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ANALYSIS OF LABOUR MARKET COMPETENCE EXPECTATIONS TOWARDS FRESH GRADUATES FROM A MANAGEMENT PERSPECTIVE

PhD *thesis statements*

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TABLE OF CONTENTS

1. Definition of the research programme 1
2. Literature summary and the research model 4
3. Methods applied in the research 6
4. Analysis of hypotheses 12
5. Novelty and applicability of the results 18

Thesis book literature 233

The author's relevant professional work 28

FIGURES AND TABLES

Figure 1: Research model (own edition) 29

Table 1: Research questions (own edition) 3

Table 2: Structure and methodology of the primary research (own edition) 9

Table 3: : Measurement and analysis tools relating to the research questions in the individual research phases (own edition) 10

Table 4: Hypotheses related to research topics, and the results of their analysis (own edition) 300

Table 5: Description of competence variables created by hierarchic clustering of competence variables (own edition) 311

Table 6: Characteristics of corporate competence profiles based on the research results (own edition) 322

Table 7: Characteristics of the competence management practices of corporate clusters based on the research (own edition) 333

Table 8: Organisation of activities serving the performance of competence management practices based on the cluster analysis (own edition) 344

1. Definition of the research programme

Due to the technological, social and economic changes in the macro economy, a significant realignment could be experienced in the labour market in the recent years. (IFTF 2011; Cedefop 2018; PwC 2017; Manpower 2016; Eurydice 2010; World Economic Forum 2016; Tóth-Nyírő, 2017) The experienced changes lead to mismatch issues in the labour market which force both employees and employers to face a new situation. Labour market surveys report that as a result of the realignment, companies sense workforce shortages of such extent that they are considered obstacles of their business success. Workforce or talent shortage is on the one hand a workforce count issue, resulting in hiring new workforce or the realignment of workforce structure. On the other hand, as the formal and substantial framework of work substantially change during the realignment, new skills, knowledge and qualifications will be required. This means that the experienced macroeconomic changes significantly change the scope of personal employee traits that are useful or valuable in work. ***In my research I focused on understanding the expectations towards these changing employees and finding the personal traits that are „valuable" on the labour market.***

In my research I analysed the system of expectations towards employees through understanding the thinking of employers from a managerial viewpoint. Several fields of science are concerned with human resources, their quality, and human resource management (HRM). Given that the problem to be analysed here is at the same time of economic, psychological and sociological nature, this is an interdisciplinary field of research that could be best classified as economic psychology. Economics, based on the principle of rationality, interprets the material value of useful work for economic operators and thus, employee traits from a market-oriented perspective. (Lazear, 1998; Ehrenberg-Smith, 2008; Galasi, 1994) Human sciences emphasise the psychological and sociological aspects of the workforce at work. (Hunyady-Székely, 2003; Fodor, 2013; Kiss, 2003) Corporate HR management builds its practice on the results of these sciences, „merging" them. (Armstrong-Taylor, 2014; Bakacsi et al, 2006; Tóthné Sikora, 2004) In my research I focus not on these operative tasks of HR management but their strategic aspects, asking how the organisation can define the employment conditions necessary to perform their objectives in a given labour market situation. The theoretical background to this is provided by HR based corporate theories, which analyse the effect of HR on organisational performance and seek the conditions of present and future success of economic organisations. (Colbert, 2004; Lepak-Snell, 2002; Wright et al, 2001) Consequently, the interdisciplinary research programme analyses the quality criteria set by employers towards employees in the light of the HR thinking of companies, from a managerial viewpoint. ***Based on the literature review, the strategic aspect of corporate HR management (that developed on the results of the science fields mentioned above) secures a proper terminological framework for this research.*** The starting point of the research is that the true content and system of employers' personal competence expectations can be understood together with understanding the underlying thinking of the organisation. Competence is a term often used in pedagogy (Nagy, 2007) and psychology (Hegyi, 2012) as well. These sciences analyse the personal components of work: how they are organised within a personality and how they can be developed. However, in my thesis I am not applying this interpretation of competence, but the one used in the management literature, basing on the early work of McCleland (1973), that focuses on selecting and identifying those

traits that are 'important' on the labour market, that are 'distinguishing' from the viewpoint of excellent work performance (Boyatzis, 1982).

I narrowed my research on career starters entering the Hungarian domestic labour market with degrees in business or engineering; this might contribute to the results of existing research programmes on the success of fresh graduates on the labour market (DPR 2010; MKIK-GVI 2011) with a new aspect. I choose this group because the shortage for talented employees is felt primarily in jobs requiring a higher degree. (Tóth-Nyírő, 2017) In my research I do not analyse position-dependent competence expectations but those that are generally relevant for the operation of the organisation and achieving its goals. From this viewpoint, career starters form a special employee group in which general 'transfer knowledge' (Fazekas, 2017) that is assessed by analysts as being of defining importance in future employee success is assumably more relevant than professional experience. When fresh graduates enter their job, employers are presumably taking a certain grace period into consideration before putting them into responsible independent positions, and therefore the section of entry and learning can be clearly separated and the general employer expectations can be assumably observed more clearly.

The research programme raises actual and important questions for the participants of the labour market and gives an opportunity to gather interesting new experience. 'Labour market information has become a public good, and its use extends far beyond the experts, decision-makers and social partners that are concerned with the topic' (Czibik et al, 2013, p. 190), as it can directly influence the decisions of employers and employees. The application of the research results can be manifold. Primarily it can provide interesting information to employers; however, a better understanding of employer expectations may be interesting to the other participants of the labour market as well.

- Exploring the competence preferences and competence management practice of the companies operating in the labour market may provide a starting point for employers in developing their own HR and quality workforce count management practice and may be useful in developing competence expectations towards fresh graduates.
- The results may help employees in identifying the personal conditions necessary to form their labour market career, as well as defining their entry and learning strategy for this purpose.
- Institutions training employees may gain a starting point from the research for planning their graduation requirements.
- Furthermore, the results of the research programme may contribute to the methodology of research on employee competence expectations by defining the relevant competence categories for the selection of fresh graduates and creating tools for their measurement.

My research is primarily of exploratory nature; it is not aimed at exactly mapping the current status of competence expectations towards fresh graduates in Hungary but rather at better understanding the quality components of work within the organisations and learning about the thinking of employees regarding expectations. Given that the expectations towards employees are in transition due to the significant realignment of the labour market, understanding the procedures and the dilemmas behind the decisions of the participants is a really interesting question; my secondary research yielded a large amount of information about this, however, it was rather scattered. In my analysis I aimed at organising the relevant theories and results in the literature and in secondary research and constructing my research on this foundation.

The goal of my research is to understand among the HR issues of domestic employers how expectations are shaped towards fresh graduate employees in a given labour market situation and to explore the thought patterns of domestic employers regarding this matter.

Research topic 1: ***How are employers' competence expectations towards fresh graduate employees affected by the current situation in the goods market?***	
1	*What general (not position-dependent) personal expectations are set on the domestic labour market towards fresh graduates?*
2	*How far do employer expectations follow labour market trends?*
3	*What differences can be found between the employers' expectations?*
4	*How are the expectations of a company towards fresh graduate employees affected by its situation in the goods market?*
Research topic 2: ***How are employers' expectations affected by their perception of supply in the labour market?***	
5	*How do employers in the domestic labour market see the preparedness of fresh graduates compared to their expectations?*
6	*To what extent do employers feel the labour market supply to be limited?*
7	*How does the current situation in the labour market shape the employers' competence expectations?*
8	*How could employers become more attractive for applicants with better skills and abilities?*
Research topic 3: ***How are employers' expectations influenced by their HR management practice?***	
9	*How are employers' expectations towards fresh graduates shaped by their hiring practice?*
10	*How do employers in the domestic labour market define the requirements towards employee necessary for the fulfilment of the organisation's goals?*
11	*With what practice does HRM at domestic employers support employee preparedness necessary for the accomplishment of company goals?*
12	*How can a corporate practice be created that effectively serves the definition and securing of personal success criteria that ensure corporate success?*

Table 1: Research questions (own edition)

The questions defined as the starting point of my research can be grouped in three topics. (Table 1) In all three cases I analyse employer expectations from the viewpoint of the employers' operation, decisions and managerial dilemmas. ***I research the problems faced by economic organisations in the definition expectations towards fresh graduates through questions relating to the operation of the labour market, the accommodation of participants and the relevant managerial issues.*** Based on this, my research questions aimed to analyse the following factors:

- the first question group analyses the effects of goods market changes on labour market demand,
- the second visits the supply limit in the actual labour market,
- the third analyses the role of companies' HR management practice in establishing employer competence expectations towards fresh graduates.

2. Literature summary and the research model

In my literature research I analysed ***HR management with special regard to its personal components with an interdisciplinary approach***, ***considering several fields of science.***

- The ways of thinking of economic and human sciences, as well as HR based corporate theories on the image of humans shape the practice of HR together. These theories also define competence-based corporate HR management and managerial thinking. (Armstrong-Taylor, 2014; Bakacsi et al, 2006) Based on my research I have found that the most important role of the competence-based management approach is that it can link in corporate HR management the viewpoints of these very differently focused fields of science. The term of competence used in a workplace context is linked primarily to useful work in economic processes and thus this economic content of the term will come into focus in my research in order to identify those employee criteria that ensure high performance for companies.
- In the market-oriented aspect of economic thinking the value of employee competences in shaped in a competition based on supply and demand. This is the basis for research on labour market mismatch concerning fresh graduates. (Allen-Velden, 2001; Teichler, 2007; Schomburg, 2010; Velden-Garcia, 2010; Kiss, 2010; Garai-Veroszta, 2012; Galasi et al, 2001; Vincze, 2012; Zerényi, 2017; Varga et al, 2017) However, the time shift of the adaptation of market participants and the risk of related decisions, as well as the personal and social aspects of work greatly influence this process.
- The methodology of the term of competence in work psychology (McClelland, 1973; Boyatzis, 1982) made the definition of the personal criteria of work possible; this is the foundation for the operative competence management of organisations that has become the defining tool of HR management. At the same time, the approaches developed in social psychology (Bandura, 1996; Wilkens, 2004; Wilkens et al, 2006) and in resource-based corporate theories (Prahalad-Hamel, 1990) enables us to interpret the quality criteria of work in corporate management at group level and organisation level as well.
- Research-based theories think from a strategic viewpoint seeking the conditions securing the aggregate performance of the organisation (Moldaschl, 2010; Kessler et al, 2010; Lepak-Snell, 2002; Wright et al, 2001; Colbert, 2004) On the other hand, the operative functioning of HR management starts from 'below', from the individuals and serves to secure the conditions of individual performance (Sandberg, 2000; Sanchez-Levine, 2009; Shippman et al, 2000; Hayton-Kelley, 2006) Organisational psychology approaches make the linking of these levels possible and also highlight the responsibility of the organisation in the procedure. (Ulrich-Lake, 1991; Cardy-Selvarajan, 2006)

Linking the micro and macro level of thinking is actually not a new thought in competence management literature. (Becker-Huselid, 2011) The greatest value of these theories is exactly the possibility of linking the quality components of work and corporate strategy; this is also being emphasised by operative and strategic approaches. Both competence based operative HR management and strategic competence management have a literature going back to the 1980s and 90s, despite this, neither practice is widely accepted. (Winterton-LeDeist Delamare, 2005; Henczi-Zöllei, 2007) Also in the HRM area (practice built on job analysis) and in corporate strategic thinking (theory of dynamic skills, knowledge management, complex theories) there are theories

that focus the attention on the quality aspect of work similarly to competence management. In my literature research and secondary research I found even less examples of competence-based thinking on the operational and strategic level. ***The novel ideal of the research programme presents the necessity of linking the two levels of thinking.*** Strategic competence management can be built on effective solutions on the operative level, and an effective HRM practice can also be built on an exactly defined system of competence expectations, which predisposes a decision at the strategic level. All this however requires a special expertise, this is the 'critical competence' defined by Srivastava (2005). This type of expertise is based on the one hand on the knowledge of the presented interdisciplinary fields, and on the other hand, can be learned in the organisations' planning procedures that are built on each other. It results from a practice based upon the experience of the organisation's leadership and HR management from planning (that involves the quality aspects of workforce planning) year after year and upon the broad involvement of employees. The analysis of the strategic role of quality headcount planning and the development of its methodology could be an interesting continuation of the work presented in my thesis. I think the proposal of the thesis to introduce a practice of quality headcount planning with a strategic aspect could also be thought-provoking for employees.

I interpreted this practice of corporate competence management (with elements built upon each other) in a new research model (Table 1) based on literature research. According to the basic tenets of economic theories, in a broader market environment corporate HR management is defined by both goods market and labour market procedures. When defining their 'competence demand' companies decide on the personal competences required for the fulfilment of their strategic goals. After this, they compare their competence needs to the competences present in their organisation. However, the existing competence set within an organisation is also defined by their internal procedures and organisational characteristics, which strongly define the retention, 'use' and incorporation of competences in their functioning. Finally, they decide based on the differences whether they develop the missing competences within the organisation or they recruit from the labour market. At the same time, the selection and training practice of the organisation is being changed based on the experience about the labour market. Consequently, according to this concept, the selection criteria toward career starters are primarily defined based on the organisational needs, but depending on the fact whether these competencies are found on the market, the criteria applied in the practice of selection is modified, or a decision can be taken to change the practice of training. Naturally, at the same time, employees may chose different entry and learning strategies according to the competence needs in the labour market, which modifies their competence set and competence sense, in other words, the 'competence supply' in the labour market. In the model I presume that a company has a more effective HR management practice if it thinks in a more conscious manner about defining the personal components that are of key importance for the success of the company, meaning that it builds its HR management practice on a competence-based thinking, and shapes its organisation consciously in order to utilize competences. In the research model the competence expectations of employers towards employees are structurally linked to the individual tasks in strategic and operative work in the HR management practice.

3. Methods applied in the research

In the research programme, the competence expectations of employers towards fresh graduates were revealed through corporate surveys. The greatest advantage of corporate surveys is the direct participation of the involved participants. At the same time, Czibik et al (2013) call the attention to the reliability issues of surveys, as the definition of skills is subjective; the survey may become less exact due to interpretation issues and distortions deriving from conflicting interests or may easily focus on marginal phenomena. Surveying about the competence expectations raises in my view three further research issues. A survey on competence preferences can only reflect expectations in a given moment, thus the results may not be properly indicative for the future employment strategies of employees and employers. In reality, the expectations dynamically change in the relationship of the participants, the behaviours and decisions of employers and employees may continually transform the system of expectations. Surveying the employers furthermore presumes that employers can exactly define their quality expectations towards the workforce. Economic models are also based in essence on this presumption. In reality, however, due to the human factor and the subjective aspects of performance, employers are unable to define this exactly, and in reality the procedures defining the requirements, the problems defining the decisions are unknown to us. In my research my concept about these three problems was the following:

- ***'Exactness' in a strategic approach*** can be interpreted as a degree how far the expectations of the company towards the employees secure higher individual performance and the accomplishment of the set corporate goals. Labour market forecasts are usually created based on the opinions of acknowledged experts who have an overview of the market and these forecasts define the success criteria of future employees most 'exactly' based on the expected tendencies in the goods market. However, personal success criteria in HR management practice (Boyatzis, 1982) is primarily identified based on the actual performance. Yet, due to fast macroeconomic changes it is uncertain whether these criteria will be relevant in future performance. (Sparrow-Bognano, 1995) All this can be influenced significantly by the goods market position of the organisation, the tempo of macroeconomic changes and the flexibility and adaptability or the organisation according to economic models. The research results of Czibik et al (2013) show that various domestic employees sense the role of future competences in the operation of their organisations differently. This contradiction gave me the idea during the research that it would be interesting to further investigate the differences between the requirement profiles of employers and to analyse how companies adapt to the labour market realignment, how far they follow the trends.
- The starting point of my research is the problem that the personal success criteria of employment change. Some competences become outdated, some remain important, and probably new, more complex expectations will be of defining importance. Accordingly, labour market requirements cannot be considered as static phenomena, because the participants are dynamically changing in their interaction. Therefore, in my research I am not examining competence expectations in themselves but in their ***labour market context***. The examined labour market research points out that employers also react differently to the experienced macroeconomic events. Employers also accommodate to the higher expectations differently and with time due to the learning procedures. The extension of employer competence expectations and the experience of the supply not being properly prepared seem to be the defining experience also in the case of the employment of domestic fresh graduates. (DPR,

2010; MKIK-GVI 2011) In my research I consider the analysis of employers' experience to be of importance because this way these quality differences can be more exactly identified. First, those competence expectations where the employer has to yield from the selection criteria during the hiring process as the supply side is not properly prepared. Second, probably those competence expectations in the selection process about which the employer has the experience that almost all applicants comply with these requirements, and thus select new ones that make the filtering out of applicants with even better skills possible. However, in some competence areas it is possible that the exact opposite market situation develops, where corporate plans are made based on better trained workforce with higher skills thus driving up the expectations towards other employees. The term of competence as used in management is looking exactly for this success criterion that changes in time and interprets the examined phenomenon in the link between work performance and the individual. (Koncz, 2004) In the research I applied this dynamic interpretation to examine the evaluation of the employers' labour market position and their relevant responses.

- ***In my research I understand under 'ability'*** the special organisational practice of a company to define the quality criteria towards its employees. Competence-based management, that is known for a long time in the corporate HR management practice, calls attention to the quality aspects of the workforce. At the same time, we know much less about the way companies define their competence expectations that are the foundation of competence-based HR management. Quality-based headcount management (Armstrong-Taylor, 2014; Koncz, 2004) may secure the link between the strategic goals of the organisation and the creation of a workforce of the right quality, where the organisation defines the personal conditions of corporate success consciously and in a coordinated manner. In my research I analysed the 'defining ability' of the companies looking at the actual employer expectations. Competence 'expertise' is usually meant to mean the knowledge about the organisation of the elements of competence within a personality and the about possibilities of their development, which is built upon professional psychological and pedagogical knowledge (Hegyi, 2012) Operative competence management in corporations is to a definitive extent built upon this professional knowledge. However, I wanted to attract attention to the role of a different 'professional knowledge'. The 'exactness' of a leader or an organisation in choosing the personal attributes that are relevant for the performance of the organisation is not based exclusively on psychological and pedagogical knowledge, but is a more complex management issue and requires different professional skills. In my research I was interested in the thinking of companies from this strategic management perspective. The basis of effective competence management can be secured exactly if the organisation establishes the set of personal competences that are relevant for it in a conscious and coordinated manner. Based on the results of research on the HR management practice of domestic employers I presumed that this may be the 'weak point' of corporate practice to which less attention is given in corporate thinking.

In my secondary research I have not found any research programme that completely covers the goals set out in my research programme. Therefore, secondary research relating to segments of my research area primarily served as a starting point for comparative analysis of partial results of the research.

- Differently from general labour market surveys about the labour market realignment this research programme analyses the labour market situation of a given market segment. I could compare the expectations towards fresh graduates

with the results of DPR in 2010 (Kiss, 2011) and MKIK-GVI in 2011 (Várhalmi-Tóth, 2012) in the first research phase. However, these instances of comprehensive research do not cover the issue of quality mismatch since 2012. From this viewpoint, the research programme may be filling a hiatus in the area of research on the employment of fresh graduates.

- Processing the results of labour market research on the international (IFTF 2011; Cedefop 2018; PwC 2017; Manpower 2016; Eurydice 2010; World Economic Forum 2016) and domestic (Tóth-Nyírő, 2017) labour market, I compiled the future competence expectations foreseen by those surveys. In the second research phase I analysed the current expectations of employers towards fresh graduates in comparison with these forecasts and I found interesting differences regarding corporate accommodation procedures.
- A starting point for research on corporate thinking was provided by research on the HR management practice of domestic companies (Bokor, 2011; Poór et al, 2012; Bácsi et al, 2006) and their headcount planning practice (Czibik et al, 2013). My research programme contributes to this field of research through the analysis of the practice of competence management and raising the issues of quality headcount planning.

I performed my primary research among employers actively seeking fresh graduates, combining the use of qualitative and quantitative tools. In the end, the programme consisted of three corporate surveys that were built upon each other:

- The first primary research that served as a vantage point measured the importance of individual competences in the thinking of employers with the help of a paper-based survey that was easy to fill out. Comparing the results of research finished in 2012 with the results of the DPR 2010 and the MKIK-GVI 2011 research, the importance of certain employer expectations was verified, however, the employer preferences differed in several aspects. These contradictions served as the basis for the research plan of the next qualitative research.
- The second, exploratory research revealed the true content of competence expectations towards fresh graduates in one hour long in-depth interviews. The in-depth interviews provided opportunity for understanding the factors behind employer preferences and their way of thinking about competences. The employer expectations, experience and practices that were revealed showed in themselves interesting results when observed in the actual labour market context. Furthermore, the results of the research founded the basis for planning a subsequent quantitative research. The questionnaire of the next quantitative research was built upon the revealed preferences, aspects and thought patterns.
- The third corporate survey already contained detailed questions linked to all three research questions and took as much as 35 to 45 minutes to fill out. I examined the competence expectations in the context of the new, extended competence definitions revealed in the in-depth interviews in a temporal logic fitting to the thought patterns of employers. I measured in a separate question block how employers sense supply. In the third part of the survey I explored the competence management practice of the participating companies. I could process 100 useful answers in the research, which made statistic processing possible, however the results cannot be generalised given the limitations deriving from the manner how the research was performed. However, as the aim of the research was to reveal the thought patterns behind employer competence expectations, and this was performed on a broad scale, it can be characterised as exploratory research. At the same time,

the new results of the research can serve as an interesting continuation of the research programme.

Research	**Sample**	**Measurement**	**Analysis**
Initial quantitative research: ***Large company research 2012*** N=88	*Recruitment experts of mainly large companies actively looking for fresh graduates* Data collection in spring 2012 on employment fairs with interviewers	*Paper-based survey,* in which we asked recruitment experts for the evaluation of the importance of competences separately in the field of business and engineering; we also asked about the company's selection practice	*Comparative analysis among the competence survey performed by DPR 2010 on students and MKIK-GVI 2011 on a corporate sample* The analysis made possible: - the comparison of the business and engineering field, - the comparison of the employer and employee aspect - the examination of the role of company size
Exploratory qualitative research: In-depth interview research 2015 N=24	*Mixed corporate sample, selection professionals of companies actively looking for fresh graduates* *Data collection: spring 2014 to early 2015 with interviewers*	*One-hour structured in-depth interview with the companies' selection experts in order to learn about competence expectations towards fresh graduates and the relevant corporate thinking*	*We revealed through content analysis:* *- the corporate interpretation of competence expectations, their true content* *- the structure of corporate thinking about competence expectations, the ways of defining expectations* *- enrolment/integration solutions for fresh graduates* *- organisational thinking about competences*
Quantitative research: Fresh graduate research 2018 N=100	*Mixed corporate sample, selection professionals of companies actively looking for fresh graduates* *Data collection: contacting companies that participated at job fairs in 2018 and through interviewers*	*Online professional questionnaire with the companies' selection professionals* *- company characteristics* *- enrolment and integration of fresh graduates* *- competence expectations in selection* *- experience on preparedness* *- company characteristics and HRM practices*	*We studied through multivariant statistical analysis:* *- the competence expectation patterns towards fresh graduates* *- the defining factors for differences between corporate competence profiles* *- employer satisfaction with fresh graduates and the result on consequences* *- typical solutions for enrolment and integration solutions in the case of fresh graduates and the relevant effects* *- the practice of corporate competence management and its effect on expectations*

Table 2: Structure and methodology of the primary research (own edition)

I performed the first quantitative research and the second exploratory in-depth interview survey with Dr. Erika Hlédik, I show the results in my thesis based on our common publication (see the list on author's the thematically relevant research). I developed and processed the third corporate (questionnaire based) survey based on these research results independently. I formulated the research hypotheses relating to the research questions building upon the results of the literature research, the secondary research and the first two primary instances of research, finalizing them before this last research phase.

	1st research question	2nd research question	3rd research question
Initial quantitative research: ***Large company research 2012*** N=88	Measurement: the importance of the competences (30 competences on a 7 point Likert scale) Analysis: by descriptive statistics, arrangement of competence preferences and competences by factor analysis, comparative analysis with secondary research	Measurement: not performed Analysis: based on the results of secondary research	Measurement: along 2 questions to determine whether competences are used in the definition of expectations and the selection procedure Analysis: descriptive statistics
Explorative qualitative research: ***Research with in-depth interviews 2015*** N=24	Measurement: interpretation of 5 highlighted competences, mapping for the arrangement of competences, open and 'ideal' question Analysis: through content analysis in order to reveal the competence categories, interpretation and thought patterns of employers	Measurement: question block about the experience about preparedness Analysis: through content analysis, to identify shortcomings	Measurement: separate question block about the selection and integration procedures of career starters as well as the organisational background of competences Analysis: content analysis to reveal the characteristics of organisational practices
Quantitative research: ***Fresh graduate research 2018*** N=100	Measurement: 54 competence elements based on the in-depth interview research, their analysis in the temporal sequence of expectations on a 4 grade scale Analysis: comparison of 10 competence groups and 5 employer competence profiles through hierarchic clustering, correlation analyses	Measurement: measurement of satisfaction along 9 competence categories on a 4 grade scale and with an open question Analysis: descriptive statistics and correlation analyses	Measurement: measurement of 12 organisational conditions and 17 HRM activities on a 4 grade scale according to the research model Analysis: identification of 6 activity variables and 4 corporate competence management practices through hierarchic clustering, correlation analyses

Table 3: Measurement and analysis tools relating to the research questions in the individual research phases (own edition)

The experience gained during our research helped ***the process of operationalisation and measurement*** step by step; this was performed within the three large research topics in the following manner:

- We performed the measurement of competence expectations in our first research with my co-author similarly to the methodology in secondary research along 30 competences on a 7 point Likert scale. Other studies also measured the importance of competences in the selection procedure on a Likert scale, although often not on a 7, but typically on a 5 point scale, but we considered the 7 point scale to enable a more exact measurement. However, when compiling the competence list we experienced that the individual studies measure along very different competences. The studies following graduate careers did not explain the selection of the competence list when they compiled their competence elements; they often used lists that were used in previous studies. In our evaluation, these competence lists primarily follow a

psychological organisation of competences, following the personality-focused (income) approach. In our primary research we aimed at compiling a questionnaire following the employers' way of thinking, so we aimed at compiling the competence list along categories used in work, which is closer to the work-oriented (outcome) approach. (Sandberg, 2000) However, the processing of these research results in factor analysis showed that the way of thinking of the individual actors may be so different, that this in itself may influence the results of the research. In our qualitative research we accordingly revealed similar and different interpretations with my co-author. Our exploratory research also showed that expectations towards fresh graduates are organised in the thinking of employers primarily according to the steps of the selection and integration procedure. As a result, in the qualitative research which I devised independently I measured the role of individual competences along a list consisting of 54 elements taking into consideration whether the given competence becomes important during selection, training or becoming an expert. Interpreting the process in an order of sequence, I treated the individual steps as an ordinal scale and I performed the analysis of competence variables through hierarchic clustering. As a result, I identified 10 competence variables in the system of expectations during the selection and integration towards fresh graduates. I think that by this result ***I successfully developed a measurement tool usable in research on expectations towards fresh graduates*** which I consider to be an important result of my research beyond the analysis of the research questions themselves. After this, by hierarchic clustering of the observation units I identified 5 different employer competence profiles along the merged competence variables. In order to understand the differences between the employer clusters, I performed correlation analysis based on the general company characteristics, the relevant field of profession and the company practice concerning career starters.

- In our first research we performed no measurements yet on the lack of competences during the selection of fresh graduates, we relied exclusively on secondary research results in our analysis. However, in our exploratory qualitative research we dedicated a separate topic to reveal the experience of employers about the preparedness of fresh graduates. In my third, independent research I measured their satisfaction along 9 competence categories asking to what extent they find the given competence among their applicants to be at the level expected at their organisation. Secondary research analysed the shortcomings along the categories used in the analysis of expectations, which made an exact comparison of expectations and shortcomings possible. However, in my primary research, given that the evaluation would be ambiguous along 54 competences, I arranged the competences into groups according to their characteristics. I evaluated the results with descriptive statistics, and I performed correlation analyses comparing the employers' practice towards fresh graduates and the expectations.

In relation to the third research question I set out the analysis of the organisations' competence management practice as a goal. In our first questionnaire, we only asked questions about the method of defining expectations and the practice of selection. In our exploratory research, we proceeded to analyse the organisational practice from several aspects. We asked our interview subjects in a separate question block about the selection, training and integration process regarding fresh graduates, as well as the organisational practice supporting the use of competences. I performed my subsequent quantitative research according the research model based on the aspects revealed in the in-depth interviews and the literature research. In the questionnaire I measured the organisational characteristics relating to competence management along 12 categories

and the HRM practice of the organisation along 12 categories. I continued examining the relevant practice of the employers participating in the research by separating it into 6 activity variables identified through hierarchic clustering, through which I identified 4 corporate competence management practices as a result. I also examined the characteristics of these company clusters through correlation analysis.

4. Analysis of hypotheses

As a result of the literature research as well as the secondary and empiric research I defined the final form of my hypothesis before the last research step, which I present along the research questions drawn up at the beginning of my thesis (Table 4). In the first step I summed up the secondary and primary research results that serve as the starting point for the hypothesis. Next, I performed the verification of the hypotheses through the results of *Fresh graduate research 2018* which I performed in the third phase of the research programme. Considering the sample size, my results cannot be generalised for the Hungarian fresh graduate market. The analysis of the research hypotheses is understood in the context of companies in my sample and with regard to business and engineering fresh graduates, although I will not be able to refer to this to full extent in all instances in order to keep the theses easy to understand and manage.

RESEARCH TOPIC 1
How are employers' competence expectations affected by the current situation in the goods market?

HYP1: When fresh graduates are being employed, there is a certain sense of a „basic competence expectation package" (personal competence for independent work, cooperation and basic communication competences supporting teamwork) in the expectations of the employers, independently from the area where the fresh graduate is going to work.

The Hungarian *DPR 2010* and *GVI 2011* studies examining the competence expectations towards fresh graduates showed, confirming the international tendencies, that professional preparedness in itself is not enough in jobs requiring a graduate degree; personal and social competences are indispensable for successful work performance. The results of *In-depth interview 2015* also confirmed this statement regarding basic employee competences. Using the results of these studies I presumed that in the case of fresh graduate career starters there is a basic expectation package in which these competence expectations appear, independently from the field of profession. However, in the results of *Large Company Research 2012* I found lower expectations regarding verbal and written communication in engineering positions as compared to business positions.

The results of *Fresh Graduate Research 2018* did not show significant differences along professional fields in my sample. During the processing of the answers through hierarchic clustering of variables a system of expectations could be outlined that was organised in the procedures of selection and becoming an expert, where the existence of 'basic requirements' could be found independently from the field of profession. Consequently, the hypothesis was verified in my sample. It was possible to identify

more exactly the sphere of relevant component skills compared to my previous research (Table 5).

HYP2: Competence expectations regarding learning, problem solving and digital skills (’future-oriented’ expectations) yet appear to a smaller extent among employers’ expectations.

Global labour market forecasts indicate an extending role for high-level learning competences, creativity, complex problem solution, a high level of responsibility transfer, as well as digital competences (altogether: ’future-oriented’ expectations). However, my results in *In-depth interview research 2015* showed that various employers think rather differently about the content of these competence expectations. This allows the conclusion that in some employer groups these ’future-oriented’ competences appear earlier and with greater emphasis, while in other instances they appear later or in a smaller extent only. *Czibik et al (2013)* also point out that Hungarian employers often sense the increase of expectations identified in the forecasts to a lesser extent in their own practice.

In the results of *Fresh Graduate Research* 2018 I have not found any expectation for ’brave’ early responsibility transfer or high level independent learning at the time of entry that were heard in the answers to the in-depth interview questions. Based on the fresh graduate expectation profile revealed through hierarchic clustering, these more complex, higher level expectations become important in the studied corporate practices only later, as part of the more complex problem solving competence areas, in the process of becoming an expert. Accordingly, in this corporate sample the hypothesis was partially verified, as this is not an expectation towards career starters but becomes important in the next career phase.

HYP3: The expectation profiles of various employer groups towards fresh graduates differ from each other in with respect to ’future-oriented’ competences

The comparative analysis of *Large company research 2012* and the secondary *GVI 2011* showed a difference in the various company groups regarding expectations. The content analysis of *In-depth interview 2015* also revealed very different employer competence expectations. Depending on the situation or the task for the solution of which the required competences are sought, similarly worded employer competence expectations may cover very different content at various companies. We saw very similar thoughts and wordings on cooperation, independence and communicative competence in the answers of the various organisations in our research. The competence of problem-solving and learning was interpreted and associated differently by our interview subjects.

The analysis of the result of *Fresh graduate research 2018* identified by hierarchic clustering of the observed employers five different competence profiles (Table 6). Based on the MDS procedure, the differences between the competence profiles may be explained by the temporal quality of competences, that is, the complexity of tasks at entry and the role of multicultural expectations. Consequently, the hypothesis was not verified in the examined sample, as the differences in the competence profile of employer groups were not in ’future-oriented’ competences but along other dimensions.

HYP4: Companies develop different competence expectation patterns in different goods market situations

We considered with my research fellow that the differences found between the requirement profiles of *Large market research 2012* and the secondary *GVI 2011* research could be explained by the difference in company size and the goods market situation. The results of *In-depth research 2015* clearly indicated that employers think in different expectation profiles. However, the framework of the research did not make it possible to examine which corporate factors determine the difference. In the research of *Czibik et al (2013)* concerning corporate workforce count management the perception of qualification expectations was influenced by the field of operation, company size, ownership and market presence. Based on this, it could be assumed that the goods market presence of companies would – *in accordance with economic theories* – define employers' expectations.

With the aid of the results of *Fresh graduate research 2018* I analysed the effect of several company characteristics during the comparison of the employer clusters of the five revealed requirement profiles. The correlation analysis on the examined sample did not prove the effect of company size and the intensity of changes in the goods market were not decisive either. However, the effect of a foreign owner and the presence on a foreign market were proven by the appearance of different expectations. Accordingly, the hypothesis was verified in the examined sample only partially, as the pace of changes on the goods market was not decisive, however, the presence on a foreign market appeared to be of decisive nature.

RESEARCH TOPIC 2:
How are employer expectations affected by their perception of labour market supply?

HYP5: Employers perceive the preparedness of fresh graduates applying to them differently; they sense a mixed labour supply.

The results of secondary GVI research 2011 and *In-depth interview 2015* showed that employers perceived the preparedness of fresh graduates very differently along the factors of motivation, the ability of independent work and social competences, while they commended the applicants' learning and digital skills. In the results of *In-depth interview 2017* the experience of employers varied very broadly as regards the preparedness of fresh graduates, they sensed a mixed labour market supply in respect of several competences considered to be important as learning and professional motivation, personal and social competences, and professional preparedness. Some found the preparedness of career starters to be excellent, while some shared very bad experience. Differences in adjustment to the accelerated tempo, use of IT and social media and work attitude was found in comparison respect of older employees.

The hypothesis was also verified through the results of *Fresh graduate research 2018*. Looking at the experience of the studied employers they were most satisfied with digital and learning skills. In the case of all other competences a high proportion of research subjects reported that a smaller number of applicants comply with the criteria. Altogether it can be said that employers have a mixed experience about the preparedness of fresh graduates. At the same time it should be noted that the questioned

employers are not actually checking the competences being praised here when making their hiring decisions.

HIP6: It is hard for employers to find the fresh graduate that complies with their expectations during the hiring processes

The starting point of our research was exactly the problem that companies on the Hungarian labour market by now often sense a labour shortage that they consider to be a factor inhibiting their business success. In the large sample *GVI 2017 research* 40% of enterprises mentioned these problems.

According to the evaluation of company representatives who took part in *Fresh graduate research 2018* the recruitment and retention of fresh graduates caused more problems while their selection was less problematic. For 43% of the employers it causes a significant problem to find enough applicants, and for 40% to keep the admitted career starters. 23% of the employers who participated in the research said that if they do not find the right workforce during selection, they choose from the existing applicants, which means that they have to make a compromise along a competence expectation during the hiring process. Given that this problem was experienced in our sample in a similar rate as in the secondary research, the hypothesis was verified.

HYP7: In the case of engineering graduates employers often yield from social competence expectations during their hiring process

Among the subjects *of In-depth interview research 2015* some respondents said that in the case of engineering fresh graduates, when it was hard to find an applicant with proper professional knowledge for jobs requiring new, special knowledge, they were forced to yield from their personal and social competence expectations.

In the results of *Fresh graduate research 2018* we found a worse evaluation regarding language and problem solving skills in the field of engineering, but this was not linked to the requirements. Thus in the examined sample the hypothesis was not verified.

HYP8: Employers setting higher requirements are more attractive for fresh graduates with better skills

Based on economic theories, the signalling mechanism of variable pay regarding competence expectations makes the application of employees with higher skills possible. When formulating my hypothesis, I was curious to see whether this signalling mechanism also makes the company more attractive for applicants with better skills in the case of higher competence expectations.

The results of the analyses performed during *Fresh graduate research 2018* show in the case of several competences that higher expectations are coupled with better experience regarding the preparedness of fresh graduates. The background for this may be that positive experience about the preparedness of applicants result in higher expectations. At the same time it is possible that this employer was able to recruit applicants with better skills through higher expectations. This connection can also be felt in the other direction, that is, worse experience about the preparedness of applicants is coupled with lower expectations. However, in this direction a limit value can be experienced, similarly to Boyatzis' 'limit competence', where employers are not lowering their

expectations regardless of bad experience. Accordingly, the hypothesis was partially verified in the examined sample.

Interestingly, the existence of an integration programme for career starters did not show a significant correlation to satisfaction in the examined sample, just in the case of competences related to independent work. However, here my analysis showed that where there is an integration programme, the experience is actually worse. This might indicate that it is not evidently the better qualified applicants for whom the offering of an integration programme will be attractive.

This is supplemented by the research result that in the thinking of employers motivation management was clearly separated from thoughts on other HRM tools. All this indicates that in the evaluation of the organisations taking part in the research an attractive salary offer is in itself not enough for building up the appropriate workforce and a less attractive offer can also be improved through the right HRM tools thereby making the company more attractive.

RESEARCH TOPIC 3:
How are employers' expectations influenced by their HRM practice?

HYP9: Different programmes developed for the integration of fresh graduates define different competence expectations at job entry.

Based on the logic of HRM practice it can be presumed that depending on the manner how the company plans to integrate the fresh graduate into the organisation, it calculates with different grace periods with regard to the different work performance criteria, and accordingly, the competence expectations may be arranged differently in their practice. Sági (2014) pointed out based on the results of *Hungarian DPR 2013 studies* that different paths evolved for fresh graduates to step from learning to working, the students follow a variety of strategies. Presumably a variety of paths or integration strategies have developed for fresh graduates from the side of employers as well. The results of *In-depth research 2015* showed that employers offer various entry options or paths for young graduates:

- internship programmes aimed at the continuous supply of professionals
- new generation (talent search) programmes
- „jump in" positons not requiring a higher degree
- positions requiring a degree.

Presumably the strategies of young employees and their employers are shaped in interrelation, as the participants adapt to the given labour market situations.

According to the results of *Fresh graduate research 2018,* these entry paths were not influential in the formation of requirement profiles, thus the hypothesis was not verified based on the analysis on this sample.

HYP10: The competence expectations towards career starters is most often defined by the direct superiors of a given job

In *Large company research 2012,* less than half of the companies involved are built on competence-based thinking. Starting from this research result I formulated the presumption that in the practice of companies nowadays it is even more typical that requirements towards the employees are defined by the professional leader alone. In this

case thinking in the organisation about competences is less conscious and less structured.

Based on the results of *Fresh graduate research 2016*, the expectations towards fresh graduates are compiled in most cases (83%) by the professional leaders in the case of the employers featured in the sample. In 63% a HR expert helps in the compilation of expectations, external experts are used in only 2% of the cases, and in 25% of the cases, an executive manager decides on the matter. Only 7% of our respondents reported that the leaders define the expectations together. The definition of expectations happens in 33% of the companies in the sample individually. In 52% of the cases, uniform competence profiles are created for the individual job areas, and only in 6% of the cases will a comprehensive expectation profile created for the entire organisation. Based on this it seems that the organisational units of the employers are not very well coordinated in the definition of the expectations towards fresh graduates. The hypothesis was verified in the pattern, as individual decisions on hiring conditions are more frequent than thinking about this on an organisational level. However, in a significant group of organisations, coordinated thinking has started in the case of important job areas.

HYP11: In the case of a larger company size and a foreign owner it is more probable that a competence based HRM practice is being followed.

Based on the literature research, the most frequent and most suitable tool for securing a high quality workforce that can be put into the service of strategic goals is competence based HR management. Accordingly, my hypothesis is also based on this approach. *Poór et at (2012)* proved in their research that the effectiveness of HR units at domestic subsidiaries of multinational companies exceeds that of companies in domestic ownership in the business sector. This is the reason why I assumed that the competence-based approach can be experienced in the practice of larger and foreign owned companies. The results of *Large company research 2012* showed that the selection practice of less than half of the surveyed companies was built on competence-based thinking. Through In-depth interview 2015 we revealed four types of selection practices:

- multi-step selection
- personal interviews
- the solution of a hard problem
- decision regarding performance in a „jump in" position or internship

Organisations participating in the research also perceived the responsibility of the organisation in the development and maintenance of employees' personal competences very differently.

Based on the results of Fresh graduate research 2018 competence-based thinking proved to be the most frequent practice in operative work, and the increase in the role of learning often parallelly happens as well. In the analysis I identified four types of corporate competence management through cluster analysis. (Table 7) However, corporate size, ownership and foreign markets did not have a defining influence on these practices according to the correlation analyses. Based on this, the hypothesis was not verified in the sample.

HYP12: Strategic level workforce count planning is not yet typical in the organisations.

Based on the literature research, the starting point of competence-based HR management is quality workforce count planning. This is the step that links the practice of operative and strategic competence management, thus helping to put the employees' personal characteristics to the service of strategic goals. I have found no research data whether such planning is performed by the organisations. *Czibik et al* (2013) point out in their research on corporate workforce count management practice that larger companies, as well as those where a foreign owner is involved in the management of the company, prepare workforce count plans for longer terms, and the more persons involved in the planning, the more exact forecasts can be achieved. However, based on their research results, more than one third of the organisations have no plans concerning the future at all. Three fourth of companies doing business planning also prepare a workforce count plan as well, but only 12% of the companies can see forward for a 3 year period, and only 6% for five years.

During the analysis of the results of *Fresh graduate research 2018* six typical HR management activities could be revealed in the practice of the examined organisations (Table 8):

- among the organisational responsibilities: motivation of employees, learning in the organisation and responsibility transfer
- belonging to the responsibility of the HR field: operative competence management, strategic HRM, strategic competence management

The way these are built upon each other enables an increasingly conscious competence-based HRM practice. Competence-based thinking in operative HRM work often comes in the examined organisations with an increased role of learning in the organisation. In those organisations where HRM also attains a role of strategic level, there is also a higher level of responsibility transfer. Strategic level competence management is attained most rarely, neither was its sense of 'common responsibility' shown based on the research results. The thought conceived in organisational theories that a company can properly manage competences if it secures the necessary organisational background now unequivocally appears in the thoughts of the involved parties. However, in the process of strategic planning the necessity of quality workforce count planning has not yet arisen, which would presuppose a higher level of organisational ability, a *'critical competence'* as defined by Srivastava. Accordingly, the hypothesis was verified in the sample.

5. Novelty and applicability of the results

The research programme revealed many new and novel results in identifying the expectations towards fresh graduates on the domestic labour market, improving the measurement methodology of employer expectations, and revealing the corporate practice of developing the expectations.

Examining the effects of changes in the goods market, I found some interesting results regarding the expectations of employers towards fresh graduates, which contributed to deeper understanding the competence components of qualified labour shortage on the domestic labour market and the adjustment of the participants, and may contain

valuable information for the participants of the labour market. Based on the results of the research:

- on the one hand, in the expectations of the employers there is a certain „basic expectation package" that has already been indicated by previous secondary research. (H1P1) Personal competences pertaining to independent work, basic communication and cooperation competences supporting teamwork are required in the labour market regardless of the professional area.
- on the other hand, the expectations in the 'future-oriented' forecasts (higher level learning, problem solution and digital competences) do not yet appear in the preferences of domestic employers at the time of entry according to my research results, jut later in the process of becoming an expert. (HIP2, HIP3) This is an interesting result because according to labour market experts exactly these could be the tokens of success in the world of work.

An important result of the research programme is that it revealed ***the substantial components of employer expectations towards fresh graduates in a much more detailed manner than previous research did***. (Table 5) Based on the arrangement of competence expectations regarding work performance I identified three levels built upon each other connected to the entry and integration of fresh graduates:

1. ***Competence expectations checked at entry*****,** which can be divided into two groups, basic employee competences and junior level expectations towards fresh graduates, where basic problem solving competences, openness and adaptability belong.
2. ***After the initial training period,*** competence expectations corresponding to an advanced or senior level necessary for promotion where expectations are extended by expecting a higher level of problem solving.
3. ***Expert level expectations,*** where the conditions of promotion are extended by expectations towards complex solving and high level professional skills.

As regards leadership skills I found that at the time of the selection of fresh graduates, these competences are the least important, while the multicultural competence variable and the importance of a service-oriented attitude varied in the practice of the various companies.

Furthermore, it became possible to identify the various competence profiles that can be found in the practice of the employers. (Table 6) I named these competence profiles according to their characteristics:

- ***In the 'talent search' employer profile*** expectations appear earlier in the case of all competence variables. It seems that here companies aim for the early selection of talented young professionals and presumably promotion can happen earlier.
- I also identified a profile serving ***'the performance of simpler goals'***; in this company group, expectations appear later compared to the average in the case of all competence variables. This may verify that admitting fresh graduates to jobs initially not requiring a degree is also a typical practice in the case of some companies. Based on the characteristics of the cluster it seems that companies in this cluster think the least consciously about the definition of expectation and they offer less initial training opportunities as well. The 'delaying' of expectations may lead to the conclusion that the performance of more complex tasks requiring a degree may only be expected much later in the case of these companies.
- In the employer profile ***„seeking for domestic companies"*** I found close to average expectations; multicultural competence expectations appear here only much later. In this cluster, the companies are in a large proportion in Hungarian ownership, working exclusively for the domestic markets.

- On the other hand, exactly those companies got in the ***„seeking for a multinational environment"*** cluster which had foreign ownership, working for foreign markets as well. Young employees have to perform in a multicultural environment, which is also mirrored in the requirement profiles. These companies and companies in the next cluster plan the requirements most consciously and they offer the most initial training options as well.
- The requirement profile ***„for a new generation of professionals"*** gives a grace period regarding high-level professional knowledge and chooses from the young applicants based on personal and social conditions of professional suitability. It seems that in these companies the goal is to raise a new generation of professionals.

Compared to the rationale of the labour market, it was surprising that according to the correlation analyses the intensity of the change in the goods market had no effect on the examined sample. (HYP4) However, verifying the experience of secondary research, my analysis showed the effect of the presence of a foreign owner and presence on a foreign market.

Concerning the limited nature of labour market supply experienced by the employers my research brought interesting results regarding the shaping of employers' selection procedures and the development of programmes aimed at the integration of young graduates.

- For companies participating in the research programme ***it is difficult to find the right applicant*** in the hiring process (HYP6) and they have a rather mixed view on the preparedness of the applicants (HYP5). These results confirmed the situation revealed by secondary research.
- At the same time it is interesting to note alongside the experience of the employers about the preparedness of the applicants that ***the surveyed employees actually do not examine in the hiring decisions those very competences with which they are satisfied***. As regards the selection and initial training practices revealed through the research I have found that the employers could improve the success ratio of selection by expanding and developing these practices.
- However, I found no direct proof to the hypothesis that employers would have to lower their expectations due to the limited nature of the supply (HYP7). Based on my research results it seems that employers consider that they can select from the applicants.
- An interesting novel result of my research is that I found a connection between higher competence expectations and higher preparedness of the applicants along several competences. (HYP8) The reason for this may be that ***through higher expectations these employers were able to recruit applicants with better skills.*** However, there seems to be a lower limit value in the requirements, similarly to Boyatzis' 'limit competence', where, despite their bad experience, employers do not lower their requirements.
- At the same time, my analysis had the surprising result that ***a fresh graduate programme operated at the employer may not necessarily be attractive for the applicants with better skills***. These fresh graduate programmes should be developed in a more conscious manner, which is also confirmed by the result that the programmes applying various integration methods are not harmonised with the requirements (HYP9).
- My research also pointed out that in the thinking of the employers an attractive offer is in itself not enough to obtain the workforce of the right quality. Participants are of the view the a less attractive offer can be supplemented by HRM tools, which

may secure development opportunities, more interesting tasks or a higher level of independence, thereby making the company more attractive.

The HR management practice of the employers was examined in a competence management approach, which in my view yielded several new and novel results. ***Based on my results it seems that employers yet think less consciously when developing their requirements towards their employees.*** This statement is an important novel result of my thesis. Supplementing the secondary results of the studies on workforce count planning practices of domestic companies (Czibik et al, 2013) my research results point out the deficiencies of quality workforce planning. (HYP12) Based on my results, competence expectations towards fresh graduates are most often defined by the direct superior, a practice of deciding about this on an organisational level is less often found. (HYP10).

In my research I also undertook to explore and understand the competence management practices in the domestic corporate practice. In the sample examined in *Fresh graduate research 2018* four types of corporate practice could be identified (Table 7) These practices greatly differ in the extent of applying competence-based thinking in the organisation, the organisational conditions of competence management and how far competence-based thinking is present in the operative functioning of HRM and whether it is linked to the strategic goals of the company.

- In the case of companies applying ***the most conscious competence management***, the organisational conditions are given, the professional quality of operative work is high and its strategic role is also important. In their practice towards fresh graduates this consciousness can also be presumed.
- In the practice of companies belonging in the cluster with ***the least conscious and least coordinated*** HR management practice, the involvement of fresh graduates does not seem to be of real importance either, requirements are usually defined individually, they are lower compared to jobs requiring a degree and promotion is less probable in these organisations.
- A ***braver future-oriented thinking*** is shown by corporate practices characterised by organisational learning and responsibility transfer that are supported by a motivation policy and the competence-based operation of HRM, but the HRM area does not yet have a strategic role. This corporate practice can be best linked to the talent-seeking profile from among the requirement profiles. Presumably in these organisations operating in a modern management approach there are high expectations towards new employees and this is reflected by the fact that the competence profile that corresponds with the highest level of expectations can be best linked to this corporate group.
- Companies which can be less attractive the field of motivation management in the labour market try to **counterbalance** this deficiency **by their careful HR management practice**. Based on the entry paths it is evident that they look for fresh graduates for real professional tasks, ensuring a continuous supply of professionals.

My research also provided results that may be used in setting up HRM systems. The HR activities revealed in the analysis (Table 8) are clearly divided into organisational responsibilities and tasks in the responsibility of the HR area in the thinking of experts and leaders, while these areas are firmly built upon each other, complement and strengthen each other's effects. Based on the frequency of applying these activities a timeline could also be provided; the sequential introduction of these tasks may enable a more conscious competence-based HRM practice.

- The connection defined by organisational theories that emphasize the importance of organisational characteristics and the responsibility of leaders in HR management procedures can be clearly found in the thinking of the participants. However, based on my research it seems that ***companies start working according to a new approach in the field of learning earlier than in the field of responsibility transfer***. An increased role of learning goes along with a more open attitude and regular meetings. It seems that a more serious change of attitude is necessary in the field of responsibility transfer for changes to occur, where colleagues are involved in decision-making, there is a supportive leadership practice, where 'it is ok to make mistakes' and there is good communication and cooperation among the professional fields. It is also an interesting result that the motivation of employees was interpreted by the company representatives participating in our research as an organisational fact that is separate from the other areas of HR management.
- In the practice of the companies' ***competence based thinking appears first in the operation of HRM, in selection and training.*** Parallel to this a change in the attitude of the company towards learning can be observed that supports the development of the employees in an effective manner. ***In the next step there is a significant quality jump both in the operation of the organisation and HRM***. The background reason for this is probably the fact the leadership increases the value of individual employee performance in achieving corporate goals, which results in several changes in the functioning of the organisation. On the one hand, the HRM area gets involved in strategic planning, employee evaluations become regular both in terms of performance and preparedness. On the other hand, responsibility transfer starts in the organisation, as well as the involvement of employees in decision-making, improvement of cooperation and communication within the organisation, and securing organisational conditions supporting creativity.

Strategic level competence management can be achieved exclusively along these basic conditions. This means a quality level where the individual competence contributions of the colleagues are being weighted. All this presumes a high level knowledge about the nature and evaluation of competences and is built upon the coordinated functioning of the organisation, ***which is called 'critical competence' by the literature. This is rarely achieved in the operation of the companies participating in the research.*** An important result of our research is pointing out that the participants think about this activity clearly as the professional responsibility of the HRM area. It seems probable that this is because of the work psychology expertise present there, however strategic competence management built upon organisational communication can become an effective management tool in the hands of the leadership. In that case where quality workforce count planning is performed at an organisational level, employee competences can be linked to corporate performance and the fulfilment of the corporate strategy.

Thesis book literature

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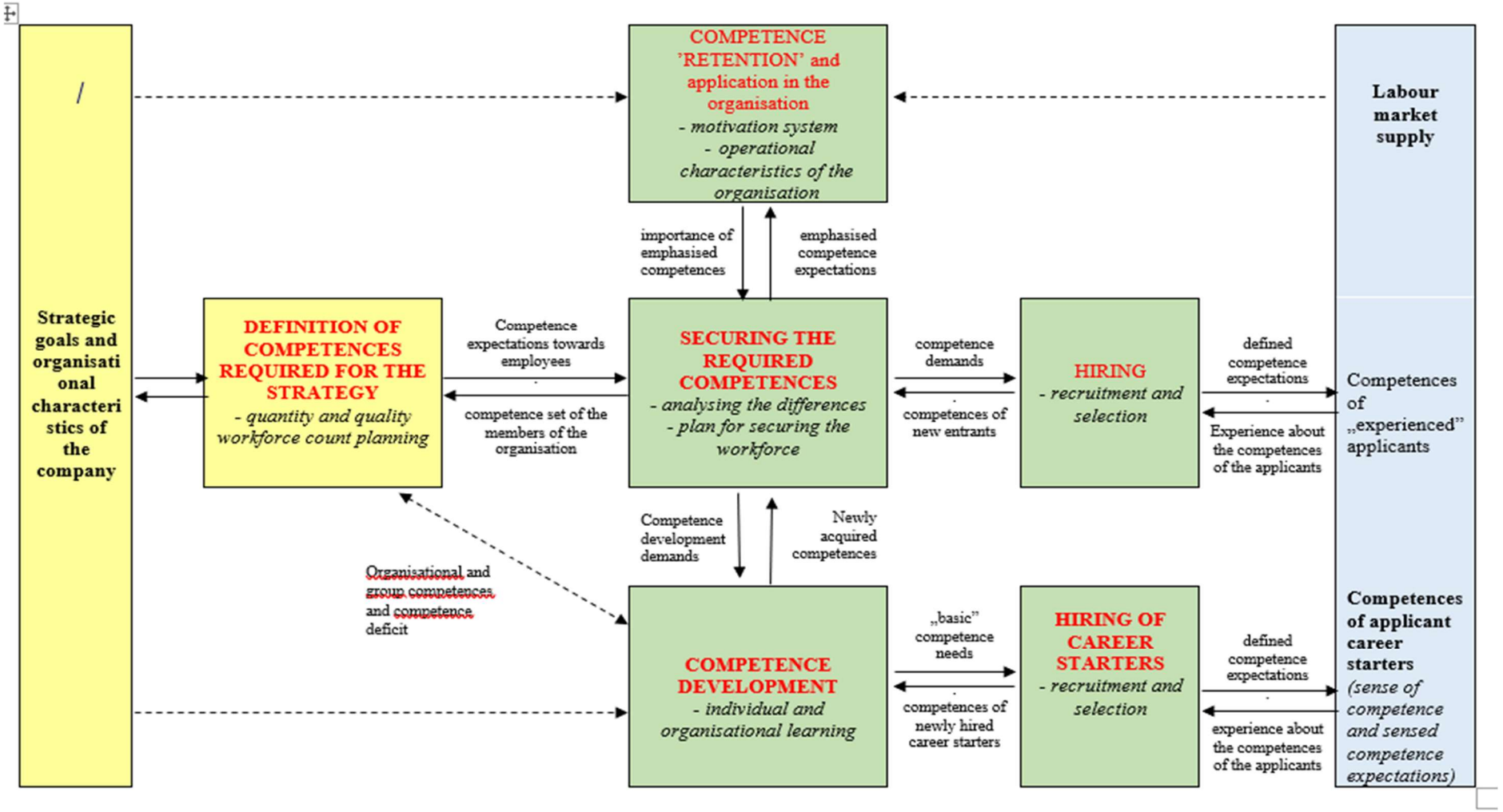

Figure 2: Research model (own edition)

Research topic 1: ***How are employers' competence expectations towards fresh graduate employees affected by the current situation in the goods market?***			
1	*Which general (not position-dependent) personal expectations are set on the domestic labour market towards fresh graduates?*	HYP1: When fresh graduates are being employed, there is a certain sense of a „basic competence expectation package" in the expectations of the employers, independently from the area where the fresh graduate is going to work.	*verified in the sample*
2	*How far do employer expectations follow labour market trends?*	HYP2: Competence expectations regarding learning, problem solving and digital skills ('future-oriented' expectations) yet appear to a smaller extent among employers' expectations.	*partially verified*
3	*What differences can be found between the employers' expectations?*	HYP3: The expectation profiles of various employer groups towards fresh graduates differ from each other in with respect to 'future-oriented' competences	*not verified*
4	*How are the expectations of a company towards fresh graduate employees affected by its situation in the goods market?*	HYP4: Companies develop different competence expectation patterns in different goods market situations	*partially verified*
Research topic 2: ***How are employers' expectations affected by their perception of supply in the labour market?***			
5	*How do employers in the domestic labour market see the preparedness of fresh graduates compared to their expectations?*	HYP5: Employers perceive the preparedness of fresh graduates applying to them differently; they sense a mixed labour supply.	*verified in the sample*
6	*To what extent do employers feel the labour market supply to be limited?*	HIP6: It is hard for employers to find the fresh graduate that complies with their expectations during their hiring processes	*verified in the sample*
7	*How does the current situation in the labour market shape the employers' competence expectations?*	HYP7: In the case of engineering graduates employers often yield from social competence expectations during the hiring process	*not verified*
8	*How could employers become more attractive for applicants with better skills?*	HYP8: Employers setting higher requirements are more attractive for fresh graduates with better skills.	*partially verified*
Research topic 3: ***How are employers' expectations influenced by their HR management practice?***			
9	*How are employers' expectations towards fresh graduates shaped by their hiring practice?*	HYP9: Different programmes developed for the integration of fresh graduates define different competence expectations at job entry.	*not verified*
10	*How do employers on the domestic labour market define the requirements towards employee necessary for the fulfilment of the organisation's goals?*	HYP10: The competence expectations towards career starters are most often defined by the direct superiors of a given job.	*verified in the sample*
11	*With what practice does HRM at domestic employers support employee preparedness necessary for the accomplishment of company goals?*	HYP11: In the case of a larger company size and a foreign owner it is more probable that a competence based HRM practice is being followed.	*not verified*
12	*How can a corporate practice be created that effectively serves the definition and securing of personal success criteria that ensure corporate success?*	HYP12: Strategic level workforce count planning is not yet typical in the organisations.	*verified in the sample*

Table 1: Hypotheses related to research topics, and the results of their analysis (own edition)

clusters	variables	required from entry	required after initial training	required on long term	not required at all	Mean	Std. Deviation	competence	name of the competency group
C1	q25_14	6	6	57	31	3,13	0,77	able to lead others	leadership competences
	q25_16	4	10	63	23	3,05	0,70	able to lead a smaller team	
	q25_15	1	3	60	36	3,31	0,58	able to lead a larger team	
	q24_16	7	14	46	33	3,05	0,87	knowledgeable in several areas	
C2	q25_7	43	16	23	18	2,16	1,17	able to promote his/her interests in a foreign language	multicultural competences
	q25_10	57	8	18	17	1,95	1,20	able to cooperate in a multicultural environment	
	q25_13	19	15	41	25	2,72	1,05	able to hold a presentation in a foreign language and to negotiate effectively	
	q23_14	56	16	6	22	1,94	1,23	able to perform monotonous tasks	
C3	q24_11	13	50	34	3	2,27	0,72	understands how his/her profession functions and how it distributes work	high level professional knowledge
	q24_14	18	34	43	5	2,35	0,83	well oriented in the practical methods in his profession	
	q24_13	16	20	57	7	2,55	0,85	possesses high level professional knowledge	
C4	q23_12	4	37	57	2	2,57	0,61	able to solve complex problems fully individually	complex problem solving competences
	q23_22	8	31	55	6	2,59	0,73	able to perform changes	
	q23_18	12	26	52	10	2,60	0,83	able to think in a strategic approach	
	q25_12	9	23	59	9	2,68	0,76	able to achieve results in negotiation	
	q23_20	15	19	44	22	2,73	0,97	able to take risks	
C5	q24_4	26	24	47	3	2,27	0,89	follows the new professional trends	creative problem solving competences
	q24_5	48	18	34	0	1,86	0,90	continuously develops his/her knowledge and skills, even individually	
	q23_21	26	34	35	5	2,19	0,88	able to make decisions	
	q25_6	29	32	34	5	2,15	0,90	able to promote his/her interests taking the others into consideration	
	q23_10	21	43	34	2	2,17	0,78	able to develop solution alternatives in problematic situations	
	q23_16	35	33	29	3	2,00	0,88	able to find creative solutions	
	q25_11	31	29	31	9	2,18	0,98	able to prepare and hold presentations	
	q23_17	43	23	28	6	1,97	0,98	dares' to make mistakes	
	q24_7	36	21	19	24	2,31	1,20	capable of using new IT/social media	
C6	q23_3	82	7	10	1	1,30	0,69	subservient (respectful, patient, accepts direction)	basic employee competences
	q24_12	71	17	9	3	1,44	0,78	possesses basic professional knowledge	
	q23_1	78	12	9	1	1,33	0,68	interested, self motivating attitude	
	q23_2	83	4	11	2	1,32	0,75	perseverant, reliable in his/her work	
	q23_15	69	19	11	1	1,44	0,73	able to think flexibly	
	q24_1	71	25	2	2	1,35	0,63	fits in and learns new tasks fast	
	q24_8	90	6	2	2	1,16	0,55	able to use basic IT tools	
	q24_3	82	6	10	2	1,32	0,74	has a desire for development, professional curiosity	
	q24_2	85	5	10	0	1,25	0,63	open for new knowledge	
	q25_5	80	9	11	0	1,31	0,66	able to understand others and to make contact	
	q25_1	84	8	8	0	1,24	0,59	able to cooperate with others and to work in a team	
	q25_4	88	7	4	1	1,18	0,54	able to express himself/herself clearly in speech and writing	
	q23_13	82	8	8	2	1,30	0,70	dedicated to ethical actions	
	q23_8	77	22	1	0	1,24	0,45	personal competences: can perform simple tasks individually	
C7	q25_2	66	20	14	0	1,48	0,73	fits in the work culture of the organisation	basic problem solving competences
	q25_3	51	32	16	1	1,67	0,78	able to handle personal conflicts related to his/her work	
	q23_11	49	42	7	2	1,62	0,71	able to solve problems related to his/her work with supervision	
	q23_5	61	21	17	1	1,58	0,81	able to take responsibility	
	q23_9	33	46	19	2	1,90	0,77	able to recognise the limits of his/her responsibility in critical situations	
	q23_6	47	31	21	1	1,76	0,82	able to work in a result oriented manner	
	q25_9	57	21	16	6	1,71	0,95	able to cooperate in the virtual space as well	
C8	q23_7	51	30	17	2	1,70	0,82	looks ahead in his/her work, takes initiative	openness
	q24_9	57	23	17	3	1,66	0,87	able to research and process new information	
	q24_6	41	33	25	1	1,86	0,83	can assess his/her abilities and plan his/her progress consciously	
	q24_10	50	35	14	1	1,66	0,76	has analytical skills, can handle data	
C9	q23_4	64	18	17	1	1,55	0,81	can take workload	adaptability competences
	q24_15	56	21	21	2	1,69	0,87	open to changes, manages changes flexibly	
	q25_8	67	12	15	6	1,60	0,95	tolerant towards other views	
C10	q23_19	46	24	18	12	1,96	1,06	able to work with a service-oriented attitude	service-oriented approach

Table 2: Description of competence variables created by hierarchic clustering of competence variables (own edition)

Employer clusters	**Expectations set earlier/later than average** (based on 1 dimension)	**Multicultural and service-oriented competence expectations** (based on 2 dimensions)	**Corporate characteristics** (based on significant correlations)	**Interpretation and naming of employer competence profiles**
1	all competences expected earlier, except for leadership and professional competence	service-oriented competence expected much later, multicultural much earlier	uniform definition of expectations and more opportunities for initial training	competence profile serving the establishment of **„a new generation of professionals"** where although higher expectations towards professional knowledge are delayed, and probably this area will gain greater emphasis in the initial training period, however, the personal and social components of professional suitability are important factors already at the time of hiring.
2	close to average expectations, but leadership and professional expectations appear just later	multicultural and service-oriented competences expected much earlier	mainly foreign ownership and working for foreign markets, uniform definition of requirements, more initial training opportunities	requirement profile for work in **„a multinational environment"** where reliable, adaptable and service-oriented workforce is sought, however, more serious professional tasks are to be expected later, but there are a variety of development opportunities
3	everything expected much later	both later	individual definition of expectations and less initial training	competence profile serving **„the performance of simpler tasks"** where the performance of more complex tasks requiring a degree can be expected just much later, and there is less support for progression
4	close to average expectations	multicultural competences expected much later, service-oriented a bit earlier	mainly Hungarian ownership, working exclusively for the domestic market	requirement profile for „domestic companies" based on the usual requirements towards fresh graduates, progression according to the average levels , but no language skills required
5	all expectations appear much earlier	both earlier	„average characteristics"	**„talent search"** competence profile that enables the performance of high level professional tasks in a multicultural environment, leadership tasks may be performed earlier and progression may be expected earlier as well.

Table 3: Characteristics of corporate competence profiles based on the research results (own edition)

Clusters	Organisational support	Competence based HRM practice	Employee motivation	Practice regarding entrants	Characteristics of the competence management practices of corporate clusters
1	learning is mostly present responsibility transfer is also more often present than not	operative competence management is performed, but not at the strategic level	present	all sorts of entry paths and practices can be found, but the talent search profile seems to be typical	**the organisational conditions** of competence management **are more favourable**, but the HRM does not yet have a strategic role, a clear entrant strategy is not visible, but **the organisational expectations are high**
2	learning and responsibility transfer are mostly present	all three levels are present, often with strategic level competence management	most typical	the definition of expectations is coordinated and uniform, higher expectations and organised initial training is typical	**conscious and coordinated competence management,** which has a high organisational support, and entrant programmes may be better planned
3	support of learning and responsibility transfer are typically not present	none of the levels are present, even operative competence management is atypical	less typical	requirements are defined individually, mostly on the basis of the simpler task profile	**HRM is not coordinated at an organisational level and is not a conscious activity,** the integration of entrants seems less important
4	learning and responsibility transfer are more often present than not	all three levels are present, sometimes with strategic competence management	least often present	they are seeking fresh graduates for real professional tasks	competence-based thinking started in the HRM field, the organisational conditions are better, **as if the insufficient motivation would be compensated by more conscious practice**

Table 4: Characteristics of the competence management practices of corporate clusters based on the research (own edition)

Organisational responsibilities based on the clustering	HRM responsibilities based on the clustering	Characteristics of the competence management practices
Employee motivation: Competitive salary Acknowledgement and rewarding of good professionals		**Appears as an „organisational fact",** a fundamental, very important tool in HRM, but is not sufficient for establishing the proper workforce according to the thinking of the participants
Learning in the organisation: Learning is part of the work Support of independent work Progress opportunities Regular meetings Good mood Openness for new ideas	**Operative competence management:** Yearly workforce count plan Leader training programme Skill development trainings Competence based selection Professional training programmes	**„In the first step"** competence based selection and development is achieved in the organisation, while the role of learning becomes more valuable, the development options become broader and the openness for new ideas increases.
Responsibility transfer in the organisation: Supportive leadership practice It is „ok to make mistakes" Involvement of the employees in the decision-making High level responsibility transfer There are role models in the organisation Good communication within the organisation Good cooperation between the professional fields	**Strategic HRM:** HRM is involved in strategic planning Regular performance evaluation Regular competence evaluation (individual preparedness) Individual development plans High level evaluation culture	**„In the second step"** alongside the recognition of the strategic role of HRM work the role of individual performance becomes more valuable, and accordingly regular evaluation practices are established, and at the same time the cooperation and responsibility sharing within the organisation changes as well.
	Strategic competence management: Quality workforce count plan Broad communication is necessary about the definition of competences Uniform interpretation of competences Registry of competence sets of the organisation	**„In the third step"** a more exact harmonisation of organisational goals and opportunities and personal goals and opportunities may be achieved, which however needs a significant step forward from both the HRM area and the leadership of the organisation, which rarely happens.

Table 5: Organisation of activities serving the performance of competence management practices based on the cluster analysis (own edition)