

ORIGINAL PAPER

# The rate of change in the salaries of employees of the State Forests compared to selected sectors of the economy in Poland

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## ABSTRACT

The formation of an incentive system is one of the main objectives of the management of enterprise operations. In the structure of forest management, the basic employment structures affecting the functioning of organizational units are separated. The aim of the study was to assess the pace and direction of changes in the salaries of selected groups of employees of the State Forest Holding Company (SFHC) in comparison with other industries in Poland. A representative group from a selected Regional Directorate of State Forests in Poland was selected for the assessment. Changes in salaries in forestry management structures were determined. The results presented show a balanced rate of economic change for Forestry employees and the specific conditions of personnel for forestry. The value of the increase in the salaries of forestry employees in the range of 2.4-3.0% was indicated. The level of wages in forestry is below the average compared to other industries in the country (4.4-6.8%).

## KEY WORDS

forestry, incentive system, rate of economic, salaries

## Introduction

Human resources are an integral part of any modern enterprise and organization. They determine the progress and development of the company. Human capital is an important resource contributing to achieving desired results and an advantage over competitors. The real sources of advantage are seen in the use of the resource-based view of the firm (RBV), which focuses managers' attention on assessing the potential of resources in order to build the organization's strategy (Prahalad and Hamel, 1990; Barney, 1991; Obłój, 2007). Appropriate formation of human resources generates the ability to rapidly multiply their value through an effective learning process, which in the long run should contribute to the creation of added value in the company (McCracken, 2000; McLean and McLean, 2001; Garavan, 2007). Management of human resources, according to Griffin (1996), takes place in a complex and constantly changing environment.

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The processes of increasing globalization and the changing structure of employment force the need for creative strategies in human resource management, especially with regard to incentive systems expressed through compensation levels. One of the aspects that affect the effective functioning of an organization is the incentive compensation system for employees. Remuneration, which is the amount payable for employees' work for the organization within the framework of the employment relationship, includes salary and other compensation components of employment, and is also a measure of an individual's value to the organization. According to Bergmann and Scrapello (2002), the primary purpose of the compensation system is to influence people's behavior in the work process. On the other hand, according to Kawka (2002) the primary purpose of the compensation system is to influence people's behavior in the work process. Remuneration is that mechanism that links the efforts and commitment of people to the common goal of the process of implementing the business strategy of an organization (Kawka 2016). The right remuneration system is effective in attracting qualified candidates (Kawka, 2001), in retaining employees and in motivating people to work efficiently (Griffin, 1996). Some researchers (Andrałojć and Ławrynowicz, 2012) believe that through an incentive system, employees better identify with the organization and its goals. On the other hand, the decision on the level of pay is an important part of management policy. It involves responding to the world of dynamic engagement with which companies are currently dealing.

Remuneration performs a number of functions in a company including motivational, cost, income and social functions (Pawlak and Smoleń, 2012; Kawka, 2020). There is generally a consensus of opinion among authors dealing with this issue that the functions of remuneration can be considered in relation to the workplace, the employee and in social terms (Davies *et al.* 2001; Kirillov *et al.*, 2015). The performance of companies depends largely on productivity as expressed by employee engagement. Therefore, it is important to motivate employees to achieve maximum results. The inclusion of performance-based pay in compensation systems is one of the tools used to motivate employees to maximize their performance. Incorporating performance-based pay into compensation systems is one of the tools used to motivate employees to maximize their productivity (Paarsch and Scherer, 1996; Banker and Lee, 1996; Lazear, 2000; Sardjana *et al.*, 2019). Performance pay is the opposite of fixed pay because it depends on variable employee performance. Performance-based pay, *i.e.*, piece rates and bonuses, is usually beneficial to productivity for two reasons (Lazear, 2000). Performance-based pay can be used to increase employee effort, but it can also have the effect of tying employees with relatively high abilities to the company (Bryson *et al.*, 2013). Nowadays, employers and managers appreciate the important role of effective employee motivation in the management process and the use of more and more new forms of employee remuneration such as competency-based pay or flexible package forms of remuneration that include a number of bonuses in addition to base pay (Kulisa and Sierpińska, 2016). As a result, many organizations are modifying and developing their remuneration systems (Beck-Krala, 2013).

The group of enterprises with significant employment potential includes entities associated with the maintenance of forestry potential. One such entity in Poland is the State Forest Holding Company (SFHC) carrying out activities related to the quality of the country's forests. SFHC is an unincorporated organizational entity. The activities of SFHC are subject to numerous legal regulations, especially in the field of forest management, concerning timber harvesting and silvicultural operations. Detailed rules for the operation of the State Forests are specified by national legislation (Ustawa, 1991), in accordance with which the principles of preserving, protecting and

expanding forest resources and the principles of forest management in connection with other elements of the environment and the national economy are regulated (The State Forests Information Centre, 2018). As part of its forest management, SFHC also has within its scope the elements of promotion, education and ensuring the openness of forests to the public, maintenance of human resources and a transparent remuneration system, and financial management for self-financing.

The management structure in SFHC is of a nature that coincides with the requirements of companies. The management role is performed by the Director General. Within the separate 17 Regional Directorates of State Forests, they are managed by Regional Directors. Internal structures run under the supervision of appointed Forestry Commissioners are subordinate to them. Within the forest district, independent positions of Supervising Engineers are subordinate to the manager (perform functional control of the correctness of the performance of economic activities and the protection of property and combating forest damage in individual forest districts and in the Forest District), Forest Guard (protection of property and analysis of the state of the threat of forest damage, prevention and combating of crimes and offenses), OHS Inspector (all matters related to health and safety at work in the Forest District), the position of personnel (all personnel matters within the meaning of the Labor Code). Within the vertical structure, the Forestry Supervisor (head of the basic organizational unit of the State Forests – forest district) appoints Deputy Forestry Supervisors managing Economic Departments with separate Forest Management and Forestry, Accounting (Supervised by the Accounting Manager within the tasks of accounting, finance, financial and economic planning, analysis, reporting, as well as organizes and exercises internal control, financial and accounting documents) and Administration (Secretary – with full administrative support of the Forestry Division, administration of real estate, preparation and implementation of plans for construction and purchase of fixed assets and repair plan for infrastructure). Within the Forestry Department, there is a structure of a managing Forester and subordinate Subforester. The forester directly manages the forestry and the work of the subforester. The tasks of the forester include all matters related to forest management in the subordinate forestry, for which he bears full responsibility. He also performs tasks related to the protection of timber resources, fixed and non-permanent assets from forest damage and deals with its eradication, using the powers set forth in the Forest Law. The forester is materially responsible for the property entrusted to him. A subforester is assigned to a forestry unit and reports directly to the forester. The subforester performs technical-production, administrative and protective activities to carry out the tasks set for the forestry.

The purpose of the study was to compare the rate and direction of changes in the salaries of basic groups of employees of the State Forestry Administration and selected industries of the enterprise sector in Poland.

## Material and methods

The study determined the dynamics of changes in the salaries of employees in 2012-2021. Changes in salaries for selected industries in Poland were analyzed. A detailed analysis was made of changes in salaries in the State Forest Holding Company for the positions of Forestry Supervisor, Deputy Forestry Supervisor, Supervisory Engineer, Chief Accountant, Secretary, Forester and Subforester. The results obtained were compared with the change in salary in the enterprise sector. For this purpose, the study included 17 sections according to the Polish Classification of Activities (PCA), which is an ordered and grouped classification of economic activities, industries or sectors:

- Section A: Agriculture, forestry, hunting and fishing;
- Section C: Manufacturing;
- Section F: Construction;
- Section G: Wholesale and retail trade; vehicle repair;
- Section H: Transportation and warehousing;
- Section I: Accommodation and food service activities;
- Section J: Information and communication;
- Section K: Financial and insurance activities;
- Section L: Real estate activities;
- Section M: Professional, scientific and technical activities;
- Section N: Administrative and support service activities;
- Section O: Public administration and defense; compulsory social security;
- Section P: Education;
- Section Q: Health care and social assistance;
- Section R: Arts, entertainment and recreation activities;
- Section S: Other service activities;
- Section B+C+D+E: Mining and quarrying, processing, electricity, gas, steam, hot water and air conditioning supply, water supply; sewage and waste management and remediation activities.

Source materials for the study were obtained using the State Forest Information System (SFIS) of the Regional Directorate of State Forests in Katowice and the Regional Directorate of State Forests in Szczecin. Data on wages and salaries in the business sector came from the statistical yearbooks of the Central Statistical Office (CSO). The average monthly salary (gross) included components not only limited to the basic salary, but also other components of remuneration, such as seniority allowances, bonuses, prizes, retirement benefits, settlement of overtime pay, *etc.*

The basic measures used in the analysis of salary volatility for selected time series are absolute increments, relative increments and indexes. In practice, however, indexes – indicators of dynamics – are the most applicable. Single-basis and chain indexes of change were used to assess wage changes. On the other hand, the logarithmic method was used to assess the average rate of change in wages for State Forests employees and selected sectors of the national economy (1):

$$\log \bar{A} = \frac{1}{n-1} \cdot \sum_{t=2}^n \log \frac{Wd_t}{Wd_{t-1}} \tag{1}$$

where:

- $Wd_t$  – the size of the analyzed variable in each year ( $t$ ),
- $Wd_{t-1}$  – the size of the given variable in the previous year,
- $n$  – the number of observations.

The logarithmic number, from which the average rate of change was determined, was calculated from the formula (2):

$$\bar{A} = 10^{\left( \frac{1}{n-1} \sum_{t=2}^n \log \frac{Wd_t}{Wd_{t-1}} \right)} \tag{2}$$

where:

- logarithmic number,
- other designations as in formula (1)

Finally, the average rate of change of wages was calculated according to the formula (3):

$$STZ = (\bar{A} - 1) \cdot 100 \quad (3)$$

where:

- AROC – average rate of change,
- other designations as in formula (2).

## Results

The analyses carried out on the change in salaries for the surveyed positions of SFHC units and compared industries in Poland over a ten-year period showed that their dynamics changed significantly (Table 1-2, Fig. 1)

**Table 1.**

Dynamics of changes in salaries for activities by PCA and selected SFHC positions in 2012-2021 in Poland (2012=100%)

Sector PCA	Single basis indexes of change [%]								
	2013	2014	2015	2016	2017	2018	2019	2020	2021
Section A	100.75	105.88	110.33	113.39	116.66	124.22	130.63	134.16	149.59
Section C	104.40	109.01	113.11	118.00	126.63	135.84	145.46	153.19	166.91
Section F	101.40	105.10	109.01	113.45	120.40	129.77	139.21	145.85	161.10
Section G	103.39	107.73	112.83	119.48	128.40	138.73	150.00	158.21	172.25
Section H	102.92	106.58	109.59	112.17	118.74	126.78	134.64	139.72	150.01
Section I	104.33	108.88	112.98	120.28	130.63	137.63	148.43	152.70	168.02
Section J	104.50	108.87	113.31	119.65	126.58	136.60	143.06	153.44	166.28
Section K	102.74	103.42	108.71	111.18	118.02	125.82	131.84	138.27	147.19
Section L	103.02	105.98	109.58	113.56	121.63	127.58	133.97	140.43	147.84
Section M	102.08	105.42	111.49	114.82	123.54	134.19	142.38	152.83	164.17
Section N	103.51	108.53	115.76	120.50	128.68	139.69	151.35	165.75	181.08
Section O	102.94	106.12	109.00	114.80	120.78	126.48	136.11	147.45	157.10
Section P	104.23	107.05	110.21	111.34	113.48	119.43	129.64	140.85	150.63
Section Q	102.24	104.73	108.04	113.68	121.36	133.74	146.80	158.70	185.22
Section R	104.25	107.44	111.39	116.76	123.46	131.43	138.65	146.43	155.74
Section S	113.16	116.90	119.64	127.42	129.91	142.52	145.14	154.62	167.27
Section B+C+D+E	104.55	107.68	110.64	114.19	121.26	129.96	138.81	145.80	157.87
Min	100.75	103.42	108.04	111.18	113.48	119.43	129.64	134.16	147.19
Med.	103.39	107.05	110.64	114.80	121.63	131.43	139.21	147.45	161.10
Max	113.16	116.90	119.64	127.42	130.63	142.52	151.35	165.75	185.22
SD	2.59	2.85	2.85	4.12	4.77	6.10	6.69	8.21	10.97
Position	Single basis indexes of change [%]								
Forestry Supervisor	103.44	108.56	108.54	111.98	107.77	111.30	111.55	107.00	125.45
Deputy Forestry Supervisor	102.53	107.94	110.32	112.67	110.01	115.32	115.24	112.99	129.27
Supervising Engineers	100.63	102.60	106.18	110.93	107.29	111.74	112.92	108.81	126.33
Chief Accountant	101.31	106.43	108.66	112.61	109.43	111.39	111.55	108.87	124.72
Secretary	102.38	104.34	110.72	111.50	109.39	113.75	114.55	109.51	126.52
Forester	101.22	104.68	109.51	112.15	110.66	116.82	117.86	114.31	131.04
Subforester	100.54	103.68	107.04	109.29	106.47	110.16	110.93	106.60	124.13
Min	100.54	102.60	106.18	109.29	106.47	110.16	110.93	106.60	124.13
Med.	101.31	104.68	108.66	111.98	109.39	111.74	112.92	108.87	126.33
Max	103.44	108.56	110.72	112.67	110.66	116.82	117.86	114.31	131.04
SD	1.00	2.06	1.53	1.10	1.43	2.26	2.32	2.69	2.32

Source: own elaboration

Table 2.

Dynamics of annual changes in salaries for activities according to PCA and selected positions of SFHC in 2012-2021 in Poland

Sector PCA	Chain indexes of change [%]								
	13/12	14/13	15/14	16/15	17/16	18/17	19/18	20/19	21/20
Section A	100.75	105.10	104.20	102.77	102.88	106.49	105.15	102.70	111.51
Section C	104.40	104.42	103.76	104.32	107.32	107.27	107.08	105.32	108.96
Section F	101.40	103.65	103.71	104.08	106.13	107.78	107.27	104.77	110.46
Section G	103.39	104.20	104.74	105.89	107.47	108.04	108.12	105.47	108.87
Section H	102.92	103.56	102.82	102.36	105.86	106.77	106.20	103.78	107.37
Section I	104.33	104.36	103.76	106.47	108.60	105.36	107.85	102.88	110.03
Section J	104.50	104.18	104.08	105.60	105.79	107.91	104.73	107.25	108.37
Section K	102.74	100.66	105.11	102.27	106.15	106.61	104.79	104.88	106.45
Section L	103.02	102.88	103.40	103.63	107.11	104.89	105.01	104.82	105.28
Section M	102.08	103.28	105.76	102.99	107.59	108.62	106.10	107.34	107.42
Section N	103.51	104.85	106.67	104.09	106.79	108.56	108.34	109.52	109.25
Section O	102.94	103.08	102.72	105.32	105.21	104.72	107.61	108.34	106.54
Section P	104.23	102.71	102.95	101.02	101.92	105.24	108.56	108.64	106.94
Section Q	102.24	102.43	103.17	105.22	106.76	110.20	109.77	108.10	116.71
Section R	104.25	103.06	103.68	104.82	105.74	106.45	105.50	105.61	106.35
Section S	113.16	103.31	102.35	106.50	101.95	109.71	101.83	106.54	108.18
Section B+C+D+E	104.55	103.00	102.75	103.21	106.19	107.17	106.81	105.03	108.28
Min	100.75	100.66	102.35	101.02	101.92	104.72	101.83	102.70	105.28
Med.	103.39	103.31	103.71	104.09	106.15	107.17	106.81	105.47	108.28
Max	113.16	105.10	106.67	106.50	108.60	110.20	109.77	109.52	116.71
SD	2.59	1.02	1.12	1.53	1.86	1.55	1.85	1.95	2.56
Position	Chain indexes of change [%]								
Forestry Supervisor	103.44	104.95	99.99	103.17	96.24	103.28	100.22	95.92	117.24
Deputy Forestry Supervisor	102.53	105.27	102.20	102.13	97.64	104.83	99.94	98.05	114.41
Supervising Engineers	100.63	101.96	103.49	104.47	96.72	104.15	101.05	96.36	116.10
Chief Accountant	101.31	105.05	102.09	103.64	97.18	101.79	100.15	97.60	114.56
Secretary	102.38	101.91	106.11	100.71	98.10	103.98	100.71	95.60	115.53
Forester	101.22	103.42	104.61	102.41	98.67	105.57	100.89	96.99	114.63
Subforester	100.54	103.12	103.24	102.10	97.42	103.46	100.71	96.09	116.45
min	100.54	101.91	99.99	100.71	96.24	101.79	99.94	95.60	114.41
med.	101.31	103.42	103.24	102.41	97.42	103.98	100.71	96.36	115.53
max	103.44	105.27	106.11	104.47	98.67	105.57	101.05	98.05	117.24
SD	1.00	1.34	1.81	1.13	0.76	1.12	0.39	0.84	1.01

Source: own elaboration

With regard to the positions functioning in the organizational structure of the State Forests (Table 1), the largest increase in salaries was found for the position of Forester where there was a 31% increase in salaries compared to 2012. For the other positions, the changes remained at a similar level and amounted to 24% for the position of Subforester, 25% for the positions of Forestry Supervisor, Chief Accountant, 26% for Supervisory Engineer and Secretary, and 29% for the position of Deputy Forestry Supervisor.

Using a chain index (Table 2) with a variable annual base, there was an increase in salaries, compared to the previous year for the positions studied, with the exception of 2017 and 2020.

In 2017, the decrease in salaries ranged from 1% for the position of Forester to 4% for the position of Forestry Supervisor. In 2020, on the other hand, the largest negative changes also occurred for the position of Forestry Supervisor and Secretary (4%), and the smallest for the position of Deputy Forestry Supervisor (2%). The remaining years showed an increase in salaries. The largest changes compared to the previous year occurred in 2021. Annual salary increases ranged from 14% for the Deputy Forestry Supervisor and Chief Accountant to 17% for the Forestry Supervisor.

The average rate of change in salaries for the surveyed positions in the SFHC remained at a similar level. The highest dynamics were found for the position of Forester, for which a 3% increase in salaries was recorded. For the other positions, the average rate of change did not exceed 3%. The rate of growth of the average salary in SFHC also remained at a similar level (2.61%).

The second group of entities surveyed were industries by section of the Polish Classification of Activities (PCA). With regard to the analyzed sections, the largest increase in wages compared to the year considered as the basis, *i.e.* the first research year, was found for the section related to health care and social assistance (Q). There was as much as an 85% increase in wages here. A slightly smaller increase of 81% was found for service activities (N). The smallest increase in wages occurred for financial and insurance activities (K: 47%), real estate (L: 48%) and agriculture, forestry and fishing (A: 49%).

Considering the dynamics of wages in relation to the previous year, an increase in wages was found in each year (Fig. 1). The largest fluctuations in this regard occurred, as in the case of SFHC positions, in 2021. An average 9% increase in wages was recorded here, the largest for the agriculture, forestry and hunting (A: 11%), construction (F: 10%) and accommodation and food services (I: 10%) industries, while the smallest for the real estate section (L: 5%). The logarithmic rate of change in wages for sections by PCA showed greater variation than for positions for SFHC. The highest rate of wage growth occurred in service-related (N) and healthcare (Q) industries, close to 7%. On the other hand, the lowest growth rate of 4% was recorded for the sections agriculture, forestry and hunting (A), financial activities (K) and real estate services (L).

The data in Figure 1 allow a comparison of the average rate of change of salaries in the business sector in relation to the average rate of change of salaries in the SF units. Based on the

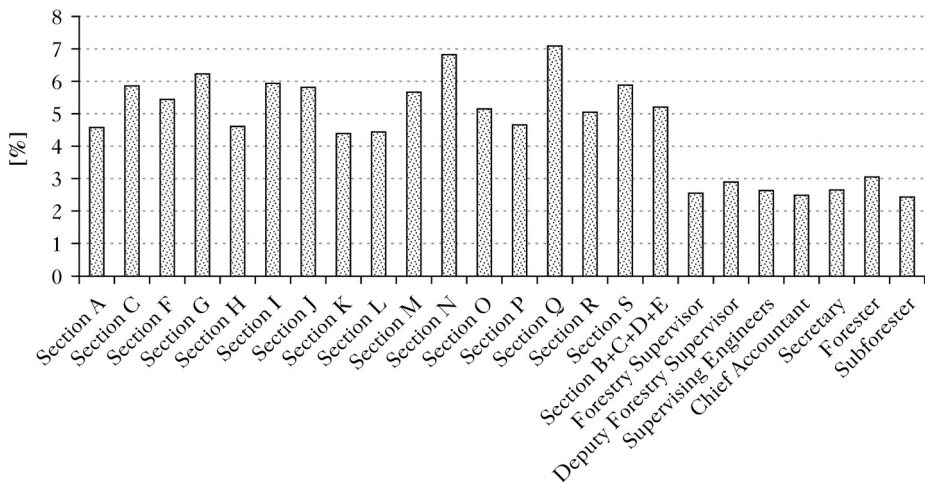


Fig. 1.

Average rate of change in salaries for activities by PCA and selected SFHC positions in 2012-2021 in Poland  
Source: own elaboration

information presented, it should be noted that the logarithmic growth rate of salaries for industries in the PCA section, for each of the analyzed entities, was nearly twice as high as for the surveyed positions in the State Forestry units.

## Discussion

Human resources, which are often an important force in the development of organizations, are an important cost element for enterprises. In order to reduce the number of negative effects of activities related, for example, to operational delays, low performance and other threats to the functioning of the organization, it is important for resource management units to properly motivate employees. Progressive technological changes affecting the form of the economic environment, generates the need to adopt the principles of economics affecting changes in human resource management, including employee compensation (Friedman, 2007; Borkowski, 2012; Hong *et al.*, 2012; Vele *et al.*, 2014; Kawka, 2016). The remuneration system plays a significant role in the management of the enterprise, causing a number of different effects, affecting people and the organization itself.

In the current conditions of the functioning of organizations, characterized by high complexity and variability of the processes taking place, companies must take measures to achieve success and competitive advantage in the market. One of such measures is the issue of proper functioning of compensation systems, as one of the important elements of human potential management in the organization, especially with regard to motivating employees and stimulating them to effective work performance (Granqvist and Regné, 2008; Oleksiak, 2013).

The assumptions of cost reduction and maintenance of employee motivation that an effective compensation system generates cause significant importance to be attached to the formation of a company's pay policy. This is the result of a number of factors, but the most important is the direct and real impact of the pay policy on the performance and achievement of corporate goals (Beck-Krala, 2013). Appropriate remuneration makes it possible to attract and retain valuable employees and motivate them to achieve high performance, as well as professional development. Such employees allow the company to gain a competitive advantage in the market (Hirst and Thompson, 1992; Tomšík and Bartošová, 2003).

According to researchers (Borkowski, 2012; Maryani *et al.*, 2022), the comprehensive remuneration model is supposed to build employee commitment, create opportunities for development on the one hand, and benefit the organization on the other. It is extremely important to ensure that the remuneration system is rational according to the implemented strategy and industry specifics. The increase in remuneration greatly affects the motivation and productivity of employees performing work. To determine the amount of change in remuneration, a system is needed that can support management decision-making. Workers' salaries are undergoing very dynamic changes as a result of economic changes, including in Poland.

Social and economic development under conditions of increasing globalization and increased mobility of human resources, is the main driver of wage inequality in developed economies. In Poland, there is a wide variation in wages depending not only on the region, but also on the industry, company size or position. Wage disparities are visible especially at lower positions. In the case of positions especially the highest managerial ones, disparities between industries are much smaller (Gagné and Forest, 2008; Fuentes-Castro, 2012; Kurniawan *et al.*, 2022; Maryani *et al.*, 2022).

In Polish conditions (Kawka, 2016), organizations that make their compensation management processes more flexible offer higher market rates and take care to enrich the diversity of non-wage components. Numerous studies are known about the impact of increasing pay on various aspects



of life, among others, on employee productivity and the acquisition of new skills (Hellerstein, 1999; Neumark and Wascher, 2000, 2007; Gunawan and Amalia, 2015; Sliwka and Werner, 2017, 2021; De Ree *et al.*, 2018), on the activities of various organizations, such as non-profit organizations (Balsam *et al.*, 2022), and on gender diversity (Strawinski *et al.*, 2018). Studies by Alege *et al.*, (2021) have shown that a significant increase in the minimum wage does not improve the welfare and living standards of households. Moreover, it puts a strain on state finances. The implication is that minimum wage policies should be complemented with other pro-poor and inclusive development policies to improve the lives of low-income workers. Minimum wage increases improve individuals' reported health security (Butt, 2020; Buszkiewicz, 2021; Chen, 2021; Syardiansah, 2022; Lebihan, 2023). The key role of compensation in building job satisfaction for employees from different cultures was pointed out by Warr (2008) in his research. In contrast, Card *et al.* (2012) showed that employees' receipt of below-median wages lowers their level of satisfaction, while raising wages above the median has no significant effect on it. What's more, after reaching a certain level of salary, the employee does not feel satisfaction from it, *i.e.* the employer is forced to look for other motivators. Numerous works have often pointed out the negative effects of raising the minimum wage in both European countries (Cerejeira *et al.*, 2012; Bargain *et al.*, 2015; Boll *et al.*, 2015) and non-European countries (Kambayashi *et al.*, 2013; Gindling *et al.*, 2015).

## Conclusions

A grade differentiation approach was used to evaluate the effectiveness of applied remuneration incentives in forestry management structures. The presented results of the assessment of the effectiveness of forestry remuneration in Poland, based on the available input and output data, indicate a balanced rate of economic change for forestry employees and the specific conditions of personnel for forestry.

The results show the value of the increase in the salaries of forestry employees in the range of 2.4-3.0% (depending on the position). Based on the results of the analysis of national data, it can be concluded that the level of motivation in forestry is below the average salaries compared to other industries in the country (4.4-7.0%). In other industries there were large differences in wages between different employee groups.

## Authors' contributions

Conceptualization – D.S.; methodology – K.A., M.S.-G.; validation – M.W., K.A., investigation – D.S., K.A., M.W.; data curation – D.S., M.S.-G.; writing-original draft preparation – D.S., K.A., M.W., M.S.-G.; supervision – K.A., M.W.; funding acquisition – D.S., K.A., M.W.

## Conflicts of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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## STRESZCZENIE

## Tempo zmian wynagrodzeń pracowników Lasów Państwowych w porównaniu do wybranych sektorów gospodarki w Polsce

Zasoby ludzkie stanowią podstawowy zasób każdego współcześnie funkcjonującego przedsiębiorstwa i organizacji. Odpowiednie kształtowanie i mobilizowanie kadry generuje zdolność do szybkiego rozwoju przedsiębiorstwa, co w dalszej perspektywie powinno przyczynić się do jego konkurencyjności i stabilności rynkowej. Gospodarowanie zasobami ludzkimi odbywa się w warunkach złożonego i nieustannie zmieniającego się otoczenia, stąd konieczne są odpowiednie formy kształtowania zaangażowania pracowników.

Kształtowanie systemu motywacyjnego jest jednym z głównych założeń zarządzania działalnością przedsiębiorstw. W strukturze zarządzania gospodarką leśną wydzielane są podstawowe struktury zatrudnienia wpływające na funkcjonowanie jednostek organizacyjnych. Struktura zarządzania w Państwowym Gospodarstwie Leśnym Lasy Państwowe ma charakter zbieżny z wymaganiami przedsiębiorstw. Rolę zarządczą pełni dyrektor generalny. W ramach wydzielonych dyrekcji regionalnych LP powoływani są dyrektorzy regionalni, którzy kierują strukturą wewnętrzną firmy poprzez mianowanych nadleśniczych. W odniesieniu do nadleśnictwa podległe zarządzającemu są samodzielne stanowiska inżyniera nadzoru, straży leśnej, inspektora oraz stanowisko ds. pracowniczych. W ramach struktury pionowej nadleśniczy powołuje zastępców i pracowników zarządzających administracją oraz księgowość. W leśnictwach obowiązuje struktura zarządzającego leśniczego i podległych podleśniczych.

Wynagrodzenie spełnia szereg funkcji w przedsiębiorstwie, w tym funkcję motywacyjną, kosztową, dochodową oraz społeczną. Za cel badań obrano ocenę tempa i kierunku zmian wynagrodzeń wybranych grup pracowników PGL LP oraz wybranych branż sektora przedsiębiorstw. Do oceny wytypowano grupę reprezentatywną z wybranych dyrekcji regionalnych LP w Polsce. Szczegółowej analizie poddano zmiany wynagrodzeń dla stanowisk: nadleśniczego, zastępcy nadleśniczego, inżyniera nadzoru, głównego księgowego, sekretarza, leśniczego oraz podleśniczego. Materiały źródłowe do badań pozyskano, korzystając z Systemu Informatycznego Lasów Państwowych (SILP) Regionalnej Dyrekcji Lasów Państwowych w Katowicach oraz Regionalnej Dyrekcji Lasów Państwowych w Szczecinie. Otrzymane wyniki porównano ze zmianą wynagrodzenia w sektorze przedsiębiorstw. Dane dotyczące wysokości wynagrodzeń sektora przedsiębiorstw pochodziły z roczników statystycznych Głównego Urzędu Statystycznego (GUS). Przedstawione wyniki wskazują na zrównoważony wskaźnik zmian ekonomicznych dla pracowników Lasów Państwowych oraz specyficzne warunki kadry dla leśnictwa (tab. 1). Uwzględniając dynamikę wynagrodzeń w odniesieniu do roku poprzedniego, stwierdzono wzrost płac w każdym roku średnio 9%, największy dla branży rolnictwo, leśnictwo i łowiectwo (11%), budownictwo (10%) oraz zakwaterowanie i usługi gastronomiczne (10%), natomiast najmniejszy dla sekcji związanej z nieruchomościami (5%) (tab. 2). Logarytmiczne tempo zmian wynagrodzeń dla sekcji wg PKD wykazywało większe zróżnicowanie niż w przypadku stanowisk dla PGL LP (ryc. 1). Najwyższe tempo wzrostu płac wystąpiło w branżach związanych z usługami i opieką zdrowotną, blisko 7%. Natomiast najniższą dynamikę (4%) odnotowano dla sekcji rolnictwo, leśnictwo i łowiectwo, działalności finansowej oraz związanej z obsługą rynku nieruchomości. Wskazano wartość wzrostu wynagrodzeń pracowników leśnych w zakresie 2,4-3,0%. Poziom wynagrodzeń w leśnictwie kształtuje się poniżej średniej w porównaniu z innymi branżami w kraju (4,4-7,0%).