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# The Role of Modern Day Education and Qualified Workforce in Improving Corporate and National Economic Competitiveness



## *Summary*

To boost economy, it is essential to enhance the research and development performance of secondary and tertiary educational institutions, which can contribute to increased performance in the whole profit and non-profit sphere. This can in turn help improve national economic performance (GDP). In our view, it is also worth examining education and competitiveness at the regional level. With a view to achieving strategic objectives aimed at boosting Hungarian economic performance, special attention must be paid to improving research and development regionally in the future. Competitiveness of the national economy can be viewed as the synthesis of regional competitiveness. There is a need for the reinvention of the whole structure, as well as the structural, methodological and financing background of vocational training, the adaptation of international best practices, not only for the sake of convergence in underdeveloped areas and regions lagging behind, but also for improving the competitiveness of the national economy. Looking at Hungary's innovation system, it can

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be concluded that based on the indicators used by the WEF the country is behind the EU average. Corporate innovation capacity is poor; the majority of businesses still base their production on cheap labour and cannot or will not innovate. However, in order to become a knowledge-based society in the future, Hungary needs increased investment (financial investment and a paradigm shift) in the areas of education and innovation.

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## INTRODUCTION

Today most developing and developed countries view knowledge-based society as an important means of economic development, which, however, can only be achieved by greater and consolidated public commitment, the creation of a solid macro-economic basis (a fiscal, monetary, growth and in the future competitiveness turnaround), to ensure a more dynamic and sustainable growth path (Kolozi et al., 2017; Lentner, 2015). In the 21st century, besides raw materials, technique and technology, as well as data and information are the major economic drives, which require continuously updated knowledge and skills to be used and utilised. Alongside life-long learning, education also has a vital role in acquiring this knowledge, given that one of its aims is transmitting learning skills. Teaching these skills is not only needed in primary, secondary and tertiary education, but also in vocational training. Technological developments in the rapidly changing economic and business environment highlight the importance of knowledge, learning skills and abilities on every level of the economy and society (national economy, company, social/local community, individual). The basic interests and goals of economic and social actors differ. While from the point of view of the entire national economy the advantages of the knowledge-based society led economy are, for example GDP growth, secure and growing tax revenues, promoting and maintaining full employment; at the corporate level it means business stability, profitability, and efficiency. On the individual level knowledge is manifest in a different form, for example, a competitive salary, secure livelihood or higher standard of living. From the perspective of the national economy knowledge has a significant effect on competitiveness, and economic growth as innovation always has a strong presence in a knowledge-based society. In Hungary the early phases of innovation, research and development are characteristic, however, the next step has to be taken, creating a prototype, as well as developing and strengthening the forthcoming phases. At the individual, the employee's level, there is coherence and synergy between knowledge and wages. Skilled professionals can easily find a job, realise competitive wages which help them improve their living standard – they use more products and/or services – thus indirectly pay more taxes (PIT, VAT, etc.) and generate further demand in the

economy (multiplier effect). Knowledge and unemployment are in an inversely proportional relationship. The more knowledge and experience an employee has, the better position they are in the labour market (and lower the chances of them ending up unemployed). This is beneficial for the national economy for more than one reason. Firstly, the unemployment rate and the related state transfer is lower. Secondly, there is an increase in the number of skilled workers having a stable (fixed) income, and thereby increasing tax revenues. The world-famous American competitiveness researcher economist M. Porter says, “The better a country’s innovation capabilities and higher its level of general knowledge, the higher chances it has for a successful competitive economy. Chances, however, can become the reality only in the possession of appropriate state development policies. In their absence knowledge and skills remain unused and may even deteriorate.” According to László Parragh, the president of the Hungarian Chamber of Commerce and Industry (HCCI) only those economies of the world have been able to improve successfully and present economic miracles which could link knowledge and economic development. The HCCI president mentioned the German, Japanese, South Korean and Finnish economies as good examples, adding that Hungary also needs to focus on knowledge-based economy, the further restructuring of the education to better adjust it to the needs of the economy (Parragh, 2017). This is also stressed by Bod (2018), according to whom strengthening innovation and education can improve Hungary’s competitive position. As he sees it, continuous attention needs to be paid to improving education and skills development, since these determine economic performance as well.

It is worth noting that the Central Bank of Hungary (MNB) also calls for a stable, up-to-date and strong education system with a view to domestic economic competitiveness development (Matolcsy, 2016). The MNB has taken active part in all this, and is trying to use all the means at its disposal in support of achieving a knowledge-based economy as soon as possible. The reason why the MNB is so actively involved can be explained by how they view national economic competitiveness. In the MNB’s view the competitive operation of the national economy not only requires macro-financial and real economic stability, but also the availability of high standard education and health-care, among others. Based on these, a well-functioning and predictable business environment can be created, investment and innovation may be promoted, which through the appreciation of the skilled workforce can eventually lead to increased productivity and permanent economic and social convergence. This idea was also confirmed and elaborated by Lentner (2007), whose study clearly showed that alongside a stable environment for public finances, modern education and healthy highly skilled workforce are also prerequisites for national economic competitiveness. Training today means much more than it did 20 years ago. According to Lentner, in developed market economies education-training is less likely to end with acquiring the first degree. Continuing technical and economic progress makes it necessary to take part in several different forms of training, periodic further training, as well as professional changes due to the continual transformation of the economic structure. Lentner (2007) makes a link, *inter alia*, between economic development and growth and the standard of education

and healthcare. He reveals that whenever the level of education and healthcare is appropriate in a country, it has a positive effect on economic growth; however, the opposite is also true: if the economic growth in a country is adequate, there is an increased possibility that the government will allocate higher financial sources for the education and healthcare systems. From another angle, Csath (2018) also highlights that the level of the education system influences the competitiveness of a country, that is, there is a close link between competitiveness and the standard of education. In his opinion, it can be explained by the fact that competitiveness is highly dependent on new value creation in a given country. New value creation, on the other hand, is also influenced by the existence of an appropriate number of professionals needed for greater added value creation. In addition to the above, Csath (2019) says that a healthy population is a matter of national interest, as the economy can only be successfully operated with the help of such people on a permanent basis. It is clearly visible that this viewpoint is close to professor Lentner's way of thinking detailed above.

Parragh also stresses the importance of knowledge, and in his understanding "the day after tomorrow is about knowledge." According to the HCCI President, this calls for high standard tertiary education, in the development of which the market has to be consulted, and this requires restructuring of the training system in a number of areas. This is all in progress today, hopefully with future results that can be translated into numbers. Nevertheless, he also points out that, one of the biggest challenges the present education faces is to prepare youngsters for the future – unpredictable – situation of the labour market, which is getting harder and harder to forecast due to increased progress.

The above ideas show that one of the basic criteria for competitiveness is human capital, assets. This is confirmed by the results of the MNB publication of its competitiveness workshop. According to the Competitiveness Mirror (2019) publication, Hungary's greatest asset is its available skilled human resource, which is the key to the survival and successful convergence of the country. In answer to this idea the Ministry for Innovation and Technology worked out (2019) the mid-term strategy 'VET 4.0 – for the renewal of VET and Adult Education (AE),' the policy answer to the challenges of the 4th Industrial Revolution, with the major aim of educating future professionals who can support efficient production and service creating higher added value, and are in possession of adequate knowledge to meet the needs of the current market. It is also worth mentioning Zéman's idea (2019), who stresses the future importance of the dynamic and inductive relationship of the sciences, education and best practices trio, which will only operate well, if their connectedness and functional efficiency are improved.

Investment in education and vocational training is fully returned since

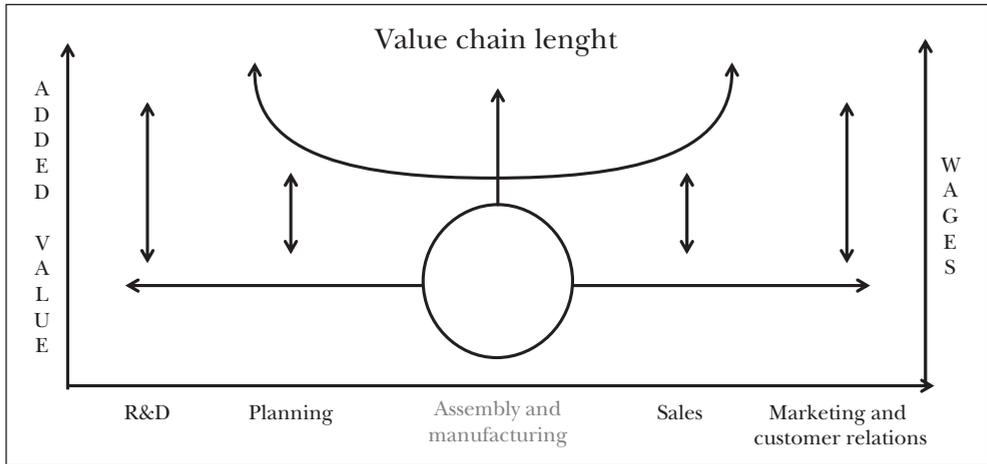
- corporate innovation capability and willingness are improved,
- companies create higher value-added products and services,
- corporate productivity and efficiency increase,
- businesses are more likely to appear on the international market (integrate into global value chains).

Based on the above, education clearly improves competitiveness, which indirectly brings about increased tax revenues.

**THE ROLE OF EDUCATION IN INCREASING COMPETITVENESS**

One of the most important factors of economic growth and increased corporate competitiveness is human capital, which affects economy through the number and the skill level of the workforce alike. To improve competitiveness, increasing employment rate is not enough tough, it requires the expansion of workplaces that generate higher added value, which is difficult to achieve without the existence of knowledge-based society. This all means that businesses that are capable of generating higher added value need highly skilled workforce. The link between added value and wages is demonstrated by the value chain below (Chart 1). Hungary, at present, instead of generating added value, is still at the stage of building on assembly and manufacturing. Increasing productivity and efficiency, however, calls for opening towards innovative activities.

*Chart 1: Added value and wages*



*Source: Presentation of Csath, M., 56th Economists Roaming Conference*

Investment in education and vocational training become manifest in economy with differing intensity. While public education expenditure is recovered in the long run on the national economy level, adult training and further training (can) even yield short-term results.

The Europe 2020 strategy announced the EU's employment and growth strategy for this decade (2010–2020), with objectives relating to areas of employment, research and development, energy management, education and fight against poverty and social exclusion (Kőrösi, 2012). In terms of education there is a special emphasis on drop-out rate, on optimising the number of students in tertiary education. The

strategy aims at lowering the rate of early school leavers below 10%, and increasing the rate of higher education qualifications of the 30–34 year-old EU population to minimum 40% (European Commission, 2010).

In accordance with the education objectives and financing opportunities Hungary has already taken steps towards change in the tertiary education sector. At the end of 2014 the Gear Shift in Higher Education strategy for restructuring tertiary education was adopted. The Government's aim is to develop a future performance-oriented higher education, in which institutions have clearly defined educational profiles that help them provide high quality education in their specific educational area. This may help create competition among institutions to concentrate on improving knowledge quality and standard. Creating such an institutional network contributes to improving the competitiveness position of disadvantaged regions. There is a focus on reducing drop-out rates, increasing pushing motivation among students, skills and abilities development, and meeting labour market needs with the fundamental aim of transferring knowledge that enables graduates to find effective and efficient employment in both the domestic and foreign job market. The main objective of the concept is to create a high quality tertiary education network of optimal size and composition: the development of knowledge-based society, which is capable of efficiently reacting to the social and economic-cultural challenges in Hungary and abroad (Kormany.hu, 2014).

After reviewing the concept, based on the experience and the lessons learned from the 2014–2016 period, a strategy including more exacted objectives and interventions was adopted. The Gear Shift in Higher Education 2.0 was accompanied by an Action Plan for the 2016–2020 period. The strategy set the 2030 deadline for transforming higher education, with a view to developing future educational programmes in which student abilities are appropriately differentiated and which focuses on both student and teacher performance enhancement. To create the basis for quality education, teachers' attitudes, both professionally and in terms of methodology need development. In the restructured institutional system each institution is specialised, has a distinct educational profile and there is space for both cooperation and healthy competition among institutions. Thus unused capacities would cease to exist and by reallocating resources there could be more emphasis on research initiatives. The parallel functioning and operation of research and development with education activities can contribute, on the student level, to increased attraction of international students, while on the instructor level, to improved social and economic competitiveness (Kormany.hu, 2016).

A possible means of strengthening the link between the education and the economic sector is the creation (preferably on the higher education level) of Knowledge Centres which are focused on economic (market) demands. These knowledge centres may also become key actors in domestic RD&I activity. Research, development and innovation activities are funded by both the state and the private sector. However, it can be clearly stated that the domestic private sector is in lack of appropriate amounts of capital power, which decidedly hinders domestic SME actors in the acute market com-

petition. Added value generated by RD&I activity is evidently a decisive competition factor today. Looking at the research and development investments of the national economy in the past 15 years, it is concluded that in Hungary the R&D-to-GDP ratio reached 1% in 2009, and it has been on the increase ever since, reaching its (1.49%) record level in 2018 (HCSO). It shows that the state has acknowledged the importance of RD&I in competitiveness. However, Hungary is still among the medium-performing countries in terms of innovation. Industries already involved in global value-chains – such as the pharmaceutical industry, the ICT sector and vehicle production –, as well as research and development companies with international relations significantly strengthen domestic innovation performance. Nevertheless, the RD&I performance of the majority of domestic businesses is well below the performance of their counterparts in more developed countries. Naturally, RD&I is closely linked with higher education and investment in this sector. Unfortunately, in Hungary this situation is far from shiny: recent investment in R&D in tertiary education could only conserve the current situation. Oftentimes this sector is characterised by divestment. It has to be highlighted that countries that prioritise tertiary education quality improvement and RD&I activity support in this area, are in a much favourable position in both IMD and WEF rankings. There are encouraging signs though showing that Hungarian tertiary education institutions are starting to take to partnerships with businesses. This is also indicated by the fact that institutions and companies cooperate in more and more areas, which can be mutually advantageous and students may also benefit.

The success of research and development activities is not only measurable in terms of increased investment. Without an appropriate level of education, which provides the conditions for research and development from the human resource side, the expansion of R&D activities is inconceivable. High quality human capital training and improvement contributes to national productivity. The standards of education and healthcare play a decisive role in developing competitiveness (Lentner, 2007). Therefore, alongside focusing on economic growth, attention must be paid to social welfare. To evaluate and monitor these, the OECD developed an indicator system, including key indicators that are indispensable for well-being (Mizobuchi, 2014). The Better Life Index maps and measures well-being on the basis of 11 indicators. Besides income, it includes community, education, civic engagement and health factors as well (Durand, 2015). A speciality of the concept is that there is no objective or absolute ranking among the participating countries, as the countries themselves determine several parameters. Hungary is below the OECD average in terms of education, subjective well-being, social relations and health.

Going back to education, the role of higher education institutions is also significant as by providing information to the community about the intellectual value created by them, as well as by its economic utilisation institutions contribute to regional social and economic growth. Changes over the past two decades have markedly influenced the regional structure of higher education. Besides its social role, tertiary education also has a decisive role in economy. Several studies reflect on the significance of higher education in rural areas. Higher education institutions in a region contribute

to its strength and development. The educational spectrum and training structure provided by universities are integral parts of regional development and renewal opportunities (Rechnitzer, 2009; Sisa et al., 2018a).

The Hungarian higher education has undergone several transformations; the higher education reform has finished: both the financing system and the institutional background have been restructured. There is observable commitment to create a performance and quality-oriented increasingly more internationalised Hungarian higher education system which supports value creation, has the ability to react to global and social trends of the world, and takes into consideration the generational characteristics and attitudes of the participants of higher education (Sisa et al., 2018b). Tertiary institutions, besides their educational and research activities, play a major role in the socio-economic development of a nation and providing its intellectual capital. Among the multiple functions of higher education in Hungary, supporting social mobility has to be emphasised which needs to be provided in the disadvantaged regions as well.

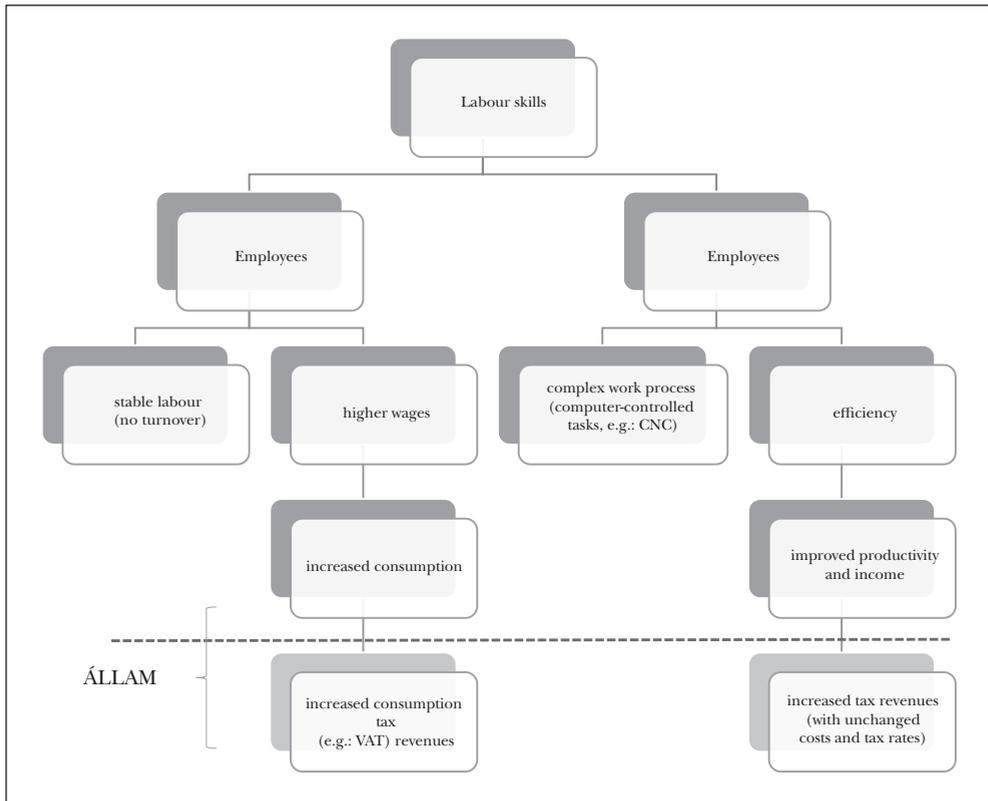
Higher education plays a considerable role in the less developed regions of the country, where there is a demand for both social mobility and economic development. Consequently, it is the task of higher education to create a segment in its institutional system that is dedicated to local prosperity. Specific institutions need to take into account and adapt to regional labour market needs when they develop their educational programmes. Practice-oriented training has to be the first and foremost objective, to provide youngsters with the basics for their future career path. To boost economy, tertiary institutions need high research and development performance, which contributes to the development of the entrepreneur sphere and eventually to GDP growth.

As we see it, adjusted to the strategic guidelines defined for higher education, the secondary level vocational education system should also be rethought. A good starting point could be - talking Winarno (2019) as an example – increased SME-actor involvement in vocational training, with mapping SME-sector labour needs as the first step. The aim is to create an integrated model which builds on vocational training (education) – business cooperation. The key elements of the integrated cooperation model are: product (service), production (service provision), human resources, management, marketing, financial system, the elements of value creation and the foundation of a sustainable training centre (Winarno et al., 2019). Small and medium enterprises have a vital role in economic growth and improved competitiveness; therefore the role of entrepreneurship education is unquestionable (Imreh-Tóth, 2014).

Knowledge, competences, skills are all driving forces of economy on all the levels (employee, employer) of the national economy. Skilled (and well-paid) workers are more efficient in a given working environment when they have an overview of the work processes at the company and also when they can use the given technology better; thus by using their expertise they efficiently support companies that create the appropriate working environment for them. Moreover, good working conditions and competitive wages lower employee turnover, shortening the initial training period, when in a period of intensive turnover businesses are burdened with the continual training of newcomers. A stable highly qualified workforce works efficiently, generates

higher added value for the business, thus improves corporate profitability. Higher work efficiency lowers per capita labour costs – and with the same corporate cost structure and tax regulations –, increases profit before tax and corporate tax payable. Highly skilled workforce – under favourable labour market conditions and due to the effect of the increasing minimum wage – realises competitive wages which improves their living standard. This, in turn, raises the demand for certain products and services, which indirectly increases VAT revenues. The Chart 2 gives a summary of the above process.

*Chart 2: Advantages of skilled labour*



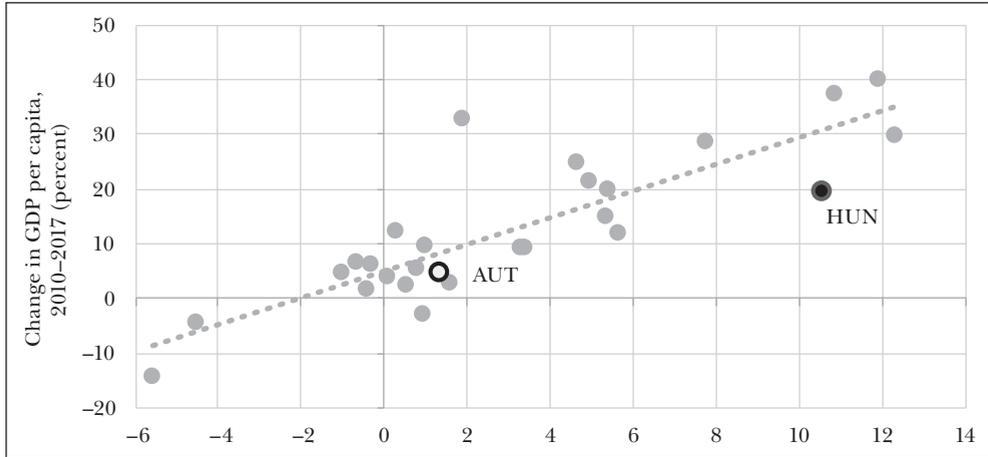
*Source: Authors' own compilation*

## DOMESTIC AND INTERNATIONAL OUTLOOK

Human capital has a major effect on economic growth and improved corporate competitiveness; firstly, by means of quantitative change (staff increase), secondly, by means of quality change (higher skills). The MNB publication Growth Report (2018) shows – analysing 2010–2017 EU data – that employment rate increase and per capita GDP changes have a positive relationship. In Hungary rates for the 15–74 year-old

population increased by 10% point; thus per capita GDP grew almost by 20% by 2017. The Chart 3 shows employment and per capita GDP changes in EU countries.

Chart 3: Employment rate and per capita GDP growth rate in EU countries, 2010–2017



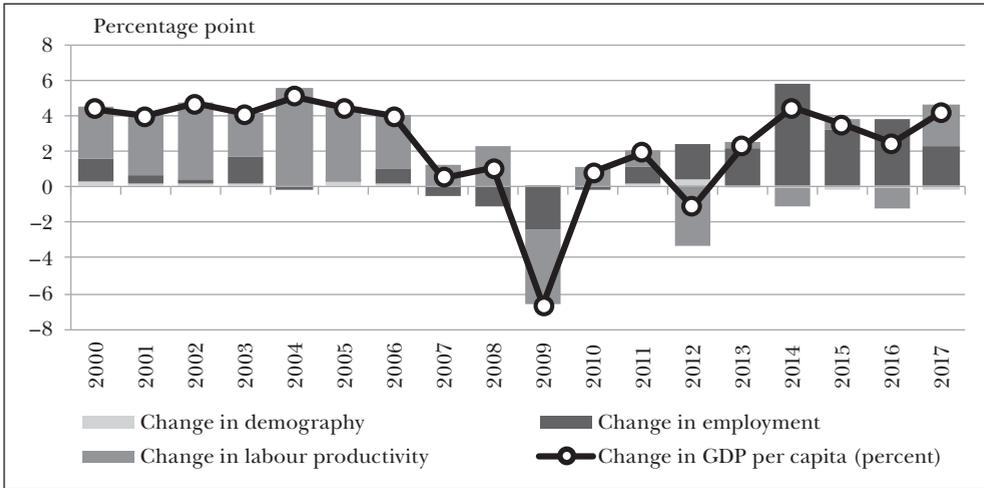
Source: MNB, 2018

The *strong labour demand* of the past few years *originates in* government measures taken in previous years to increase employment. Consequently employment rate increase resulted in about 20% per capita GDP growth, while demographic changes had a negative influence on the indicator. Given that due to demographic changes the labour force is continuously shrinking – and also because of labour shortages in the sector and improved productivity efficiency –, increasing employment in itself is not enough to maintain competitiveness. It is indispensable that certain work processes are rationalised and digitised, for which skilled labour must be provided. This requires training and vocational training even in the short term. The current education and (vocational) training system calls for development, updating and fine-tuning.

The Chart 4 clearly shows the positive effect of improved employment on per capita GDP growth.

The reduced pace of employment growth rate is also shown in the report on the 2018 labour market by the Hungarian Central Statistical Office published in April 2019. Data show that in 2018 the number of employed persons kept increasing, amounting to 4,469 thousand employed, a 1.1% increase, about 50 thousand employed, compared to the previous year. Although both 2018 and 2019 show positive employment growth, the pace of growth slowed down despite having significant shortages in the labour market. Increased labour demand – supported by constant conscious government measures – redirected a part of previous public sector employees into this market segment. In addition, the significant scale of pay rises in recent

Chart 4: Labour market factors in domestic per capita GDP growth



Source: MNB, 2018

years also contributed to stopping the increase in the number of workers seeking employment abroad. To sum up, Hungary is nearing full employment. This means that businesses need to restructure their labour capacities and employment to be able to meet increased market demands and increase productivity. This can only be achieved by automatisisation (digitisation) and by employing and training (more) highly skilled labour.

#### OWN RESEARCH

Domestic and international practice shows that companies that provide employees with personalised training programmes fitted to their jobs, are more effective and efficient in their everyday operation. As evident from the previous sections, it can be stated that in today's turbulent world education and training are vital in the development of the individual and the company alike. Based on all these, a targeted survey was conducted among businesses (*both SME-sector and large companies*) for the 2016–2018 period, which looked into training opportunities provided by employers, their results and the lessons learned, and their effect on corporate productivity, efficiency and business operation.

The company training questionnaire examined whether companies supported or are going to support employee training in the past and forthcoming 3 years, respectively, in what form, and what the motivation for supporting further training was. Additionally, it was examined how entrepreneurs view the supported trainings, how these relate to corporate operation (profit, growth, etc.), and what role they play in employee retention.

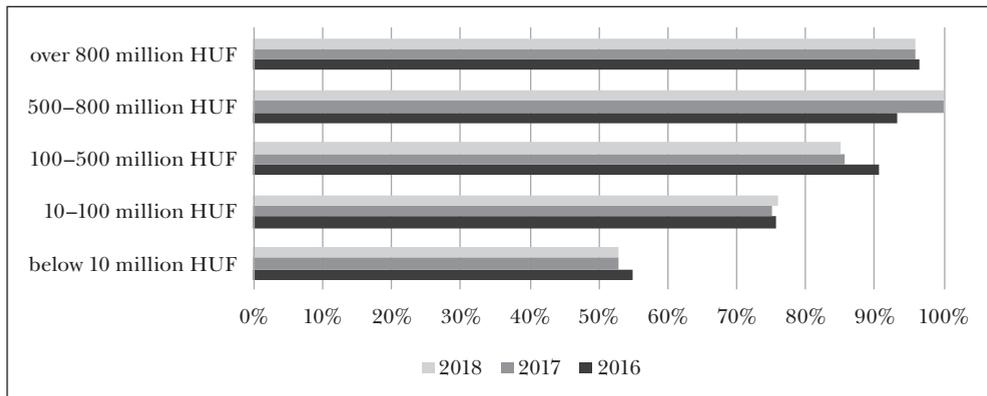
## CORPORATE TRAINING

This section presents the results of those companies which stated in the survey that they supported or are going to support professional employee development and training in the past and forthcoming 3 years, respectively. 86% of respondent companies supported employee development and training, which confirms that businesses find it more and more important to provide employee training opportunities. 46% of these businesses have practical training places related to dual training.

Next, the distribution of companies supporting employee training according to the number of staff, revenue and region were examined. While in businesses employing 1–9 workers willingness to support employee training is 63%, large companies show significantly higher results. It can be concluded that as the number of staff increases, so does the number of companies that support employee training and professional development.

Looking at staff number and revenue categories, it can also be established that with their growth training support exponentially grows, too. Based on the results it can be said that there is only one outstanding result, that is, significant difference among the categories: in the smallest category for both number of staff and revenue. Basically this is caused by smaller company size, narrower and less complex scope of activities, and more simple organisational structure. (The smallest businesses support employee development the least.) Smaller companies are characterised by less precise separation of functions, simpler management structure and less complex or digitised work processes, thus there is lower demand for training. At the same time, in the next staff and revenue category (10–49 workers and above 100 M HUF revenue) companies need to develop a more complex organisational structure, where decision-making, organisational tasks and work processes are clearly separated; therefore they require specialised knowledge and skills at their disposal at all times – hence training is of importance.

Chart 5: Distribution of businesses supporting employee training according to revenue



Source: HCCI own compilation (N: 213)

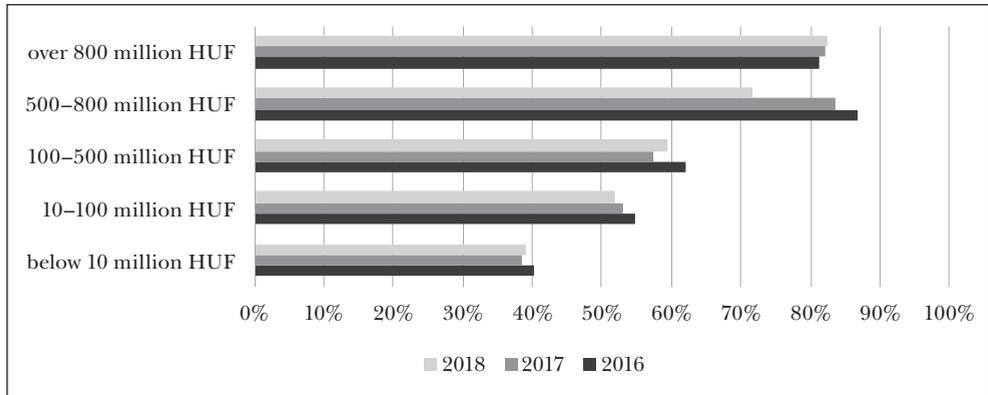
CHARACTERISTICS OF SUPPORTED TRAININGS

In the previous section those companies were presented that support employee training. This part analyses the major characteristics of supported trainings (level and type, content, motivation for training, initiators, aims and forms of training). The analysis of employer supported trainings draws a distinction based on training level, content and form. The next chapters detail these categories.

*Level of supported training*

The level of training refers to (1) own internal training, (2) state-recognised trainings in the National Vocational Qualification Register (NVQR) and/or other supported trainings outside the NVQR, and (3) higher education. In terms of training level, in the past 3 years 81% of participating companies supported state-recognised trainings in the NVQR and other supported trainings outside the NVQR, 71% supported internal professional trainings, whereas 51% supported higher educational training (college/university). Training levels were examined in connection with company size (number of staff) to see different training type preferences for different sizes. In this respect, a high percentage of companies with smaller than 50 and larger than 100 staff supported NVQR training, while companies with 50-100 staff preferred internal training, but they supported NVQR trainings as well. Higher educational programmes (college/university) were mostly preferred by companies having more than 250 workers; however, for this size – similarly to other company sizes – NVQR trainings were still prevalent.

*Chart 6: Distribution of NVQR and other supported trainings outside the NVQR based on company revenues (%)*

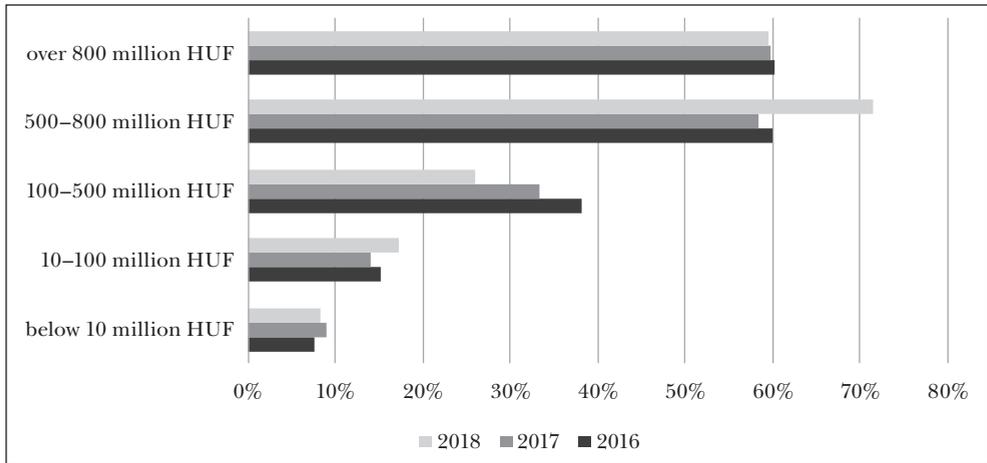


Source: HCCI own calculation (N: 213)

Besides NVQR trainings higher education support is also significant, therefore, we also looked at the revenue factor for this training type. In the examined period two revenue categories show greater change in supporting employees' college and/

or university education. Support for this type of education has significantly grown in companies with 500–800 million HUF revenue, while in companies with 100–500 million HUF revenue, support for this type of education has decreased (Chart 7).

Chart 7: Distribution of higher education training support based on company revenue (%)



Source: HCCI own calculation (N: 213)

Supporting higher educational programmes is justified by the complexity of corporate processes, the higher standard of professional knowledge requirements and the development of a knowledge-based competitiveness model. Larger companies are more likely to have a human resource strategy, which helps long-term planning for individual workers, and provides them with future prospects that motivate participation in longer educational programmes.

#### *Content and direction of supported training*

Based on training content we created 5 categories as follows: (1) language trainings, (2) digital competences, (3) compulsory professional training (e.g.: certified accountant training), (4) non-compulsory professional training, retraining (5) organisational development (marketing, strategy, etc.).

It is important to remark that non-compulsory training serves as an umbrella term for all trainings that were initiated individually by businesses, that is, not out of compliance with legal obligations. Within the non-compulsory professional training category, a few important areas were highlighted, such as digital competences development, organisational development and language trainings. This area has the highest value (63%), which indicates that those training types are prioritised which help improve corporate development, efficiency and effectiveness.

Apart from compulsory and non-compulsory professional trainings the participant companies prefer language trainings followed by organisational development cours-

es. Digital competences development, however, takes the last place among supported trainings. The low ranking of digital competences development shows that businesses are not aware that today digital competences are needed to secure their market position, profitability and stability, partly through digital development of operations, and partly through professional development of employees using these tools and systems.

The cliché “Whoever is left out, is left behind,” is often heard these days. Raising corporate awareness in this respect could be taken up by the government, with a more efficient involvement from the chamber system. In the survey companies were asked how secondary vocational training and tertiary education is linked to the professional development of employees: whether they develop their existing skills or support acquiring new knowledge different from their earlier expertise. Based on the results, supported and provided employee trainings further develop existing skills acquired in secondary or higher educational programmes, which indicates that deepening existing knowledge is preferred by companies.

This enables employees to acquire in-depth knowledge in a certain professional area complementing existing knowledge with new, which then will be integrated into their everyday operation.

#### *Aims of supported trainings*

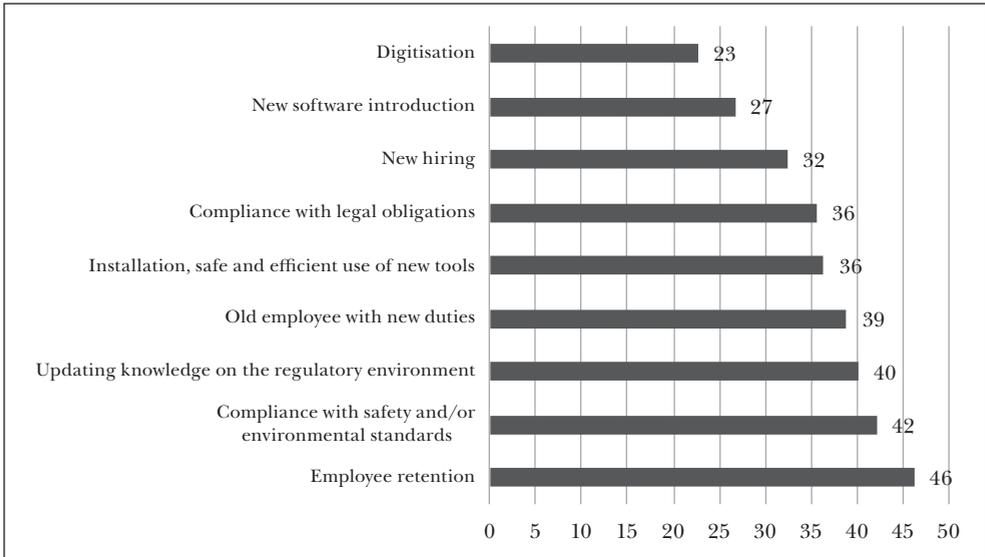
The survey set up 9 aim categories as follows: (1) digitalisation, (2) installation, safe and efficient use of new tools, (3) new software introduction, (4) new hiring, (5) old employee with new duties, (6) promotion of employee self-fulfilment (employee retention), (7) updating knowledge on regulatory environment, (8) compliance with legal obligations, (9) compliance with safety and/or environmental standards.

Taking a look at the aims of supported employee trainings, it can be concluded that the most important aim is employee retention, which is followed by compliance with safety and/or environmental standards, and updating knowledge on regulatory environment (see Chart 8). It is a surprising finding that the least important motivation for supporting employee trainings is digital competences development (digitisation).

One of the major aims of supporting employee training is employee retention. This underlines responsible leadership and management decisions that in today’s tense labour market situation seek to lower turnover rate and retain existing workforce in the long run. It is perceivable that businesses are becoming more and more aware in this respect. Besides employee retention, compliance with safety and/or environmental standards and compliance with legal obligations are also stressed showing that companies pay special attention to legal compliance. Based on the results, businesses ranked digital competence development least often as the aim of employee trainings.

This reflects the fact that businesses are not fully aware that today is the age of digital revolution (4th industrial revolution), and, if they fail to incorporate/apply available digital developments, they are bound to be left behind. It is a clear conclusion that there is a huge untapped potential in digitisation.

Chart 8: Distribution of supported employee trainings based on motivation (%)



Source: HCCI own compilation (N: 185)

The aim of supported trainings has a considerable effect on willingness to support trainings; therefore the aims were examined from another angle, based on company size (staff number). Characteristically, micro businesses employing 1–9 workers marked compliance with legal obligations as their sole and foremost objective. While employee retention is an important aim of supported trainings for small companies, smaller medium enterprises (50–99 staff) find new hiring related training the most important. For large companies updating knowledge on regulatory environment is seen as the primary training aim. Smaller businesses dominantly concentrate on one aim, whereas larger companies determine much more and more diverse aims which they regard equally important. On this basis it can be stated that while legal compliance takes up a great deal of energy in smaller businesses, large companies, in the possession of up-to-date regulatory knowledge, have ample capacity to exploit opportunities, sooner and to a greater extent.

For medium enterprises introduction of new tools, new hires and employee retention all indicate an intention to strengthen their market position. Training preferences of medium-sized companies definitely reflect their purpose of growth.

## TRAINING COSTS

The study also examined to what extent companies gave support for employee professional development in the last 3 years. In order to achieve comparability and receive detailed results, a scale was developed, which helped companies identify the volume of their training costs. The scale includes the following value categories:

- below 50,000 HUF
- 50,001–300,000 HUF
- 300,001–500,000 HUF
- 500,001–1 million HUF
- 1–3 million HUF
- 3–5 million HUF
- 5–10 million HUF
- over 10 million HUF

Data analysis shows that in the given period companies increased their employee training expenditure. Another positive point is that the rate of companies supporting employee development with the least amount – that is less than 50,000 HUF – continuously decreased. It has to be noted that the largest improvement is related to the 1–3 million HUF and over 10 million HUF value categories. In the examined period training cost per employee shows a marked increase. In addition, considering the form of training support, time off work for studies, and covering all or a part of the training costs were typical. The above data clearly confirm that companies invest more and more in employee development and besides financial subsidies they support employees with providing time off work for studies. It also has to be mentioned that more than 50% of participant companies stated that they had not applied for/received any external aid or subsidy for supported employee training costs. Taking all of these into account it may be concluded that businesses invest increasingly more in employee development from their own resources. In summary, companies are aware of the importance of training in corporate performance and more of them invest increasingly more in this area.

#### THE EFFECT OF CORPORATE TRAININGS ON PAY RISE

From the employee's point of view, besides self-fulfilment, the possibility of pay rise is also a motivating factor. For this reason, *pay rise* following the successful completion of a training was also examined in connection with the *form of training* (external training company and/or internal training), and also compared to the *type of training* (internal training, NVQR or other supported trainings, higher education). Overall, it was found that 60% of participant employers rewarded their employees with a pay rise after they have successfully completed their studies.

Comparing the types of training to the rate of pay rise, it is visible that in the case of company-independent and blended trainings employee wages increased at a higher rate than following the completion of “only” internal training courses. Pay rise following training completion showed the highest rate (65%) in those companies where blended (external training company and internal training) forms were used. The lowest rate of pay rise was characteristic of companies that only offered internal training. The prospect of pay rise following successful training completion is not only dependent on the form of training, but also on the type of supported training. The following was found in terms of the connection between training type and pay rise: 81%

of companies supported NVQR or other supported trainings, 71% supported their own internal professional training, while 51% supported higher education (college/university) training programmes. Companies mainly prefer shorter duration trainings rather than longer, occasionally 3–5 year-long, higher educational programmes.

The possible reasons for this could be that the company operation requires employees taking part in short and more targeted training, or, if an employee with higher skills is needed, they prefer hiring new adequately qualified employees instead of enrolling existing workforce. It also has to be noted that in several companies there is a perceivable lack of consciously designed human resources strategy, which could help them choose the most fitting form of training for a certain job, employee or task.

The rate of companies rewarding their employees with a pay rise following the successful completion of a training does not differ greatly based on the type of training. While for internal trainings 61% of companies reported employee pay rise, in companies supporting “only” NVQR trainings, the rate was 62%. Respective data for higher education was 67%. Based on data analysis it is favourable that pay rise is present for all training types. This shows that companies acknowledge employees’ knowledge expansion financially as well.

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