ASSESSMENT OF CHANGES IN THE TURNOVER OF LITHUANIAN RETAIL TRADE ENTERPRISES IN 2001–2008

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Abstract. *The paper presents an analysis of the methodological side of assessing the turnover of Lithuanian retail trade enterprises, i.e. the indicators to be employed in assessing changes in the volume and composition of the turnover over a longer term, their relationship with other national economic indicators, as well as their theoretical and practical significance. The analysis of changes in the volume and composition of the turnover of Lithuanian retail enterprises in 2000–2008 has revealed its positive and negative trends and the factors influencing these changes. The period under consideration is remarkable in that the years 2000–2001 marked the recovery of the Lithuanian economy after the financial crisis in Russia, its growth until the third quarter of 2008 and the beginning of its decline. The paper summarizes trends in and problems of changes in the volume and composition of the turnover of the country's retail trade enterprises in the period under consideration and shows the possibilities for its development.*

Key words: *retail trade, turnover, volume, turnover composition, food products, non-food products*

Introduction

According to many prominent economists, the level of trade development is the barometer of the country's level of economic development. On the one hand, a well-developed network of shops, a wide choice of goods and services, a high quality service culture, the increasing per capita turnover are closely related with the country's economy and reflect its growth. On the other hand, the trade itself efficiently contributes to the improvement of the country's economy, since it provides employment for a significant number of the country's working population and assists in the creation of the added value. As early as the second half of the last century, retail trade took shape of a powerful economic organism. For example, at the end of the 20th c., in Great Britain about 10% of the labour force were employed in the retail trade, and its share of GDP amounted up to 14% (Broadbridge, A, 1998). Initially, retail trade network develops in its own country and then moves further to foreign countries. Some retail trade enterprises grow into large international corporations which, according to their revenue and the number

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of customers, frequently outperform industrial corporations on a global scale (The Economist, 1995).

Any company trading in food products, ranked in the European top ten retail companies, in terms of sales volumes outperforms any European producer of this good, the only exceptions being Nestle and Unilever. The spectrum of the goods sold and services rendered has been constantly expanding. The transformation of the Wal-Mart network from an insignificant company into one of the world's largest retail trade corporations in 1990 made many economists turn their attention to the rates of development of the biggest retail trade enterprises (Kent, 2007).

The assessment of the trade sector and changes in it brings out methodological issues, since there are no sufficiently grounded methods for the evaluation of separate trade indicators, their changes and correlation with other macro indicators of a country as well as their significance for the country's economy. The quantitative indicators are important, but they serve more for consultation and information and are insufficient to describe the qualitative aspect which reveals not only the economic but also the social significance of these indicators. Therefore, in the assessment of trade indicators, besides the quantitative method of analysis, the qualitative method is also used, which may help determine a correlation of retail trade turnover and its components with other macro indicators of the country and, by applying mathematical-statistical methods, the degree of their interdependence. Since the turnover of retail trade enterprises is not homogeneous, it is important to use the logical method of analysis in the assessment of its volume, components and changes which, depending on the competencies and experience of researchers, allow tracing the influence, interrelation and interdependence of individual factors and even processes and thus making appropriate generalizations.

The present article considers the turnover of Lithuanian retail trade enterprises and its changes not from the quantitative but rather from the qualitative aspect, showing the importance and significance of this indicator for the country's economy as well as its relation to and the influence and dependence on other macro indicators of the country. We believe that the assessment of the country's economic situation should increasingly rely on the indicator of retail trade turnover, which reflects the standard of living of the country better than does GDP.

The scientific problem of this article is to consider the methodology for assessing changes in the trade sector. The purpose of the article is the evaluation, from both theoretical and practical points of view, of changes in the turnover of retail trade enterprises as well as its influence and correlation with other indicators of the country.

The paper pursues the following goals:

- discussion of the methods of choice and assessment of the indicators, volume and composition of retail trade turnover;
- assessment of changes in the volume and composition of the turnover, taking into consideration changes in prices, GDP and real wages;

- assessment of changes in the turnover of enterprises engaged in retail trade and wholesale and retail trade and repair of motor vehicles and motorcycles in the first and second quarters of 2009;
- defining the possibilities for the development of the turnover of retail trade enterprises.

The methods used in the present work are as follows: analysis of scientific literature, secondary data analysis, comparative analysis, mathematical-statistical methods, logical deduction, quantitative and qualitative methods.

Theoretical aspects of the turnover of retail trade enterprises and its indicators

Trade is an important sector of economy not only because it employs the bulk of the workforce, creates a significant part of the added value, but also because the level of its development allows judging the level of economic development and the quality of living. It is described by qualitative indicators, such as the average per capita turnover and sales space, change in the structure of consumption by the population. These indicators are used in statistics and seem to have no relation to methodological issues. The procedure of the calculation of these indicators is defined by the Department of Statistics; however, assessment of changes of these and other turnover indicators is a personal matter. We believe that such analysis of turnover indicators and the issues related to their assessment methods are important in the light of the current economic crisis. Analysts of commercial banks treat changes in turnover and its components in their own manner, i.e. depending on the context of a report.

It should be noted that the definition of retail trade varies with individual authors. A. Pajuodis[1] and A. Newman[2] define retail trade in a rather similar way, i.e. as "a sale of goods to end-users for the satisfaction of their individual and household needs". In addition to goods, A. Newman's definition includes services. B. Berman[3] and D.R. Evans[3] make a distinction between retail trade of goods and retail trade of services, while P. Kotler's[4] definition of retailers includes not only different service establishments, but also doctors who visit patients. As can be seen from the above, different authors treat retail trade in a different manner, i. e. as a sale of goods, while others include the sale of services in their definitions. Since the trade of services is accounted for separately, it cannot be combined with retail trade of goods. Here it is possible to include the services provided to customers by retailers.

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1 A. Pajuodis. Prekybos marketingas. Vilnius: Eugrimas, 2005, p. 20.

2 Э. Нюмен, П. Каллен. Розничная торговля – организация и управление. Изд. Thompson, 2005, p. 45.

3 Б. Берман, Д. Эванс. Розничная торговля: стратегический подход. 8-ое изд. М: Изд. Дом «Вильямс», 2003, p. 105.

4 П. Котлер, Г. Амстронг. Основы маркетинга. М: Изд. Дом «Вильямс», 1999, p. 251.

It is nonetheless important to discuss the approach of different researchers to the use of the turnover indicator on macro- and micro-levels. On the macro-level, turnover as an economic indicator shows the supply of goods for personal consumption, expressed in monetary terms, as well as consumption expenditure of the population. Turnover dynamics shows the proportions of production and consumption, the need of enterprises for material labour recourses, and characterizes the development of the trade network. Turnover as a statistical indicator shows the volume of the sale of goods to population through all realization channels. The volume of turnover largely defines the condition of national economy, reflecting the situation in industry, agriculture, the conjuncture and capacity of the internal market. Other indicators that we have mentioned earlier and that reflect the significance of trade as a sector of the country's economy are the generated share of GDP, the proportion of the employed population in the country's total GDP or in the number of the country's employed population (Bragin, 2000; Newman, Cullen, Dunne, Lusch, 2005; Bujaj, Tuli, 2005; Kent, Omar, 2007). The latter authors recognize, in one or another sense, the significance of the turnover indicator for the country's economy, although they do not engage in wider discussions.

The volume of retail trade turnover and changes in it show the variable of change; however, it remains obscure what the influences that caused these changes were and how to assess them on a macro level. Different kinds of assessment should be employed for the increased turnover of alcoholic beverages and tobacco, on the one hand, and the turnover of motor vehicles, on the other. It is nonetheless important to determine the factors that influenced have changes in the volume and composition of the turnover. A number of foreign authors do not engage in deeper studies of retail trade turnover and, therefore, we cannot assess the methodology of qualitative research. They perform a deeper analysis of the indicator on a micro level, i.e. as an indicator of individual companies and enterprises.

L.A Bragin (2000) views the turnover indicator from the socio-economic aspect as reflecting the level of well-being, which corresponds to the classification of the United Nations Organization.

In the authors' opinion, the value of the above-mentioned derived indicator (average per capita turnover) actually shows the country's standard of living and should be employed among other indicators to measure the country's well-being or the indicator of the quality of life. It has to be noted that the theoretical models of the quality of life assessment judge the standard of living by the household consumption expenditure, i. e. the share of the said expenditure in total expenditure rather than by the average per capita turnover (Rakauskienė, Lisauskaitė 2009). We believe that the average per capita turnover is a more precise indicator reflecting the changes induced not only by the GDP and inflation, but also by the shadow economy and other unaccountable income. Overall, the indicators of the average per capita turnover should be used more widely in the analysis and assessment of the country's social and economic situation as well as changes in the

consumption. The dynamics of the market goods turnover reacts more sensitively and more rapidly to the upcoming decisive changes in countries' economy compared with changes of GDP. This thesis is based on forthcoming analytical data.

Lithuania's domestic trade comprises trading events where the greatest role is played by markets. A special feature of the Lithuanian trade is that markets are open 5 to 6 days a week, so, essentially, they perform a retailing function. The majority of them are small retailers (farmers, business licence holders, retail outlets of local producers, etc.), part of them trading in modern trading venues equipped with appropriate devices. Perhaps modern markets may be compared to retail stores (in terms of number, sales area, and sales turnover). However, the Statistical Classification of Economic Activities in the EC (NACE Rev. 1.1.) does not allow this.

The main indicator of a trade enterprise is the sales turnover. It is the revenue of an enterprise obtained from the sales of goods and services rendered over a certain period (month, quarter, year). The data on retail trade turnover provided by the Lithuanian Department of Statistics are, according to the national version of the NACE, classified into three divisions: 1) sale, maintenance and repair of motor vehicles and motorcycles, retail sale of automotive fuel (NACE division 50), wholesale and commission trade, except motor vehicles and motorcycles (NACE division 51) and retail trade, except motor vehicles and motorcycles (NACE division 52). Owing to the fact that, in addition to purely trade enterprises, there are also enterprises engaged in trading activities of which trade is not the main, the Department of Statistics has not been providing data on retail trade since 2003. Therefore, the only remaining data to be analysed are data on the turnover of retail trade enterprises covered by divisions 50, 51 and 52 of NACE as well as the turnover of market-place retailers whose size is remarkable in Lithuania. The turnover of the retail trade of enterprises would comprise the turnover of enterprises classified in divisions 50 and 52 of NACE, restaurants, bars and other catering enterprises as well as market places. The method of research used in the present work is the same as that used to the turnover of the whole retail trade, i.e. to begin with the quantitative (i.e. the volume of turnover of individual divisions and groups) and then proceed to the qualitative (that of components of turnover) assessment, taking into account the indices of prices, real wages and GDP. The use of the latter two indices would allow a better assessment of changes in the turnover of retail trade enterprises, i.e. whether the rise in national consumers spending on goods and catering services is attributable to the increase in their real wages or whether it has been determined by the money of the shadow economy. Thus, a deeper analysis of the turnover of goods may reveal the causes of its growth or contraction, which can be of value in analysing other areas of the national economy.

As one can see, the turnover of goods is influenced by many factors; the impact of some of them can even be estimated, while the impact of other factors, such as shadow economy, GDP growth or decline, does not lend itself to direct calculation, as it requires special research in order to confirm the existence of this influence itself. Another impor-

tant indicator of the quality of life of the population or of the influence made on it is the per capita turnover. This indicator depends not only on the turnover of goods, but also on the number of the country's population. We know that the unemployment rate in the country would be even higher; however, each year, and especially in the period of economic crisis, many people emigrate from the country. The decline of the population due to emigration contributes to the increase in the average per capita turnover. Since part of the emigrated population returns to the country on the occasion of various holidays, they purchase goods and leave a proportion of their monetary income, while others transfer money to the country to maintain their family members or support parents. Thus, they contribute to the increased average per capita turnover, although they are not included in the population statistics. Only an appropriate research can show the influence of this factor on the country's volume of goods turnover and the amount of average per capita turnover. This phenomenon is typical of the whole Eastern Europe, and also of Lithuania.

Retail trade turnover is an important macro indicator of the country, defining its economic and social situation and its changes. An analysis of its volume, composition, components and their changes as well as the influence of macro factors by using quantitative and qualitative, logical deduction and mathematical-statistical research methods is presented further in the article.

Assessment of the turnover of retail trade enterprises

Data on the volume, composition and dynamics of the turnover of retail trade enterprises in the country in 2001–2008 are presented in Table 1. In the period of eight years, the total turnover of retail trade at current prices increased 2.7 times, while at constant prices 2.37 times. The increase of the total average annual retail trade turnover at actual

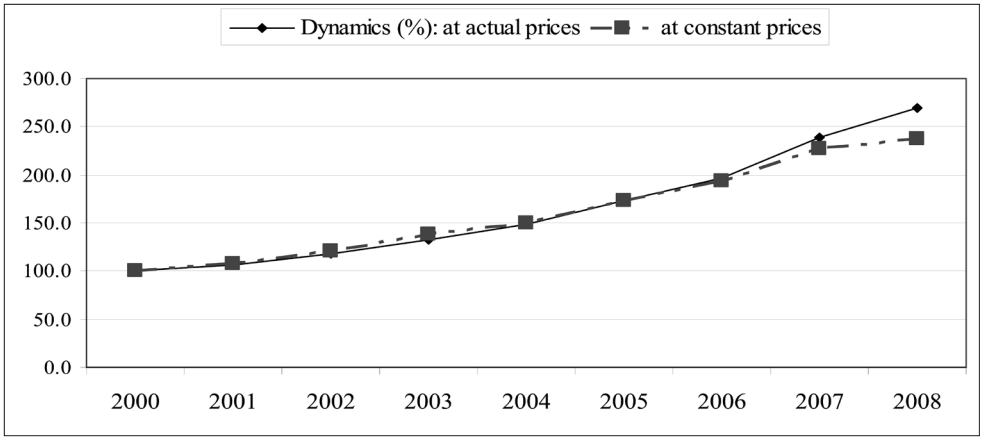

FIG. 1. **Dynamics of Lithuanian retail trade enterprises at actual and constant prices, 2001–2008 (%, 2000 = 100)**

prices accounted for 13.2% and at constant prices for 11.4%. This shows not only a rapid growth of the turnover of goods, but also the fact that this growth was to a certain extent determined by the increased prices of goods and services.

Figure 1, presenting the change in the turnover of retail goods at actual and constant prices, shows evidence of a certain impact of the fluctuation of prices; however, this im-

TABLE 1. **Change of the turnover of Lithuanian retail trade enterprises (VAT exl.) in 2001–2008* (amount at actual prices, LTL mill.)**

Indicators	Year								
	2000	2001	2002	2003	2004	2005	2006	2007	2009
Total trade[1] (division 52 and 50)	13,255	14,91	15,640	17,641	19,613	22,923	26,016	31,573	35,788
Dynamics (%): at actual prices	100.0	106.3	118.0	133.1	148.0	172.9	196.3	238.2	270.0
at constant prices	100	107.2	120.5	137.8	150.7	173.7	194	227.4	236.8
Trade of motor vehicles[2] (division 50)	3,729	4,66	5,147	6,227	6,823	8,258	9,829	12,444	13,832
Dynamics (%): at actual prices	100.0	114.4	138.0	167.0	183.0	221.5	263.6	333.7	370.9
at constant prices	100	119.9	146.7	176.8	188.9	225.9	270.2	333.3	348.6
Retail trade, except motor vehicles and motor cycles[3] (division 52)	9,526	9,825	10,493	11,414	12,790	14,665	16,187	19,129	21,956
Dynamics (%): at actual prices	100.0	103.1	110.2	119.8	134.3	153.9	169.9	200.8	230.5
at constant prices	100.0	102.3	110.4	122.6	135.8	153.3	164.2	184.3	193.0
Retail sale of food products, alcoholic beverages and tobacco	5,697	5,658	6,068	6,587	7,239	7,979	8,904	10,555	12,499
Dynamics (%): at actual prices	100.0	99.3	106.5	115.6	127.1	140.1	156.3	185.3	219.4
at constant prices	100.0	96.8	105.0	115.3	123.7	132.1	140.7	151.6	155.2
Retail sale of non-food products	3,829	4,166	4,425	4,827	5,551	6,686	7,293	8,574	9,456
Dynamics (%): at actual prices	100.0	108.8	115.6	126.1	145.0	174.6	19.5	223.9	247.0
at constant prices	100.0	111.4	121.2	134.7	133.4	153.8	184.9	199.3	233.2
Restaurant, bars and other catering enterprises	350	362	430	507	587	758	823	886	1,055
Dynamics (%): at actual prices	100.0	103.5	122.9	144.7	167.7	216.5	235.2	253.1	301.5
at constant prices	100.0	102.1	119.6	140.4	160.0	199.1	207.9	205.4	210.2

* Here and further on, if not mentioned separately, the tables have been compiled on the basis of annual reports of the Department of Statistics < http://www.stat.gov.lt/lt/pages...>

[1] Retail trade, including trade in motor vehicles and motorcycles, their maintenance and repair, retail sale of automotive fuel – divisions 52 and 50.

[2] Sale of motor vehicles and motorcycles, their maintenance and repair, retail sale of automotive fuel – division 50.

[3] Retail trade, except of retail sale of motor vehicles and motorcycles – division 52 (at actual prices, LTL mill.).

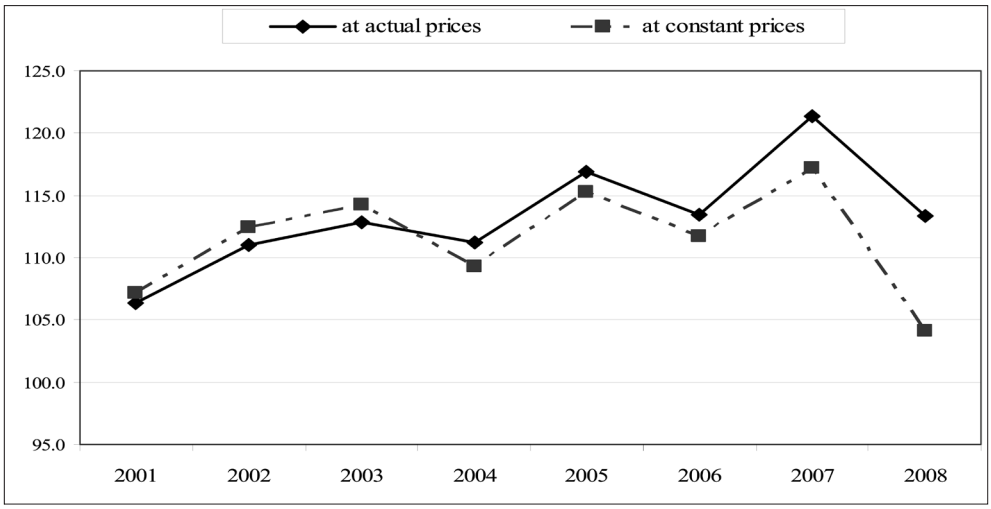

FIG. 2. **Annual change rates of the turnover of the Lithuanian retail enterprises at actual and constant prices in 2001–2008 (%, 2000 = 100)***

* Compiled using data from Table 1.

pact was not decisive. Moreover, during the first four years of the period under analysis, the change in prices was hampering the growth of goods turnover.

Practically, only as of 2007, the curve showing the change of turnover at constant prices has had a tendency to lag well behind the curve of turnover change at actual prices.

However, the impact of goods and services on the change in turnover volume is most obvious from the annual comparison of the change rates of turnover volume at actual and constant prices (see Fig. 2).

Until 2004, the volume of turnover at constant prices as compared to a year earlier was growing at a faster rate than the volume of turnover at the current prices of that time. However, already in 2004, a different trend was observed: the impact of prices, particularly during 2007 and 2008, was increasingly stronger. In 2004, Lithuania became a member of the European Union, which stimulated the development of the whole economy. Economic growth is always connected with inflationary processes of a certain degree, and Lithuania's economic development after its accession to the EU was not an exception.

While assessing the quantitative change in the volume of turnover of retail enterprises in 2001–2008, one should account for the change of Lithuania's economic situation. In 2000, against 1999, the GDP, average real wages, average annual change of prices on goods and services were respectively 3.3%, -5.1% and 1%. In 2000, the Lithuanian economy was getting on a recovery path after the Russian economic crisis. This is confirmed by the data provided in Table 1. However, the rate of inflation and, in particular, the unemployment rate were remarkably higher in 2000.

Despite the fact that there was a stable increase in GDP in the period 2001–2008, its positive impact on the unemployment rate and the average wage of the country's em-

TABLE 2. **Changes of Lithuania's key economic indicators compared to previous year**

Indicators	Year									2009	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	Q1	Q2
1. Change of turnover of retail enterprises, %	13.7	6.3	11	11.3	11.1	16.9	13.5	21.4	13.4	-25.9	-26.9
2. Change in GDP, %	3.3	6.7	6.9	10.2	7.4	7.8	7.8	9.8	2.8	-13.3	-20.2
3. Change in average annual real wages of employees, %	-5.1	-0.4	3.8	9.2	4.9	6.8	14.9	17	10.7	-5.2	-6.4
4. Change in annual average prices on consumer goods and services, %	1	1.4	0.3	-1.1	1.2	2.7	3.7	5.7	10.9	8.7	5.2
5. Rate of inflation, %	1.4	2	-1	-1.3	2.9	3	4.5	8.1	8.5	3	-0.6
6. Unemployment rate, %	16.4	17.4	13.8	12.4	11.4	8.3	5.6	4.3	5.8	11.9	13.6

ployees was not yet observable in 2000 and 2001. The real wages in the above-mentioned years were still on a decreasing trend, and the slowing down of the unemployment rate since 2002 was not favourable for the increase of the volume of goods turnover.

A more prominent increase in the average real wages of employees of the country was registered since 2002, this increase being especially notable during the years 2003 and 2006–2007. However, the turnover of retail enterprises was increasing even faster, although its growth was slowed down by still high unemployment. Evidently, only in 2007, when the unemployment rate was at its lowest and the change in real wages at its highest, could the highest change in turnover of retail enterprises be recorded – as much as 21.4%, despite the fact that the unemployment rate was significantly falling also due to the increasing emigration of the workforce. It should also be noted that in 2007, inflation recorded the highest level in the period under consideration.

It is obvious that, given such a rapid decline of the unemployment rate and wage increase, the level of inflation would remain unaffected. Since 2004, the prices of consumer goods and services began to rise, and in 2008 the rate of inflation nearly caught up with the change in real wages of the country's employees, while the unemployment rate was falling during the same time, with the exception of 2008 when it recorded an increase by 1.5 point against 2007.

Thus, the falling unemployment rate, increasing real wages and a rapidly growing GDP contributed to the increase in the purchasing power of the population thereby facilitating the growth of the turnover of retail enterprises up to 2009. Although data in Fig. 3 do not deny this, they also show marked fluctuations in the changes of all indicators in separate years, most discernible being those of the rapidly changing turnover.

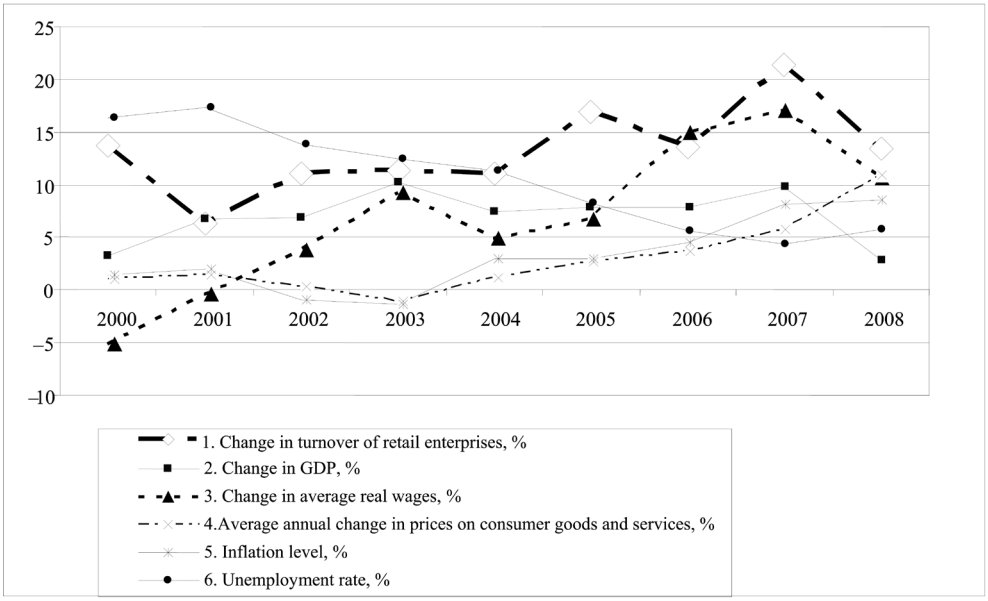

FIG. 3. **Changes in certain economic indicators of Lithuania (%) in 2000–2008***

* Compiled using data from Table 1.

In 2001–2005, the change of the turnover of retail enterprises at constant prices exceeded the change in the average real wages of employees by respectively 7.6, 8.6, 5.1, 4.4 and 8.5 percentage points, while in 2006–2008 the situation went in the opposite direction. The fast growth of the turnover of retail enterprises in 2006-2008 was influenced by an even faster increase in the real annual wage of employees. It is hard to determine the impact of the shadow economy as well as the money transferred by emigrants to their parents and other family members on the growth of the turnover of retail enterprises.

A comparison of the dynamics of retail trade turnover and GDP points to an obvious correlation between these indicators. The coefficient of determination showing the correlation between the change of retail trade turnover and the change in GDP was estimated to be 0.63. However, an even higher determination coefficient (0.76) was found for the correlation between the GDP and the change in retail turnover. This leads to a preliminary conclusion that the analysis of changes in retail trade turnover is of great importance for predicting the overall perspective of the country's economic development (see Attachment 1).

There is no doubt that the change in the turnover of retail enterprises is impacted by the shadow economy as well as by money transferred by Lithuanian emigrants to their parents or other family members. However, it would be difficult to provide an unambiguous assessment of this impact. The rise of unemployment contributes to the increase in emigration, which in its turn reduces the rate of unemployment. It has to be noted that in the period 1994–2000, Lithuania had a rather stable negative migration saldo (the

TABLE 3. **Developments of certain economic indicators of Lithuania in different quarters of 2008 and 2009** (%, at actual prices as compared to the corresponding period of the previous year)

Indicators		2008				2009		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3
1. Change of turnover of retail enterprises	13.4	17.7	7.9	-0.6	-5.6	-25.1	-26.9	-25.9
2. Change in GDP	2.8	6.9	5.1	2.1	-2.2	-13.3	-19.5	-14.2
3. Change in average real wages of employees	10.1	14.2	11.7	9.1	6.2	-5.2	-6.4	-8.7
4. Change in consumer prices	10.9	10.6	12.1	11.7	9.3	8.7	5.2	2.6
5. Unemployment rate, %	5.8	4.9	4.5	5.9	7.9	11.9	13.6	13.8

difference in the number of immigrants and emigrants). During that period, this migration indicator accounted for 22,8–20,3 thousand[5]. In subsequent years this indicator was gradually decreasing and equalled 8.8 thousand in 2005 and 5,24 thousand in 2007.

The economic instability of the country or the worsening of the situation contribute to the expansion of the shadow economy. However, the volume of the shadow economy does not lend itself to a direct estimation. For this reason, the methods of its calculation are different, and research plays an important role here. According to the estimation of the Lithuanian Institute of Free Market, the part of black/grey economy in the GDP in 2000, 2005, 2009 amounted to 22, 21 and 23 percent, respectively.[6]

The period 2000–2008 is also interesting in that the year 2000 was the first year to see the recovery of the Lithuanian economy after the Russian economic crisis which had a significant impact on the Lithuanian economy, and at the end of 2008 Lithuania felt the impact of the global financial and economic crisis which continues through 2009–2010. Table 3 shows changes of the same indicators as those provided in Table 1 in different quarters of 2008 and 2009.

Assessment of the development rate of all main economic indicators presented in Table 3 shows that the first two quarters of 2008 do not seem to imply any dramatic economic changes. However, a separate evaluation of changes in the turnover of retail enterprises alone indicates the onset of a rapidly approaching economic crisis in the second quarter of 2008 (see Fig. 4). Already from the second quarter of 2008, the change in the turnover of retail enterprises was almost tree times smaller than in the first quarter, and in the third quarter a negative rate of its development can already be discerned. Meanwhile,

[5] The main data source on key indicators of the country's economic development in the years 1994–2001 is the Department of Statistics: http://www.stat.gov.lt/lt/pages/view/

[6] Lietuvos laisvosios rinkos institutas. Lietuvos ekonomikos tyrimas 2009/2010 (2). http://www.lrinka.lt/pranesim/LET2010.pdf.

the change rates of other economic indicators of the country presented in Table 3, in particular those of real wages and GDP, do not so clearly indicate the approaching crisis. GDP in the second quarter increased by 5.1%, and in the third quarter the rate of GDP change, though noticeably lower, still remained positive. The change rates of the average wages of employees remained very high during both second and third quarters. This was clearly determined by political rather than economic factors – the upcoming elections to the Seimas (parliament of the country).

On the basis of data from Table 3 and Fig. 4, an important conclusion may be drawn that the change rates of the turnover of retail trade of the country should be regarded as the most explicit sign of the approaching economic crisis or economic recovery. A decrease in the rates of change, especially when they are turning to negative from positive, is a clear indicator of the looming economic decline. On the other hand, their stabilization or even their moving into positive may show economic recovery.

The full force of the economic crisis was felt since the fourth quarter of 2008 and continued throughout 2009. Its consequences were an increasing unemployment rate and a rapidly falling turnover of retail enterprises. The beginning of the economic recovery in 2000, 2001 and 2002 was first signalled by an increase in the turnover of retail enterprises, while it was the first to decline at the onset of economic downturn. In the first, second and third quarters of 2009, an increase in the unemployment rate, a decrease in the average wages of employees encouraged a more pronounced saving trend among population, and this caused a further sharp decline of the turnover of retail enterprises, although over 6 months of 2009 the prices on consumer goods and services were falling as compared to the previous month and remained stable over 3 months.

In December 2009, versus November, the turnover of retail enterprises, except for those trading in motor vehicles and motorcycles, increased by 21.4% at constant prices. The turnover of enterprises trading in non-food products (motor vehicles excluded) in-

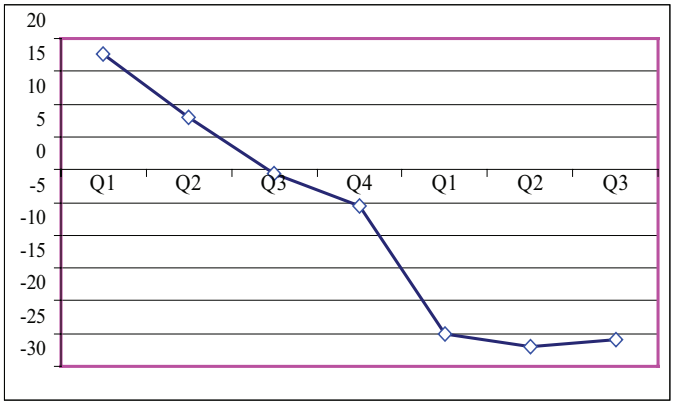

FIG. 4. **Changes in the turnover of retail enterprises of Lithuania in different quarters of 2008–2009 (as compared to the corresponding periods of the previous year, %)**

creased by 21.9% and of those trading in food products by 26.9% at constant prices. The turnover of enterprises trading in automotive fuel in December 2009, against November, increased by 8.7% at constant prices.[7]

The growth of the turnover of retail enterprises under the 2001–2003 scenario may be expected only after the attainment of GDP growth compared to the corresponding period of the previous year. Thus, it may be reasonably maintained that positive changes in the turnover of retail enterprises show signs of recovery of the country's economy, while its negative changes indicate the further economic recession or, at best, stagnation.

Assessment of change in the composition of the turnover of retail enterprises

The change in the volume of the turnover of Lithuanian retail enterprises in 2001–2008 was also determined by the composition of turnover, which is broken down into retail sale of motor vehicles and motorcycles, maintenance and repair of motor vehicles and motorcycles, retail trade of automotive fuel and retail trade. As can be seen from Fig. 5, the dynamics of the turnover of retail trade at constant prices during 2001–2008 did not even reach 200%, whereas the turnover of motor vehicles (division 50) approached 350%.

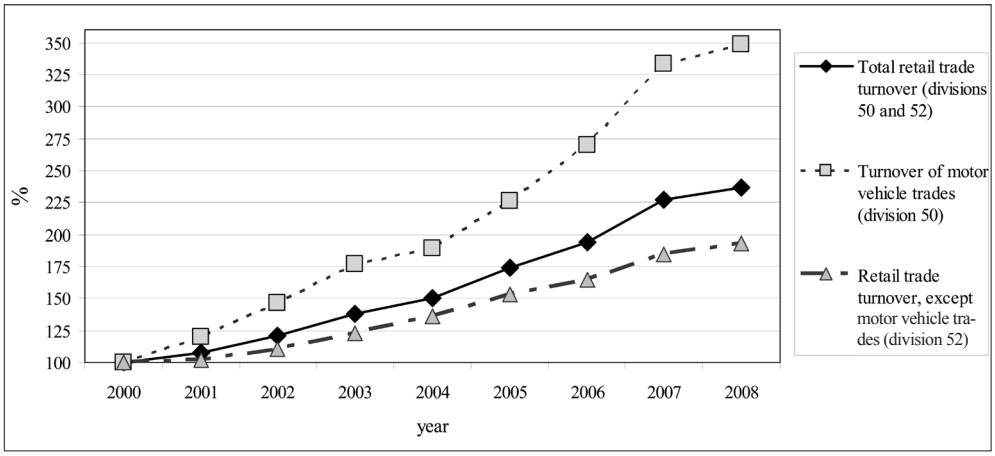

FIG. 5. **The dynamics of the total turnover of retail trade and its components at constant prices**

The rapid growth rates of the turnover of goods classified within division 50 determined the dynamics of the turnover of the total retail trade (50 + 52), and the share of goods within this division in total retail turnover showed a continuous growth (see Fig. 6).

We may conclude that the especially rapid growth rates of retail trade turnover in the period under consideration were largely determined by the automobilization of our country.

[7] Department of Statistics under the Government of the Republic of Lithuania RETAIL TRADE TURNOVER IN DECEMBER 2009 www.stat.gov.lt, see 19-12-2010

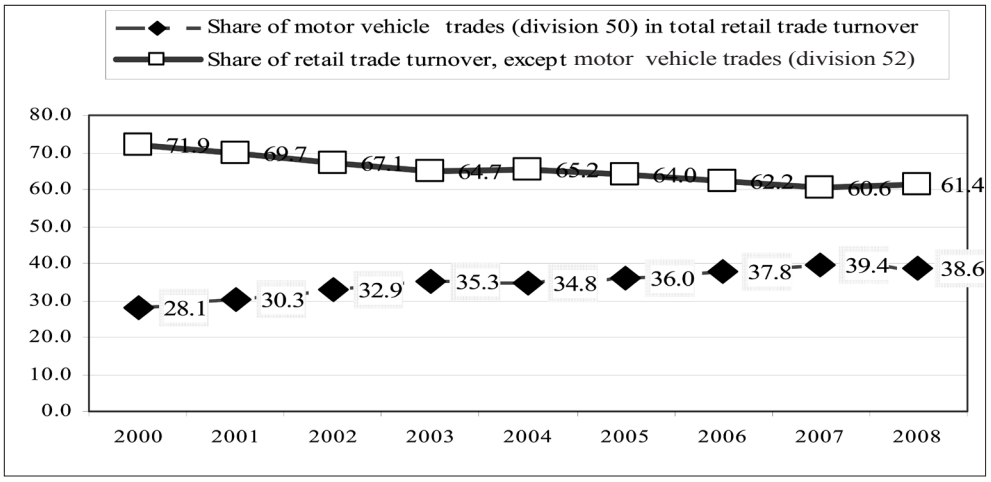

FIG. 6. **Shares (%) of the turnover of motor vehicle trades (division 50) and retail trades, except those of division 50, in total retail turnover in 2001–2008**

The favourable terms of granting consumer credits were the major contributors to the increase in new car sales. The vigorous sales of used cars, which began already in 1990, were especially conducive to the expansion of the network of car services thus making a significant contribution to the growth of the turnover of this division and its share in the total retail trade. The average annual increase in the turnover of goods of division 50 at actual prices would make up 17.8%, while the increase in the retail turnover of other goods (division 52) 11%, although this was not significant, either.

The turnover of the division 50 of NACE "Sale, maintenance and repair of motor vehicles and motorcycles, retail trade of automotive fuel" includes the sale of motor vehicles, sale of automotive fuel, sale of motor vehicle spare parts and accessories and maintenance and repair of motor vehicles.

The first two groups accounted for 82.3% of the turnover of the whole division in 2008, and their sales were growing fastest (see Table 4).

The increase in sales volumes of motor vehicles was influenced by the increasing growth of the country's economy. In addition to used cars, the country's population were increasingly buying new vehicles. The same could be said of the Lithuanian transport enterprises which replaced their fleet of tractor vehicles with new auto vehicles purchased under lease contracts. Agricultural enterprises and farmers were the biggest purchasers of tractor vehicles. The turnover of motor vehicle sales in 2001–2008 was increasing 2.6 times faster compared to retail sales turnover. The increase in motor vehicle sales was accompanied by a simultaneous increase in the turnover of the sales of automotive fuel. The growth rates of turnover from these sales were slower than those of the turnover from motor sales, although they still exceeded the growth of retail sales turnover 1.75 times. The increase in the number of vehicles lead to the growth of the volume of fuel

TABLE 4. **Developments of automotive fuel and motor vehicle sales and their share in the turnover of the whole division in 2000–2008 (at prices of that time, LTL mill.)***

Indicators	Year					Dynamics (%) deva-tion (point)	
	2000	2001	2004	2005	2008	Tb	Tv
1. Trade of automotive fuel	1672	1686	2772	3329	5633	336.9	116.4
1.1. Share (%) in whole division tumover (50)	44.8	39.5	40.6	40.3	40.7	**4.1**	x
2. Sales of motor vehides	1168	1467	2307	29625	5760	493.2	122.1
2.1. Share (%) in whole division tumover (50)	31.3	34.4	33.8	35.9	41.6	**10.3**	x

Tb – basic rate of change in 2008 versus 2000, %. Tv – average annual rate of change.

* Compiled on the basis of data of the Department of Statistics: http://www.stat.gov.lt/lt/pages/view/?id=1111

sales, which was also influenced by the fluctuations of fuel prices, most frequently in an upward direction.

In 2008, versus 2009, the increase in the turnover of motor sales (division 50 of NACE Rev. 1.1) accounted for 44.8% of the total increase of retail trade turnover, although in 2008 the former accounted for a mere of 38.6% of the total retail trade turnover. According to NACE Rev. 2.1, the trade of motor vehicles is classified in retail trade, and from 2009 the turnover of motor vehicles division (50) will decrease, while that of retail trade enterprises will increase.

The slower growth of the turnover of retail trade enterprises as compared to the turnover of motor vehicles division (50) during 2001–2008 was determined by the composition of the former, which includes food and non-food items. Figures of the share of food and non-food items in the total turnover of retail enterprises in 2000-2008 are presented in Table 5.

The general trend is that of a decrease of the share of food items and an increase in the share of non-food items. In 2008, against 2009, the share of food products dropped by 2.9 point. Such a change is not significant, the share of food items remaining comparatively large and exceeding 55% throughout the period under consideration, with the exception of 2005. On average, the share of food items in the period under consideration was larger by 13.6 points than the share of non-food items. Regrettably, this shows that the population spend most of their income on food products, alcoholic beverages and tobacco, which is not a sign of a high standard of life. The only positive outcome is the slower growth of the turnover of food products as compared to non-food products. The volume of the turnover of food products at constant prices in 2008 against 2000 increased by 55.2%, while that of non-food products by 133.2%. A more rapid growth of the turnover of non-food items indicates an improving trend in the quality of life up until 2009. However, in 2008 the share of food items again showed a more significant increase.

TABLE 5. **Composition of the turnover of retail enterprises in 2000–2008 (%)**

Goups of goods	Year									Change (point)
	2000	2001	2002	2003	2004	2004	2006	2007	2008	
Food items*	59.8	57.6	57.8	57.7	56.6	54.4	55	55.2	56.9	-2.9
Non-food items	40.2	42.4	42.2	42.3	43.4	45.6	45	44.8	43.1	2.9

* Including alcoholic beverages and tobacco.

The increased share of the turnover of alcoholic beverages and tobacco enterprises in the turnover of food enterprises should be viewed as a negative trend. In 2001, these two groups of goods accounted for 25.7% of the total turnover of food enterprises and in 2007 for 29.9%. This was partly determined by increasing excise taxes on these goods as well as by an increase in prices. In 2007, against 2001, the turnover of alcoholic beverages and tobacco enterprises accounted for as much as 34.8% of the total increase in the volume of turnover of food sales. This problem can be partially addressed by increasing the affordability of the services of catering enterprises (restaurants, cafés and bars) by the majority of the country's population. However, on average, the turnover of catering enterprises in 2000–2008 accounted for as little as 8% of the total turnover of food sales. The turnover of catering enterprises can essentially be attributed to the turnover of retail sales of food, or the level of development of catering services can be judged by the share of the former in the latter. A higher share of the turnover of catering enterprises in the turnover of food retail sales points to an increase in the number of population using catering services and hence an improving quality of life. On the basis of the data provided in Table 1, it can be stated that the increase in the turnover of catering enterprises in 2001–2008 was largely dependent on price growth. In 2008, against 2000, the turnover of restaurants, bars and other catering enterprises increased at actual prices by 201.5%, while at constant prices only by 110.2%.

The dynamics of the turnover of catering enterprises at constant prices in 2000–2008 was twice as high as the turnover of food products. This shows an improving quality of life in that period.

The significant role of market places in trade is quite a phenomenon in Lithuania against the background of Western European countries. The volume and composition of the turnover of market-place retailing reflect the economic situation in the country and the level of the quality of life (see Table 6).

In 2000 and 2001, which marked a step-by-step recovery of the Lithuanian economy, the turnover of market goods was the highest. Despite the growth of the Lithuanian economy in 2002–2008, changes in the total values of the turnover of market sales were negligible. During 2007 and 2008, against 2006, it resumed growth. No substantial changes in the composition of the turnover of market-place retailing in 2000–2008 were observed,

TABLE 6. **Volume composition and of the turnover of market goods and its share in the turnover of retail food and non-food enterprises in 2000–2008**

Year	**Market goods turnover, LTL mill.**	Turnover composition, %			Share of food products (%) in total retail food turnover	Share of non-food products (%) in total retail non-food turnover
		Food products, %	Non-food products, %	Plants and animals, %		
2000	**1443.8**	49.1	46.8	4.1	12.4	17.6
2001	**1498.5**	44.1	51.8	4.1	11.7	18.6
2002	**1293.5**	47.1	48.9	4	10	14.3
2003	**1204.5**	47.3	49	3.7	8.6	12.2
2004	**1216.2**	44.2	52	3.8	7.4	11.4
2005	**1177.6**	43.6	52.6	3.8	6.7	9.5
2006	**1187**	44.5	52.6	2.9	5.9	8.6
2007	**1262**	44.2	52.6	3.2	5.3	7.7
2008	**1283.1**	46.4	50.1	3.5	4.8	6.8
Dynamics, %	**88.9**	x	x	x	x	x
Change, +, –; points		-2.7	3.3	-0.6	-7.6	-10.s8

although the share of non-food products showed a slight increasing trend, while food products showed a declining tendency. Since in the period under consideration the turnover of food and non-food retailing was rapidly growing, the share of market-place food and non-food traders in the total retail food and non-food turnover was declining year by year. The role of the turnover of market-place food and non-food traders as expressed in percentage tends to diminish, although its total value has not changed significantly during the recent seven years. This is confirmed by the average per capita turnover of market-place retailing.

TABLE 7. **Average per capita turnover of market-place retailing in 2000–2008**

Indicators	Year								
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Average per capita turnover (LTL)	413	430	373	349	354	345	350	374	382
Dynamics (%)	100	104.1	90.3	84.5	85.7	83.5	84.7	90.6	92.5

Owing to the fact that in 2008 against 2000, according to statistical data, the number of the population decreased by 141368 people, the average per capita turnover showed less fluctuation in the period under consideration and, therefore, better reflected the real situation. It can thus be stated that the impact of the turnover of market-place retailing remains practically unchanged, and there is a possibility of its growth in the period of economic crisis.

Analysis of the volume and composition of the turnover of retail enterprises of Lithuania in the period 2000–2008 has revealed different patterns of change of its indicators in different years as well as the factors influencing this change. The significance of the other indicator – the share of the average per capita turnover – is that it is a qualitative indicator which provides information about the quality of life, its improvement or deterioration. This indicator can be compared with the corresponding indicators used in other countries.

TABLE 8. **Average per capita turnover of retail goods in 2000–2008**

Indicator	Year							
	2000	2001	2003	2004	2005	2006	2007	2008
Average per capita turnover (LTL)	3788	4048	4500	5709	6714	7665	9353	10657
Dynamics (%)	100	106.9	118.8	150.7	177.2	202.3	246.9	281.3
Average per capita monthly turnover (LTL)	316	337	375	476	559	639	779	888

Owing to the fact that in the period under analysis the number of the country's population was falling, the dynamics of the average per capita turnover was slightly higher than the dynamics of the turnover volume. A visible increase of the average per capita turnover was observed since 2004. Table 8 shows the average per capita monthly turnover. This indicator clearly reflects the rise of consumption. In 2008, against 2003, the average per capita monthly turnover increased by 136.8%. The fast growth of the Lithuanian economy, which was accompanied by the increase in retail turnover and the average per capita turnover, continued for the period of five years until the fourth quarter of 2008 which showed the first signs of economic downturn. This worsened situation continued through the whole of 2009 and is forecast to last all the way through 2010. It is only upon the recovery of the country's economy that the turnover of retail enterprises will improve. During the economic crisis, the function of market-place retailing is becoming more prominent. In this respect, a special role belongs to open-air farmers' markets which are held in public areas of municipalities during specific days of the week and at specific hours. The farmers' markets offer locally grown and made products at competitive prices.

The marketplace traders and farmers' markets, though being small competitors, can still offer some competition to larger food retailers in certain food product categories.

Conclusions

1. The indicator of retail trade turnover is not only a statistical, but also an economic one and indicates the level of the quality of life of the country's population and correlates with its other macroeconomic variables, such as the GDP, the unemployment rate, the rate of inflation, the average real wages of employees and the shadow economy. The present research has shown that the rates of change in the country's retail turnover may be regarded as the most reliable indicators of economic development. The decline of indicators, particularly when they turn negative from positive, is an obvious sign of the approaching economic decline. Conversely, stabilization of these indicators or their reversal into positive may indicate economic recovery. It is hard to assess the changes of this indicator in terms of methodology, since the indicator itself is a composite of two parts (divisions 50 and 52), where separate groups of goods account for different proportions of total turnover of that division. Moreover, the turnover of catering enterprises and market-place traders requires separate assessment. Although it does not contribute to the said indicator, it influences retail turnover and the level of the quality of life of the population. Since it was not possible to identify a single complex indicator that would reflect changes in the retail turnover, the article presents the author's system of assessment of turnover increases.
2. In 2001–2008, and especially from 2004, the turnover of retail enterprises of Lithuania was characterized by a fast growth. During the said period, a certain interdependence of turnover growth and other macroeconomic indicators can be observed.
   2.1. In the first years of recovery after the Russian economic crisis (2000, 2001), when the country's GDP showed a remarkable growth (3.3% and 67%), while all the rest macroeconomic variables (such as unemployment, inflation, real wages of employees) continued to decline, changes in the turnover of retail enterprises were respectively 13.7% and 6.3%. The growth of the turnover during this period was determined by the country's economic recovery, i. e the increase of GDP.
   2.2. In the first and second quarters of 2009 (second and third phases of the economic crisis), the turnover and other macroeconomic indicators, except that of inflation, showed a rapid decline. The rate of inflation in the first quarter of 2009 made up 3%, and already in the second quarter a deflation of –0.6% was recorded. At the onset of the economic crisis, the fall of turnover was determined by all macroeconomic indicators (except the decreasing rate of inflation), including deflation which cannot prevent the fall of consumer purchases.
   2.3. The rapid increase of the turnover of retail enterprises in the period under analysis was determined by the shadow economy (despite its contraction) and the emigrants' money transferred or brought to Lithuania, part of which was used for purchasing goods.

3. The largest contributor to the fast growth of the turnover of the national retail trade in the period under consideration was the still faster growth in motor vehicle retailing (division 50) and its increased share (10.5 point) in total national retail in 2008 against 2000. The period of economic boom saw a considerable increase in vehicle purchases for cash or on lease by farmers, businessmen, state enterprises, institutions and population. Sales of motor vehicles increased 4.9 times over 8 years, whereas the turnover in another product category of NACE Division 50 – automotive fuel retailing – was also rapidly going up due to the increasing price and demand.
4. In the period under consideration, the turnover of Division 52 of NACE, which covers retail trade, excluding retail trade of motor vehicles and motorcycles, showed a decrease in the share of food-retailing, while the share of non-food retailing was increasing. However, despite this positive change, the share of food retailing in 2008 accounted for more than a half (56.9%) of the total retail turnover. The increase in excise tax on alcoholic beverages and tobacco products accounted for their increasing share (29.9% in 2007) in the total food retailing. The ongoing economic crisis has a negative impact on the composition of retail trade, i.e. it contributes to an increase in food retailing sales.
5. The turnover from catering enterprises showed the slowest growth, its main contributor being an increase in prices. The services of catering enterprises did not enjoy massive popularity among population, accounting for as little as 8% of the total turnover from food retailing sales, which shows a comparatively low quality of life of Lithuanian people.
6. In 2008 versus 2009, the turnover of market place retailing decreased by a mere 11.1%, exceeding the turnover of catering establishments by 21.6%. In the period under consideration, a visible trend towards contraction of the share of food sales emerged. Nevertheless, a significant role of market place retailing is reflected in the fact that in 2008 against 2009 the average per capita turnover dropped only by 7.5%. The period of economic hardship saw the emergence of farmers' markets.
7. With the decline of the population number, the average per capita turnover grew slightly ahead of the turnover of retail enterprises. The employed indicator of the average per capita turnover volume in 2004–2008 is a result of the country's economic boom. Owing to the continued crisis, this indicator accounted for a mere LTL 7887, or only LTL 222 less than in 2006.
8. The further growth of the turnover of retail enterprises in 2010–2014 will only be possible at a rise of GDP by 1–2% and also taking into consideration the possible rise in unemployment rate, a decrease of the real average wages and the low rate of inflation. A growth of the turnover from market-place retailing and farmers' market sales may be expected.

Attachment 1

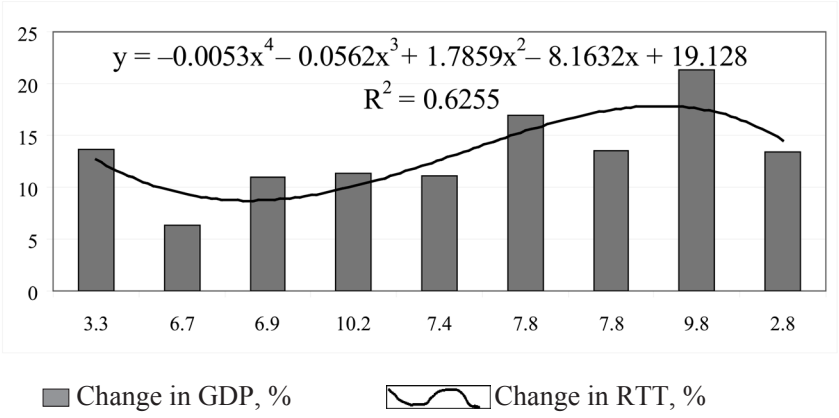

FIG. 1.1. **Retail trade turnover (RTT) correlation with change in GDP**

(R-squared value: a number from 0 to 1 that reveals how closely the estimated values for the trendline correspond to your actual data. The trendline is most reliable when its R-squared value is at or dose to 1. Also known as the coefficient of determination).

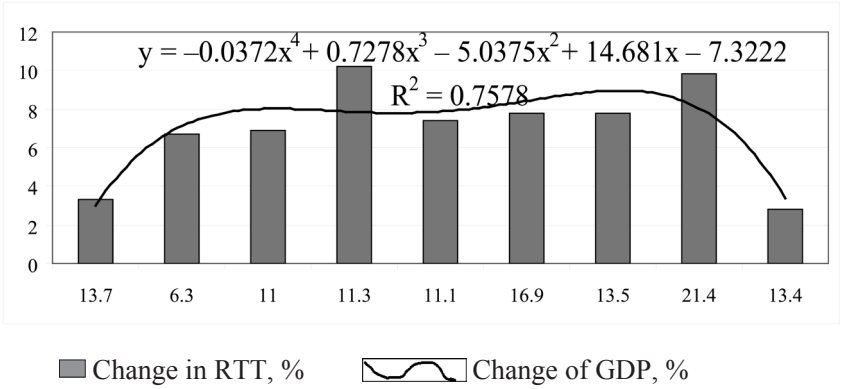

FIG. 1.2. **GDP correlation with change in RTT**

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