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RISKS ASSESSMENT OF ACCOMMODATION AND FOOD SERVICES SECTOR: THE CASE OF LATVIA

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Abstract. The purpose of this work is to study assessment of risks in accommodation and food services sector on a sample of Latvia. The authors have created the accommodation (hotel) and food services technological process flow map and have carried out a survey of the most important risk factors in the stages of the technological process. The authors have created the algorithm of identification, classification and assessment of enterprises' risks in the accommodation (hotel) and food services sector. The risks assessment by using the special coefficient method demonstrates that Latvia's accommodation and food services sector risks dynamic increased in the period from 2006 to 2009. The authors have offered rating of external and internal risks by their affect on the development of enterprises.

Keywords: accommodation and food services sector, risks assessment, risks ranking method, economic risks, financial risks.

Jel classification: G32

1. Introduction

Today it is important for enterprises, operating in the Latvia's accommodation and food services sector, to create an efficient economic activity in both economic growth and economic slowdown. Companies have to assess marketing activities to attract new and retain existing clients in hotels, restaurants and cafes, as well as create marketing activities that increase client loyalty to enterprise's brand.

Because of the country's economic slowdown and reduction in client's solvency, Latvia's accommodation and food services sector enterprises have to follow financial health indicators, in order to operationally deal with enterprises' solvency problems. Latvian accommodation and food services sector enterprises have to increase own capital through the profit to improve own financial stability.

In order to minimize any possible risk values Latvian accommodation and food services sector companies are recommended to conclude contracts with global hotel chain operators. This would enable the companies into the overall activities with single hotel brand and operations' concept.

Enterprises have to develop their strategy that effectively carries out their own economic activities in Latvian accommodation and food services sector. In order to develop their business strategy, enterprises need to identify, classify and assess the Latvian accommodation and food services sector risks. The target of this work is to research the risk assessment methods and their application for Latvian accommodation and food services sector risk analysis. The authors have created the algorithm of identification, classification and assessment of enterprises' risks in the accommodation (hotel) and food services sector.

2. Risks assessments tools for accommodation and food services sector: Theoretical consideration

In order to create a sustainable competitive advantage company should take into account risks and their impact on companies' development. The important stage of risk management is risk identification and classification (Rutkauskas 2008).

Analyzing the external environment, the authors learned about the surveys of the major risks in the world. Aon Corporation, who is the leading global provider of risk management services, published Global Risk Management Survey 2011 results. Respondents, which included 960 companies and organizations from 58 countries of the world, representing the widest range of industries, as the major risks mentioned the economic slowdown, regulatory/legislative changes, insolvency (bankruptcy), liquidity, increasing competition, financial instability of suppliers and damage to reputation. "Aon" corporation has taken also 21st Century Supply Chains Survey. Respondents, which in-

cluded 100 enterprises, representing different sectors and markets (the accent was put on companies, working in Europe, the Near East and Africa), described the main risks:

- Financial instability of suppliers (75 %);
- Physical damage in the supplier's object (43 %);
- Defects of supplier's work quality, which leads to the recall of production (42 %);
- Extraordinary conditions (accidents, breakdowns) in own object (37 %);
- Outsourcing partner's service breakdown (33 %).

Henschel (2010) has studied German small and medium-sized businesses' risk management framework, and risk identification and classification problems of companies.

Zimecs and Ketners (2009) have researched the importance of risk management for small and medium enterprises. Because of the impact of the economic crisis on activities of Latvian small and medium enterprises, it is important for their entrepreneurs to understand and create a system of the risk management. This system of risk management should be integrated into enterprises development strategies and could also be used for increasing the level of enterprise competitiveness. Zimecs and Ketners (2010) have also studied business solution methodologies and their impact on risk management and carried out survey of risk management developments. As shown by the survey results, the businessmen, who use the risk management elements in their daily activities, mainly manage risks by using information of business results.

Komkova (2008) has researched the need of risk management and major problems in Latvian non-financial companies:

- Commercial companies have a lack of understanding about the need of the implementation of risk management;
- The practical implementation of risk management is not possible without relevant risk models adaptation to Latvian economic situation;
- There is a lack of experience in implementation and adaptation of risk management.

Jansone and Voronova (2010) have studied financial stability problems of Latvian trade sector enterprises. Jansone *et al.* (2010) have researched financial and economic risks impact on Latvian food retail sector.

Baumane and Vedina (2011) have researched Latvian hotel performance possibilities, due to tourism promotion. Urban (2009) has studied problems of quality assurance in services companies. Dehtjare (2008) has researched the hotel services market in Latvian. Hotel services have dif-

ferent quality and amount of offered services.

Largest market share of Latvia have three-star hotels with medium service quality and price levels. Companies conclude contracts with global hotel chain operators, and join the overall activity with a single hotel brand and operational concept. Millere (2009) has studied the processes of food services enterprises in Latvian regions. Risks associated with the food safety plays an important role in the food service. The company's employee's lack of professional experience and ignorance of legislative increases the probability of infectious diseases among consumers.

3. Latvian accommodation and food services sector analysis

The authors have researched the division of the total Latvian accommodation and food services sector turnover in 2010.

The turnover of accommodation services is the lowest and it forms 27 % of the total Latvian accommodation and food services sector turnover. The turnover of food services forms 73 % of the total Latvian accommodation and food services sector turnover. In the period from 2004 to 2011 the authors have researched changes of Latvian accommodation and food services turnover (Fig.1).

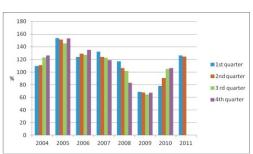


Fig.1. Total turnover indices of Latvian accommodation and food services sector enterprises from 2004 to 2011 (% of previous period) (Source: The Central Statistical Bureau of Latvia 2011)

In the period from 2004 to 2007 in Latvian accommodation and food services sector has been observed an increment of total turnover. In 2007 the total turnover of sector reached biggest rates. From 2008 sector turnover has started to decline, reaching lowest rates in 2009. From 2010 Latvian accommodation and food services sector's turnover has begun to increase.

The authors have created the survey of largest Latvian accommodation and food services sector enterprises (Table 1).

Table 1. Latvian accommodation and food services sector enterprises net turnover from 2007 to 2009 (after the net turnover in 2009 (in millions of LVL) (Latvian largest companies 2007, 2008, 2009)

Name of an enterprise	Name of hotel	2007	2008	2009	
Accommodation (hotel) services					
SE "Viesnīca Latvija"	Radisson Blu Latvija	14.42	12.55	8.62	
Ltd. "BBH Investments"	Baltic Beach Hotel	6.12	5.70	5.00	
Ltd. "Polar Bek Daugava"	Radisson Blu Daugava	7.11	6.25	3.51	
Ltd. "Hotel SPA Jūrmala"	Jūrmala SPA	4.32	4.37	2.84	
Ltd. 'Elizabetes centrs''	Radisson Blu Elizabete	Open 2008		2.40	
Ltd. "Islande Hotel"	Islande Hotel	2.98	3.23	2.03	
Ltd. "Reho"	Hotel de Rome	4.11	3.51	2.02	
Food services			_		
Ltd. "Lido"		24.16	25.40	18.23	
Ltd. "Premier Restaurants Latvia"		8.25	10.45	9.39	

Hotel activities were affected by the country's economic slowdown. In 2008 and 2009 people traveled and stayed at hotel less. Amount of the international and local events decreased. In result indexes of amount of hotel work decreased.

In accommodation services includes the provision of short-stay accommodation, typically on a daily or weekly basis, principally for short stays by visitors and other travelers. This includes the provision of furnished accommodation in guest rooms and suites. Services include daily cleaning and bed-making (Hotel management and operations 2007).

A range of additional services may be provided such as food and beverage services, parking, laundry services, swimming pools and exercise rooms, recreational facilities as well as conference and convention facilities. The additional services are food and beverage service. The accommodation services are provision of client's requirements with activities of special trained staff.

To make clients feel satisfied with accommodation services, it has to provide (Volkov 2009):

- Accommodation in different size and equipped rooms;
- 2.Good quality of hotel planning and designing;
- Standards of client's services;
- Activities of hotel security system;
- Good quality of food services;

- The additional services (beauty, health, fitness).

Food services include food and beverage serving activities providing complete meals or drink fit for immediate consumption, whether in traditional restaurants, self-service or take-away restaurants, whether as permanent or temporary stands with or without seating (Melngaile 2008).

The standards of Hazard Analysis and Critical Control Point (HACCP) system were observed in the stages of the food services technological process (Voronova 2007).

HACCP system provides a methodology to manage the food services technological process, starting from raw materials until finished food products, which are delivered to the clients. This is a warning system and is designed to eliminate (minimize to an acceptable level) the risk that the dangerous products will be delivered to the clients (Carrasco *et al.* 2011).

The stages of HACCP system (Blija 2007):

- Make the analyses of risk causes in order to create a list of risk causes;
- Identify critical control points of technological process;
- Determine borders of critical control points;
- Create a system to verify critical control points with systematic tests;
- Determine necessary corrective activities to limit borders of critical control points;
- Make documentation of necessary activities.

Food assortments are included in food services. Various foods have been supplied for different seasons and different parts of day. Menu of meat, fishes, vegetables, soups and cakes (etc.) are made for different prices and qualities. Supply of bars' beverages assortments is formed accordingly to agree client's requirements (Shock 2005).

Important factor in food services organization is qualification of staff. It is necessary to train staff so that client's requirements are satisfied qualitatively and in time (Sala 2006).

Qualification and skills of kitchen staff will determine quality of food products. Equipments of the latest developments in technology will provide qualitative preparation and storage of food products (Kotschevar 2007).

The authors have done the analysis of external and internal environment of Latvian accommodation and food services sector. External environment's opportunity is to increase turnover of Latvian accommodation and food services sector, if the country stimulates the economic growth. As well as external environment's opportunity is to choose qualified staff, because costs of labour decrease. Latvian accommodation and food services sector external environment's threat is the

risk of insufficiency of credit resources, which may lead to decrease of current assets.

Latvian accommodation and food services sector internal environment's strength is a possibility to offer assortment of quality services, because level of staff skills has been improved. Latvian accommodation and food services sector internal environment's weakness is a possibility of reduction in assortment of services due to risk of insufficiency of credit resources. In result enterprises' indices of liquidity may decrease and the risk of financial instability may increase.

4. Research description

The authors offer to make identification, classification, assessment of the external and internal risks according to algorithm (Fig.2).

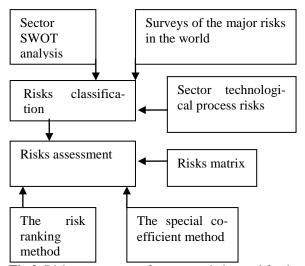


Fig.2. Risks assessment of accommodation and food services sector (source: The authors have created)

Important stages of risks assessment:

- Make the SWOT analysis of accommodation and food services sector;
- Get to know with the surveys of the major risks in the world;
- Create the classification and description of accommodation (hotel) and food services sector technological process risks;
- Classify and assess risks in order to create risks matrix:
- Assess risks by using the special coefficient method;
- Rank external and internal risks by their impact on sector enterprises' development.

Identify risks by creating the Latvian accommodation and food services sector SWOT analysis, including estimation of sector's external environment's opportunities and threats, also defining sector's internal environment's strengths and weaknesses (Voronova 2008).

The authors, classifying risks by the public relation's field, have considered the economic risks. The authors, classifying risks by type of commercial activity, have considered the financial risks. Risks are classified by fields of origin:

- External risk arises in the external environment; it does not depend on actions of the business structures;
- Internal risk arises by activities of the business structures

The financial risks are greatest share of the total package of business risks (Pettere, Voronova 2003). They have both objective and subjective nature. The subjective nature of financial risk is associated with the circumstances (Hillson 2007):

- The businessmen assess the risk situation and make the choice of many alternatives;
- Risk perception is associated with each person's character and psychological traits, knowledge and experience in their own fields.

Based on the above mentioned the authors have created classification of Latvian accommodation and food services sector's economic and financial risks in the period from 2010 to 2011. The authors have classified risks, by fields of their origins, into external risk and internal risk.

The economic risks are external risks. The financial risks are external and internal risks.

The authors have created the technological process flow map of accommodation (hotel) and food services (Jansone, Voronova 2011).

The authors have carried out a survey of the most important risk factors in the stages of the technological process. Food service has been reviewed as a component of accommodation (hotel) service. So, stages of the technological process (accounting and payment departments) operate in both types of services.

The authors have created classification of the accommodation (hotel) and food services technological process risks (Table 2).

The technological process risks are internal risks. The important accommodation (hotel) service's technological process risks are the risk of security system, the risk of client's payment and risk of accounting.

The important food service's technological process risks are the risk of HACCP (Hazard Analysis and Critical Control Point) system, the risk of employees' hygiene and the risk of food preparation.

Table 2. Classification and description of accommodation (hotel) services technological process risks (source: The authors have created)

	,	
Stage of techno-	Risk of techno-	Description of
logical process	logical process	risk
Reservation of hotel rooms	V1. The risk of reservation	Possible loss if client cancels the reservation
Client registra- tion in hotel	V2.The risk of registration	Case, if the hotel cannot provide reserva- tion of rooms
Hotel security department	V3. The risk of security system	Possible loss due to thefts or attacks
Food services ordering	V4. The risk of ordering food services	The possibility of client poisoning and diseases
Hotel room service depart- ment	V5. The risk of room service	Case, if required job skills of hotel employees are missed
Ordering of additional ser- vices (beauty, health, fitness)	V6. The risk of ordering additional services	Quality assurance of addition services
Client checkout of hotel	V7. The risk of client's payment	Possible loss if payments are made
Accounting department	V8. The risk of accounting	Possible loss if accounting is realized partly

The authors have arranged risks_by their size of possible losses for enterprises. For each type of risk has been assessed its probability of realization. The size of the risk characteristics (losses) are divided into – low risk, medium risk, high risk, maximum acceptable risk and critical risk.

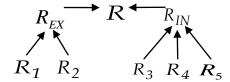
Most of the authors classified Latvian accommodation (hotel) and food services sector's economic, financial (Table 4) and technological process (Table 2) risks size are from medium till maximum acceptable. The probability of risks realization is from 0.2 till 0.6.

The critical risks are the risk of insolvency (bankruptcy) and the risk of security system.

The maximum acceptable economic risks are the risk of legislative changes, the risk of increment of taxes, the risk of reduction in client's solvency and the risk of damage to reputation. The maximum acceptable financial risks are the risk of unpaid credit and the risk of financial instability. The maximum acceptable technological process risks are the risk of HACCP (Hazard Analysis and Critical Control Point) system and the risk of employees' hygiene.

The high economic risks are the risk of demand's instability, the risk of insufficiency of credit resources and the risk of increment in raw materials prices. The high financial risks are the risk of debtors, the risk of insufficiency of own capital, the risk of liquidity, the risk of monetary, the risk of increment of interest, the risk of insufficiency of current assets and the risk of investment (the new project planning). The high technological process risks are the risk of reservation, the risk of food preparation, the risk of accounting, the risk of ordering food services, the risk of choice of food assortment and the risk of food products storage. The authors have divided external and internal risks into several groups of risks (Jansone, Voronova 2011) (Fig.3).

In group of risk R_1 are economic risks. In group of risk R_2 are external financial risks and in group of risk R_3 are internal financial risks. In group of risk R_4 are accommodation (hotel) technological process risks and R_5 are food services



technological process risks.

Fig.3. Latvian accommodation and food services sector external and internal risks division into groups of risks (source: The authors have created)

The external risks R_{EX} consist of groups R_1 and R_2 . Groups of risks R_1 and R_2 weighting coefficients of impact are $w_1 = w_2 = 0.5$, by the formula (1). The total sum of weighting coefficients of impact is 1.

$$w_k = \frac{1}{n} \tag{1}$$

where: n – amount of risks' groups, k - ordinal number of risks' group.

Internal risks $^{R_{IN}}$ consist of groups of risks R_3 , R_4 and R_5 . Groups of risks R_3 , R_4 and R_5 weighting coefficients of impact

are
$$w_3 = w_4 = w_5 = \frac{1}{3}$$
, by the formula (1).

The authors have created external and internal risks ranking by their effect on accommodation and food services sector's enterprises' development (Table 4). The risk with the greatest impact has the greatest weighting coefficient. For each next risk, weighting coefficient is less than for the previous one. The total sum of is weighting coefficients of impact 1. Groups of risks R_1 , R_2 , R_3 , R_4 and R_5 weighting coefficients of impact are

calculated by the Fisburna formula (2) (Loiko, Jefanova 2008).

$$w_{i} = \frac{2 \cdot (m - i + 1)}{(m + 1) \cdot m} \tag{2}$$

$$R_k = \sum_{i=1}^m w_i \cdot a_i \tag{3}$$

where m - number of risks in a group and i - ordinal number of risk in a group;

 a_i - the risk value at the risks matrix scale and

 W_i - weighting coefficient of impact.

Groups of risks R_1 , R_2 , R_3 , R_4 and R_5 are calculated by the formula (3).

5. Empirical results

The authors have assessed Latvian accommodation and food services' sector risks by using the special coefficient method. From year 2006 till year 2009 the authors studied average financial indexes of Latvian accommodation and food services sector enterprises and did the economic analysis (Rurāne 2005).

Table 3. Latvian accommodation and food services sector risks assessment by using the special coefficient method in the period from 2006 to 2009 (source: unpublished data of Central Statistical Bureau of Latvia 2011)

Title of indices	D	Period of time (year)		ear)	
Type of risk	ע	1	2	3	4
Indic	liquidit	ty			
The coefficient of	D_d				
total liquidity	D_{in}	0.92	0.96	0.74	0.56
The risk of liquidity					
The coefficient of	D_d				
<u>liquidity</u>	$\overline{D_{in}}$	0.32	0.34	0.20	0.13
The risk of liquidity					
The coefficient of	D_d				
absolute liquidity	$\overline{D_{in}}$	0.32	0.34	0.20	0.13
The risk of liquidity					
Indices of profitability					
Profitability of	D,				
<u>turnover</u>	$\frac{D_d}{D_{in}}$		6.51	-	-
The risk of profitabil-	- in		0.51	7.90	22.3
ity of turnover					
Profitability of assets	D_d				
The risk of profitabil-	D_{in}		0.05	0.04	0.09
ity of assets				0.04	0.09
Profitability of	D_d				
own capital	$\frac{D_d}{D_{in}}$		25.6	-	-
The risk of profitabil-	- in		23.0	23.7	70.0
ity of own capital					

End of table 3

Title of indices	D	D Period of t			ime (year)	
Type of risk	ע	1	2	3	4	
Indices of solvency						
The coefficient of						
financial	D_{in}					
dependence risk	$\overline{D_{in}}$	0.81	0.79	0.83	0.91	
The risk of financial						
instability						
The coefficient of	D.					
financial risk	$\frac{D_{in}}{D_{in}}$	4.41	3.98	5.09	10.0	
The risk of financial	D _{III}	4.41	3.96	3.09	10.0	
instability						
Indice	s of c	irculati	on			
The coefficient of	η.					
circulation of stocks	$\frac{D_d}{D_{in}}$		19.7	16.3	13.7	
The risk of circula-	ν_{in}		19.7	10.5	15.7	
tion of stocks						
Period of debt	D.					
collection (days)	$\frac{D_{in}}{D_{in}}$		49	65	82	
The risk of debtors	D _{in}					

Enterprises' coefficient of total liquidity decreases and as a result risk of liquidity increases. The risks assessment by using the special coefficient method demonstrates that Latvian accommodation and food services sector risks dynamic has increased in the period from year 2006 till year 2009 (Table 3).

Table 4. Latvian accommodation and food services sector external risks ranking by their impact on enterprises' development (source: The authors have created)

prises development (source: The authors have created)					
External risks	W_{i} - weighting coefficient		$w_i \cdot a_i$		
Group of risks R_1			6.25		
E1. The risk of legislative changes	20/110	7	1.27		
E2. The risk of increment of taxes	18/110	8	1.31		
E10. The risk of damage to reputation	16/110	7	1.02		
E4. The risk of demand's instability	14/110	6	0.76		
E5. The risk of reduction in client's solvency	12/110	7	0.76		
E6. The risk of insufficiency of credit resources	10/110	5	0.45		
E7. The risk of increasing competition	8/110	3	0.22		
E8. The risk of the emergence of alternative services	6/110	4	0.22		
E9. The risk of increment in raw materials prices	4/110	5	0.18		

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External risks	W _i - weighting coefficient	a _i - risk size	$w_i \cdot a_i$
E3. The risk of financial instability of suppliers	2/110	3	0.05
Group of risks R_2			5.57
F1. The risk of unpaid credit	12/42	7	2.00
F2. The risk of increment of interest	10/42	5	1.19
F3. The risk of monetary	8/42	6	1.14
F4. The risk of inflation / deflation	6/42	3	0.43
F9. The risk of debtors	4/42	6	0.57
F8. The risk of insufficiency of current assets	2/42	5	0.24

The coefficient of profitability of turnover decreases and as a result risk level of profitability of turnover increases. The coefficient of circulation of stocks decreases and as a result risk level of circulation of stocks increases. Period of debt collection increases and as a result risk level of debtors increases.

The symbols are adopted for the table 3:

D - The symbol of risk dynamic: D_{in} - level of risk increases; D_d level of risk decreases.

Period of time: 1-2006; 2-2007; 3-2008; 4-2009.

The authors have calculated the external risks $R_{\rm EX}$ as following.

$$R_{EX} = 0.5 \times (R_1 + R_2) = 0.5 \times (6.25 + 5.57) = 5.91$$

The authors have calculated the internal risks R_{IN} as following:

$$R_{IN} = \frac{1}{3} \times (R_3 + R_4 + R_5) = \frac{1}{3} \times (6.11 + 6.11 + 6.14) = 6.12$$

Values of R_{EX} and R_{IN} are almost equal (difference is 4%), so both risks have an important impact on the Latvian accommodation and food services sector enterprises' development.

6. Conclusions

In the period from 2004 to 2007 in Latvian accommodation and food services sector has been observed an increment of total turnover. In 2007 the total turnover of sector reached biggest rates. From 2008 sector turnover has started to decline, reaching lowest rates in 2009. From 2010 Latvian accommodation and food services sector's turnover has begun to increase.

Latvian accommodation and food services sector's external environment's opportunity is to choose qualified staff, because costs of labour decrease. External environment's threat is the risk of insufficiency of credit resources, which may lead to decrease of current assets. Enterprises coefficient of financial risks increases and as a result enterprises risk of financial instability increases.

The risk of demand's instability and the risk of reduction in client's solvency negatively impact Latvian accommodation and food services sector enterprises' development.

In the period from 2010 to 2011 the major economic risks are the risk of legislative changes, the risk of increment of taxes, the risk of demand's instability, the risk of damage to reputation and the risk of reduction in client's solvency.

From 2010 to 2011 the major financial risks are the risk of insolvency (bankruptcy), the risk of financial instability, the risk of monetary, the risk of unpaid credit and the risk of unpaid credit.

In the period from 2006 to 2009 the risks assessment by using the special coefficient method demonstrates that Latvian accommodation and food services sector's risks dynamic has increased.

The important accommodation (hotel) service's technological process risks are the risk of security system, the risk of client's payment and risk of accounting. The important food service's technological process risks are the risk of HACCP system, the risk of employees' hygiene and the risk of food preparation.

In the period from 2006 to 2009 enterprises' coefficient of financial risks increased, so enterprises risk of financial instability also increased.

Values of external and internal risks are almost equal (difference is 4%), so both risks have an important impact on the Latvian accommodation and food services sector enterprises' development.

Latvian accommodation and food services sector enterprises can use the authors created algorithms of identification, classification and assessment of the risks to produce their own risk management systems.

References

Baumane, I.; Vedina, R. 2011. Capacities and competencies as sources of competitive advantage: The Case Study of Latvian Hotels. *Research Journal - Review of International Comparative Management* 12(2): 301–318.

Blija, A. 2007. *Pārtikas un uztura kvalitāte un drošums*. [Food and dietary quality and safety.] Riga: LU Akadēmiskais apgāds.104 p.

Carrasco, E.; Valero, A.; Pérez-Rodríguez, F.; García-Gimeno, R.; Zurera, G. 2011 .Food Safety Risk Management, *Risk Management in Environment, Production and Economy* 9: 77–102.

Dehtjare, J. 2008. The development of hotel services market in Latvia. RTU, Riga, Latvia

- Henschel, T. 2010. Typology of Risk Management Practices: An Empirical Investigation into German SMEs, Journal of International Business and Economic Affairs 9(3): 1–28.
- Hillson, D. 2007. *Understanding and managing risk attitude*. Hillson D. and Murray-Webster R. Aldershot, England; Burlington VT: Gower 180 p.
- Hotel management and operations. 2007. /Edited by Denney, G.; Rutherford, M. J.; O'Fallon./ New York: John Wiley&Sons. 478p.
- Jansone, I.; Nespors, V.; Voronova, I. 2010a. Impact of Financial and Economic Risks to Extension of Food Retail Industry of Latvia, Scientific Journal of RTU: Economics and Business 20: 59–64.
- Jansone, I.; Voronova, I. 2010b. Assessment Tools of Latvian Trade Sector Enterprises Financial Stability, Strategija antikrizisnobo upravlenija ekonomiceskim pazvitijem Rosijskoj Federaciji, Russia, Penza, 7 October, 18-21.
- Jansone, I.; Voronova, I. 2011a. External and Internal Risks Impact on Accommodation and Food Services Sector of Latvia, The 52nd Scientific Conference on Economics and Entrepreneurship'2011 RTU, Latvia, Riga, 7 October: 50-51.
- Jansone, I.; Voronova, I. 2011b. Latvian Trade Sector External and Internal Risk Assessment International Conference, The Current Issues in Management of Business and Society Development - 2011, Latvia, Riga, 5.-7.May: 53-54.
- Komkova, J. 2008. Risk management models for Latvian non-financial sector enterprises. RTU, Riga.
- Kotschevar, L. H. 2007. Presenting service: the ultimate guide for the foodservice professional. New York: John Wiley & Sons. 255p.
- Latvian largest companies 2007, 2008, 2009, *Dienas bizness*, *Top 500*.
- Loiko, V.; Jefanova, H. 2008. Kolicestvennije modeli i metodiki ocenki riskob v agropromislenkih integrirovannix proizvodsvennix sistemax. [Quantitative models and methods of risk assessment in agrointegrated production systems], Scientific Journal of Kuban State Agrarian University 40(6): 105 – 124.
- Melngaile, A. 2008. *Sabiedriskās ēdināšanas uzņē-mumu ražošanas organizācija*. [Catering industry organization], Riga: LU, Latvia.
- Millere, I. 2009. The acitivity processes in catering businesses in Latvia's regions. LUA, Latvia
- Pettere, G.; Voronova, I. 2003. *Riski uzņēmējdarbībā un to vadība*.[The risks in business and risks management], Apgāds Rasa ABC, Riga, Latvia.

- Rurāne, M. 2005. *Finanšu menedžments*. [The financial management] ,RSEBAA, Riga, Latvia.
- Rutkauskas, A. 2008. On the sustainability of regional competitiveness development considering risk, *Technological and Economic Development of Economy* 14(1): 89–99. http://dx.doi.org/10.3846/2029-0187.2008.14.89-99
- Sala, J. 2006. *Marketing v obschestvennom pitanii*. [Marketing in catering], Moskva.: Finansy' i statistika.
- Shock, P. 2005. *Marketing v restorannom biznese*. [Marketing in the restaurant business], Restorannije vedomosti, Moskva, Russia.
- The Aon Global Risk Consulting 'Risk in 21st Century Supply Chains', [online] [accessed 10 March 2011], Available from Internet: http://insight.aon.com/?ElqPURLPage=4388
- The Aon Global Risk Management Survey 2011. [online] [accessed 11 October 2011], Available from Internet: http://www.aon.com/risk-services/thought-leadership/reports-pubs_2011_grms.jsp
- Urban, W. 2009. Service quality gaps and their role in service enterprises development, *Research Journal Technological and Economic Development of Economy* 15(4): 631–645.
- Unpublished data of Central Statistical Bureau of Latvia 2011 (NACE Rev. 2).
- Voronova, I. 2007. Integration enterprise risk management system creation in production enterprises, International Scientific conference "Research of Technogenic Environment Protection." Riga, 30 Mach 2007. Riga, RTU 72-82.
- Voronova, I. 2008. Methods of analysis and estimation of risks at the enterprises of non-financial sphere of Latvia, *Journal of Business Economics and Management. Transition Processes in Central and Eastern Europe* 9(4): 319–326.
- Volkov, J. 2009. *Gostinicnij I turisticeskij biznes*. [The hotel and the tourist business], Feniks. Rostov na Donu, Russia.
- Zimecs, A.; Ketners, K. 2009. Significance of the Risk Management in Activity of the Small and Medium Enterprises, *Scientific Journal of RTU 3. Series: Economics and Business*19: 137–147.
- Zimecs, A.; Ketners, K. 2010. Entrepreneurial Decision Substantiation Methodology and It Impact on Risk Management, *Scientific Journal of RTU. 3. series.*, *Economics and Business* 20: 157–163.