FACTORS IMPACTING THE AMOUNT OF STATE SOCIAL INSURANCE BENEFITS IN LATVIA

Baiba Mistre¹, Mg.oec.; Inguna Leibus², Dr.oec. and Iveta Bulina³, Mg.oec.

^{1, 2, 3}Faculty of Economics and Social Development, Latvia University of Life Sciences and Technologies

Abstract. State social insurance benefits play an essential role in situations where residents experience any of the social risks (unemployment, sickness, disability, maternity etc.), since the benefits partially compensate for the previous income of residents. State social insurance benefits in Latvia include benefits in case of unemployment (unemployment benefit and benefit in case of death of an unemployed person) and benefits and allowances for maternity and sickness insurance (maternity and paternity benefits, parental allowance, sickness benefit and funeral allowance). The defined research hypothesis states that the amount of social insurance benefit and wage remuneration are subject to the impact of the same factors. The research aim is to study factors impacting state social insurance benefits in Latvia. The authors have identified factors impacting work remuneration and respectively social insurance benefits based on the scientific literature and the research of the Ministry of Welfare of the Republic of Latvia. In the course of the research, seven experts were asked to evaluate the identified factors by means of the paired method and determine the most significant factors influencing the amount of social insurance benefits. The research results show that experience and education (personality-related factors) are among the most important factors influencing wage remuneration and, hence, the amount of social insurance benefits. The research highlighted a necessity to make a proposal to the State Employment Agency to continue organising various training courses and educational programmes that increase the qualification of an employed person. However, the influence of a region was noted by experts as the main factor when evaluating the impact of the workplace on the wage remuneration.

Key words: state social insurance benefits, work remuneration, impacting factors.

JEL code: J310, J380, I380

Introduction

The social security system and its sustainable development, which protects people in case of social risk, plays an essential role in ensuring the well-being of the population. The state implements social security through social insurance, state social benefits, social assistance and social services.

Social protection of the population as one of the priority areas has been marked by the strategic planning documents of Latvia already for several planning periods. The need to improve social security and increase funding for the social sphere is especially emphasised in order to increase the quality of life of the population and promote the birth rate in the country (Latvijas ilgtspejigas attistibas ..., 2010). Promoting the birth rate and ensuring the provision of population regeneration are vitally important issues for Latvia, as the number of population has been continuing to decrease since 1990 (Kristapsone, Kantane, 2019). The long-term conceptual document "*Latvia's Growth Model: People Come First"* (2005) specifies that inhabitants and their welfare are the main resources of the country. Many closely related aspects such as awareness and education, employment, material well-being, environmental protection, human resources, social security, family etc. shall be taken into account when ensuring the level of well-being and security of the population in the long term. The growth model emphasises the increase of human resources as one of the priority long-term tasks, which can be implemented by promoting the birth rate in the country (Latvijas izaugsmes modelis ..., 2005). Based on the population survey Kristapsone and Kantane (2019) indicate that social insurance benefits, which provide parents with income during a child care, play an important role in promoting birth.

464

¹ E-mail: baiba.mistre@lbtu.lv

 ² E-mail: inguna.leibus@lbtu.lv
³ E-mail: bulina.iveta@inbox.lv

Proceedings of the 2023 International Conference "ECONOMIC SCIENCE FOR RURAL DEVELOPMENT" No 57 Jelgava, LBTU ESAF, 10-12 May 2023, pp. 464-473 DOI: 10.22616/ESRD.2023.57.046

According to the National Development Plan of Latvia 2021-2027 (2020), one of the course of actions is "Strong Families in Generations", which is aimed to improve the support system for families with children simultaneously promoting the birth of a second child and the formation of large families. It should be noted that the population of Latvia positively evaluates the system created so far to support families with children; however, they emphasise that improvements should be targeted so that the birth of a child in the family does not significantly reduce the level of income per family member (Latvijas Nacionalais attistibas ..., 2020).

Several researchers such as Grinfelde (2010), Latviete (2012), Cunska, Muravska (2008), Volskis (2008), Abolina (2016) and others have addressed the problematic issues of social security in Latvia. Social insurance issues have been analysed in several studies of the Ministry of Welfare (Labklajibas ministrija, 2019). Mietule (2012) and Liepina (2012) have summarised the factors impacting wage remuneration and analysed trends in wage remuneration changes by sectors and regions in Latvia.

The defined research hypothesis states that the amount of social insurance benefit and wage remuneration are subject to the impact of the same factors. The research aim is to study factors impacting state social insurance benefits in Latvia.

The following tasks are subjected to the research aim:

- 1) to study the effect of wages on the amount of social insurance benefits;
- 2) to identify and evaluate the factors affecting wages.

Research methods: the monographic and descriptive methods, analysis and synthesis, graphical method, method of statistical analysis (analysis of chain increase, correlation), paired method as well as a method of sociological research – structured survey of experts – to find out the opinions of experts on the factors influencing wage remuneration and social insurance benefits.

The present research is based on various scientific publications, publicly available documents, information available in databases and other sources.

Research results and discussion

1. The impact of wages on the amount of social insurance benefits

State social insurance benefits play a significant role in situations where residents experience any of the social risks (unemployment, sickness, disability, maternity etc.), since social benefits partially compensate for the previous income of residents.

Vanaga and Sloka (2022) specify that social protection helps individuals and families manage risks and provides support in adverse situations as well as helps maintain and improve living standards.

State social insurance is one of the areas of social security, which is based on social insurance contributions made by the population. The basic principles of state social insurance envisage solidarity between social insurance contributors and recipients of social insurance services, and the use of social insurance funds only for social insurance services consistent with the law (On State Social ..., 1997).

Based on the types of social insurance and consistent with the law "On Unemployment Insurance" (1999) and the law "On Maternity and Sickness Insurance" (1995), state social insurance benefits are divided into *unemployment benefits* (unemployment benefit and funeral benefit in case of death of an unemployed person) and *benefits for maternity and sickness insurance* (maternity, paternity, parental, sickness and funeral).

The research authors will concentrate only on a profound studies of maternity, paternity and parental benefits, since they directly relate with demographic processes in the country and serve as an essential support for parents in case of a child birth and care.

Under the law "On State Social Insurance" (1995), only persons who are socially insured and for whom mandatory state social insurance contributions have been made or had to be made for no less than three months of the last six months period or six months in the last 24-month period before the month in which the insured event occurred have the right to maternity, paternity, parental and sickness benefits.

The amount of state social insurance benefits depends on the salary or wage subject to a person's insurance contributions, as evidenced by the data of the State Social Insurance Agency. The average wage remuneration subject to insurance contributions and the amounts of social insurance benefits tended to increase within the period 2011-2021. The trend excluded the amount of parental benefit, as the period of receiving the benefit was changed due to the amendments in the regulatory enactments. From 1 October 2014, the recipients of the parental benefit were given the opportunity to choose the period of receiving the benefit is higher if the recipient chooses to receive it for a shorter period; hence, the benefit equals to 60% of the wage or salary subject to contributions. Yet, the benefit equals to 43.75% of the wage or salary subject to contributions if the period of receipt is longer. The data show that the amount of parental benefit has a tendency to increase from 2016 (Fig. 1).



Fig. 1. Amounts of the state social insurance benefits and the average wage remuneration subject to insurance contributions in Latvia within the period 2011-2021, EUR

The calculated chain increase rate shows that the fastest increase in the average wage remuneration subject to insurance contributions in the analysed period was observed in 2021, when it increased by EUR 127.59 or 13.57%. The increase of the minimum monthly wage from EUR 430 to EUR 500 in 2021 is one of the factors impacting the growth (Valsti noteikta minimala..., 2022). The calculated correlation coefficient (r=0.976) shows a close linear relationship between these indicators.

The main factor leaving an impact on the amount of state social insurance benefits is wage remuneration; thus, the factors directly influencing wage remuneration are studied hereinafter. It is

important that social contributions for a person are made from the entire work remuneration; otherwise, if any part of the income is paid unofficially (cash-in-hand), then it does not impact the person's social protection.

The study "Shadow Economy Index for the Baltic States 2009-2021" indicates that "envelope wages" in Latvia, Estonia and Lithuania constituted the most important component of the shadow economy in 2021 accounting for 46.2% of the total shadow economy in Latvia, 42.7% in Estonia, and 38.8% in Lithuania. In 2021, underreported business income in Latvia constituted 30%, while the component of underreported number of employees - 23.8% of the total shadow economy (Sauka, Putnins, 2022).

Researchers Sauka and Putnins (2015) emphasise that the shadow economy may create a vicious circle: individuals work illegally, and thus, they do not pay taxes, as a result of which revenue in the state budget decreases requiring an increase in tax rates, which further fosters unregistered activities and weakens the economic and social base.

Lately, more and more people become aware of the problems of social guarantees, which arise due to unmade social insurance contributions. Benkovskis and Vilerts (2021), economists of the Bank of Latvia, in their study on the shadow economy have confirmed that "envelope wages" mean lower social protection. In addition, the economists have also concluded that the COVID-19 pandemic proved how difficult it is to provide adequate support in crisis situations to the employees who work in industries and professions with a relatively high proportion of unreported wages. Also, Szewczyk–Jarocka (2022) in the study on the most important disadvantages of unregistered work, states that the most important is the lack of social security.

Although, as pointed out by Darzina, Brikmane and Dambe (2022) in their research almost one fifth of the population of Latvia would agree to receive part of their wage as cash-in-hand. Such a trend shall be evaluated negatively due to a frivolous attitude of part of the population towards social protection. When a person makes a decision to receive a wage as cash-in-hand, it does not think about the potential social risks that could happen and the social protection that could be required in such a situation (Zarina, Zvaigzne, Koldane, 2022). Often cash-in-hand wage earners have low income, and thus, the necessity for the state support becomes urgent. People with higher level of education and higher income have a more negative attitude towards unreported income (Darzina, Brikmane, Dambe, 2022).

Employees who officially receive at least the minimum monthly wage are more socially protected. Many authors have concluded in their studies that raising the minimum wage has a positive effect on the well-being of low-income earners. Ferraro, Merikull and Staehr (2018) in their research on the impact of minimum wage changes in Estonia have concluded that the minimum wage has contributed to the reduction of wage inequality, and this is especially true for those segments of the labour market with low wages. A study by Flavin and Shufeldt (2017) shows that subjective well-being increases among low-income citizens in countries that have decided to increase their minimum wage. The researchers demonstrated that this impact refers only to low-income citizens. Larger social insurance contributions are made with the increase of the minimum wage, consequently leading to the growth of the amounts of social insurance benefits.

Education is one of the most essential factors impacting work remuneration (Darba algas un..., 2006). The US Bureau of Labor Statistics has conducted a study confirming that the potential of an employee increases with each additional level of education obtained. For example, workers with a secondary education earn more than those without such a diploma. Also, employees with a master's degree earn more than those with a bachelor's degree etc. (Career Profiles, s.a.).

The effect of education on wages and salaries has been studied for a long time. In 1974, J. Mincer, conducting his regular study, created an analysis model in which the salary is a function of the number of

years spent in education and work experience of an individual. The main result of the model - the Mincer equation shows by what percentage each year of schooling increases the salary (Mincer, 1975). This model has also been used by Vilerts, Krasnopjorovs and Brekis (2015), experts of the Bank of Latvia, in their study on the impact of education on wages and salaries. The study demonstrates that a higher level of education in Latvia is associated with higher salaries.

Mistre, Zvaigzne, Mazure (2019) in their population survey in Latgale region recognised that education and the position held are one of the most important individual factors of people impacting the level of wages and salaries. Other important factors include the place of work either in an international or local company and the length of service.

The age of an employee is also an important factor for applying the salary size. In addition, this factor also has two effects. One of them is experience, as previous experience ensures additional productivity, and the employer is interested in employing an experienced employee and paying him a higher salary. Therefore, it could be concluded that the salary should increase with the employee's age. However, this is not the case, since productivity declines with the age due to the decline of an employee's physical and mental abilities. Consequently, the employer has a reason to pay a lower salary to an older employee (Darba algas un..., 2006). This fact indicates on a matter why people of pre-retirement age very often have difficulties finding a new job.

The international salary survey platform "Paylab" has collected information on salaries and wages in Latvia over a 10-year period and indicates several trends:

- companies operating in the most demanded sectors offer better remuneration (e.g., IT industries, banking and financial sector);
- the amount of money that could be earned also depends on the company size, as larger companies pay larger salaries;
- work remuneration is higher in the private sector than in the public sector;
- employees with higher education earn by 50% more on average than those with secondary education;
- work remuneration is higher in the capital and larger regional cities (Septini faktori, kas..., 2019).

The Ministry of Welfare indicates on work remuneration variations among representatives of different nationalities in Latvia. The conductors of the study believe that this is related with the proficiency level of the official language of these employees. Lower level of the official language reduces work productivity. An employee who does not know the official language at all is forced to accept any job offered by the employer for any specified wage (Darba algas un ..., 2006).

The survey data of the study "Language Situation in Latvia: 2016-2020" (2021) indicate an increase in the number of the Latvian language speakers in various population groups whose native language is not Latvian: in 1989, only 23% on average of members of ethnic minorities knew Latvian, while this number has risen to about 90% in 2019 and has been relatively constant over the latest ten years. Younger generation has higher self-assessment of the Latvian language skills (Valodas situacija Latvija..., 2021).

Erasmus+ funded study "Skills Required in the Labour Market: Opportunities to Use Information from Job Advertisements to Identify Skills Required by the Labour Market" (2018) indicates that the main skills of an employee required in job advertisements in Latvia and Estonia include specific personality-related skills, character traits, followed by language skills and previous work experience.

2. Assessment of factors impacting work remuneration

The research authors base their identification of the factors impacting work remuneration and, thus, state social insurance benefits on the scientific literature and studies done by the Ministry of Welfare. In the course of the research, seven experts were invited: two of them were chief accountants, two were representatives of the State Revenue Service: chief tax inspectors who deal with payroll tax issues. Three experts specialising in calculation of unemployment benefits and sick-leave benefits represented the State Social Insurance Agency departments of Valmiera, Daugavpils and Jelgava. The identity of the experts is not disclosed for confidentiality reasons and at the request of the experts.

After the evaluation of the factors identified in the structured survey and application of the paired method, the experts marked the factor that was superior to the other. The results of the expert survey questionnaires based on the questions of the paired methods are summarised in the form of a matrix (Fig. 2) determining the importance of each factor.

Factors impacting work remuneration are classified into two groups:

- 1) personality-related factors of an employee (experience, education, age, sex and language skills);
- 2) factors characterising workplace (region, industry, size of the company).



Source: authors' construction based on the structured survey of the experts (n=7) and the paired method Fig. 2. Evaluation of the personality-related factors of an employee impacting work remuneration

Experts have assessed an employee's experience as the most important factor related with the employee's personality followed by the employee's level of education (Fig. 2).

Table 1

2010	2014	2018	Changes 2018/2010, %						
1394	1934	1994	43.04						
907	1169	1566	72.66						
674	912	1222	81.31						
538	707	967	79.74						
518	681	956	84.56						
	665	896	-						
464	640	889	91.59						
400	564	815	103.75						
	1394 907 674 538 518 464	1394 1934 907 1169 674 912 538 707 518 681 665 464 640	1394 1934 1994 907 1169 1566 674 912 1222 538 707 967 518 681 956 665 896 464 640 889						

Average monthly gross wages and salaries by levels of education in Latvia for the period 2010-2018, EUR

Source: authors' construction based on the data of the Official Statistics Portal, 2022

Statistical data indicating that employees with a higher level of education receive higher salaries also confirm the impact of an employee's level of education on work remuneration (Table 1).

The comparison of changes in average monthly gross wages and salaries (2018 vs 2010) show that employees with a doctor's degree have the lowest increase in salaries. Unfortunately, the data for the year 2018 are the latest available data on monthly average gross wage broken down by the levels of education.

Experts have ranged language skills in the third position, followed by the age of an employee. The analysis of the survey results leads to the conclusion that experts do not consider the issue of gender to be important and they believe that this factor has no influence on the wage or salary.

Nowadays, when there are so many problems with attracting qualified labour force, the employer highly values the employee's experience and accumulated knowledge. The practical work experience of the present research authors also confirms the importance of above-mentioned skills in determining work remuneration.



Industry (in which a person is employed)

Source: authors' construction based on the structured survey of the experts (n=7) and the paired method Fig. 3. Evaluation of the workplace characteristic factors impacting work remuneration

Experts distinguish the influence of the region as the main factor when evaluating the impact of the workplace on wage or salary (Fig. 3). Statistical data also confirm the impact of the region on wages and salaries. According to the statistics, employees in Riga region receive higher wages and salaries followed by Pieriga region, while the lowest wages and salaries are received in Latgale region. The comparison of wages and salaries in Riga region and Latgale region reveals that employees in Riga region receive significantly more, for example, in 2021, the difference was EUR 538 or 1.6 times (Table 2). This means that, in general, the residents of Riga region are better socially protected than the residents of Latgale region. Moreover, the increase rate does not indicate on the improvement of the situation.

Table 2

Region	Average monthly gross wages and salaries, EUR				Chain increase rate, %				
	2017	2018	2019	2020	2021	2018	2019	2020	2021
Riga	1044	1129	1206	1276	1434	8.14	6.82	5.80	12.38
Pieriga	871	949	1028	1108	1225	8.96	8.32	7.78	10.56
Vidzeme	739	803	860	914	1010	8.66	7.10	6.28	10.50
Kurzeme	775	858	922	971	1085	10.71	7.46	5.31	11.74
Zemgale	786	848	915	971	1089	7.89	7.90	6.12	12.15
Latgale	640	701	751	793	896	9.53	7.13	5.59	12.99
Latvia	926	1004	1076	1143	1277	8.42	7.17	6.23	11.72

Average monthly gross wages and salaries in the regions of Latvia within 2017 and 2021, EUR

Source: authors' construction based on the data of the Official Statistics Portal, 2022

The fastest increase in monthly wages and salaries of employees in all regions of Latvia was reported in 2021 due to the increase in the minimum wage.

According to the experts, the industry and the sector are the next important factors impacting wages and salaries.

Statistical data show that work remuneration in the public sector has exceeded work remuneration in the private sector; however, the differences in wages and salaries are small and tend to decrease. The data confirm that the type of activity sector influences the level of wages and salaries (Stradajoso menesa videja.., 2022).

The research results confirm that the company size does not have a decisive impact on the level of wages and salaries.

Conclusions, proposals, recommendations

1) The amount of state social insurance benefits in Latvia depends on a person's wage or salary subject to social insurance contributions or the size of wage or salary.

2) The research results confirm that work experience, education and region are among the most important factors having an impact on wages and salaries and, hence, on the amount of state social insurance benefits.

3) Wages and salaries evidence a tendency to increase in all regions of Latvia during the analysed period. The highest wages and salaries are received by those working in Riga region, while the lowest ones are paid in Latgale region. In 2021, the work remuneration in Riga region was EUR 538 or 1.6 times higher than in Latgale region, which creates significant differences in the amount of social insurance benefits.

4) It is recommended for the State Employment Agency to continue to organise various training courses and educational programmes, especially in Latgale region, to increase the qualifications of employees, since education is one of the main factors influencing wages and salaries as well as the amount of social insurance benefits.

Acknowledgements

This paper was prepared with the support of the European Social Fund as part of the project No 8.2.2.0/20/I/001 and was carried out within the framework of the project "Social Protection for Families with Children in Regions of Latvia" and funded by the Latvian University of Life Sciences and Technologies within the program "Strengthening of Scientific Capacity".

Bibliography

- 1. Abolina, L. (2016) Gimene un tas atbalsta politikas attistiba Latvija (Family and Policy Supporting it in Latvia) (1990-2015). Promocijas darbs (PhD Thesis). Retrieved from: https://dspace.lu.lv/dspace/handle/7/31863
- Benkovskis, K., Vilerts, K. (2021) Enu piecdesmit nokrasas jeb kur slepjas aploksnu algas? (Fifty Shades of Shadow or where Envelope Wages are Hidden). Retrieved from: https://www.makroekonomika.lv/enu-piecdesmitnokrasas-jeb-kur-slepjas-aploksnu-algas
- 3. Career Profiles [s.a.] Factors Influencing Salary. Retrieved from: https://www.careerprofiles.info/salary-factors.html
- Cunska, Z., Muravska, T. (2008). Socialas politikas istenosana Latvija pec iestasanas Eiropas Savieniba (Implementation of Social Policy in Latvia after Joining the European Union). Retrieved from: https://providus.lv/article_files/1273/original/Latvia_sociala_politika_LV_200409-1.pdf?1328196342
- Darba algas un to ietekmejosie faktori (Wages and Salaries and Factors Impacting Them) (2006). Labklajibas ministrijas petijums Retrieved from: http://www.biss.soc.lv/downloads/resources/darba%20algas/darba-algas-unto-ietekmejosie-faktori.pdf
- 6. Darba tirgu pieprasitas prasmes iespejas izmantot darba sludinajumu informaciju darba tirgus pieprasito prasmju identificesana (Skills Required in the Labour Market, Opportunities to Use Job Advertisement Information in the

Identification of Skills Required by the Labour Market) (2018). Jaunatnes starptautisko programmu agentura. Retrieved from: http://www.dagda.lv/uploads/media/BizzSkillSet_Study_Report_2018_LAT_saisinats.pdf

- Darzina, L., Brikmane, E., Dambe, A. (2022). Sabiedribas attieksme pret aploksnu algam nulles tolerances nav (There is Zero Tolerance in Society's Attitude towards Envelope Wages). Retrieved from: https://lvportals.lv/skaidrojumi/342965-sabiedribas-attieksme-pret-aploksnu-algam-nulles-tolerances-nav-2022
- Ferraro, S., Merikull, J., & Staehr, K. (2018). Minimum Wages and the Wage Distribution in Estonia. Applied Economics, 50(49), pp. 5253-5268.
- 9. Grinfelde, A. (2010). Life Quality of Pensioners in Latvian Regions. Summary of doctoral thesis. Jelgava. p.113.
- 10. Iedzivotaju skaits gada sakuma, ta izmainas un dabiskas kustīibas galvenie raditaji 1920 2022 (Population at the Beginning of the Year, its Changes and Main Indicators of Natural Movement) (2022). Statistics Database. Retrieved from:

https://data.stat.gov.lv/pxweb/lv/OSP_PUB/START_POP_IR_IRS/IRS010/table/tableViewLayout1/

- 11. Kristapsone, S., Kantane, I. (2019). Iedzivotaju uzskaite un socialdemografisko apsekojumu pieredze. In: Tautas ataudze Latvijā un sabiedrības atjaunošanas izaicinājumi (Population Reproduction and Challenges for Renewal of Society in Latvia). Retrieved from: https://www.apgads.lu.lv/fileadmin/user upload/lu portal/apgads/PDF/Tautas ataudze/talsai viss.pdf
- Latviete, I. (2012). European Social Fund Financing in the Welfare Sector in the Regions of Latvia. Summary of doctoral thesis. Jelgava. p.128.
- 13. Latvijas ilgtspejigas attistibas strategija 2030. gadam (Latvia's Sustainable Development Strategy for 2030) (2010). Retrieved from: http://polsis.mk.gov.lv/documents/3323
- 14. Latvijas izaugsmes modelis: Cilveks pirmaja vieta (Latvia's Growth Model: People Come First) (2005). Ilgtermina konceptualais dokuments. Retrieved from: https://likumi.lv/ta/id/217923-par-konceptuala-dokumenta-apstiprinasanu
- 15. Latvijas Nacionalais attistibas plans 2021.-2027. gadam (Latvia National Development Plan for 2021-2027) (2020). Retrieved from: https://www.pkc.gov.lv/sites/default/files/inlinefiles/NAP2027 apstiprin%C4%81ts%20Saeim%C4%81 1.pdf
- 16. Menesa videja bruto darba samaksa pa darbibas veidiem un izglitibas limeniem pec dzimuma (Average Monthly Gross Wages and Salaries by Types of Activities and Levels of Education) (2022). Oficialas statistikas portals. Retrieved from:

https://data.stat.gov.lv/pxweb/lv/OSP_OD/OSP_OD__apsekojumi__ds_struktura/DSS230.px/table/tableViewLayou t1/

- 17. Mietule, I., Liepina, R. (2012). Wage Trends in Latvia during the Downturn in Economy. Retrieved from: http://www.rta.lv/uploads/source/content_EN/Science%20publications/Journal%20of%20Social%20sciences/Nr_1(4).pdf
- 18. Mincer, J. (1975) Education, Experience, and the Distribution of Earnings and Employment: An Overview. Retrieved from: https://www.nber.org/system/files/chapters/c3693/c3693.pdf
- 19. Mistre, B., Zvaigzne, A., Mazure, G. (2019) Factors Impacting Work Remuneration in the Context of Social Security Protection in Latvia. Retrieved from:
 - https://llufb.llu.lv/conference/economic_science_rural/2019/Latvia_ESRD_50_2019-147-154.pdf
- 20. On Maternity and Sickness Insurance (1995). The Law of the Republic of Latvia. Retrieved from: https://likumi.lv/ta/en/en/id/38051
- 21. On State Social Insurance (1997). The Law of the Republic of Latvia. Retrieved from: https://likumi.lv/ta/en/en/id/45466
- 22. On Unemployment Insurance (1999). The Law of the Republic of Latvia. Retrieved from: https://likumi.lv/ta/en/en/id/14595
- 23. Putnins, T. J., Sauka, A. (2015). Measuring the Shadow Economy using Company Managers. Journal of Comparative Economics, 43(2), 471-490
- 24. Sauka A., Putnins T. (2022). Enu ekonomikas indekss Baltijas valstis 2009.–2021. gadā (Shadow Economy Index for the Baltic States in 2009-2021). Retrieved from: https://www.sseriga.edu/sites/default/files/2022-05/SSERiga_Enu_ekonomikas_indekss_2009_2021_brosura_0.pdf
- 25. Septini faktori, kas ietekme to, cik daudz nopelnam (Seven Factors Influencing our Earnings) (2019). Retrieved from: https://www.algas.lv/newsroom/7-faktori-kas-ietekme-to-cik-daudz-nopelnam/50517
- 26. Statistika par pensijam, pabalstiem, atlidzibam un sociali apdrosinatam personam (Statistics on Pensions, Benefits, Remunerations and Socially Insured Persons) (2022). Retrieved from: https://www.vsaa.gov.lv/lv/statistika-parpensijam-pabalstiem-atlidzibam-un-sociali-apdrosinatam-personam
- 27. Stradajoso menesa videja darba samaksa regionos (Average Monthly Gross Wages and Salaries by Regions) (2022). Retrieved from: Oficialas statistikas portals. Retrieved from: https://data.stat.gov.lv/pxweb/lv/OSP_PUB/START__EMP__DS__DSV/DSV040/table/tableViewLayout1/
- 28. Szewczyk–Jarocka, M. (2022). Advantages and disadvantages of unregistered work in Poland. Retrieved from: https://llufb.llu.lv/conference/economic_science_rural/2022/Latvia_ESRD_56_2022-349-358.pdf
- 29. Valsti noteikta minimala menesa darba alga (Minimum Monthly Gross Wage) (2022). Oficialas statistikas portals. Retrieved

from:https://data.stat.gov.lv/pxweb/lv/OSP_PUB/START__EMP__DS__DSM/DSM010/table/tableViewLayout1/

30. Vanaga, R, Sloka, B. (2022) Sociala aizsardziba un ienakumu nevienlidziba (Social Protection and Income Inequality). Monografija: Latvijas speks ilgi pastevet, pp.161-171

Proceedings of the 2023 International Conference "ECONOMIC SCIENCE FOR RURAL DEVELOPMENT" No 57 Jelgava, LBTU ESAF, 10-12 May 2023, pp. 464-473 DOI: 10.22616/ESRD.2023.57.046

- 31. Vilerts, K., Krasnopjorovs, O., Brekis, E. (2015). Izglitibas ietekme uz algam Latvija ekonomiskas krizes un peckrizes perioda (2006.-2012. gada datu vertejums) (Impact of Education on Wages and Salaries in Latvia during the Economic Crisis and Post-crisis Period. Evaluation of the data for the years 2006-2012). Retrieved from: https://www.makroekonomika.lv/petijums-izglitibas-ietekme-uz-algam-latvija-ekonomiskas-krizes-laika-un-peckrizes-perioda-2006
- 32. Volskis, E. (2008). Pension System's Development Problems in Latvia. Summary of PhD paper. Riga. p. 31.
- 33. Zarina, L., Zvaigzne, A., Klodane, A. (2022). Theoretical Aspects of the Role of the Shadow Economy. Journal of Regional Economic and Social Development, 14, pp.119-126.