POSSIBILITIES FOR REALLOCATION OF CORPORATE INCOME TAX TO LOCAL GOVERNMENT BUDGETS

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Abstract. Tax revenues constituting the majority of total local government basic budgets describe the level of financial autonomy, stability and legal capacity of every local government. In Latvia, all taxes fall under the category of state taxes, since no tax is determined as a local government tax. State and local government transfers constitute a large proportion of local government budget revenues. Reallocation of resources through the Equalisation Fund of Finances implemented for several years has not promoted the financial stability of local governments in the depressed regions, and it has also to a certain extent hindered the development of donor local governments, since the currently prescribed financial sources restrict free legal capacity of these local governments to act with their resources. The achievement of budgetary independence is essential for the increase of financial stability of local governments. Insufficiency of sources of revenue to cover the expenditure of local governments and their dependency on the state aid leads local governments to become financially unstable. To diversify the sources of budgetary revenue for local governments, it might be efficient to increase local government budgets with revenues from the taxes where local governments themselves are interested to increase the tax base. It may be ensured by corporate income tax (CIT) which is directly related with the business performance result not indirectly as it is in case of personal income tax (PIT). Therefore, the authors suggest including part of the CIT revenues into local government budgets. It is recommended to compensate the decrease of the state budget with the PIT revenue for the non-transferred part of CIT to avoid the reduction of either the state general budget or the local government general budget caused by the reallocation, thus, proportionally decreasing the share of PIT which is transferred to the budgets of local governments. The research includes the calculation of the most appropriate tax reallocation proportion and the analysis of possible benefits and losses of local governments due to such tax reallocation between the state and local government budgets.

Key words: corporate income tax, tax revenue, local government budget, regional economic development.
JEL code: H23, H25, H71

Introduction

Business promotion and support through the tax system may strengthen the competitiveness and balanced development of the national economy in the regions of Latvia. It may be ensured by means of a multi-level tax system in territorially large countries (Germany, Portugal), since it is easier to monitor small territories and, thus, to assess faster changes in the situation. There is no need for a multi-level system in Latvia, as its territory is small and it is possible to administer efficiently the taxation system. However, inconsiderate policy centralisation leads to the reduction of local governments' initiative. To enhance local governments to promote business in their administrative territories, their budget should depend on business to be promoted (Orehova, 2001; Pukis, Zacesta, 2003; Fatejevs, 1994, 2004;

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Smith, 2004). The independence of local governments is expressed through their decentralisation (Pukis, 2010). Dynamic business being the source for tax revenues is an essential factor for the financial autonomy, stability and legal capacity of every local government. In Latvia, no tax is determined as a local government tax; however, the majority of personal income tax revenues, part of lottery and gambling tax, and natural resources tax revenues as well as immovable property tax revenues in full are transferred to the budgets of local governments. The expansion of financial stability of local governments requires the achievement of feasible autonomy and budgetary independence of local governments by increasing their sources of revenues with corporate income tax.

The research aim is to assess the possibilities for reallocation of corporate income tax to the budgets of local governments.

The tasks of the research: 1) to ascertain problems hindering allocation of the CIT revenues to local governments; 2) to calculate the reallocation proportion of CIT and PIT revenues between the state budget and the budgets of local governments; and 3) to clarify budget changes of every local government caused by the reallocation of CIT and PIT.

The research object: taxes as source of revenues for local government budgets.

The research subject: CIT as efficient source of tax revenues for local governments.

Research hypothesis: it is possible to determine such distribution proportion of the CIT and PIT revenues between the state and local government budgets which does not reduce tax revenues of these budgets but ensures that **the budget of local government is increased by a tax impacting the development of local government directly through the business performance result.**

The method of data grouping, calculation constructive method, and statistically graphical method have been applied for processing and analysis of statistical data. The mathematical method of statistics (t-test for related samples) using Microsoft Excel and IBM SPSS Statistics and PAST software for data processing, and the clustering method for assessing the results were applied to determine the probable distribution of the CIT and PIT revenues satisfying the budgets of state and local governments.

Research results and discussion

1. Arguments for the inclusion of corporate income tax into the budgets of local governments

Historically, the revenues from profit have already been twice reassigned to the budgets of local governments in Latvia. The first time dates back to the period of 1922-1940 when companies paid income tax in three ways: as basic levy through buying out sales and industry notes (permits), as tax on capital, and as ad valorem income tax. The sales and industry tax was a significant direct tax in the revenue formation of state and local government budgets. Annually, it provided for 5-10% on average of total tax revenues collected by local governments (Balodis, 1991). The second reassignment of corporate profit to the budgets of local governments occurred between 1941 and 1943. The guidelines for budget revenue formation and expenditure adopted by the German occupation authorities greatly differed from the guidelines implemented by the Soviet authorities, and they prescribed gradual rearrangements in the budgetary revenues of land authority and local governments by raising total revenues up to the amount sufficient for covering all the necessary expenses (Aizsilnieks, 1968). The financial situation of local governments considerably improved in terms of revenues, since they received the amount of own revenues sufficient for covering 65% or even 100% of all annual expenditure under an economical management (Straumens, 1999).

Taxation policy implemented in the territory of Latvia from the end of World War II does not any more envisage the reallocation of corporate income tax to the budgets of local governments. The authors believe that the historical experience in Latvia has not been studied sufficiently accurately, and the denial to allocate revenues from the corporate income tax to the budgets of local governments does not encourage local governments to develop business in their administrative territories. The positive impact of decentralisation of local powers on the stabilisation of financial system of regions is demonstrated by Flamanda, a researcher from the University of Barcelona, simultaneously indicating on the risks caused by the centralised power of local governments for financial independence of the state economically less developed territories (Flamand, 2013). The authors of the present research analyse one of the most frequently mentioned risks due to which the reallocation of corporate income tax revenues to local governments is not supported by the taxation policy of Latvia. This risk relates with the reduction risk of the state budget revenue part due to the reallocation of corporate income tax revenues to local government budgets. **No changes in the taxation policy may negatively impact the revenues of the state basic budget.**

2. Evaluation of reallocation of corporate income tax to the budgets of local governments

The authors primarily determined the proportion between the PIT and CIT contributions to the state basic budget (Table 1) within the previous nine taxation periods to identify the potential part for reallocation of the CIT revenues to the budgets of local governments.

Table 1

Ratio between the revenues from personal income tax and corporate income tax in the state budgetary revenues in Latvia between 2004 and 2012

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
PIT, mln LVL	123.6	137.4	164.0	186.5	204.7	124.5	155.6	142.8	174.4	157.1
CIT, mln LVL	127.8	180.7	253.8	399.8	503.1	197.2	112.2	196.4	243.9	246.1
k=	0.97	0.76	0.65	0.47	0.41	0.63	1.39	0.73	0.72	0.64

PIT – personal income tax, CIT – corporate income tax, K – ratio PIT/CIT

Source: authors' calculations based on the data of Finansu ministrija, 2013

The largest fluctuations of the coefficient k are observed for the period of 2007-2010 due to the unstable economic situation in Latvia, yet this ratio is close to the average indicator (k avr. = 0.64) during the period of economic stability. Hence, partial substitution of the PIT revenues in the budget of local governments by the part of CIT revenues should be determined based on this proportion.

After summarising the data on transferred CIT and PIT revenues to the state and local government budgets from 2004 to 2012, the current tax distribution (Variant 1) was compared with other revenue reallocation variants depending on the percentage distribution of CIT and PIT in these budgets (Table 2).

The analysed variants include:

1) calculations on the revenues from CIT and PIT (mln LVL) in the state and local government budgets for each modelled variant;
2) cost-benefit calculations from the modelled changes for each analysed year;
3) the distribution of CIT and PIT meeting the needs of both budgets (state and local governments) has been determined by means of the t-test for related samples.

Table 2

Variants for the reallocation of corporate income tax and personal income tax between the state and local government budgets, %

Variants	CIT		PIT	
	State	Local government	State	Local government
Variant 1 (current distribution)	100	0	20	80
Variant 2	80	20	20.5	79.5
Variant 3	50	50	30	70
Variant 4	0	100	40	60

Source: authors' calculations

The actual CIT and PIT revenues were initially summarised for the period of 2004-2012 to compare the fiscal result of the analysed variants with the existing data (Table 3).

Table 3

Corporate income tax and personal income tax revenues in the state and local government budgets between 2004 and 2012, mln LVL

Budget	2004	2005	2006	2007	2008	2009	2010	2011	2012
State	215	283	385	577	708	343	268	354	418
Local government	348	407	526	710	818	583	622	632	698

1. ***Source: authors' calculations based on the data of Finansu ministrija, 2013***

The calculations for the distribution of the CIT and PIT revenues in the state and local government budgets lead the authors to obtain the probable CIT and PIT revenue indicators in each tax allocation variant in their selected percentage distributions (Table 4).

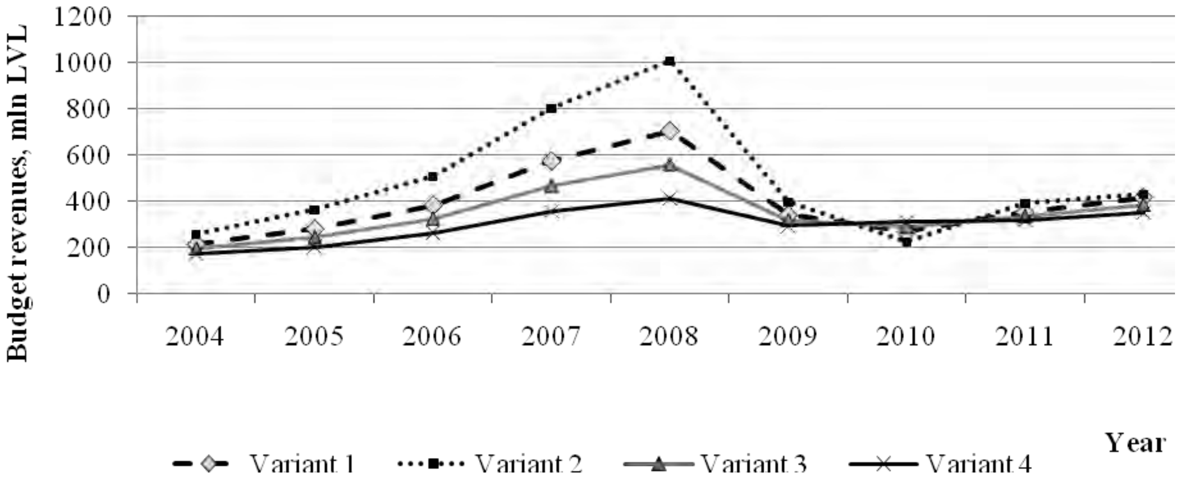
Table 4

Corporate income tax and personal income tax revenues in the state and local government budgets after the reallocation for the years 2004-2012, mln LVL

Year	Variant 1		Variant 2		Variant 3		Variant 4	
	State	Local government	State	Local government	State	Local government	State	Local government
2004	215	348	256	346	195	369	174	389
2005	283	407	361	405	243	447	204	486
2006	385	526	508	523	324	587	263	648
2007	577	710	800	706	466	821	355	932
2008	708	818	1006	813	558	967	409	1117
2009	343	583	394	580	317	609	292	635
2010	268	622	224	618	289	600	311	579
2011	354	632	392	628	335	651	316	670
2012	418	698	427	693	384	732	349	767

Source: authors' calculations

The actual tax revenues gained between 2004 and 2012 and the calculated data show that **the state budget fiscal interests** in the reallocation result of the CIT and PIT revenues display a large range of differences for the period of economic instability, while such data redistribution maintains the level of previous revenues within the period of economic stability.

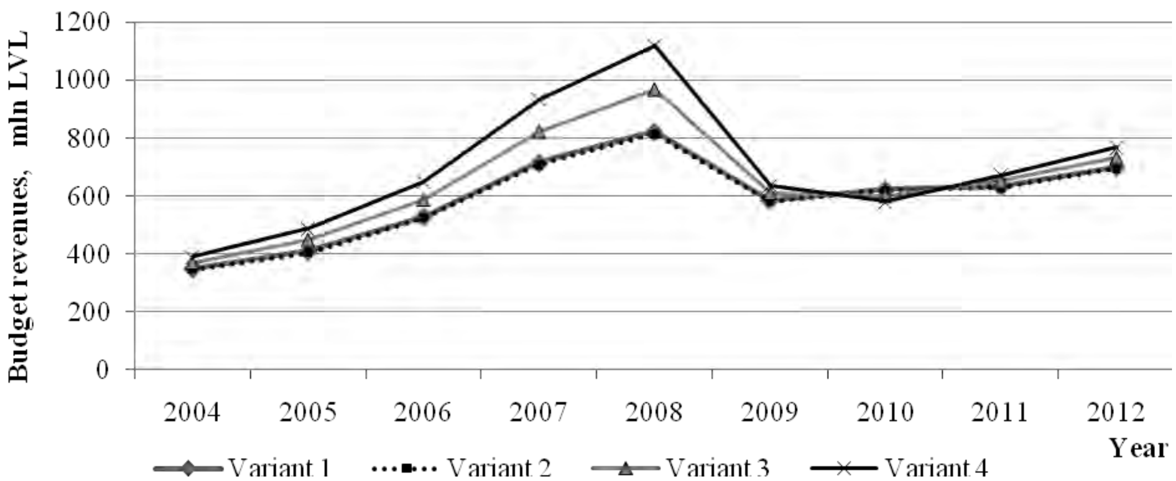


Source: authors' construction

Fig. 1. **Changes of corporate income tax and personal income tax revenues in the state budget for the period of 2004-2012 by determining alternative proportions for the reallocation of resources**

The revenues in the state budget calculated in the reallocation Variant 2 even exceed the revenues gained in the present tax distribution (Variant 1) (Fig. 1).

The **revenues in the local government budget**, in turn, after the reallocation of resources by the proportion of Variant 2 are equal to the present tax distribution (Variant 1) (Fig. 2). Such reallocation is **fiscally** also profitable **for the local government budget** (Variant 2).

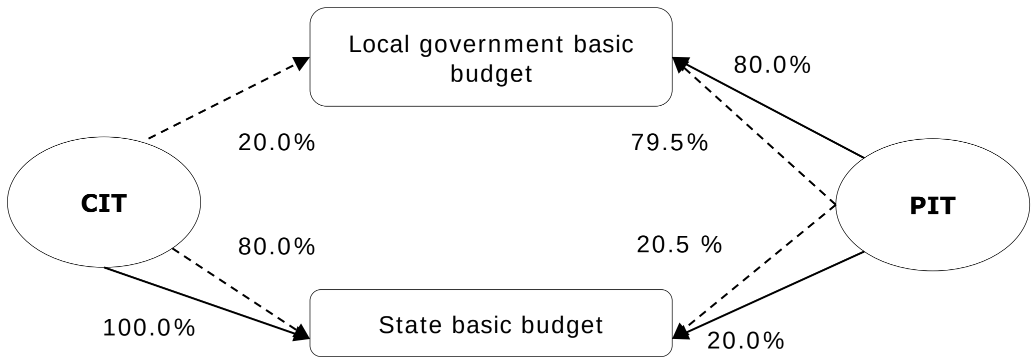


Source: authors' construction

Fig. 2. **Changes of corporate income tax and personal income tax revenues in the local government budgets for the period of 2004-2012 by determining alternative proportions for the reallocation of resources**

Since the aim is to establish tax distribution reducing neither budgetary revenues of the state nor local governments, then the authors by means of the t-test for related samples determined the proportion the results of which comply both with the interests of the state and local governments. The reallocation proportion of revenues acquired as the result of calculations show that the substitution of 20% of the CIT revenues by 0.5% of the PIT revenues in the state basic budget in addition to the present

PIT revenues in the amount of 20% (20.5% in total) (Fig. 3) earns the proportion essentially reducing the budgetary revenues neither of the state nor local governments (Variant 2, the decrease in the state budget is less than 0.0002%). In return, **the budgetary revenues of local governments are increased by a tax impacting the development of local government directly through the business performance result.**



________ actual distribution
----------- recommended distribution
Source: authors' construction

Fig.3. **The recommended distribution of corporate income tax and personal income tax revenues by budgets, %**

Inclusion of the CIT revenues into the budgets of local governments might completely or partially replace the settlements of transfers in long-term, thus, leaving only the possibility to make the necessary adjustments (within the range of increase or decrease for the difference of resources necessary for the local government). Respectively, in case the amount of transfers increases in a particular local government then the budget is revised only for the amount of increase; in case of decrease, it would show the efficiency of the implementable tax policy.

Interbudgetary transfers alone without looking for solutions to strengthen local government budgets through the tax policy would not solve the socio-economic problems of those local governments where the territorial development index (hereinafter - TDI) indicates on low level of development (TDI < 0). In addition, the increase in the proportion of transfers in the revenue structure of local government budgets with a simultaneous decrease of tax and non-tax revenues in these budgets reduces the possibilities of local governments to select priorities in the budget expenditure part as well as negatively affects the amount of local government budget deficit and the debt amount of local governments. At the same time, it is necessary to minimise the amount of subsidies paid to local governments shifting the emphasis from earmarked transfers to the sources allowing local governments to use freely the revenues from these sources to solve their socio-economic needs. This would increase the independence and financial mobility of local governments which is extremely significant under the deficit of these resources as well as reduce the administrative expenses and considerably reduce the scope of financial documents related with the claiming for earmarked financial resources and reporting on the spending of resources. Certainly, it is connected with delegating of certain powers (to determine allowances) to local governments which would promote higher competiveness among local governments.

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3. Benefits and losses of local governments from the reallocation of corporate income tax

The authors have calculated the budgetary changes in every local government to evaluate benefits and losses caused by a partial reallocation of the CIT revenues to local government budgets. The use of the tax revenues for 2011 as the basis has allowed: 1) to determine interconnections between actually collected PIT revenues by every local government and forecasted revenues after the reallocation of the CIT and PIT revenues; 2) to calculate and to analyse the changes in income tax revenues per capita of every local government.

All local governments are divided into four clusters according to the in-fact collected amount of personal income tax in 2011. Cluster 1 encompasses only one city − Riga which shows the largest PIT revenues. Cluster 4 composes local governments having the least PIT revenues and it includes the majority or 79.8% of total number of local governments (Fig. 4). Cluster 2 unites 5 cities: Daugavpils, Jelgava, Jurmala, Liepaja, and Ventspils, while Cluster 3 unites the rest of local governments not included into the previous clusters.

The analysis of the data characterising local governments by the collected amount of PIT per capita outlines that Cluster 1 comprises 7 local governments (Adazi, Babite, Garkalne, Ikskile, Kekava, Marupe, and Stopini) located around Riga and producing the largest tax revenues per capita. Also in this case, the largest cluster (Cluster 4) is composed by local governments having the smallest tax revenues per capita. This cluster encompasses slightly more than a half of local governments.

Source: authors' construction

Fig. 4. **Grouping of local governments into clusters by the personal income tax revenues in local government budgets in 2011**

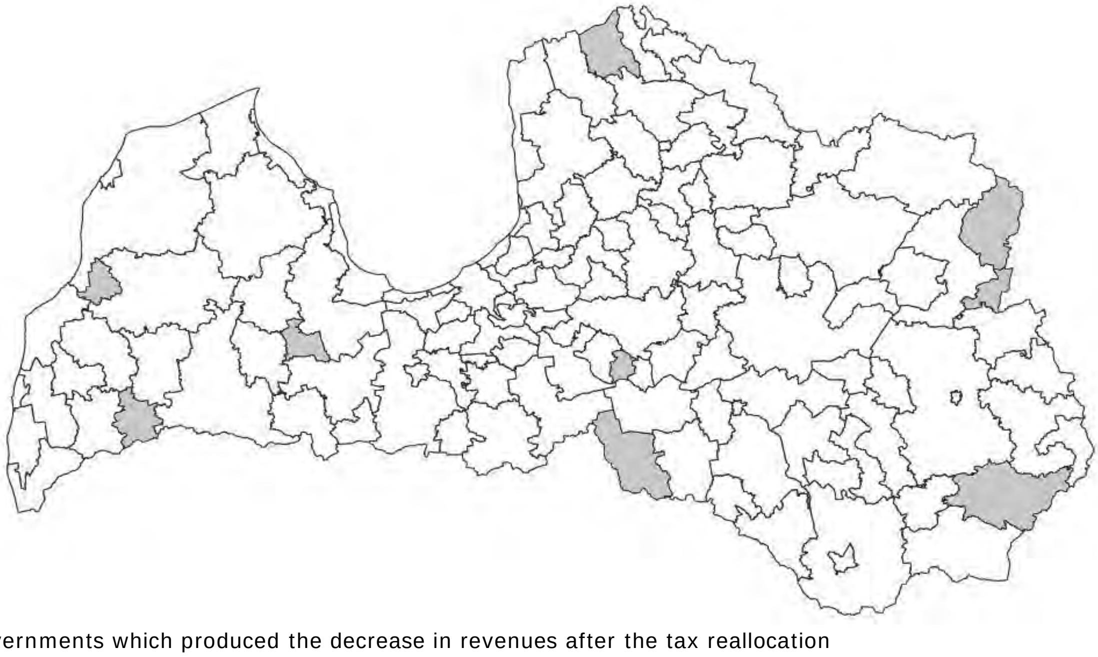
Especially explicit changes in clusters may be observed when analysing the data on tax revenues per capita acquired due to the reallocation, since the changes refer to both the proportion and the division of local governments in clusters (Fig. 5).

local governments the division of which differs from the actual data

Source: authors' construction

Fig. 5. **Grouping of local governments into clusters after the reallocation of corporate income tax and personal income tax revenues**

Out of 7 local governments, only one local government of Marupe remains in Cluster 1; out of 10 local governments previously forming Cluster 2, now 14 local governments move to Cluster 3 after the reallocation of taxes. The number of local governments encompassed by Cluster 4 increases considerably, i.e. by 19.4 percentage points; however, after the reallocation this cluster unites those local governments the minimum indicators (LVL 131 per capita) of which exceed their indicators displayed before the reallocation by 24.8%. This growth is due to the increase of tax revenue amount per capita.



local governments which produced the decrease in revenues after the tax reallocation

Source: authors' construction

Fig. 6. **Local governments which produced the decrease in revenues after the tax reallocation**

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The comparison of data before and after the tax revenue reallocation outlines that all local governments are grouped into two clusters. Local governments which produced the decrease in revenues from the income taxes were included into Cluster 1, while those local governments which produced the increase of revenues were included into Cluster 2 (Fig. 6). The statistical analysis of the data and data grouping, and the calculation of difference between the actual revenues from income taxes in 2011 and the reallocated data allow concluding that the revenues after their reallocation are higher both in terms of total amount and per capita in almost all local governments.

Table 5

Local governments which produce the decrease in tax revenues after the reallocation of corporate income tax and personal income tax

Riga	Kurzeme	Zemgale	Vidzeme	Latgale
Jaunpils	Alsunga Vainode	Nereta Skriveri	Mazsalaca	Baltinava Dagda Vilaka

Source: authors' construction

The reallocation of income taxes recommended by the research authors would lead to the budgetary revenue decrease in nine local governments; moreover - in one up to three local governments in every planning region (Table 5). The data obtained during the research outline the possibilities to apply the CIT as instrument for the development of regions.

Conclusions, proposals, recommendations

1. The reassignment of profit revenues to local government budgets has historically existed in Latvia, this issue has again recently become topical; however, there are no detailed studies done on the possible reallocation of the corporate income tax to local governments.
2. It is possible to compensate the decrease of the state budget revenues by the reallocation of part of the CIT to local government budgets by changing the distribution proportion of the PIT revenues between the budgets.
3. The budgetary revenues of local governments may be increased by a tax impacting the development of local government directly through the business performance result by changing the revenue proportion between the CIT and PIT in the state and local government budgets.
4. The recommended proportion for reallocation of revenues which maintains the previous fiscal level of both budgets is as follows: 80% of the CIT and 20.5% of the PIT revenues shall be included into the state budget, while 20% of the CIT and 79.5% of the PIT revenues shall be included into the local government budget.
5. The decrease in resources from tax revenues due to the reallocation of revenues is expected in nine out of 119 local governments in Latvia, moreover - in one up to three local governments in every planning region. This outlines the possibilities to apply the CIT as instrument for the balanced development of regions.

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Bibliography

1. Aizsilnieks, A. (1968). *Latvijas saimniecibas vesture 1914-1945 (History of Latvia's Economy 1914-1945).* Riga: Daugava, 983 lpp.
2. Balodis, A. (1991). *Latvijas un latviesu tautas vesture (History of Latvia and Latvians).* Riga. Apgads "Kabata", 432 lpp.
3. Fatejev, V. (1994). Upravlenije i regionalnaja politika za rubezom *(Management and Regional Policy Abroad)*. Minska: EGU, Nauka i tehnika, 80 str.
4. Fatejev, V. (2004). Regionalnaja politika: teorija i praktika *(Regional Policy: Theory and Practice)*. Minska: EGU, Nauka i tehnika, 480 str.
5. Flamand, S. (2013). *On Group Loyalty and the Decentralization of Redistribution.* Nova School of Business and Economics. Retrieved: http://sabineflamand.com/research/Paper%203.pdf. Access: 20.12.2014.
6. Orehova, A. (2001). Nodokļu sistemas izmantosanas iespejas uznemejdarbibas veicinasanai Latvija (Possibilities for Tax System Application for Business Promotion in Latvia). *Promocijas darba kopsavilkums*. LU, Riga. 75 lpp.
7. Pukis, M. (2010). *Pasu valdība (Self-Government)*. ISBN 978-9984-39-863-1, SIA Jelgavas tipogrāfija, 511 lpp.
8. Pukis, M., Zacesta, L. (2003). *ES regionalas attistibas politika un pasvaldiba Latvija (The EU Regional Development Policy and Local Government in Latvia).* Riga.
9. Smith, E. (2004). *Preliminary Draft Report: 20 Years of the European Charter of Local Self-Government*. Strasbourg: Council of Europe, p. 7.
10. Straumens, V. (1999). *Latvijas statistika okupacijas laika:* Latvijas statistikas 80 gadi (Latvia's Statistics during Occupation: 80 Years of Statistics in Latvia). Riga: LR CSP, Latvijas Statistiku asociacija.