Elements of the System of Financing Social Transfers and Assessment of Factors Affecting Them in Latvia

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Abstract. The aim of the present research paper is to investigate the elements forming the system of financing social transfers and the factors affecting them.
The system of financing social transfers was investigated, the socio-economic factors affecting the state social insurance special budget were analysed, and the changes in revenues and expenditures of the state social insurance special budget were assessed in the present paper.
The key element of the system of financing social transfers is the state social insurance special budget.
The research showed that there was a strong causal relationship between the state social insurance special budget's revenues and the number of socially insured persons as well as the average wage subject to insurance contributions of socially insured persons.
The number of socially insured persons is significantly affected by employment – the number of socially insured persons grows at a greater rate, with the increase in the number of employed individuals.
An annual deficit has emerged in the state social insurance special budget since 2009, thus, decreasing the amount of accrued funds in this budget. If such a trend continues, a situation might emerge that the special budget lacks funds to pay out social transfers.
Key words: social transfers, socially insured person, wage subject to insurance contributions of socially insured persons, system of financing.
JEL code: G22, G29, I39

Introduction

Social transfers consist of state pensions and government benefits. Social transfers play a significant role in the system of social security, as they ensure the social protection of residents and affect their welfare in situations of social risk. The majority of social transfers are financed from the state social insurance special budget (Mistre B., 2009).

Economic development and employment are prerequisites for a social security system of high level. The aging of population, a low birth rate, an increase in the average lifespan, and emigration affect the life of residents in Latvia. Due to these factors, the number of retired persons continues increasing, while the number of employees and payers of social contributions decreases, thus, significantly increasing the burden on social insurance system in the country.

To ensure a balanced budget, it is important to assess the changes in revenues and expenditures of the state social insurance special budget.

Hypothesis: various socio-economic factors affect the state social insurance special budget.

The **research aim** is to investigate the elements forming the system of financing social transfers and the factors affecting them.

The following **tasks** were set to achieve the research aim:

— to investigate the system of financing social transfers;
— to assess the changes in the state social insurance special budget;
— to analyse the socio-economic factors affecting the state social insurance special budget.

The monographic method, analysis and synthesis, deduction and induction, and statistical analysis methods as well as the graphical method were employed in the present research.

Legal enactments of the Republic of Latvia, data of the Central Statistical Bureau (CSB) and the State Social Insurance Agency (SSIA), and studies in the field of social insurance in Latvia were used in the present research.

Research results and discussion

1. System of financing social transfers

In Latvia, state social insurance pensions and benefits are financed from the state social insurance special budget, while state social benefits are financed from the central government basic budget and social assistance benefits are paid out from the respective local government budget.

The consolidated budget is divided into the central government budget and local government budgets in Latvia. The central government budget, in its turn, is divided into the basic budget and the state social insurance special budget.

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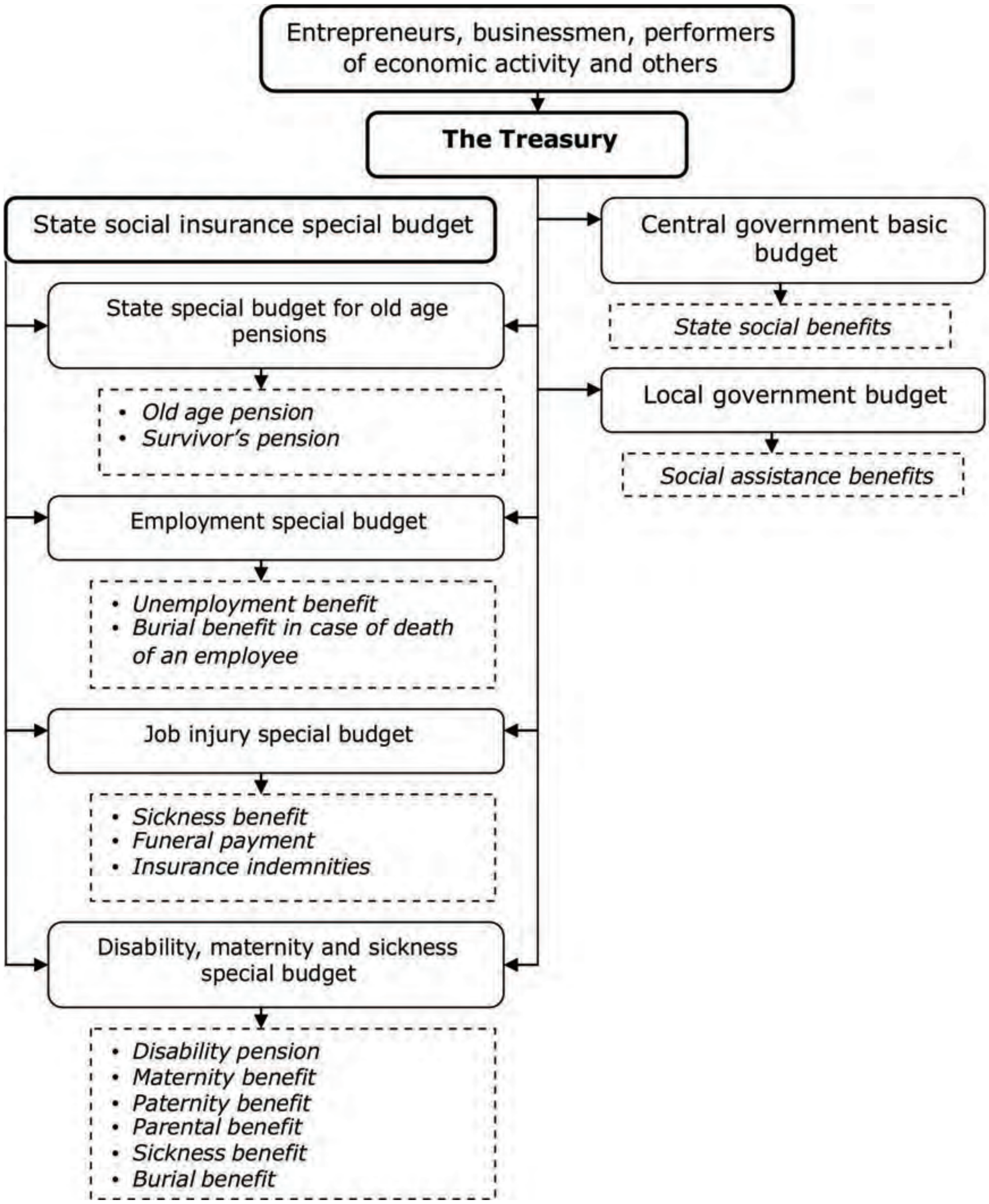


Source: authors' construction based on laws of the Republic of Latvia

Fig. 1. **System of financing social transfers in Latvia**

The state social insurance special budget is divided into the state special budget for old age pensions, the employment special budget, the job injury special budget, and the disability, maternity, and sickness special budget (Figure 1).

Tax payers – entrepreneurs, businessmen, performers of economic activity (employers), and other persons – pay taxes, duties, and other fees, assessed in accordance with the procedure stipulated in legal acts, to the Treasury.

In accordance with the law "On State Social Insurance" (1997), an employer shall calculate a mandatory contribution to be made for each employee from the object of contributions and pay it to a special budget account.

The object of mandatory contributions of an employer and employee is all calculated employment income from which personal income tax has to be deducted without deducting the non-taxable income, tax concessions, and eligible expenses for which the taxpayer has the right to reduce the taxable income. The object of mandatory contributions of a self-employed person is the freely selected income from the production of goods,

Table 1

Rates of state mandatory social insurance contributions for certain categories of taxpayers in Latvia in 2001-2011, %

Status of socially insured person	2001	2003	2009	2010	2011
Employees as well as domestic employees employed by a foreign employer who are insured for all types of social insurance. *Total rate*	35.09	33.09	33.09	33.09	35.09
Rate for employers	26.09	24.09	24.09	24.09	24.09
Rate for employees	9.00	9.00	9.00	9.00	11.00
Employees as well as domestic employees employed by a foreign employer who has reached the age of retirement. *Total rate*	28.26	27.01	28.30	25.94	29.36
Rate for employers	21.02	19.67	20.60	18.88	20.16
Rate for employees	7.24	7.34	7.70	7.06	9.20
Self-employed persons	32.1	30.27	30.48	28.17	31.52
Self-employed persons having reached the age of retirement	28.17	26.92	28.04	25.65	29.05
Natural entities who manage a real estate	-	28.09	25.24	24.13	27.98
Foreign employees employed by a foreign employer	32.8	31.06	31.13	28.99	32.22

Source: authors' construction based on the Cabinet Regulations No. 452, 613, 1027, 1557, 1199

performance of work, provision of services, creative and professional activity, and other income from economic activity. The minimum amount of the object of mandatory contributions was LVL 200 a month in 2011.

State mandatory social insurance contributions calculated and paid compose revenues of the state social insurance special budget.

Voluntary contributions to pension insurance, dividends from capital shares transferred to the state pension special budget and revenues from the sale thereof and other revenues compose this budget's revenues in addition to mandatory contributions.

Considering the economic situation in the country, the Cabinet of Ministers sets rates of state mandatory social insurance contributions every year for respective categories of socially insured persons (Table 1).

In general case, if an employee had been insured for all types of social insurance, the mandatory contribution rate was constant, i.e. 33.09% from 2003 to 2011 (Mistre B., Dobele A., 2010).

For the other categories of socially insured persons, who are not insured for all types of social insurance, mandatory contribution rates are lower and changeable.

The overall distribution of mandatory contribution rate by type of social insurance affects changes in the mandatory contribution rates for the other categories of taxpayers.

Yet, the economic and demographic situation in the country determines the overall distribution of the mandatory contribution rate by type of social insurance.

To retain the social insurance system in a long-term, the rate for employees was significantly increased (by 2 percentage points) in 2011, while the rate for employers was kept at the level of previous years, i.e. 24.09%. Therefore, in general case, the total mandatory contribution rate was 35.09% in 2011.

The mandatory contribution rates for other socially insured persons also significantly rose in 2011, which was related with an increase in the mandatory contribution rate in general case.

The increase in the mandatory contribution rate was necessary to finance pensions and other social insurance services, as the number of employed individuals and their income significantly declined due to the economic crisis, thus, the revenues in the special budget decreased.

In accordance with the law "On State Social Insurance" (1997), the Treasury credits accounts of the special budget with mandatory contributions every day in accordance with a special budget revenue proportion stipulated in an annual state budget law.

Social insurance services are financed from the state special budget for old age pensions only in accordance with the law "On State Pensions", except disability pensions, and administrative expenses of this budget are also covered from it. From the employment special budget, social insurance services and administrative expenses of this budget are financed in accordance with the law "On Unemployment Insurance". From the job injury special budget, social insurance services and administrative expenses of this budget are financed in accordance with the law "On Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases". From the disability, maternity and sickness special budget, social insurance services as well as disability pensions and administrative expenses of this budget may be financed only in accordance with the law "On Maternity and Sickness Insurance" (On State Social Insurance, 1997).

Appropriations from the special budget cover only expenses that do not exceed real revenues, a budget surplus at the beginning of a fiscal year, and borrowed funds from the central government basic budget. All appropriations become invalid at the end of a financial year.

An annual state budget law is designed in a way that if revenues and a budget surplus of previous years in any special budget do not cover expenditures of an annual budget while there is a budget surplus in another special budget, funds are redistributed to cover this deficit when calculating the revenue proportion for each special budget. If expected special budget revenues exceed

Table 2

Proportion of expenditures on social insurance and state social benefits in GDP in Latvia in 2002-2010, mln LVL

Year	GDP (current prices)	Social insurance	% of GDP	State social benefits	% of GDP
2002	5758.3	508.4	8.8	62.3	1.1
2003	6392.8	516.3	8.1	69.2	1.1
2004	7434.5	577.3	7.8	73.7	1.0
2005	9059.1	645.7	7.1	89.4	1.0
2006	11171.7	770.8	6.9	98.4	0.9
2007	14779.8	891.5	6.0	123	0.8
2008	16188.2	1192.2	7.4	134.3	0.8
2009	13082.8	1439.6	11.0	142.3	1.1
2010	12735.9	1492.7	11.7	148.6	1.2

Source: authors' calculations based on the CSB and Treasury data

expenditures, according to an annual state budget law, funds redistributed among the special budgets are related to the proportion of special budget revenues by taking into consideration the changes made in the proportion of revenues during the previous years, thus, providing the necessary funding (On State Social Insurance, 1997).

After analysing the system of financing social transfers, one can define the key factors that affect revenues and expenditures of the state social insurance special budget; they are wage subject to state social insurance contributions and number of socially insured persons.

2. Analysis of the state social insurance special budget

To assess the role of the state social insurance special budget in Latvia, it is important to identify the proportions of expenditures on state social insurance and state social benefits in the GDP of Latvia (Table 2).

Table 2 data show that the GDP grew in the period of 2002-2008, which may be explained by the fact that economic growth was observed in the country. The expenditures on social insurance increased during this period, as the average amounts of social insurance pensions and benefits rose (Mistre B., Muska A., 2011). However, the proportion of expenditures on state social insurance in GDP declined by 2.8 percentage points in the period of 2002-2008.

An economic crisis began in 2008, which caused a GDP decrease and an increase in expenditures on social insurance. The increase in expenditures on social insurance may be explained by an increase in unemployment in the country, which caused significant increases in the number of recipients of unemployment benefits as well as the average amount of such benefits. The increase in the average amount of unemployment benefits relates to an increase in wages, an increase and legalisation of employment as well as amendments made to Latvian legal enactments (Mistre B., Muska A., 2011).

On average, the proportion of state social benefits in GDP was 1% over the entire period of analysis.

The state social insurance special budget is analysed further in the research, as it is the main source for financing social transfers.

The basic principle of the system of social insurance is self-financing – expenditures on recipients of pensions and state social insurance benefits are covered from contributions made to the budget.

In the period of 2001-2008, the revenues and expenditures in the state social insurance special budget rose, and the increase of revenues was greater; in the result, an annual surplus was observed in the budget (Table 3).

The largest surplus in the social budget was recorded in 2007 – LVL 379.7 million, and it was the fastest increase in revenues of the state social insurance special budget; the revenues rose by LVL 311.8 million or 31.8% compared with the previous year.

The increase in revenues of the state social insurance special budget was natural, as the economic growth rate rose in the period of 2002-2007; simultaneously the performance of various government control institutions improved, the retirement age increased, the employment rate in the registered labour market rose. In addition, the number of working-age individuals increased, as individuals born in the 1980s when the demographic situation was favourable entered the labour market (Concept "On State Social …, 2008).

Since 2009, the revenues of the social budget have started decreasing, whereas the expenditures have continued increasing sharply, and thus, an annual deficit has emerged. The decrease in social insurance revenues may be explained by the economic crisis in the country, which resulted in a significant decrease in the number of employed individuals and in labour income. The high unemployment rate and the sharp increase in wages during the previous years affected the increase in expenditures of the state social insurance special budget, thus, the amounts of benefits rose. Besides, the amount of newly granted pensions also increased due to the increase in wages during the previous years. The financing of parental benefits has also been transferred from the central government basic budget to the state social insurance special budget since 2008.

Table 3

Changes in the state social insurance special budget in Latvia in 2001-2010

Year	Revenues, mln LVL	Expenditures, mln LVL	Current year surplus/ deficit, mln LVL	Annual increase rate, %	
				Revenues	Expenditures
2001	489.5	498.7	-9.2	-	-
2002	536.6	534.9	1.7	9.6	7.3
2003	578.9	560.6	18.3	7.9	4.8
2004	658.0	606.8	51.2	13.7	8.2
2005	769.3	678.1	91.2	16.9	11.8
2006	980.3	798.5	181.8	27.4	17.8
2007	1292.1	912.4	379.7	31.8	14.3
2008	1441.1	1213.8	227.3	11.5	33.0
2009	1248.5	1461.5	-213.0	-13.4	20.4
2010	1178.1	1513.9	-335.8	-5.6	3.6

Source: authors' calculations based on the Treasury data

Table 4

Correlation coefficients for the factors affecting the state social insurance special budget in Latvia in 2002-2010

Indicators	Special budget revenues	Special budget expenditures
Number of socially insured persons	0.74	0.25
Socially insured persons' average wage subject to social contributions	0.92	0.92

Source: authors' calculations based on the CSB and SSIA data

3. Analysis of the socio-economic factors affecting the state social insurance special budget

A correlation analysis was conducted and correlation coefficients were calculated to identify effects of the number of socially insured persons in the country and the average wage subject to social contributions of socially insured persons on the revenues and expenditures of the state social insurance special budget (Table 4).

The correlation analysis showed that there was a strong causal relationship between the revenues of the special budget and the average wage subject to social contributions of socially insured persons. A medium strong relationship existed between the number of socially insured persons and the revenues of the special budget.

A correlation analysis was conducted between the revenues of the special budget and the number of socially insured persons and the average wage subject to social contributions of socially insured persons. The calculation showed that there was a strong relationship between the average wage subject to social contributions of socially insured persons and the revenues of the special budget. However, the number of socially insured persons did not affect the revenues of the special budget, as the correlation coefficient was very low (r=0.25).

After analysing the number of socially insured persons, one can conclude that it was volatile. In the period of 2002-2007, the number of socially insured persons tended to increase in Latvia, whereas this number started sharply decreasing with the beginning of the economic crisis in 2008 (Figure 2).

In 2008 compared with 2007, the number of socially insured persons decreased by 11.2 thousand, while a decrease of 94.4 thousand was observed in 2009 compared with 2008. In 2010, the number of socially insured persons continued declining – by 82.2 thousand compared with 2009, which was a negative fact, as it affected the revenues of the special budget.

The number of socially insured persons significantly affects economic activity in the country. The number of socially insured persons has to rise with the increase in the number of employed individuals.

To find out whether such a causal relationship exists, a regression model was analysed:

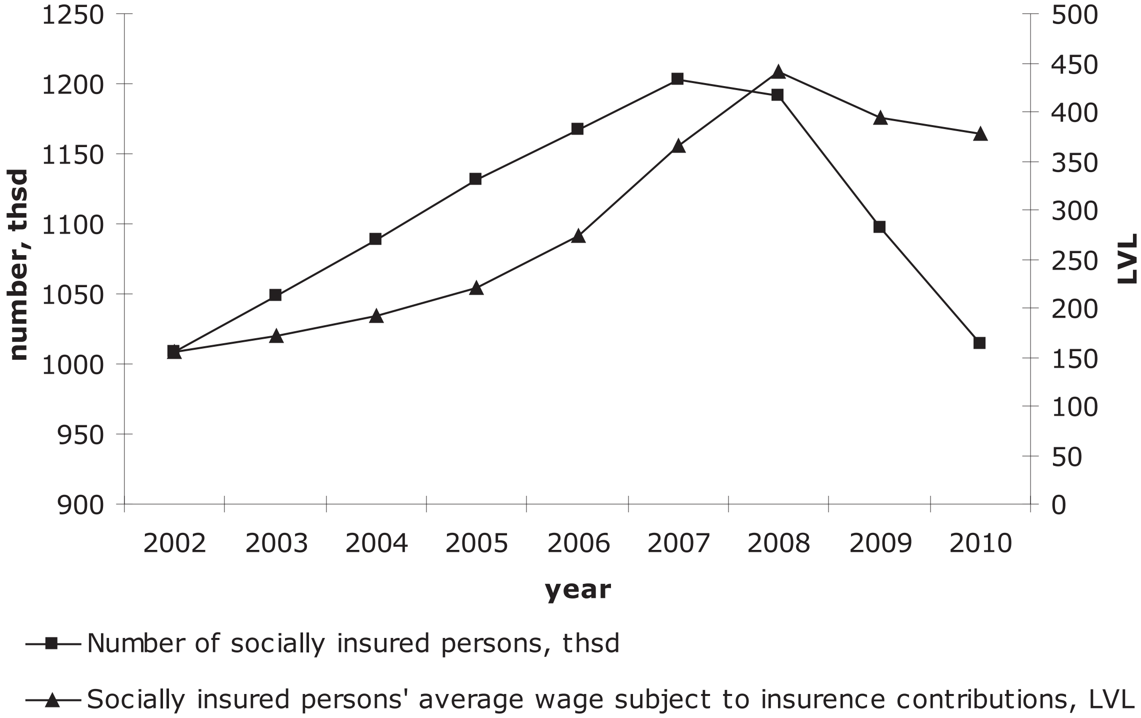
$$\mathrm{Y_i} = \hat{a}_0 + \hat{a}_1 \cdot \mathrm{X}_i + \mathrm{r}_i , \qquad (1)$$

where

Y_i – number of socially insured persons;
β_i – regression model parameters;
X_i – number of employed persons;
r_i – casual error.

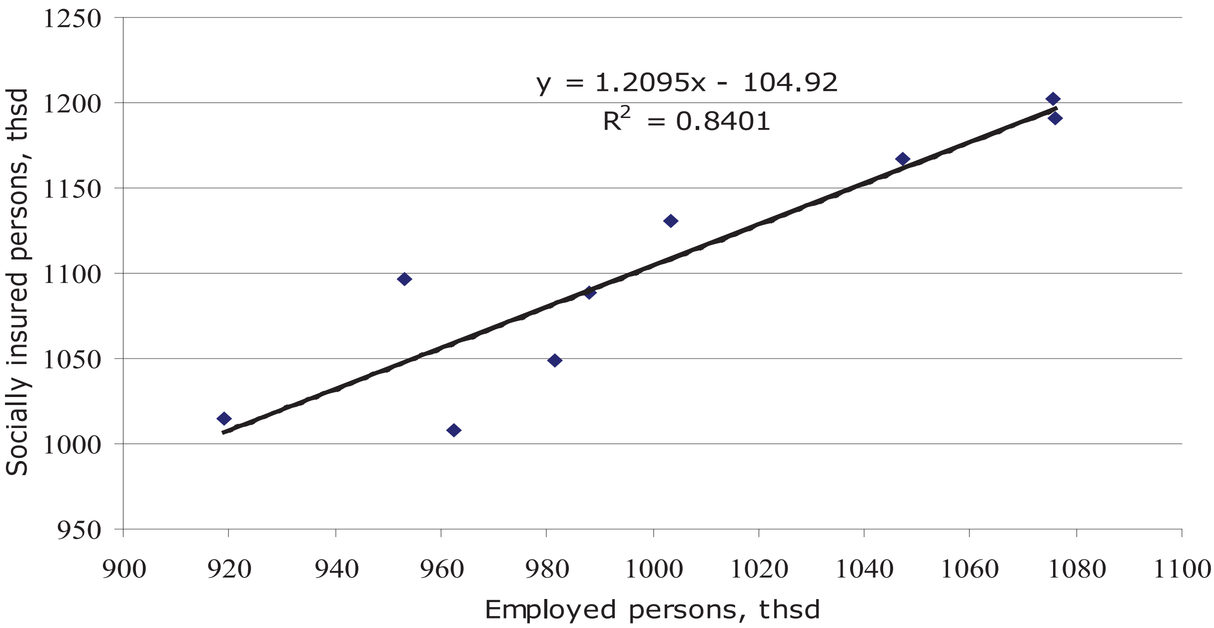
An analysis of the result produced by the above-described regression model is presented in Figure 3.

After analysing the regression model, presented in Figure 3, one can conclude that the number of socially insured persons rises faster than the number of employed individuals. The number of socially



Source: authors' construction based on the CSB and SSIA data

Fig. 2. **Changes in the factors affecting the state social insurance special budget in Latvia in 2002-2010**



Source: authors' construction based on the CSB and SSIA data

Fig. 3. **Relationship between the number of employed persons and the number of socially insured persons in Latvia in 2002-2010**

insured persons rises by 1.2 thousand on average with a 1 thousand increase in the number of employed individuals. The effect of the factor is significant with a probability of 95% (p-value = 0.000509). A faster increase in the number of socially insured persons may be explained by the fact that socially insured persons are not only employed individuals but also their family members on whom voluntary social contributions may be paid if they are not subject to mandatory social insurance.

After analysing the changes in the average wage subject to social contributions of socially insured persons, one can conclude that the average wage tended to rise in the period from 2002 to 2008, which positively affected the revenues of the state social insurance special budget.

Although, the economic downturn started already in 2008, the average gross wage of employees and, in its turn, the average wage subject to social contributions of socially insured persons decreased but they did not fell as fast as the number of socially insured persons. The average wage subject to social contributions of socially insured persons decreased by LVL 46 or 10.5% in 2009 compared with 2008, while in 2010 it fell by another LVL 16 or 4% compared with 2009.

The correlation analysis showed that wages and their increase played a significant role in stabilising the state social insurance special budget and in social security in the country.

Conclusions

1. The determinant element of the system of financing social transfers is revenues of the state social insurance special budget.
2. There was an annual surplus in the state social insurance special budget in Latvia in the period of 2002-2008, whereas an annual deficit has emerged since 2009. Therefore, the amount of accrued funds in this budget has decreased. If such a trend continues, a situation might emerge that there would be a lack of funds for paying out social transfers.
3. The number of socially insured persons and the average wage subject to social contributions of socially insured persons significantly affect revenues of the state social insurance special budget. Yet, the average wage subject to social contributions of socially insured persons affects expenditures of the state social insurance special budget.

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