

# “The analysis of labor fluctuation in the Nitra region of Slovakia”

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## The analysis of labor fluctuation in the Nitra region of Slovakia

### Abstract

Fluctuation in the labor force has been the subject of numerous recently published studies and literature. This study presents the characteristics of the theoretical and practical problems of fluctuation. Our goal is to present the characteristics of labor fluctuation in a selected region via an empirical research conducted among companies. The authors analyzed fluctuation in different occupational groups, the key characteristics of key-person migration and replacement, the costs of replacing labor, workplace policies and programs relating to the conservation of staff separately. During the examination process of fluctuation problems it was also important for us to separate the analysis of motivational tools used to prevent employee turnover. The study summarizes the specific features of the analyzed factors.

**Keywords:** fluctuation, key-person migration, human resources, costs of fluctuation.

**JEL Classification:** A11, C12, D21, D83, L21.

### Introduction

Fluctuation is a general phenomenon, which causes changes even in the direct environment of individuals. The impact and presence of fluctuation can be observed in workplaces in the form of the continuous changing of colleagues and of their specialization as well as in frequent employment abroad (Nagy, 2007). Fluctuation in general means the alternation or oscillation of something. Poór, F. (2013) and Armstrong (2007) drive the attention to the fact that fluctuation is often incorrectly perceived as the migration of labor force away from an organization; however, its notion also involves movement within a company. As a result of the above understanding of fluctuation organizations mostly attribute negative meaning to the phenomenon. Many perceive fluctuation as the exchange of labor force. There are several types of the movement of labor force. Fluctuation between companies takes place when an employee leaves a company and finds employment with another one straightaway. This movement can be spontaneous or can be planned in advance. We also talk about fluctuation, when the movement of labor takes place within a given company. In addition to the above types of fluctuation we can also talk about the changing of job positions, which involves the taking up of a new position and duties by an employee in his existing company or in another one (Pichňa, 1994).

Not only can fluctuation be expressed in numbers, it is also a general phenomenon, which causes changes even in the direct environment of individuals. The impact and presence of fluctuation in society and in our everyday activities can be observed in workplaces in the form of the continuous changing of colleagues and their specialization as well as in frequent employment abroad. Those who are in favor of fluctuation say that anyone can be replaced

(Nagy, 2007). However, it is important to point out that there are employees who significantly influence the efficiency of a company/organization. These key people have a key role among all managers and employees, since changes within their organization are introduced through them (Pataki, 2004). If these key people leave a company, it causes rather big changes and brings along high costs for the company/institution in question.

### 1. Labor fluctuation and labor economics

The aim of the analysis of labor fluctuation is to bring the labor market closer to equilibrium. There is a state of equilibrium on the labor market “when the parameters of the market stay unchanged for a long time (own translation)” (Galasi, Nagy, 2003, p. 9). The peculiarities of remuneration for work are closely related to the analysis of the movement of labor. It is not only financial factors that play a key role among the conditions of so to say *hiring* labor force. It is also important to mention non-financial factors such as the working environment, the personalities of managers working on different management levels, fairness or the flexibility of working hours. These are the factors, which frequently influence fluctuation the most (Ehrenberg, Smith, 2003).

The movement of labor has different forms and can take place for different reasons: we talk about spatial movement of labor when people migrate in order to find a new job. Fluctuation can also take place when employees change their scope of activities, their position, and also when they obtain higher qualifications (Dolmány, Hajós, Magda, 1998). On the basis of the theory of labor economics job mobility can be influenced by different factors, such as wages, since employees working for lower wages tend to change jobs more often. Also, the shorter time it takes for employees to find a new job, the more frequently they will find one; i.e. the cycle of changing jobs gets shorter. If we look at

employees' age and the time they have spent in a certain job, it can be stated that younger staff make human capital investments with much higher probability than employees belonging to older generations. Labor mobility is also closely related to the costs that arise from an employee leaving a company. It can also be stated that the lower the costs of an employee leaving a company are, the higher the probability of mobility is (Ehrenberg, Smith, 2003).

**1.1. Human resources and fluctuation.** The basic aim of human resources as such is to support and maintain the efficiency of an organization. Organizations/businesses nowadays mainly focus on profit maximization, on strengthening their market position and on cost cutting. There are several key factors in human resources that influence efficiency, such as high employee performance, high-quality outputs, employees who have relevant knowledge and skills, competitive salaries, job satisfaction, low level of fluctuation, good working environment and working conditions. The mix and structure of these may vary with organizations/companies (Poór, Karoliny, 2002, 2010).

Human resources management can be introduced in different ways. For instance, it can be done on the basis of management schools or management cultures, or on the basis of the size of organizations and according to economic sectors. HR management in this region is largely influenced by traditions, the level of economic development, disparities in development, the level of globalization and the standard of living. Differences can also be observed between foreign and locally-owned companies as well as between state-owned and privately-owned firms. The diversity in languages and religions, the different sets of social values, the power of mutual trust, the existence of prejudice, the sharing of experience in the workplace and different wage levels are all of key importance in the analysis of relations between international human resources and fluctuation (Poór, 2009). As perceived from a human resources view, labor movement is the outflow of the human factor from an organization for different reasons.

**1.2. Labor fluctuation.** Fluctuation in general means the alternation or oscillation of something. Labor fluctuation is the frequent or permanent changing of jobs by employees/workers (Poór, F., 2013, online). There are several approaches to the research of labor fluctuation. The factors influencing labor fluctuation can be put into two major groups: The first group is made up of those factors, which are present independently from the situation in a given business. These are factors such

as the general developments in the economy, legislative measures etc. The factors belonging to the second group are those ones, which are closely related to the way how a given business operates. These are such as the general atmosphere at the workplace, the management style prevailing at the company, the corporate structure and corporate culture (Ambrus, Lengyel, 2006).

Businesses have elaborated different methods for the forecasting and for the finding of reasons for fluctuation. One of the most frequently used methods is the use of fluctuation rate, which is the proportion between the number of those who have left a company and the number of those employed at the firm. Another commonly used method is the use of stability index (Karoliny, Halmos, Poór, 2005).

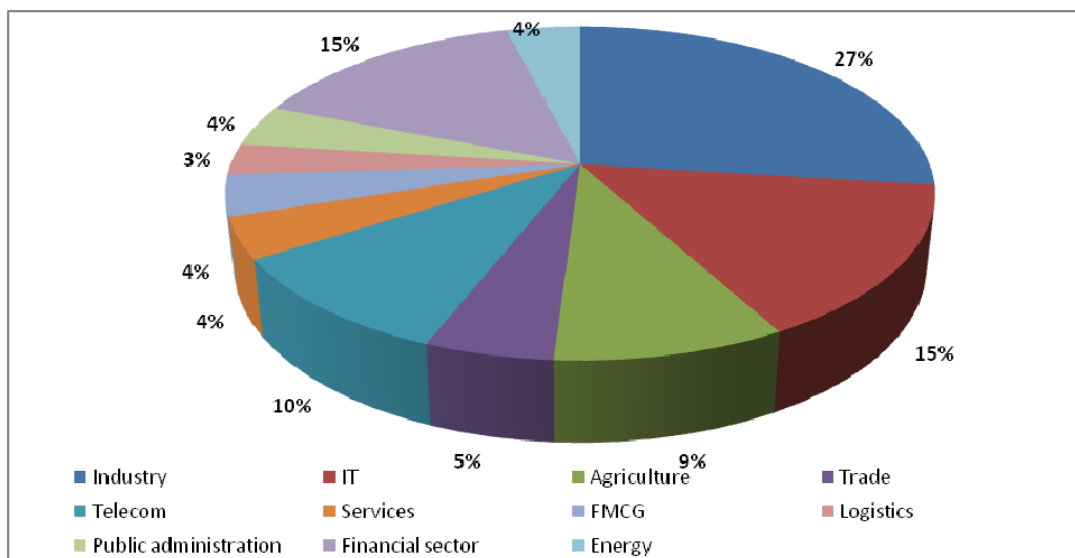
Fluctuation can be dealt with in different ways, e.g. by organizing different training programs and programs for the integration of new colleagues, by elaborating and adapting relevant remuneration strategies, by the relevant organization of the scope of activities, by the strengthening of corporate culture and by the efficient management of human resources (Karoliny, Halmos, Poór, 2005). Our research suggests that from among the above mentioned methods the following ones prove to be the most efficient: increasing of staff motivation, increasing of employee satisfaction, provision of ideal conditions for promotion, introduction of flexible working hours and the introduction of individual performance-based remuneration (Tomčíková, Živčák, 2011).

## 2. Peculiarities and results of our research

In our research we set out from the definition of labor fluctuation, according to which it is the changing of an employee's job for a specific reason. The individual reasons have been analyzed in details above. The primary aim of our research is to analyze different factors, which influence labor fluctuation among different groups of employees in the researched region. The second goal of our research is to analyze the peculiarities of retaining policies and tools in the researched businesses. The research is based on an earlier questionnaire survey ( $n = 66$ ), which was a part of a more wide-ranging research on labor fluctuation. A detailed description of the earlier desk research can be found in a document also referred to in the reference list of this paper (See Poór, Bóday, Kispál, Vitai, 2009). This paper deals with a certain part of the above mentioned wider research, namely with the responses of businesses based in the Komárno District of Nitra Region, Slovakia (Okres Komárno). The number of responding businesses was 100 and the survey was conducted in September 2013. We analyzed fluctuation separately among senior mana-

gers, middle managers, administrative staff and blue-collar workers. When researching fluctuation we analyzed the peculiarities of the fluctuation of working groups, the importance of key people in businesses. We also tried to find out which corporate policies result in the retaining of employees.

**2.1. Peculiarities of the researched businesses.** All surveyed businesses have their seat in Komárno District. The respondents do business in different sectors: the highest proportion of them are in some industry, or are involved in trade or in the service sector.

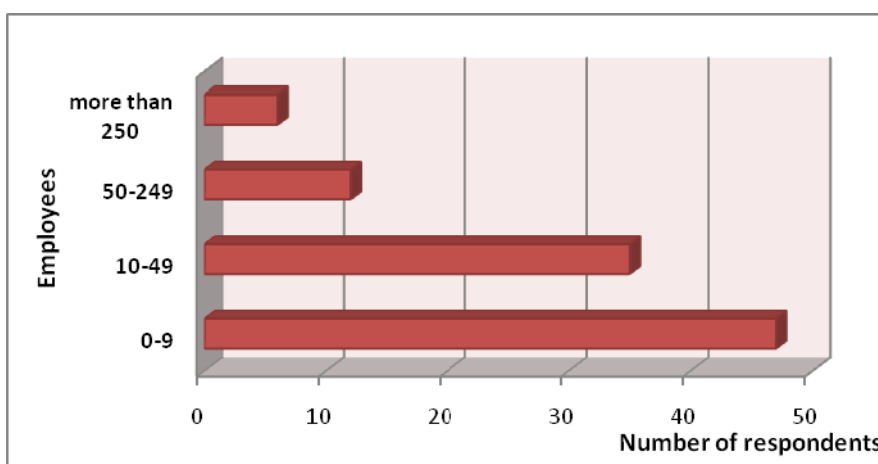


Source: own graph based on own research.

**Fig. 1. Distribution of the companies in the sample by sectors**

On the basis of ownership form 57% of the surveyed businesses are Slovak-owned private businesses. The proportion of foreign-owned, state-owned businesses and of companies in mixed ownership ranges between 10 and 15%. The classification of businesses on the basis of their size is also important in our research. The classification of businesses according to their size is regulated by an EU directive. According to this the size of a

business is determined on the basis of the number of its employees or its annual turnover. In our research we worked with the number of employees. According to the Commission Recommendation 2003/361/EC, microenterprises are those employing fewer than 10 persons; small enterprises employ 10 to 49 persons, medium-sized enterprises have 50 to 249 employees, and those employing more than 249 persons are large enterprises.



Source: own graph based on own research.

**Fig. 2. Number of employees of the surveyed businesses**

The largest proportion of companies is made up of microenterprises (47%). Small enterprises make up 35%; the medium sized ones – 12%, and large enterprises account for 6%. The distribution of the

surveyed businesses represents the statistical proportions of businesses in Komárno District.

**2.2. Method of research.** Since we worked with questionnaires that included questions with Likert

scales, and the figures expressed as a percentage were only approximate, we used a new indicator, namely the fluctuation index in order to make the results comparable. The value of the index can range from 1 (0% fluctuation) to 4 (fluctuation above 10%). Similarly, we also classified the surveyed businesses according to their revenues, number of their employees and on the basis of their form of ownership. When classifying businesses according to revenues and size we set out from the definition of SMEs laid down in the Commission Recommendation 2003/361/EC<sup>1</sup>. The putting of respondents into categories was conducted as described below.

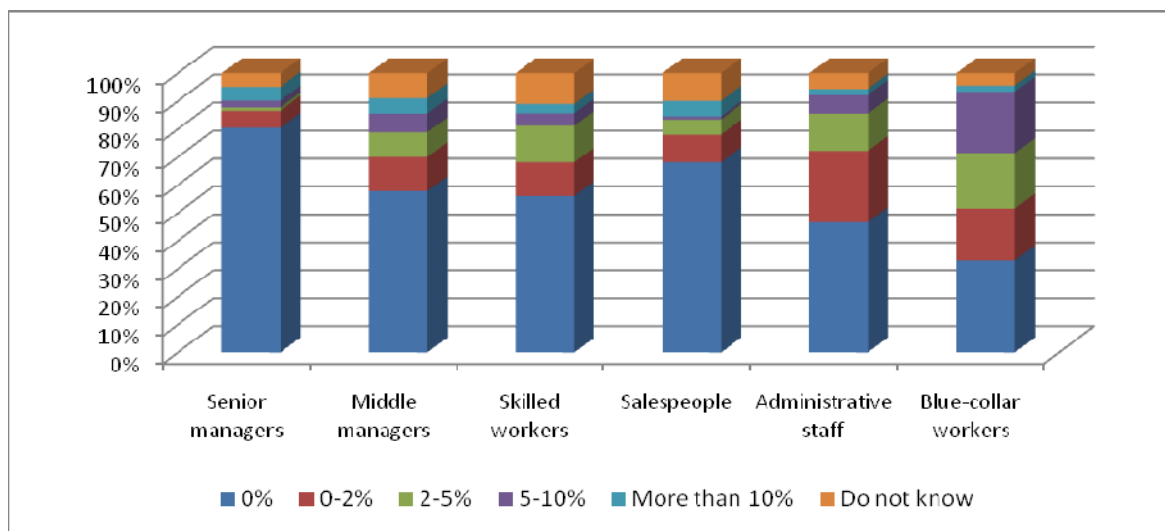
To analyze the collected data first we put the surveyed businesses into groups on the basis of categories, such as company size, revenues, and ownership form. Then we analyzed the businesses in the individual categories on the basis of responses provided by their employees in different positions, such as senior managers, middle managers, administrative staff and blue-collar workers. E.g., if the value of the fluctuation index of senior managers in small enterprises is 1.32, it means that the value of the company's fluctuation is somewhere between 0 and 1%, but it is closer to 0%, i.e. it is approximately 0.33%. The closer a company's fluctuation is to four, the closer the value of average fluctuation is to 10%, and the closer the value is to one, the closer the value of average fluctuation is to 0%.

The following hypotheses were elaborated previous to the research:

- H1: Labor fluctuation depends more on the size of the organization than on its ownership form;
- H2: The fluctuation rate is more affected by revenue increases than by the organization's ownership form;
- H3: The higher people's position is and the higher their status at work is, the less they have to worry about losing their job, since fluctuation tends to be lower in high positions.

**2.3. Research results.** In our research we analyzed the peculiarities of fluctuation and especially of fluctuation related to key people in the surveyed businesses. We also dealt with corporate policies aimed at the retention of employees. The results of the research are introduced on the basis of workplace positions. We worked with the following ones: blue-collar workers, administrative staff, salespeople, skilled workers, middle managers and senior managers.

First we analyzed the level of fluctuation in the surveyed businesses. Since most surveyed businesses are SMEs, labor fluctuation can be considered important in them. It often happens that a person leaving the company is a key person at that particular business. We also observed in several cases that one person was working in several positions simultaneously.



Source: own graph based on own research.

**Fig. 3. Rate of fluctuation**

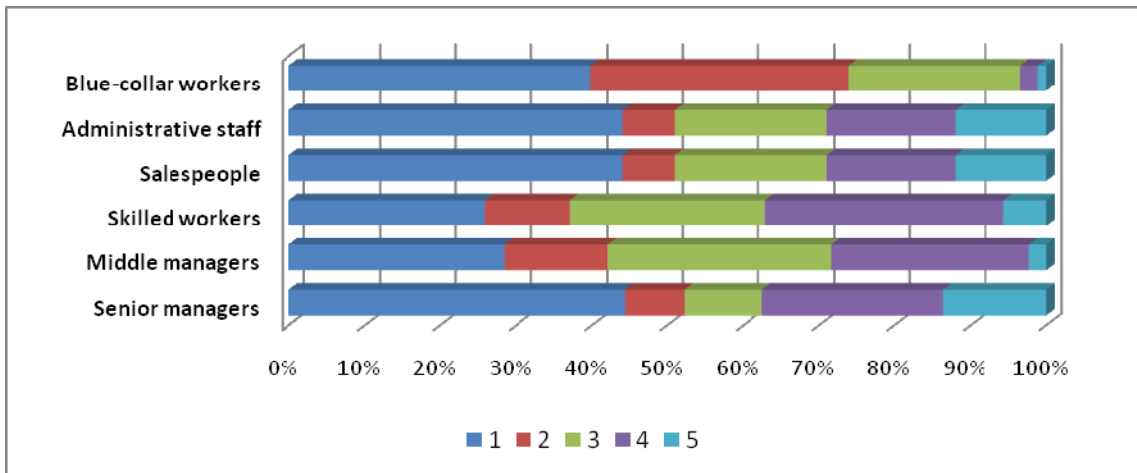
The graph shows the rate of labor fluctuation in the surveyed businesses among senior managers, middle managers, skilled workers, salespeople, administrative staff and blue-collar workers. It can be seen that

there is fluctuation among all of them. Fluctuation among blue-collar workers in the surveyed businesses most frequently ranges between 5 and 10%. The same figure among administrative staff is 0 to 2%. Similarly fluctuation among salespeople ranges between 0 and 2% or was not marked by respondents. When surveyed in person a lot of respondents marked the “I do not

<sup>1</sup> COMMISSION RECOMMENDATION of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises [Official Journal of the European Union L 124, 20. 5. 2003].

know” option, in spite of the fact that they could have marked a concrete number. More than 50% of skilled workers, middle and senior managers indicated zero-percent fluctuation. The level of fluctuation among skilled workers and middle managers was nearly identical. The lowest fluctuation can be observed among senior managers. This can be explained by the

fact that in SMEs senior managers are also the owners. When researching fluctuation it is important to deal with the fluctuation of key people, since their retention is often the key to the success of the business. We asked the representatives of the surveyed businesses about how much the fluctuation of key people in certain positions is typical in their organization.

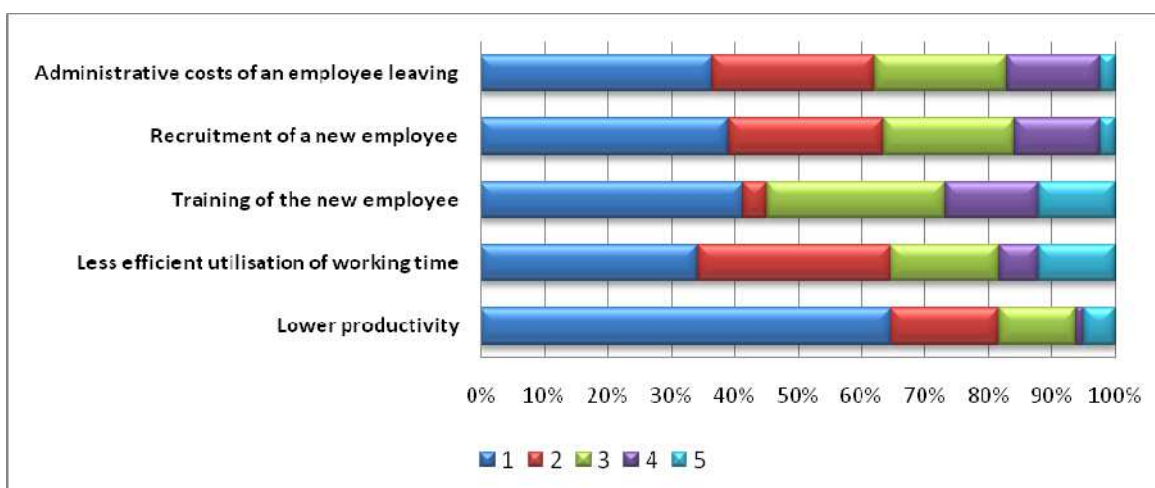


Source: own graph based on own research.

Fig. 4. Key people migration problems

Respondents could choose from 5 levels of fluctuation among key people in certain positions. Responses show that the fluctuation of skilled workers and managers causes most problems. If key people leave a company, not only does it bring along extra costs, it also causes a shortage of knowledge and expertise, which is necessary for the business to maintain its competitiveness. The problems caused by the fluctuation of blue-collar workers and administrative staff are not significant. The negative impacts of fluctuation can also be observed when non-key people

leave a company. In our research we also dealt with the most typical costs that are brought along by fluctuation. On the basis of earlier conducted surveys the respondents could choose from several response options and they could also list other types of costs based on their own experience. None of the responding managers opted for the latter option. In our research lower productivity, the costs of working time, the training and recruitment of new employees and the costs of an employee leaving were listed as the most significant costs of fluctuation.



Source: own graph based on own research.

Fig. 5. The costs of fluctuation

Respondents had to indicate on a scale of 1 to 5 how much typical these costs were in their own company. The administrative costs of an employee

leaving a company were not marked as significant by 60% of respondents. These were the costs of a new employee’s training and recruitment that were

marked as the most typical costs of fluctuation. Lower productivity as a result of fluctuation and the cost of less efficient utilization of working time were also marked as frequent impacts.

On the basis of the fluctuation data it can be claimed that while in microenterprises it is administrative workers who have higher job security than their superiors, in large enterprises blue-collar workers are in the same situation. In other cases it can be concluded that the bigger a business is, the more frequent the partial fluctuation of senior managers (2-5%) tends to be. This perhaps is not the result of growing redundancies, but rather of the fact that senior managers tend to be more flexible when it comes to changing jobs. The same trend can be observed in the case of middle managers. The following trend can be observed among employees in lower positions: fluctuation increases with the size of companies.

Table 1. Company size and labor fluctuation in the analyzed region

Company size	Senior managers	Middle managers	Administrative staff	Blue-collar
0-9 persons	1.26	1.90	1.80	2.34
10-49 persons	2.13	2.30	2.31	2.78
50-249 persons	2.00	1.89	2.00	3.11
more than 250 persons	3.00	3.33	3.33	2.67

Source: own research.

The lower position people have in a company, and the bigger their company in size is, the higher the chance is that they will lose their job or change it. Large enterprises are an exemption from this rule, where data show the direct opposite of this. It was proved true at the same time, however, that the employees of large enterprises feel that the atmosphere in their workplace is more impersonal than in smaller companies. This mainly happens when employers do not reckon them as their partners but as employees who can be replaced any time.

Fluctuation is the lowest among senior managers (fluctuation index: 1.35). The index reaches its highest value among administrative staff in large enterprises. With the increase of revenues fluctuation reaches values above 5%. It must be noted that fluctuation grows in correlation with revenues. It is interesting to note that the movement of labor in large enterprises in the case of blue-collar workers and middle managers is lower than in

medium-sized enterprises. The values of the fluctuation index in different position and revenue categories are shown in Table 2.

Table 2. Fluctuation index of businesses in different revenue categories

Revenues	Senior managers	Middle managers	Administrative staff	Blue-collar workers
Lower than EUR 2 million	1.52	1.89	1.89	2.22
Lower than EUR 10 million	1.55	2.06	2.09	2.83
Lower than EUR 50 million	2.29	2.63	2.38	3.00
EUR 50 million or higher	3.00	1.52	3.00	2.20

Source: own research.

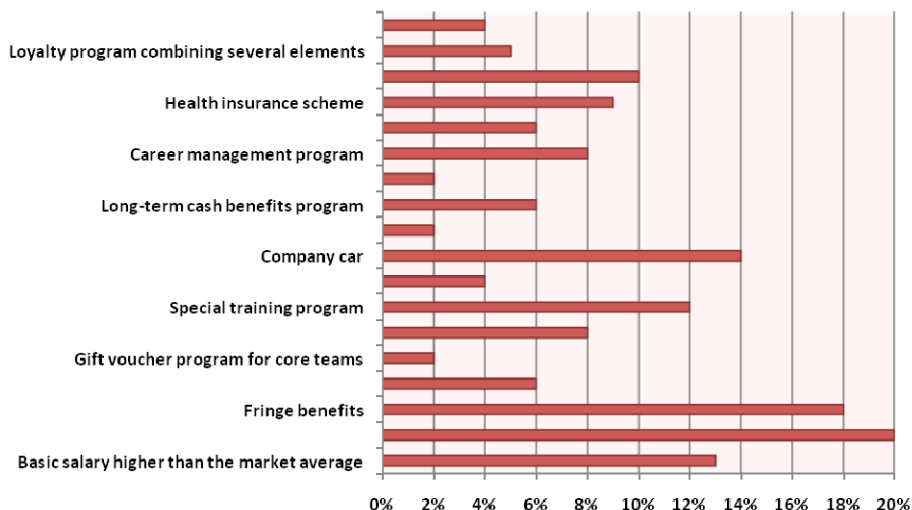
Besides middle managers working in foreign-owned companies, it is always blue-collar workers who are most influenced by fluctuation. The fluctuation rate of administrative staff and middle managers in Slovak businesses with private and mixed ownership is approximately the same. However, the same comparison between Slovak publicly and foreign owned businesses shows significant differences. It is senior managers working in privately owned Slovak businesses who want to keep their jobs most. In companies with mixed ownership fluctuation is the highest among blue-collar workers. The values of the fluctuation index of companies in different ownership categories are shown in Table 3.

Table 3. Fluctuation index of businesses in different ownership categories

Ownership form	Senior managers	Middle managers	Administrative staff	Blue-collar workers
Slovakian private	1.43	2.04	2.02	2.37
Slovakian public	1.83	1.67	2.00	2.83
Foreign	1.88	2.86	2.29	2.71
Mixed	2.25	1.75	1.75	2.67

Source: own research.

The surveyed businesses try to use different incentives to decrease fluctuation, but there are only a few companies that have elaborated their separate corporate policy for this specific purpose. The managers and owners of businesses primarily use different tools and programs to decrease the rate of fluctuation. During our research we tried to find out to what extent these tools and programs are typical for the surveyed businesses.



Source: own graph based on own research.

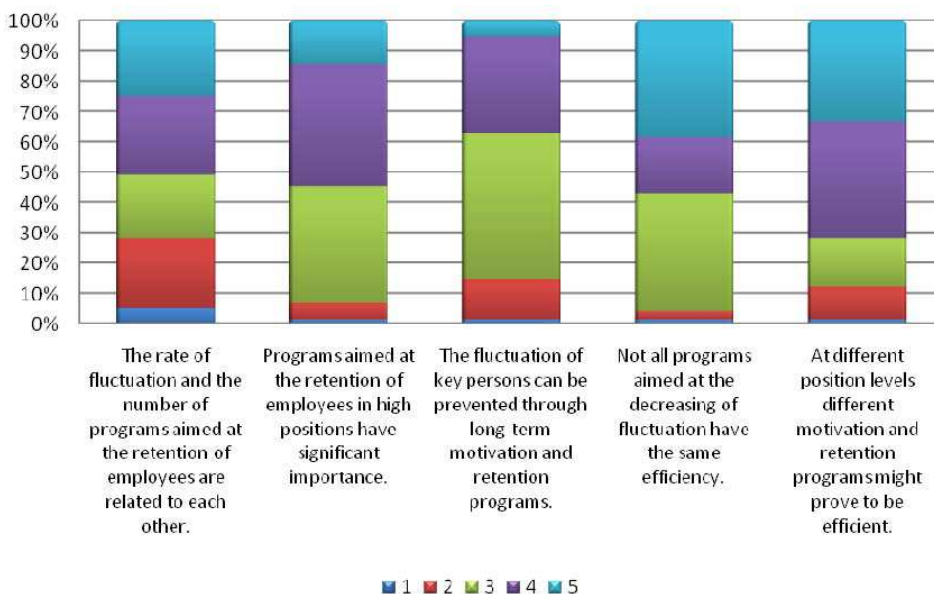
Fig. 6. Programs and tools to retain employees

The surveyed businesses use several tools simultaneously to retain and motivate their employees. The most frequently indicated ones in the questionnaires were flexible working hours, fringe benefits, company cars and above average wages. Among non-wage-based motivation tools special training programs are the most frequently used ones. Key person programs, the offering of share options and gift programs for core teams are less popular as tools to retain employees. Those who indicated the option *other tools and programs* also listed similar answers to the multiple-choice options listed, and most of them were wage related.

1. The rate of fluctuation and the number of programs aimed at employee retention are in relation to each other.
2. Programs to retain employees have higher importance among those working in higher positions.
3. Long-term motivation and retention programs decrease the fluctuation of key persons.
4. Not all programs affect the rate of fluctuation the same way.
5. The most efficient motivation and retention programs at different position levels might differ from each other.

We also asked for the respondents' opinion about some generally true statements, which we had elaborated on the basis of our theoretical knowledge and experience. These were the following:

Respondents had to indicate to what extent they agree with the above statements on a scale of 1 to 5, where 1 indicated the highest level of disagreement and 5 the highest level of agreement.



Source: own graph based on own research.

Fig. 7. Fluctuation related findings

The responses show that the fluctuation rate and the number of programs aimed at the retention of employees are related to each other. Respondents also agreed that the retaining of employees in high positions should be a priority. However, respondents did not agree with the statement that the fluctuation of key persons can be prevented through long-term motivation and retention programs. Businesses also experience that not all programs aimed at the decreasing of fluctuation have the same efficiency. The biggest agreement between the respondents and the researchers was regarding the last statement. Thus, it can be stated that in order to avoid fluctuation efficiently and successfully different specific employee retention programs must be used on different position levels.

## Conclusion

During our research we came to the conclusion that the elaborated hypotheses in the case of the researched businesses show a mixed picture.

*H1:* The first hypothesis, according to which labor fluctuation depends on the size of the organization, proved to be true.

*H2:* The second hypothesis, according to which the fluctuation rate is more affected by revenue increases than by the organization's ownership form, also proved to be true. The reason for this might be that there is little relation between fluctuation and the ownership form. This was also proven in our earlier

research projects. On the other hand, the rate of job mobility generally grows simultaneously with revenue increases.

*H3:* This trend proves to be basically true; however, there are rather frequent and rather high oscillations, which prevent us from stating undoubtedly that lower status means higher fluctuation. In several cases it is primarily the group of middle managers where fluctuation is higher than for example among blue-collar workers. In addition, if we look at fluctuation from the perspective of company size, we can also observe cases in which administrative staff have less secure jobs than blue-collar workers.

In this paper we described the main result of our research aimed at analyzing the effects of fluctuation. On the basis of the descriptive results the peculiarities of fluctuation in the SMEs of the Komárno District (okres Komárno) could be specified. The research sample is not representative, but the distribution of the responding businesses according to company size is identical with the statistical distribution of all businesses in the district. The presence of fluctuation has been proved by the research results as well, since it was shown that programs and tools to retain employees are actively used even in businesses which size is smaller and employ a smaller workforce. The surveyed businesses are also aware of the importance of key people. The results of the research will form the basis for further research papers published at home and abroad.

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