than paying a normal salary for the already employed" (Ágnes).

The Japanese Ibiden Hungary Kft. employs Ukrainian workers that are first employed through temporary agencies and selects the best workers. From 2500 employees 200 are Ukrainians. However, this type of employment also leads to labour shortage because it selects between the employers instead of training and keeping them on a long-term (Dániel). Furthermore, in some cases, they disappear after their training program to find better work in Western Europe (Tihamér).

Temporary Agency Workers

Hiring temporary agencies became popular during the 2008 crisis because very often employers could not afford themselves to provide eight hours job to the workers. It is one type of atypical classical work; protecting the interest of those who are employed temporarily is almost impossible. Leasing workers from agencies are the strategy of companies that do not want to create new positions or offer fix-termed contracts to the workers. Zoltán commented the following:

> "But, of course, it is also a better solution to have such a group of employees than downsizing because of diminishing production […] It is, of course, a much easier solution for the management of a company, but at the same time, it may also pose a problem of operational security if some firms heavily rely on or overestimate this lending job. Since leased employees may not be such good professionals […], the quality of their work is unknown. Thus, it is a double-edged mission".

Temporary agency work became the practice because companies profited a lot from hiring people only for 2-3 days. Employment of temporary workers is still used for profit maximisation:

> "it is a common thing however they start to realise that a temporary worker is never going to be the same as a permanent employee. But of course, they can manipulate the expenses very well and unfortunately the interest for this is still stronger then the interest for receiving good service by devoted labour force" […] "we have always commented to the management that […] it does not worth to train these people for 3 weeks if they anyway leave afterwards. […] So, what is more economical? Our workers are an expert in everything who can be trusted and work well. They should be paid a little more so there would not be a need to hire people temporarily" (Ancsa).

As Ildikó mentioned that one reason for hiring leased personnel is because of less financial and administrative obligations in hiring them; employers must not notify temporary workers at the authorities. Another reason lies in the current labour market situation in which people cannot cope anymore with the increasing pressure in work while production cannot stop. This results employees' disadvantaged position, however, companies can be rescued from closing down (Zoltán). Accordingly, it can theoretically happen that a company has zero personnel even if they are leasing employees. Because during their training period, they do not have to be declared as permanent workers. Temporary agency work also became a tool for employers to test newcomers without any definite commitment or responsibility; managers use temporary employment to test the labour force whether they are "worth" to be hired on a long-term.

The New Labour Code left scope for the application of temporary agency work which does not secure severance grant and notice period for dismissal. Ildikó argued that a worker if it is temporarily hired, can be fired as if he would have never worked. Currently, conditions of temporary employment changed, and workers receive one month of severance grant, but their notice period of dismissal was extended. The limit of temporary employment at the same company is five years. After that period, the temporarily employed person usually gets fired instead of being permanently hired. However, employing temporary agency workers are strictly regulated:

> „liability rules are stringent, thus if someone causes material injury to the temporary agency worker, then both the Lending and Borrowing party are severally liable for the causes. Thus, a temporarily employed worker is more expensive" (Ildikó).

The problem is furthermore complicated by the lack of awareness of employees about the consequences of the temporary work (Zoltán).

> "one-day workers will realise that this is not good for them because while employers are getting richer […], they live worse. That is why there is a need for collaboration as it was before in the golden age of trade unions, but there is no sign for this yet" (Ágnes).

Summarizing, it could be said that hiring temporary agency workers became lately a common practice and often head-hunter companies also help the recruitment process. However, the institution of temporary agent workers must be critically approached since it is an atypical form of employment (Ágh et al. 2016:8).

Overwork

To eliminate labour market shortages, lately, overtime hours have been increased; some requirements for qualification of workers for specific jobs were also reduced as the need for professional workers is higher than general qualification of workers. As it was previously argued, in some cases, work is contracted out, however, in certain professions, it cannot be a solution because of high qualification requirements (Barnow et al. 2013:5). Therefore, research results reassure the Barnow et al. (2013) and Borjas (2013) statements.

Overwork has become an everyday practice:

> „Currently, we can only solve the problem with overwork. Our employees work 12 hours instead 8, and they even work on the weekends either on Saturday or Sunday. So, this is a lot" […] „even if there is a problem with the labour force, production processes must continue the same way, the required volume must be mounted. So, this can only be solved by overwork of high-skilled workers. However […] young people do not want to overwork, not for this money and older generations are simply tired" (Erzsébet).

Due to the substantial requirements, this cannot be sustainable on a long-term. Therefore, they also launched a new recruitment program:

> „in law enforcement, the problem started with fluctuation, because there is also fluctuation, and here especially the professional stock fluctuates because we also have public workers in law enforcement, in captaincy. So now we had to launch a new system to convince the youth to become border police because there is a huge labour shortage in border areas. So currently we try to overcome the shortage with the internal workload, but we are back on the treadmill again because while somebody works for someone, we have to find another person who works for this someone" (Katalin).

Pension system

In specific industries, workers' responsibility is very high even if they are hired as semi-skilled labour. Workforce started to leave these jobs because of increasing responsibility and burdensome tasks. Hungarian labour stock is physically exhausted and collapse under dire employment conditions.

According to the interview partners, regulation of pension system on a European level was especially harmful because the quality of life and social care in Hungary cannot be compared to Western European standards (Galgóczi 2017, Myant 2016). Gábor told the following:

> „real time bombs are sitting at the wheels of Volán (regional bus company), 60-70 years old people who take their heart medicine before getting to work. This is a huge problem because first there is no labour supply, second, these people older than 60 cannot go on pension, while they cannot even get on the bus or the train without help".
>
> „retirement age is being extended annually while the number of holidays stops at the age 45. This means that the minimum number of holidays is 20 plus 10 days after a certain age. It was the same when people retired at the age of 55 in case of women and 62 in case of men. Now the retirement age is 65 but the number of holidays remained the same while an older person would need more time for regeneration, relaxation" (Erzsébet).

New regulations resulted in the abolishment of the previous pension system. Public servants could retire earlier than the rest of the population until their retirement age limit was raised up to the population level that has dangerous consequences:

> "We had an excellent pension system. After 25 years of service everyone could go on pension, or if they finished a certain year of service within the FÜV procedure (procedure for suitability revision), people could go to the service pension" (Gábor).

> "nobody thinks of the early death in this profession because of the strong physical workload. Also, I would like to address the question: do they think that a 62 years old policeman will be able to run after criminals?" (Katalin).

On the margins of the very human side of East-West division, it could be said that EU regulations make people's employment more difficult on the (semi-)periphery because of extended retirement age and increase in the number of working years for the calculation of pensions. Current measurements aim to return pensioners to the labour market after their retirement. However, social security conditions and people's health is incomparable to Western European standards (Galgóczi 2017, Myant 2016).

5.3.3. Regional Differences

The research reveals regional differences apart from national disparities, on the global and European level.

Hungarian regions adapted to the new economic order differently, first after the transition. Spatial segregation of Hungarian regions has further accelerated after the accession to the EU especially in urban-rural relation.

Rural areas offer fewer opportunities and additionally, employment is more difficult due to inadequate infrastructure and transportation (Sik/Szeitl 2016, Hárs 2016). Currently, regional disparities are hurdles in economic development; due to poor employment conditions unemployment rates are high in the countryside:

> "it could be said that people are afraid, even those who are employed, of losing their means of subsistence. There are available jobs, mostly in the capital, but not on the countryside. People do not know where they can find a job while they have to maintain their family, to buy milk and bread, and their children have to go to school, so they need money to survive. Moreover, despite this, there is labour shortage" (Antónia).

Accordingly, research reveals different developments on the labour market: simultaneously to high unemployment, the labour shortage is also a problem. The reason is that there are vast differences between the quality of services in cities and the countryside. Still today, because of lousy infrastructure in rural areas it is a problem to employ labour force even temporarily (cf. Delteil/Kirov 2016:11). The costs of transportation or rents are often so high in rural areas that it does not worth to go to work in some cases. Therefore, fluctuation and migratory movements can also be interpreted as a result of different regional development processes. People from previously military-industrial areas started to migrate to regions which offered better living conditions. However, rapid depreciation of properties restrained migration from areas with lower income (ETF 2001:5). Having the geographical advantage, people from border areas in West Hungary choose to commute every day if they find a better opportunity (cf. Brozova 2016:544):

> „it was not common before. It started 3 or 4 years ago. People got retired or demobilised; maybe one left from a 100. But now every time more and more people leave. Only now six quit together. For example, in Szombathely, the master and his crew went from Szombathely to a village 30-40 km away to a packaging firm (in Austria), work on the production line. They earn the double, they sit in the car in the morning, they commute every day but it still worth it. No responsibility, travel expenses are refunded, what else would they want? No stress, no harassment…" (Gábor).

Thus, the labour shortage is instead a problem in central areas, while in peripheral areas like Nyíregyháza supply of labour is much higher than the demand of labour (cf. Borjas 2013, Tschopp 2012, Zerche 2000). Because of lack of job opportunities, people are forced to leave and search for work somewhere else which often results in moving abroad. Migration from these areas has become common already many years ago. Ancsa mentioned that two ex-colleagues left Nyíregyháza 20 years ago because the situation was so bad. In the public service sector, the second shift is forbidden that often makes people move because salaries are not enough to pay the mortgage and maintain the family:

> „while until now young fire brigades thought of themselves as professionals, today if someone becomes one of us, after having worked maybe for 5-6 years and receiving a better job offer and salary with 100 Euros more, would leave without thinking. It also happened that a firefighter after being equipped, finished the school, stayed only for a half a year. He left because he received a "better" offer as a lorry driver and a better salary. Moreover, we provided him with the licence to different vehicles and what for if he leaves in 2 minutes because we cannot pay him enough. If we cannot offer better salaries, nobody will come to work with us" (Gábor).

Gábor also called attention to the differences in labour services between Eastern and Western Europe. Because of the better employment circumstances, higher salaries and social care, Western Europe is a real threat to brain drain due to higher salaries. Furthermore, fluctuation within the country worsens the situation:

> "now not only Western Europe drains the labour force but different regions in Hungary too. The situation in general in Eastern regions is so bad that many people ask for help to get away from those areas once they notice the difference in other regions. I talked with many colleagues and even tried to help them to get from Nyíregyháza or Borsod or Hajdú to Győr or Sopron or Szombathely or Zalaegerszeg or other Western and Central regions.

> However, many who reach Sopron also start to work illegally in Austria for example twice a week and then slowly they quit" (Gábor).

Regional disparities are often seen as the heritage of communism (cf. Enyedi 2005, Gál/Schmidt 2016, Jelinek et al. 2013). In some cases, it was part of the ideology. For example, in the social care sector, old, sick and disabled persons had to be kept separated from the rest of the society. The institutional structure of healthcare also symbolised this belief: institutes were dispersed throughout the country far away from centres. Furthermore, it also had a practical reason; certain services and production processes were shifted to the countryside to combat regional unemployment:

> „this was the perfect job. If nobody had a job, those who worked in the "soci" as it is said (it was the abbreviation for social care institutes), they had […]. The salary was regularly paid, not much, but there was a salary. Nobody ever thought that it would not work. However, it does not work anymore. Everybody who could work already went abroad" (Antal).

Regional differences were further influenced by strict environmental regulations. For example, during production processes, dangerous chemical materials are created, therefore, it had to be a safe action for annulment (Anita). Many companies were located in rural areas because they could not meet minimum environmental standards in central regions. Plant productions, therefore, have been shifted to the countryside. The categorisation of occupations regionally influenced where employers opened up their enterprises taking advantages of regional characteristics. The categorisation of occupations is also influenced by an imaginary value attribution to certain professions that defines workers' social prestige (Rechnitzer/Smahó 2006:6).

5.3.4. Production Processes

During the interviews, the superordinate category of "production processes" was often referred as one of the main reasons that caused the labour shortage. More specifically, low-value-added production processes indicated the lack of technological development in Hungary.

More developed technologies require more qualified labour force and therefore higher salaries. However, specific production processes would not be worth to implement with highly advanced technologies, this is why low-value-added production is implemented in countries where labour costs are lower (cf. Böröcz 2012, Kanat et al. 2015):

> "there are certain segments which would not be worth to be implemented due to high investments. So, they transport such production processes that correspond to Hungarian prices and wages. Because the implementation of new production activities cannot be recovered in the short-run" […] "they bring productions to Hungary that would be loss-making in Western-Europe. Moreover, the high-value-added production which yields huge profit remains in Western Europe" (Attila).

Tamás complained that employers continuously cut expenses of training because students make many mistakes generating extra costs in terms of time and money. Costs that nobody wants to take responsibility of. Therefore, there is no financial basis for practice between real conditions. However, unlikely to office work where the CP can be restarted without severe losses, failures in manual professions are very risky (Tamás).

The results confirm the assumption that Hungarian labour market developments were strongly impacted by the transition period, the 2004 accession to the European Union and the 2008 economic crisis (cf. Bohle/Greskovits 2012, Böröcz 2012, Gál/Schmidt 2017, Pogátsa 2015). Contraction work that is done by Hungarian workers does not have any added value, therefore, the quality of work and labour force is degrading. Labour union representatives also emphasized that wages have always played a significant role in attracting foreign capital, and currently are kept low in order to keep investors and TNCs within the country (cf. Galgóczi 2017).

Transition

During the regime change, capital had to be imported, since modern technologies at that time were unknown in Hungary. These new technologies accelerated progress in education, training of labour force and facilitated lifelong learning programs that contributed to workers' professional and personal development.

After the transition, the Antall government (1990-1993) supported privatisation processes and the import of foreign technologies. Profits were generated without reproducing knowledge capital. Certain sectors were abolished. Only core economic activities were carried out to save labour costs. Besides, many companies were registered as private property, which meant that the owner and manager were one person, so the activity of the company was much less taxed (Ákos).

Very often, changes in economic policy have resulted in restriction measures. The first shock came after the transition when about 1,5 million people were shut out of the labour market. The accession to the EU brought the decline of specific industries resulting in high unemployment again. For example, István argued,

> "the period of democratic change brought exactly the opposite what we expected. In the market economy, automatization, technological development meant the loss of jobs and the reduction of the workforce" (cf. Brozova 2016:547-548).

During the 1990s, Hungary's leaders aimed to provide property right to the management of the country to create a national elite to counterbalance foreign capital (cf. Bohle/Greskovits 2012). That harmed bargaining power of labour unions since these always had to adapt to a new situation without knowing what they can expect (Dániel) (cf. Bafoil 2016, Pogátsa 2015).

Preparing for Accession and Membership in the European Union

Hungary had corporative advantages in agriculture and food industry that has been progressively downsized after the transition and after 2000:

> „the whole poultry industry was sacrificed for the EU accession. Some sooner and some only later" […] "the closure of factories, bankruptcies and liquidations happened very often to beat off competition, or they downgraded firms until such an extent, so they could sell it for a meagre price" (Antónia).

After the joint to the EU, agricultural production has been further curtailed, and agricultural policy ceased to exist. Furthermore, the price of agricultural production rose so sharply that it was cheaper to import them, abolishing previously competitive sectors (cf. Böröcz/Mahua 2005, Pogátsa 2015a):

> "if the competitiveness of industry could somehow be developed, but there is no improvement until now. When we go the shop, we see that products from the EU and overseas are cheaper. Since our products have a relatively high price, of course, it does worth to import chickens from China that are raised under 'free range' and not in sheds with infrared lights, so the little chickens do not freeze. Moreover, even if the industry would be developed, then there are the poultry diseases" (Antónia).

Antónia furthermore added that once they have a terrible year in production, then they cannot provide people with work.

The situation is similar to the food industry and trade and tourism. The situation is often worsened by the fluctuation of owners that always have severe consequences for the employees. Especially the year 2002 brought much liquidation, and redundancy payments were not paid. Only firms could have been saved from closing down that were in a convenient distance from central areas:

> "those factories which were on frequented places or better said far away from bigger cities, they could not have been saved" since these were labelled to be no longer profitable: „normally, factories in good locations with provincial capitals and thousand employees were shot down" (Antónia).

Tamás complained that their company went through colossal restructuring and downsizing based on European Union principles. He also argued that the accession to the EU also mean that economic and statistic factors became highly dominant in decision-making processes at their company. However, he said that in this profession subjective standpoint is required because human resources are the central pillar of this industry. In the last ten years, downsizing was a general strategy in the firm. While in 2007 their physical stock was about 700 now it is barely 400,

> "In Hungary, there is not even 2000 persons, maybe 1500 who works as a gas worker while in whole Europe Hungary has the second biggest gas network […]. Also, I do not think that there is anyone in the country who would be worried and would not be able to sleep, although, it could do ugly things that nobody thinks of. Currently, the whole system is run by 1500 workers in Hungary, and I think that it is way too few. However, due to economic indicators and international trends, this industry was narrowed down".

After 2004, as custom penalties were eliminated, low-value-added production processes have been implemented. Many companies from Asia settled down in Hungary to produce to European markets. Currently, the Eastern Opening has become one element of Hungary's trade policy due to Hungary's excellent geographic location. Thus, highways construction has become an integrated part of Hungarian economy for further transportation toward Western Europe. Accordingly, Hungary attains a gate position in world economics by providing manufacturing places for Asian companies like Apollo or Hankook Tires that are generally assembly activities (Ákos). However, the politics of Eastern Opening is often criticised because it has a downward pressure on wages, working moral and culture. Thus, stricter quality assurance is required (Zoltán).

It could be said that Hungary's semi-peripheral position in the world economy required a highly centralised institutional and infrastructural background to fulfil production requirements of East and West. Accordingly, Hungary is dependent both from centres and peripheries and fulfils a transit position for international trade that does not provide much upgrading possibilities in the world division of labour (Gál/Schmidt 2017:78-79).

After the 2008 Economic Crisis

The next shockwave started with the 2008 economic crisis which called for new initiatives from below. Representatives of labour unions remember for this time as a threat to their employment. 2008 crisis have had a high impact because of collective redundancies. At that time, labour unions had to work hard to organise work in a way that people did not lose their jobs:

> "we had to organise ourselves how to save energy, how to organise language courses for those who were "unnecessary" at that time. For example, it was interesting to see how employees saved 50% of the energy of a hotel because everybody felt that salary and existence depend on it […] but anyways both employers and employees knew that they have to work together to maintain working places. The employer felt that he has to keep the skilled people somehow because one day the crisis will end".

Quality of Production

As it was previously mentioned, although foreign companies work with more advanced production processes in their home country, in developing countries they adapt to local and national conditions of an economy, and they avoid implementing forms of production that would require technological development and higher qualification of labour (Drahokoupil/Jepsen 2017:42). The interview partners mentioned that owners of companies from Western Europe or Atlantic regions often implement outdated and decaying technologies in Hungary. Alternatively, employers from developing countries bring new technologies that have not been tested yet. The interview partners argued that the reason why multinational corporations chose to produce in the semi-periphery is due to the quite high standard of work ethic, infrastructure, the culture of work and quality assurance compared to peripheral regions.

The governmental program of "Eastern Opening" aims to attract investments from Asia like Russia, China, India or South-Korea. The reason why these investments come to Western Europe is that they could not produce the same quality in their home counties but compared to Western Europe production costs are still lower.

It was highlighted during the interviews that production processes have changed after the joint to the EU. She said that before the accession production was less regulated that ensured Hungary's comparative advantage compared to Western Europe:

> "At that time, we had material and production processes which were rather dangerous from environmental or health point of view. Moreover, it is not just rumoured it turned out indeed, that all materials or processes which did not correspond to European standard

> because of gas emission or negative consequence on health, were shifted from Western Europe here" (Anita).

Accordingly, working conditions allow safe production but still at a lower price than in Western Europe also because of less environmental regulations. Anita said that employment conditions and production processes are profoundly influenced by pressures from the top management of the parent company. She said that local managers to preserve their position, often overload local workers. She said that Hungarian subsidiary does not lack the technological equipment and they are more efficient than the parent company. She told the following:

> "a new production system will be installed from January, so there is much development to boost efficiency. I sat down with the person who is responsible for the whole procedure, and he told me that he was lucky to visit many factory plants in […] (because of privacy reasons, the name of the country was deleted). He said that they work with much less efficiency than us. However, they have the privilege of being the parent company and national plant so they can sit back without any consequences".

It could be said that technological development and production processes at the parent company usually are different furthermore, the situation is worsened by a hierarchal relationship between them: "So it is like if you would buy the onion from here, and the potato from there…" (Anita).

Ancsa shared similar experiences; she said that even within the group of their different company products are sold at different prices while the profit goes to the same owner. This is a disadvantage in the distribution of products of competing suppliers. She highlighted that it is not indifferent if the product is sold in Austria or Hungary because of the different currency. Thus, profit still has priority before wages and employees. Therefore, parent companies integrate themselves into the circumstances of a given country:

> "There is no such thing because the foreign owner absolutely adapts to the local situation, immediately adapts, because he sees that he can profit from this. He has lower labour costs than in another country while being the same effect. So, it is fun for them" (Ágnes).

It is believed that in the Fourth Industrial Revolution digitalisation processes and technological development might replace labour force. However, it is often not the case because of the low education of labour force. According to the interview partners, Hungary should utilise its corporative advantages since there are no available raw resources. Therefore, economic development should be based on human capital which is neglected in the current debates. Jobs related to transportation and logistics are currently the practice due to the geopolitical position of the country. However, it only attracts assembly work which does not require any technological development (cf. Böröcz 2012, Galgóczi 2017). Substitute machinery for labour is not possible because of the substantially lower technological development in the country. Employees often do not have enough qualifications to operate high technology equipment.

A key finding of the research is that despite the lack of advanced technologies, production is often more productive than in Western Europe. This outcome of the research could be interpreted as evidence for the assumptions of Galgóczi (2017) and Myant (2016). Therefore, low wages in the CEEC region is not reasonable (cf. Greenwood 2016, Pogátsa 2015a).

The different technological capabilities and development in the region mirror structural heterogeneity and asymmetries within the EU. Different levels of economic development and the relatively low productivity in the Eastern European region result in growing social inequalities, unequal employment relations and quality of jobs and disparate yields between capital and labour (ECLAC 2010:85). Research results coincide with statements of Böröcz (2012), Galgóczi (2017), Myant (2016) and Pogátsa (2015) explaining that wage-adjusted productivity resulted that only those types of productions were implemented that could have been produced on the price of the Hungarian national economic average. Interviews and scientific works (Bohle/Greskovits 2012, Böröcz 2012, Gál/Schmidt 2016, Weissenbacher 2015) proved the liaison between the unequal distribution of wages and division of labour within the EU. More specifically, high value-added products are produced in Western Europe and low value-added in Eastern Europe preserving the dependent position of CEE.

An exodus of companies?

Currently, in Hungary, there is a growing demand for labour force with high educational attainment, but there is almost no such labour force that could fulfil the requirements. The question arose whether production is threatened because of the tight labour market and thereby companies would leave the CEE market to place their production into countries where costs of production and labour are cheaper:

> "the other day, we received a call from one of our company that they already employ everyone, but they cannot work so in 2-3 months they have to search for the new labour force to provide quality work" (Zoltán).

> „from one of our companies they called us whether we could find 300 people immediately because they could employ them, and they would like to increase production. Well, we could not (he laughs). Therefore, of course, now it is more difficult to attract entrepreneurs" (Richárd).

Specific production processes have been shifted from Hungary to other countries. For example, production processes of Vibroacoustic from Nyíregyháza has been shifted to Poland, or the Akzo Nobel co. or Michelin. However, these productions have been slowly shifted back because they could not produce the same quality in the new plants as in Hungary (Dániel). According to the representatives of labour unions, an exodus of companies is therefore not a threat. Moreover, only series productions can be shifted to lower-cost countries since these production processes do not require highly-skilled workforce. Companies with important production plants and high-value-added production cannot move that quickly. Effectivity of workers and cheap production make companies stay.

Anita said:

> "I believe that we are still alive because as the managers of the parent company also stated many times that we have such high-level competence which they do not even get in their home country. This is thanks to the old school-system which educated outstanding chemists. […] Because in their home-country, people are hired after a half a year of vocational training, and they are only specialised for a certain activity. We are very few people here, and everybody does everything, so everybody must know everything, and this requires very high competence […] our 3 plantations are so full of work that we cannot even accomplish the requirements. So, I do not think they would leave. It is true though that they are buying new plants in India or China and they bring certain production processes there. It is not yet a threat, but probably it soon will be".

> „well, we could say that we shift the production to India and China because they also fulfil the high-quality standard since the American FDI inspection supervises them too. However, moving transport and logistic activities would be a difficult task" (Erzsébet).

Therefore, the assumptions of Kanat et al. (2015) cannot be applied in the case of Hungary: interviewees argued that in non-EU countries, inadequate infrastructure, the dominance of religious and cultural traditions hinders capitalist mode of production and capital accumulation in peripheral areas that are often labelled as threat to safe production that puts people's lives in danger. Anita said the following:

> "One of my ex-boss has been to India for an audit, and the conditions are the same now there as it was in the 80ies here […] it is worked under Stone Age conditions, but the quality is still good enough to sell the products".

Moreover, low labour and production costs, the quality of work, high work ethics and the professional knowledge of Hungarian labour force make businesses stay:

> „the labour force in Hungary is still cheaper than in other countries in the EU. If Hungarian wages were as high as in other member states in the EU, then no investors would come to Hungary. Neither the Mercedes nor the Audi would have established their production facility here (…) thus I believe that the governments make all the necessary

> measures that Hungarian companies remain profitable. Like currently levy reduction so that it is also inviting foreign investments" (Erzsébet).

Hungary in the world division of labour

One of the most important findings of this research was that dependency relations hinder structural changes in the economy and the improvement of quality education. Based on the interviews and the literature, it could have also been concluded that FDI and MNCs based development does not result in vulnerability and unsustainability in the domestic economy. However, due to the weak national elite, the national economy is not ready to connect with global investors and international markets that would require the high participation of SMEs in GVCs by high-value-added production processes (cf. Delteil/Kirov 2016, Makó/Illéssy 2016, Streeten 1981). The relation between MNCs and SMBs is conflicted by their different room to manoeuvre due to their different productive capacities. The issue is further complicated by current governmental measurements favouring TNCs. The competition between them is very high mainly because of their different levels of capital. Production processes in Hungary became more expensive after the transition and after 2004 that is in connection with Hungary's growing embeddedness in global markets and cheap import of foreign products. Nevertheless, Hungary's lack of competitiveness is due to the lack of language skills, low level of further training, the absence of cooperation/networking and the low intensity of innovation which are the key to connecting to GVCs (Pogátsa 2015, Makó/Illéssy 2016).

While Transnational Corporations have a bad reputation in the CEE region, it could be said that culture of business and ethical employment relations was implemented by them (cf. Bafoil 2016). Although the positive impacts of foreign direct investments cannot be denied, adverse consequences must also be highlighted. The national economy was harmed because of the lack of national knowledge-based economy and human capital development (Böröcz 2012:25).

Even though transformation took place a long time ago, the CEE region did not lose its specific character and still didn't resolve the challenges from the transition period and EU accession that both had a significant influence on labour market conditions and policies. Despite of having established the institution of market exchange, free price system, predominance of private ownership and private profit that allowed the regions integration into the world economy, economic levels and structures, forms of ownership; capital market operations and the link between businesses and political power does not allow to compare the newly established capitalism to those in Western Europe (Drahokoupil/Jepsen 2017:43, Myant 2016:5). "Top-down" Europeanization processes are to be blamed for the divergence between European regions that lack resiliency and local knowledge. Moreover, after the joint to the EU, agricultural production has been curtailed, agricultural policy ceased to exist. Furthermore, the price of agricultural production sharply rose to such extent that it was cheaper to import them. That resulted in the abolishment of previously competitive sectors. The statements of Böröcz/Mahua (2005) were therefore reassured in the explanations of interview partners. This model did not support research and development in the region but destroyed the roots of the knowledge-based economy in Eastern Europe (Böröcz 2012). Due to the lack of national economic strategy, Hungary's infrastructural and logistical potential remained untapped (Delteil/Kirov 2016).

Since the development was due to exported technologies from abroad, Hungary's economic development is highly dependent on foreign economic factors (Drahokoupil/Myant 2016, Gál/Schmidt 2016, Pogátsa 2015). Currently, low-value-added productions and works dominate the labour market because of the lack of modern technologies and because of high personnel costs. Therefore, according to the interviewees, Hungarian companies are not able to deal with the new technologies because of energy-sensitive production. Due to the country's semi-peripheral position, there were no investments made in Research and Development sector.

5.3.5. Labour market strategies

Based on the statements in the theoretical background, it could be concluded that the results of the analysis strongly relate to the strategies of labour market actors. The complexity of the issue has come to the surface during the interviews that are manifested by the often-overlapping topics.

The fifth and last category was labelled as "labour market strategies" because here the focus of interest is to describe decisions made by labour market actors and to analyse interactions between them. The role of labour market actors and Hungarian labour market have considerably changed after the transition period. Major concepts related to the description were lack of unity both on employers and employees side. Therefore, Hungarian labour unions are weak because of the descending number of their members and the loss of their bargaining power. Current governmental measurements strengthen their marginalisation due to the centralisation of governmental powers over decision-making processes.

Hungarian labour market actors are the employers: the Hungarian state, multinational corporations, small and middle scale enterprises; often represented also by the VKF, the NGTT; and employees represented by labour unions. Labour unions, employers' associations have been established after the transition.

The research has found that regulatory powers are strongly centralised in higher levels of government. Decision-making powers have been shifted from the local to the governmental level. Thus, many people experience that they stopped influencing the course of their life. The specific political atmosphere in Hungary has a high impact on workers' willingness to migrate. Current employment measurements do not contribute to the welfare of workers. Moreover, meagre wages force them to find additional activities to supplement their earnings.

Trade unions in Transformation

While labour unions fulfilled human tasks during socialism, after the privatisation processes, traditional tasks of labour unions were abolished. Since then, they have an undervalued political and economic position. The reason for the negligence was the drastic change in the perception of labour unions: Hungarian companies aimed to get rid of labour unions. Only international firms had the interest to preserve them:

> "before the purchase, the Hungarian owner restored the plant, prepared the utilities and liquidated the trade union. Meanwhile, the Hungarian partner thought that trade unions are not needed, the American owner emphasised their importance. If anything gets wrong, only the trade union can help in the situation because workers will not address their problems to their superiors. I will be very vulgar, but the shit rolls downhill" (Gábor).

> "in the wave of privatisation, catering and tourism were firstly privatised. The central government believed that there is no need for central advocacy since working units were very dispersed like a shop and a restaurant can run on the corner without central organisation. Therefore, it was the ministerial resolution to distribute every company into million parts and then sell them one by one. However, we were lucky because at this time they still feared trade unions, so we could ensure our position in the so-called property agency to influence decisions of the new owners…" (Ágnes).

After the transition, work councils have been established after the German model holding essential responsibilities and often have more power than trade unions (Ágnes) (cf. Bafoil 2016:31). However, their establishment was not trouble-free because employers tried to use the work council against labour unions. Therefore, labour unions urged the chairman of the work council to become also the secretary of the labour union, so they cannot be turned against each other. Since then it is a tradition, and the positions of the chairman of work council and secretary of the labour union are held by the same person (Antónia).

Trade unions successful integration into the global market was supported by international actors like European Trade Union Confederation (ETUC) and the World Federation of Trade Unions (WFTU). The integration of Hungarian labour market into European markets was also supported by the idea to create working councils Europeanwise. These have already been functioning in Western Europe and after the expansion Eastern members had received the opportunity to join them. That ensured the newly joined labour unions to inform each other about employment relations in their home country. However, very often problems were discussed only on the European level and possible local solutions were neglected (István) (cf. Galgóczi 2009). Moreover, the membership in the EU work council is costly therefore Hungarian labour unions often cannot afford themselves to join.

Attila said that they are a member of the Euroforum that allows them to compare Hungarian employment conditions to those in Germany, England, France or Spain. He said that one of the most striking differences is wages.

It was also believed that the accession to the EU would help change the organisation of work and employment conditions in specific sectors. However, centrally made EU regulations are often not executed on the national level. For example, Gábor told that according to the European rule all fire stations should be grounded in 20 minutes driving radius from all destinations where a problem can be localised. Although new fire stations were installed according to this regulation, they never manage to arrive at the place of fire on time, whatever fast they are. He also complained that instead of investing in new equipment the central government only redistribute already existing equipment portraying the equipment if they were new.

Therefore, it must be pointed out again that regional differences and the unequal development of the different EU member states do not allow the enforcement of specific measurements. EU regulations often remain ineffective against national governmental decisions (Barta et al. 2005, Kornai 2008).

Labour Code

To palliate the consequences of the 2008 economic crisis, a new Labour Code has been issued to motivate higher collective underwriting capacity of employers.

The Labour Code was already being prepared during the MSZP government, but it was finally released in 2012 by the Fidesz government. Labour union representatives only refer to it as „Employers Code" since it overtly favours employers. It must also be highlighted that the Hungarian government is still the biggest work provider in the country. Thus, the new Labour Code in the first place provided the government with a bigger room for manoeuvre. The introduction of the new Labour Code could be understood as part of a social policy that aimed to reinforce employment after the 2008 economic crisis:

> „until 2012, it was the big heartache of employers who occasionally but very rarely had an opportunity to win any trial" (Ildikó).

Ildikó told her own experience with employment tribunal while the previous Labour Code was in force:

> „I had a trial because an employee lost one of his finger […] but then he asked for a huge amount of money, in forms of meal enhancement and other social benefits instead of financial compensation. However, he could not argue why he was asking for non-material harm compensation. Then the judge asked him, since he was Roma, whether he is more disadvantaged now in his environment (without his finger). He said yes of course meanwhile I was sitting there thinking that it is not happening. So why was I sitting there if the judge anyways was giving the instructions? So, what can I say, that time the Labour Court represented employees' side".

Ildikó also said that lately the Equal Treatment Authority started to favour employers. Previously, no EU tenders could be applied if the company had a case in front of the Equal Treatment Authority or Labour Protection services. However today these cases are made disappear,

> „the number of trials has been falling in front of the Equal Treatment Authority since the new Labour Code came into force. New trials are only alibi process […]" (Ildikó).

Ildikó highlighted that after the transition, in the 1990s due to the massive wave of redundancies many people became homeless. Therefore, the Labour Courts tried to compensate their losses.

The new Labour Code brought drastic changes. In 2011 unemployment benefit was reduced from 12 months to 3 months. Curiously, the governmental public work program was launched at the same time that is often believed to be the replacement of unemployment benefit.

Furthermore, employment conditions were eased: now, it is much easier to hire and fire the labour force. Therefore, labour defence is weak; employment relations are unbalanced. Employment conditions are centrally coordinated, and annual working time was changed.

Before 2012, job placement was more predictable and secure, and employees had more rights. Therefore, the new Labour Code is often criticised by experts. Its rules and regulations can continuously be changed by the government without informing trade unions about any modification. Employers often feel authorised for abusing their power over their workers. Therefore, employees became very vulnerable (Ildikó). Unaccountability in decision-making processes is also safeguarded by the retroactive effect of laws. This regulation harms the most employees in the public sector since their employer is the state and thus their employment is based not on a collective agreement but the Labour Code.

In practice, it means that severance pay of public sector employees can be reduced by law. Their main mail break is excluded from regular necessary hours; employees must stay after 12 hours of work 40 minutes more to compensate losses stemming from the break. Moreover, to avoid negotiations with trade unions, employers do not offer collective agreements to the newly employed personal but only bilateral contracts that follow the regulations included in the 2012 Labour Code. It often also results in the withdrawal of unemployment benefit.

Strategic Partnerships

Strategic partnerships are often presented in the media as something evil, and that harms employment conditions by favouring multinational companies (cf. Ágh et al. 2016:8).

However, representatives of private sector whose company was in strategic partnership with the government portrayed the situation positively. For example, Attila said that currently, the management is planning to expand production processes, but it is not yet foreseeable whether they will have the necessary labour force because of the tight labour market. However, the management does not need to worry as it is a state-supported project. He highlighted that the management indeed finds a solution to the problem since the government supports the process. Usually, interview partners did not have much information about the content of Strategic Partnership Program since it remains hidden between the state and employers. Also, it has only little influence on employees. However, strategic partners enjoy special treatment at the court against employees:

„the thing is now that you cannot win a case against strategic partners. Against strategic partners listed in the Government Decree, you cannot win any trial at the Labour Court" (Ildikó).

However, there are also some mixed experiences:

> "it cannot be much said about this. It is a framework contract. For example, the government carried out a strategic partnership contract with Heineken but then there was this issue with the Real Csíki Beer which the government messed up. So, it does not have any special significance. The government cannot interfere in market processes in favour of strategic partners because it would harm other labour market actors. Moreover, it surely does not have any effect on employment. It is only a possibility regarding tenders and other benefits" (István).

While before firms were proud to be strategic partners of the government now, they are somewhat disappointed because of the growing number of companies involved in the program.

Ancsa said that they had many hopes that the strategic partnership will benefit the company and therefore workers, e.g. concerning earlier retirement.

Another interesting point is that the treatment of different companies is not equal. Erzsébet and Tamás work both in state-owned companies, however, while Erzsébet's company produces for international markets, Tamás serves only national consumers. Thus, gas industry was not offered a strategic partnership, and they are very neglected. Agreements are often made secretly, and labour unions are not provided with the information regarding the contract. Thus, strategic partnership only favours employers while employees and their representatives are excluded from the decision-making process.

Despite some governmental actions, it could not be said that the relationship between employers and the government are better. Currently, entrepreneurs are seen as competitors for the government. The analysis has shown that there is a cooperation between employers and the government when it comes to social security contributions, aids, social and strategic partnerships. It is further manifested in the Labour Code (Dániel). Employers' advantageous position on the labour market creates an atmosphere in which the more power of employers does not allow to identify the seriousness of the problem of labour shortage.

Taxation

Hungarian economic structure and weak state capacity do not allow a real wage increase. Therefore, some measurements were introduced by the government to reduce employers' contribution to health insurance and to reinvest levy reduction in employees' wages. For example, in 2017 health contribution of employers have been reduced by 5 % that was expected to be reinvested in wages (Blaskó/Fazekas 2016:13):

> „they wanted employers to reinvest this 5 % concession of employers' health care contribution. At the same time, however, the minimum wage was raised which the employer cannot produce. For example, in the trade industry employment contracts were rewritten from 8 hours to 6 hours, so they do not have to pay the 160 thousand HUF. On the countryside, they cannot..." (Ildikó).

Furthermore, high taxes hinder wage development, too. Antónia mentioned for example that employers only organise events that are taxation free:

> "if somebody receives a bonus in 10% excess of the minimum wage, then he or she has to pay with almost 41% higher taxes, this is, of course, an obstacle".

Previously, there was a progressive tax system with multiple tax rates. Currently, there is a flat rate system that is not only unfair to the majority of society but also threatens with the abolishment of working places. Previously, the minimum wage did not tax that has been changed by the Fidesz government (Ildikó) (cf. Ágh et al. 2016:6-8). Currently, because of high taxes, many multinationals think to shift jobs, production processes and investments abroad (Ákos).

Especially in public sector, employment conditions got worse because of central distribution of finances from the central budget. The introduction of public utility taxes in 2013 was primarily harmful to public service providers. Higher tax rates hinder good quality service because of cut on expenses for materials. For example, Tamás highlighted that cutting off public utility costs could be seen as a positive measurement for the population but very harmful to the workers in the gas producing industry. For example, to keep prices low for the population, gas workers did not receive any wage increase, and further employment benefits were cut. Tamás said the following:

> "it should be invested in safety factors, and this is something that the state does not want. Currently, it says that for safety factors like professionals or regular pipelines are not worth to be paid. Also, it can be of course a good decision in the short term because the system runs still, but once these professionals get retired without any resupply and the cable network is getting old…".

Furthermore, high taxes demotivate investing in technological development.

Centralization and Nationalization

According to the literature, current governmental measurements aim to build a national elite that could be understood as a result of failed nationalisation processes during the privatisation (Ákos). The concept of "selective economic nationalism" by Tóth reflects this process as a counter-movement that aims to break the monopolistic position of MNCs in Hungary (Makó/Illéssy 2016:94). This proposition coincides with labour union representatives' explanation. Current state-protectionism selects between the different sectors mainly based on political loyalty between Hungarian domestic entrepreneurs. Meanwhile, supporting new FDI projects by the new Labour Code providing high flexibility to MNCs regarding work and employment conditions (cf. Makó/Illéssy 2016, Pogátsa 2015). Therefore, the current policy orientation does not eradicate inequalities but instead reproduces them.

As it was previously argued, organisational restructuring by the second Fidesz government harmed professional autonomy in many sectors by bringing them under the control of the central management. Centralisation processes are often manifested symbolically:

> „it was said that fire brigades were non-existing formations. The poor Ödön Széchenyi would turn in his grave who established the organisation in 150, almost 160 years ago. Compared to that the new organisation stands for 2 or 10 or whatever years. The disaster management is only seven years old, but the fire fighter's museum was already renamed to disaster protection museum. Alternatively, there is no longer fire orchestra because there is a central orchestra of disaster protection and the list could go on. I am even worried that they will recall all books mentioning firefighters to rewrite it to „disaster manager" or soldier" (Gábor).

Apart from depriving public servants of their symbolic power, changes in legislation hinder their work further: their supervision was shifted from the civil legislation to the military jurisdiction that is a more powerful decision-making body under direct governmental control.

The situation is very similar in the social care sector that was previously organised and coordinated in little units by municipalities, locally. However current governmental measurement started to establish a new institutional system of social care by giving the responsibilities to the church. For the monitoring of the public sector a new informatic system, a so-called "central command system" is currently under development that will allow top-down organisation and the shifting of economic and financial powers from municipalities to the central government. Governmental ideologies pervade politics and society that degrade certain professions:

> "until 2012 it was excellent within the law enforcement, we were a community, firefighters were working together as a family, policemen enjoyed their work, but it is not typical anymore. Employees are alienated and held under psychological control" (Gábor).

Nationalization of public sectors further curtailed the powers of labour unions. Labour unions have to adapt to the new system profoundly to influence decision-making processes; therefore, they often feel themselves to be tools of political 'games'. Authorities of labour unions are denied and shifted to the central management.

Modifications in legal circumstances make the job of labour unions also harder. Before the Fidesz government labour unions tried to fortify their position with laws, but currently, it seems that the legal framework can be changed first. Furthermore, it is also a problem that labour force does not organise itself:

> "The situation of labour unions were not different during the transition period: it is traditionally strong and stable, in other words, resistant to any change. However, of course, certain movements also helped reshape the old structure of labour unions. It has been transformed, democratised and modernised" (Antal).

Bargaining Power of Labour Unions

As it was already argued, main economic changes also influenced the work of trade unions. Firstly, associations and units lost their bargaining power as a result of privatisation processes as they were broken into pieces (Bafoil 2016, Pogátsa 2015). Not only the tasks of labour unions were reduced, but they also lost many of their members due to new governmental regulation that the changed compulsory membership to voluntary membership. As many trade unions are self-help organisations losing their members meant the loss of income from membership fees. This happening profoundly contributed to their marginalised position. Antónia told that right after the establishment of the trade union of Poultry and Refrigeration Industry they had twenty thousand members, this number is currently four hundred and thirty. In the public service sector, the number fell from 24000 to 8000.

> "There was a huge change in the organisation of labour union because until 31 of December 2011 labour union membership was automatically deducted from salaries. However, after the 2010-2011 street riots which were organised by public service employees, deductions from salary were no longer possible, and they froze pension-like treatment before the age limit. Consequently, labour unions lost 50% of their members." (Katalin).

Gábor said that in 1996, they lost 60% of their members and he also highlighted, similarly to Katalin, that they lost a considerable number of their members when the central membership fee deduction was abolished. Therefore, many labour unions were made bankrupt by cutting off the primary source of funding, or they merged into other labour unions. In the public sectors especially, losing labour union members might have dangerous consequences. Due to people's political unawareness, passivity, and incapability of collective actions, recruitment of members is very hard. People's disinterest and lack of knowledge about their rights and possibilities are often attributed to communism. For example, Antónia told a story regarding the right to strike:

> "last year […] our union faced unfavourable situation regarding hours, employment, organisation and equipment of work, so everything concerning working conditions. Therefore, we organised a strike, a warning strike. The strike committee was established, it was fixed with the employer when and how it will take place, so we will not disturb the work or any other market requirements. However, by the time we looked behind our backs, no one was there to participate. […] Or another time we were negotiating the collective agreement at a company, and we just saw that there was a huge crowd in the backyard. We did not know what happened. It was a wild strike; the employees simply stopped working. However, normally it does not work this way. It should not work this way. If working conditions and wages were sufficient, people would not need to strike".

Some representatives complained that employees are often not conscious about their rights and think only in short-term. Only in case of emergency, they ask for the help from the labour union:

> "people are not rushing to become a trade union member. They only start to think of it when their interests are conflicted. Probably we receive 5 or 6 calls a day that they are in trouble and they need our help. Then we ask them in which unit they are members, but very often they are not members at all. So, we ask them why are they asking for the help of the union? Then they say that this is the obligation of trade unions to help in such situations. However, even if it is not much, members pay a membership fee which maintains the union and in exchange, they receive our help. Because only ringing the doorbell of a lawyer costs more than the yearly membership fee" (Ágnes).

Probably the most harmful regulation for trade unions was the issuing of the new Labour Code that denied the right to strike. Ildikó told that already the 1989 Law on Strike is a rigorous framework of law:

> „it has serious literature, and it has to be read if one does not want to organise an unlawful strike" (Ildikó).

Ildikó, however, emphasised that the strike law somewhat influence strikes in the public sector since the state can easily claim a strike to be unlawful due to the lack of service. For example, when the right to strike was abolished, it did not relinquish the right of the individual but of the union. Katalin said that this is very rare in the European Union:

> "so now neither the police, nor the BKV (transportation), nor the firefighters, nor the background institutions of these organisation, nor the immigration office can organise a strike. The organisational strike was finished with this. It means that we cannot defend our interest in an enforcing strike. Softly said, nobody cares about published brochures,

> this is the truth. We are part of collective bargaining, and we are also members of the national civil service reconciliation council. Before, the home affairs council was run by the Ministry of Interiors, but in the last three years it functions only formally".

Antónia told that people are not keen on taking part in demonstrations because they are in constant fear of losing their job. Regional differences are also a string argument since in the countryside there are fewer job opportunities. Thus, she said, it is a fascinating situation that while workers struggle with unemployment, employers have to face the labour shortage.

It was believed that labour shortage would restore power to labour unions and contribute to their better position in decision-making:

> "in 2012 one of the plants went almost bankrupt, it was even closed for a while because there were many problems with it. At that time, we faced many restrictions which were only lifted in the last year. In the last year, there was a bonus increase and the 5% of employer healthcare contribution relief was also given to the workers in the form of wages. So, I believe if we do our job well, we can achieve now a lot because they cannot do anything else. They have to pay if they want to maintain the labour force".

> "there is a huge labour market shortage, especially in our profession, in the paper industry and it is getting every day more difficult for our managers. Now we have some advantages since we have more chance for successful negotiation regarding benefits and wages. We can argue that the current labour market situation is awful and therefore, quality job, hardworking labour and especially professionals must be paid a higher salary to keep them" (Ancsa).

It could be said that bargaining power in private sector is not as much restricted as it is in the public sector and bargaining seems to be more comfortable for them either. High fluctuation of workers makes the work of labour union more difficult, and it is different in each segment of the economy. Despite the expectations that labour market shortage will increase the bargaining power of unions, the situation did not bring real and sustained change for them. As it was predicted, in private sector labour unions have better position and success in bargaining. However, the situation got systematically worse in the public sector (Pogátsa 2015).

It could be furthermore argued that trade unions of private companies have always been in a successful situation because they successfully survived privatisation processes. Those who have already enjoyed a more privileged position have now also more benefits from the current labour market situation. Confederations of labour unions can sit down with the government thus the communication between the different representatives is very hierarchal (Ágnes). It should be emphasised that labour unions have difficulties with not being heard. As the research has found, labour unions have been enjoying the support of political parties in the 1990s, so they were not neutral. This resulted in their vulnerable position as labour market actors since they have always been pending from centrally distributed money (Antal). Furthermore, activities of trade unions are not systematically organised. Thus, they have difficulties by organising strikes or other social movements.

The answers of the interview partners have always had severe political and social connotation; critical voices arose against the current governmental labour market policy. The legislative background ensures the government and employers to keep labour unions out of the debates and negotiations.

Tripartism?

It could be said that different levels of discussion, collective bargaining and Social Sectoral Dialogue are not harmonised. This is as simple as that establishment of labour unions at the working places are not compulsory, accordingly, there are no such regulations that could be applied in every sector. It was also argued that very often not even the instructions of the Labour Code are followed. It could also be said that managers and directors of many companies usually do not like labour unions. Thus, they always have to struggle for their positions. Ancsa said that once they had new managers from car industry whose culture of work was very different, therefore, they did not take into account human factors in production. Employers still think of getting rich fast and not in long-term and sustainability. Nevertheless, it would also be in their interest to have the responsible and reliable labour force.

While before there was a robust social dialogue between sectoral partners, today it does not exist. Moreover, governmental representatives often do not participate in such dialogues:

> "if managers see that the government does not respect trade unions, so why would they do? New managers are young, maybe 30-40 years old. Therefore, they do not have the experience that trade unions were once respected. They see that nobody respects them, they will not do it either. This is why it is complicated to confront employers" (Ágnes).

Gábor also highlighted that there are not many platforms for negotiations. He said that they lately have to turn to the media. Otherwise, they cannot call the attention of the executive committee:

> "Currently we are in such a situation that to safeguard the interests of the colleagues and the profession we often have to say NO. No longer, because people's lives are at stake" (…) and unfortunately, we have to say that the government is playing with people's lives. Thus, the situation is very critical".

Anita also confirmed that labour unions are not invited in negotiation processes:

> "wage bargaining in our company means that we have a joint wage negotiation, which is the worst. We do not receive information in advance just at the meeting, face to face. If I would like to be very harsh, I would not even say negotiation. It is only an informant meeting which the employer gives us if he increases the salary. There is no possibility for confrontation, so the trade union either accepts or accepts it" […] "no one is invited to negotiation, neither the work council nor the trade union, we do not know anything. The last week there was an ÉTOSZ meeting, and I wrote down to myself that labour unions have to know what strategic partnership contracts do include. Because it should also include training programs and it would not be bad if we would also know about the details".

Antónia also said that,

> "our powers were given to the works council, […], without rights there is no control, no prior consent, we have no voice. So, we can say our opinion, but nobody cares neither on the local or the national level".

There are not many mutual strategies between employers either. Tripartite negotiations are rare, and the communication system between labour market actors is very hierarchal since negotiation takes place either at the upper or the lower deck but there is no mezzo-level communication (Ákos). Politics has an overall effect in social and economic spheres:

> "Professionalism has disappeared from this system. However, we do not want that the politics, or any other dilettantism gives direction to our work. We want professionalism back. It does not mean that we are against a control-command system since there is a need for coordination, but we would like to have support for initiatives from below" (Gábor).

Dual training programs are often a source of conflict between employers and the government since their coordination belongs to the Hungarian Chamber of Commerce and Industry. While Audi, Opel and Mercedes organise their training programs on a German design, Asian companies like Hankook Tire Hungary apply for state financial support to finance their training programs. Afterwards, they fluctuate the workers to get new financial support (Dániel). However, due to the lack of qualified labour force training programs must be started otherwise some profession will perish.

Anita said that their HR team and the Directorate of the company have good relations with the government and they work on programs together to overcome labour shortage. She told the following:

> "they are thinking in a dual vocational training programme. There is a secondary school in the district of our company, and we have a contract with it, so they can provide us with electricians and mechanics within the framework of traineeships. Currently, it still recovers the supply".

However, she stated that the problem is still concerning since the new vocational programs were launched already late and it might take up to 10 years to have a qualified labour force.

Tripartite bargaining is not universal; while employers are referred to be competitors for the government, labour unions are enemies (Dániel). However, labour unions and employers gather together regarding wage agreements, tax contribution, technology, employment conditions and labour rights.

The current situation is the continuity of a process that started during the transition period further hindering trade unions to exercise their powers (Bafoil 2016, Pogátsa 2015). Bafoil's statement of "one of the principal tasks of the transition to capitalism has been to break the resistance of the working class", was reassured by interviewees. They argued that labour unions have had a neglected position in labour market policy since the transition period and it could not have been recovered until today due to current governmental measurements (Bafoil 2016:25).

Communication with all actors is needed, central-planning and top-down mechanisms are old fashioned. Current measurements and increment of wages can only be short-term solutions: it might minimise the pressure on workers, but it cannot be a sustainable solution in a long-term. Despite economic convergence, there is a significant gap in the social and labour sphere that is further deepened under the current governmental rule (cf. Ágh et al. 2016).

5.3.6. Reconceptualising Labour Shortage

Currently, Hungarian employers call attention to their difficulties in recruiting labour force of the essential quality (Black et al. 2010, Hárs 2016) (cf. Sik/Szeitl 2016:56). In sectors without labour surplus, replacement of the lost workforce is almost impossible. Despite technological development, better equipment and working conditions, recruitment of new, and maintenance of existing members is still tricky.

Considering the classical economic definition of labour market shortage, according to which labour shortages must be identified by employer's willingness to pay, labour shortage might in Hungary be considered as not real. Taking into account the theoretical arguments of the work of Barnow et al. about employer's recruiting efforts, research results were inconsistent with these statements and illustrated that labour market actors' reaction is rather contradictory which might question the occurrence of the labour shortage (Barnow et al. 2013). However, one of the main finding of this research is that despite the contradictions between literature and research results, labour shortage in Hungary must be considered as real. Significant changes can be observed in employer's attitude regarding wages and employment conditions, even if the changes have happened for the worse. Due to the lack of labour force, labour market started to become more transparent, and wages are often specified in vacancy notices (cf. Borjas 2013:46).

Literature (Black et al. 2010, Csedő 2010, Gedden/Scholten 2016, Schreiner 2008) and interviews have shown that phenomenon of labour market shortage has already been realised for a long time in Western European countries. In Eastern-European countries, it was defined as a problem much later after the transition period, and currently, high outward migration makes the phenomenon unique for the region. Interview partners' reporting about emigration and fluctuation coincides with the arguments of Sik and Szeitl (Sik/Szeitl 2016:56). Problems related to these processes have accelerated in the last years. Based on the literature, emigration started only later after 2004 due to strong restrictions by old EU member countries, but interview partners mentioned that emigration, especially from Eastern regions, has always been a problem (Hárs 2016, Tóth et al. 2012). Therefore, critically viewed, it could not be said that Hungarian people's willingness to migrate was exclusively influenced by the accession to the EU. Nevertheless, only the accession made the high number of migration possible. Furthermore, migration processes were also influenced by the crisis of 2007/2008 (Bodnár/Szabó 2014:6).

The problem was also known before from reports from their colleagues, e.g. from Austria or Germany. It could be said that labour shortage became a noticeable problem 2-3 years ago while in specific sectors it has always been present. Mainly engineers, technicians and other professionals are missing. Even though they already knew about the problem at that time nobody took it seriously:

> "Honestly, we struggle with these problems, which came to surface now, for years without any solution" (Gábor).
>
> „we are now in the 23rd hour from 24" (Erzsébet).
>
> „Particularly specialists are missing, […] and we do not have enough chemists, because chemistry education is abysmal and deficient. Maybe, there are only 1 or 2 schools left that still train chemists. Currently, there is no shortage of chemical engineers and technologists. However, we are close to that too. Furthermore, we would need more people in other stuff like logistic, driving trollies or top management. Now, we are searching for a person in HR already for months" (Anita).
>
> "Absolutely, in the gas industry there is a huge labour shortage […] currently, there is a shortage of professionals like gas workers who grabs the pliers, goes down into the pit and welds" (Tamás).

The situation is worse in the public sector than in the private sector. It was believed that jobs in the social sector would never lack the labour force due to the existential and financial security that the job provided during socialism:

> „As a governmental representative once said: we will always find labour force for the guaranteed wage minimum that will be able to learn the job. It was maybe one year ago, but he already proved to be wrong […] Because what they do not consider is that when they say that there is unskilled or low-skilled labour force in the country, yes, there is, they are right, but surely not for this job. Because not everyone is capable to work in a human institution with people" (Antal).

The research has found there is a connection between emigration, the lack of professional workers and insufficient wages. The sequence of subcategories indicates that even ageing of society and globalisation have an impact on the current labour market situation even if to a lesser extent; workers also became more aware, and they do not want to accept conditions that could be harmful to them (Carmel/Cerami 2011:5):

> "I am going to be 40 years old soon, and in some years, there will not be a next generation to whom this profession should have been taught already. The colleagues from whom I learned the profession, my masters will not work any further, so there is a huge void behind us" (Tamás).

> "as I noticed, before, in the old mentality, people kept saying themselves that staying at the old workplace is good for them: they had their salaries, stable work and so on, but some years ago the world opened up" (Anita).

The current ideology of world of work cannot efficiently match supply and demand because of externalities produced by the current system. After the privatisation, based on the belief that markets will produce qualified labour force, most training institutions were abolished. The transfer of knowledge is further complicated by the lack of communication between older and younger generations while young, and freshly educated people do not have enough experience for responsible work.

Another critical aspect to be highlighted is that due to the particular characteristic of the region, besides the high number of unfulfilled vacancies, unemployment rates are high too. Accordingly, labour market equilibrium is overturned. The overall social consequences of the situation are difficult to be predicted, but there is a rising fear in society. Typically, short time consequences of skill shortages for business performance are not visible, however, in Hungary, employers started to complain that the current situation is at the expense of productivity growth (Bakó/Lakatos 2016). In some cases, production processes had to be stopped because of the lack of labour force. Labour shortage can also be observed by the fact that due to the lack of qualified labour force, employers were forced to restructure the organisation of work to reduce loss-making activities, just as it was argued in the article of Barnow et al (2013).

There is a correlation between the education level of the labour force and labour costs growth depending on whether firms are either part of the Core or the Periphery (Dickens/Lang 1992:13). Upgrading levels of production are unimaginable and barely possible without a sufficient educational level of the labour force and thus, an educational mismatch becomes an obstacle to economic development. In old member states, newly arrived migrants with higher education were expected to balance labour market mismatches. This is why their inward migration was well promoted in Western European countries (Schreiner 2008:96).

The analysis has identified that there is a strong liaison between Hungary's membership in the European Union and outward migration, similarly to some research in context (Hárs 2016, Pogátsa 2015, Sik/Szeitl 2016, Verwiebe et al. 2017). However, the causes of emigration date back to Hungary's integration into the world economy that brought drastic changes in the Hungarian economic structure. Currently, low educated labour force is more likely to emigrate, but there is also a continuing trend for people with higher education levels to migrate because of work purposes (Pogátsa 2015). Driving forces for emigration, apart from the Freedom of Movement, are lousy employment conditions and low wages just as it was argued by Ágh et al. (2016), Galgóczy (2017), Pogátsa (2015). Therefore, it could be said that emigration from Hungary arises from Hungary's semi-peripheral position in the international division of labour.

Despite the fact that there is a strong connection between Hungarian labour market shortage and the accession to the EU, it cannot be devoid the positive effects of EU rules and regulations like the implementation of some worker-friendly policies, favourable formal regulations of temporary agency work and institutions of employment relations (Delteil/Kirov 2016:4). To a greater extent, internal factors like the development of Hungarian politico-economic system and society influenced labour market happenings. Labour shortage might be interpreted as a result of lack of professionals and the extinction of traditional jobs. The decadence had started after the transition period when many people became unemployed. Furthermore, wages have been stagnating since then. Low salaries and lousy employment conditions contributed to the devaluation of certain professions. Segmentation of labour market by public-work programme and homogenization of workers are seeming to be a cause of incorrect governmental interventions in the labour market. Companies who are oriented in saving their profit, cannot employ labour force on the price they would offer. To find the necessary labour force, employers must raise salaries (Tóth/Nyírő 2017:57).

A significant finding of this research is that beside of economic factors, mentality, human and cultural factors are also constraints in development: employers are still searching for legal loopholes to avoid new regulations. The problem is that employers do not understand that abusing the capacity of workers does not contribute to higher effectiveness or more profit since employees are exposed to constant stress. Workers who cannot cope with the circumstances sooner or later quit their job. Despite the fact that the Hungarian government raised the minimum wage, employers in order not to pay the higher salary, rewrite employment contracts or register their workers for fewer hours. However, it was also argued in the interviews that the reason is often as simple as small or middle scale companies cannot make enough profit that would cover the growing expenses deriving from governmental pressure. Based on the assumptions of Böröcz (2012), Drahokoupil/Jepsen (2017) and Makó/Illéssy (2016), low-profitability of SMBs might be the result of privatisation processes that assigned them a subordinated position compared to TNCs (Böröcz 2012:25). Working conditions did not get better either, and overwork must be recovered mostly by internal labour stock. Furthermore, the new Labour Code ensures more power of employers over their employees.

6. Conclusion

This study aimed to analyse the phenomenon of labour market shortage in Hungary by means of semi-structured expert interviews conducted with representatives of labour unions. According to the definition of labour economics, labour shortage results from bad conjunctures and lasts only a short time. The analysis has however exposed long-term consequences of the issue. To gain a broad understanding of the Hungarian labour market shortage, the traditional framework of labour economics was extended by theories of institutional economics, geo-economics and development studies.

The research demonstrates that the first research question “Whether labour market shortage can be discussed as an existing problem in Hungary?” can be answered with yes. Despite the lack of quantitate evidence on the phenomenon, qualitative research and the institutionalist economic approach proved to be useful alternative methods for measuring labour market shortage. According to the concept by Healy et al., wages are the indispensable criteria of labour shortage (Healy et al. 2011:3). The conducted interviews however revealed that even though Hungarian wages did not increase, labour market shortage is real.

The second research question aimed to identify the political, historical, social and, economic background of the labour shortage in the Hungarian labour market. The research revealed the complexity of the issue: According to the interviewees Hungarian labour market developments has been highly impacted by the transition period, the 2004 accession to the European Union and the 2008 economic crisis that had severe demographic, social and political consequences.

This research was subject to certain limitations because the topic is less explored and contemporary academic literature is still incomplete on the subject of the Hungarian labour shortage. Therefore, the literature for the analysis was selected arbitrarily. For a more in -depth insight into Hungarian labour market developments and labour shortage, the issue must be further discussed. Subsequently, the following questions are suggested for future research: The question why employers do not find the appropriate labour force might be wrongly put and should be instead addressed as why labour force does not find the suitable job for itself? Could the realisation of the model of "development from below", based on internal resources and the endogenous development potential of Hungary (in economic, socio-cultural, environmental, historical and political terms) put an end to external penetration and structural differences between Eastern and Western Europe? (Stöhr 1985:233). Considering that the industry 4.0 is on the rise, what is going to happen to Hungary if it cannot develop the digital economy?

Nevertheless, based on this current research, the following concluding remarks can be made: Due to its secondary position in the world economy, Hungary missed the opportunity to build a knowledge-based economy, since internal problems have usually been solved by foreign capital. Because of the generally low quality of human capital, new technologies cannot be implemented, creating disadvantages for highly-skilled workers and for the national economy as well. This research found that there is a liaison between emigration, labour shortage and Hungary's membership in the European Union. Although it is moved by the goodwill, it must be argued that top-down EU regulations cannot influence national policy in full and carry out structural changes in national economies. Recent regulations lack specific local features and challenges. Therefore, the redistribution of power between domestic actors, the importance of top-down policies and decentralisation of powers would be recommended (Ascani et al. 2012:3). However, not only the accession of the EU is the cause for the current situation; it is a result of marginalisation of democracy. Reasons lie in the politico-economic structure of the country. Consequently, the current labour market situation is highly politicized and controversial.

The research has further illustrated that emigration and labour shortage are dependent on a third variable: Hungary's semi-peripheral position in the world economy. Accordingly, Hungary's marginal position in the division of international labour proved to be a crucial element of Hungarian labour market developments. The dependency relation is manifested in production processes: there is a correlation between low wages and low production technologies. Even though efficiency and productivity of the Hungarian labour force are not lower than those in Western Europe, their appreciation and compensation are significantly lower (Galgóczi 2017:7). Low wages lead to anomalies, however, despite the expectations, current wage policy with the increment of wages have similar outcome because of the lack of structural change. Current policy decreases the value of work of highly-educated workers. Wages are selective; workers are rewarded unequally or not rewarded at all. As a recommendation, wages should reach a certain, and probably satisfactory level, so Hungarian workers do not need to move abroad.

The negligence of labour unions can be seen as part of centralisation processes and the total ignorance of bottom-up initiatives which could bring a more human perspective to the ruling systematic thinking (Ágh et al. 2016:8). Hence, labour shortage was also affected by the absence of labour unions, the lack of unity between them and the problems in their functioning. Insufficient labour union activities furthermore result that employees cannot counteract or resist due to the lack of their bargaining power. Weak trade unions and the expansion of precarious employment also contribute to a dysfunctional labour market since labourer's interests cannot be defended (Bafoil 2016:30).

Current governmental measurements aim to increase the overall performance of the economy by creating its powerful economic elite. This exclusionary nationalistic politics does not guarantee equality between employers and employees, therefore, further strengthens already existing social and regional inequalities. Previous and current labour market policy resulted in a disproportionately higher amount of capital that benefits employers. This research, nevertheless, argues for a regulatory policy with the better distribution of economic powers (Borjas 2013:51). Giving more emphasis for endogenous development processes, supporting and including the qualified labour force in decision making processes would help slowing down emigration processes that would also contribute to national economic growth. Given the findings of this research, I hope that this contribution will assist further research in the areas of labour market information and regional development.

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Appendix

Abstract

This project deals with labour market shortage in Hungary and aims at discovering labour market developments from a multidimensional perspective. This study therefore addresses the following research questions: Whether labour market shortage can be discussed as an existing problem in Hungary? and What macroeconomic, historical, social and political changes did labour union representatives observe in the Hungarian labour market that could lead to the labour shortage? The primary goal of this study is to provide labour market information notwithstanding the difficulties in the identification of labour market shortage, ascribable to the deficiency in quantitative vacancy measures. This research considers that economic phenomena are multidimensional and therefore, this study extends the assumptions of neoclassical economics with the alternative approach to economic analysis, considering cultural, political and social aspects of economic development. Therefore, this contribution aims to go beyond the economic definition of labour shortage focusing on the regional characteristic of economic development in accordance with centre-periphery models, dual economy, geo-economics and dependent capitalist development. This research reflects on the territorial aspects of asymmetry within the EU and Hungary's semi-peripheral position in the global arena. The analysis takes into consideration both, endogenous and exogenous development processes. Methodologically, qualitative data highlights the complexity involved in strategies of labour market actors and their influence on the Hungarian labour market. The analysis is based on semi-structured expert interviews conducted from November 2017 to January 2018 with 17 trade union representatives in Hungary. The research revealed liaisons between the "Eastern enlargement" of the EU, low-value-added production processes and semi-peripheral position of Hungary in the international division of labour that contributed to the occurrence of labour market shortage in Hungary and regionally.

Abstract in German

Die vorliegende Arbeit befasst sich mit dem Arbeitskräftedefizit und dessen historischer Entwicklung in Ungarn. Die Forschung beschäftigt sich konkret mit folgenden Forschungsfragen: Kann ein Mangel an Arbeitskräften in Ungarn als bestehendes Problem diskutiert werden? und Welche makroökonomischen, historischen, sozialen und politischen Veränderungen haben die ungarischen Gewerkschaftsvertreter auf dem Arbeitsmarkt beobachtet, die zu einem Arbeitskräftemangel geführt haben könnten? Vor dem theoretischen Hintergrund, dass ökonomische Phänomene multidimensionale Betrachtungsweise erfordern, werden in dieser Arbeit sowohl die politischen als auch die kulturellen und sozialen Aspekte der wirtschaftlichen Entwicklung berücksichtigt. Das verfolgte Ziel ist dabei, die Annahmen aus neoklassischer Ökonomie mit alternativem Ansatz zur ökonomischen Analyse zu erweitern. In diesem Zusammenhang werden regionale Ungleichheiten in der wirtschaftlichen Entwicklung innerhalb der EU anhand von Zentrum-Peripherie-Modellen, dualer Wirtschaft, Geoökonomie und abhängiger kapitalistischer Entwicklung reflektiert. Über die klassische Definition von Arbeitskräftemangel hinausgehend, werden in dieser Arbeit die territorialen Aspekte der Asymmetrie innerhalb der EU und die halbperiphere Position Ungarns in der internationalen Arbeitsteilung untersucht. Die Analyse berücksichtigt sowohl endogene als auch exogene Entwicklungsprozesse. Zur Untersuchung wurden zwischen November 2017 und Januar 2018 halbstrukturierte Experteninterviews mit 17 Gewerkschaftsvertretern aus Ungarn durchgeführt. Die Interviews wurden mit Hilfe der qualitativen Inhaltsanalyse nach Philipp Mayring analysiert und ausgewertet. Die Forschungsergebnisse legen nahe, dass die „Osterweiterung" der EU, Produktion mit geringem Wertschöpfungsanteil und ausländische Direktinvestition negative Auswirkungen auf den ungarischen Arbeitsmarkt hatten und zu einer Arbeitsmarktineffizienz in Ungarn und in der mittelosteuropäischen Region führten.