



RETAIL SUPPLY CHAINS AND EFFICIENCY OF RETAIL TRADE

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ABSTRACT. Background: Since in today's supply chains in particular areas (for example in the grocery sector) most power is in the hands of retail chains on which manufacturers depend, this paper analyzes the retail supply chains. The aim of this paper is to propose a new indicator of retail trade efficiency for an individual national economy. This indicator would then be used to complement the usual analyses. As large marketing systems, retail supply chains present new competition for production companies in particular states, because they can get around them or replace them with other production companies.

Methods: Concepts relating to retail supply chains are analyzed on the basis of accessible literature, and available data sources are used as the basis for a table presentation of 10 world's largest retail chains in the grocery sector, with basic remarks about their logistics and about the development of their supply chains (basic models are described). Efficiency of the total retail trade in the selected countries is analyzed on the basis of the following indicators (a) turnover per unit of selling surface; (b) turnover per 1 employee in the retail trade. These indicators are presented in tables and graphically for the selected European countries.

Results: The performed analysis leads to the conclusion that retail trade efficiency, as measured by the realized turnover per 1 employee in the retail trade and by the realized turnover per unit of selling surface in the retail trade, is realized diversely in individual observed countries; yet there are no differences in the results between transitional and market-developed countries. However, the analysis of retail trade efficiency of entire economies of the observed states shows that there are differences between transitional and market-developed countries.

Conclusions: Thus, in order to evaluate the retail trade efficiency for the total economy in a particular country it would be necessary to also take into account the ratio between the realized gross domestic product (the GDP) and the retail turnover in the given country. This proposal is important because it would enrich the information basis for the analysis of retail trade efficiency. In that respect, further research should be focused on the analysis of this broader understanding of retail trade efficiency that is important especially for economically less developed countries (in this case the countries in transition).

Key words: retail trade, retail chain, retail supply chain, retail trade efficiency.

INTRODUCTION

Based on available literature, this paper starts from the analysis of the following relevant concepts: distributive trade, retail trade, retail chain, supply chain, retail supply chain, and foreign trade; there are also some remarks about the indicators chosen for the analysis of retail trade efficiency in a particular country.

After that, tables presenting the 10 largest retail chains in the grocery sector around the world are used to emphasize the importance of international retail chains, upon which their logistics and development of their supply chains are analyzed (basic models are described).

Then, based on the selected indicators, the efficiency of retail trade in selected European countries is analyzed. The analysis

includes the following market-developed countries: Austria, Finland, Germany, Italy and the Netherlands. Of the countries in transition, the analysis included: Croatia, Hungary, Slovakia, the Czech Republic and Poland.

On the basis of the performed analysis, it has been observed that the evaluation of retail trade efficiency requires the taking into account not only of the efficiency of the retail level, but also of the efficiency of the retail supply chains for a particular national economy.

RETAIL TRADE AND ITS EFFICIENCY

Retail trade is an integral part of distributive trade defined as follows [SLJH 2012]:

"Distributive trade is a set of all forms of commercial activities, from the procurement of goods from the manufacturer to the delivery of these goods to final consumers. It includes the wholesale trade for its own account, agency in the wholesale trade, retail trade, and servicing and repairing of motor vehicles and motorcycles."

"Retail trade (section 47, class 45.32 and a part of groups 45.1 and 45.4 of the NKD 2007. (New Classification of Economic Activities harmonized with the NACE of the EU)) is the sale of goods to final consumers, i.e. to the population, for personal usage or for usage in the household."

In this paper, retail sale will be considered as the sale of goods and services relating to the sale of goods to the final consumer, regardless of by whom it is performed (by a business entity for which retail trade is its basic activity, or by some other business entity).

Therefore, in the wholesale trade, buyers are those receivers that use the purchased goods for further economic activities, whereas the retail trade serves the final consumer or the final user as a buyer [Lerchenmüller, 2003].

The object of our consideration is the retail company (or a retail group) that can also deal in wholesale trade. Retail chain is a company that is doing business with many retail units of the same owner and usually has a centralized decision making in terms of defining and implementing of its strategy. Some retail chains are divisions of larger corporations or holding companies [Levy and Weitz, 2007].

Retail trade is the integral part of the so-called value creation chain. That is, every product or service has its own value creation chain. In respect to the assortment with which it is in business, the retail company is an integrator of different value creation chains.

In that sense, value creation is the result of a target oriented chain of activities within and outside of the company that - depending on the point of view - is denoted as: business process, process of creation of value, or as the logistic chain, procurement chain, or supply chain [Berning, 2002], and also as "logistic network" [Mandel, 2011].

Value creation chain is especially important for the understanding of the vertical partnerships of manufacturers and trade, i.e. of the vertical system of marketing.

In today's supply chains, for example in the grocery sector, the greatest power belongs to retail chains, and manufacturers depend on them [Dujak, 2012]. When a large retailer (a retail chain) dominates in the supply chain, it is possible to use the expression "retail supply chain". However, in some areas, supply chains are dominated by manufacturers.

Vertical marketing systems are also particularly important from the standpoint of foreign trade, because the entry of large retail chains into a country immediately opens the possibilities and needs for the development of entire supply chains, regardless of which manufacturers of goods and providers of services will become members of such channels.

In present-day conditions, processes of internationalizations and globalizations of business are developing. It is therefore important to understand foreign trade as

an "economic" activity that comprises the exchange of goods and services with countries abroad, in other words as an activity that includes the complete exchange of material and non-material goods between countries" [Andrijanić, 2005].

Concentration processes in the economy develop especially through the expansion of individual companies/groups into countries other than the country of origin. Actually, internationalization of businesses operations (both of the retailer and of the manufacturer) is, along with industrial consolidation, the most important, key initiator of changes in the retail supply chain.

Anyway, the spreading of international retail chains from developed into less-developed countries creates dangerous competition that may push domiciliary manufacturers and retailers off the market, because of their inability to adjust to the new competition in a short period of time.

In that sense, especially for countries in transition, it is possible to observe problems in their economic development, because the large international retail supply chains that end in their geographical areas do not contribute sufficiently to the economic development of these countries.

There are two indicators that have been used for a long time in the efficiency analysis of the retail trade in a particular country [Lerchenmüller, 1992; Retailing in the EEA, 1996]: (a) retail turnover per 1 employee in the retail trade, and (b) retail turnover per unit of selling surface. However, for the evaluation of total efficiency and importance of retail trade in a country it would be necessary to take into consideration all activities coordinated by retail supply chains, and these activities yield different effects in different countries. It is therefore important to consider another indicator: the ratio between the realized gross domestic product (GDP) in a given country and the realized retail turnover in that country.

These analyses are of special importance for us because of the investment into the development of infrastructure in particular countries, which supports the building up and

development of retail trade and of retail capacities. Although this enables the development of retail supply chains (that cross the borders of individual countries), such development need not contribute to the economic development of a particular country.

INDICATORS OF IMPORTANCE OF INTERNATIONAL RETAIL CHAINS AND BASIC REMARKS ABOUT THEIR LOGISTICS

It has already been emphasized in many research works that retail supply chains are important because of their size, because of the possibility for further expansion, and because of the introduction of new technologies. The advantages of international retail chains lie in the fact that they have concentrated their functions, so that they are much larger than the retail chains in the countries in which they operate, and they operate in a number of countries (both in and outside of Europe). So, for example, Carrefour does business in 36 countries, Metro Group in 33 countries, Tesco in 13 countries, Schwarz-Gruppe in 25 countries, Rewe Group in 13 countries, Auchan in 14 countries, and Leclerc in 6 countries [2010. The 250 Global Retailers, 2011].

More recent data for the 10 world's largest retail chains in the grocery sector are shown in Table 1. However, from the standpoint of format, i.e. the type of retail operating units, the importance lies on the retail brands of these types. The top 10 in the trade (most of them in the retail trade) in the grocery sector in the world in 2013 are presented in Table 2. Striking is the position of Amazon as the global multi-channel retailer. Although Amazon is now opening a store, it differs from those retailers that have first had only stores [Morschett, 2013].

The greatest discounters in the world in 2012 are presented in Table 3. Discount shop is a specially interesting format, regarding the connection with the manufacturers and the shares of retail brands. Therefore, discounters are becoming dominant in supply chains they manage, and they expand internationally.

Table 1. Top 10 retail chains in the extended grocery sector in the world in 2012
 Tabela 1. Top 10 sieci detalicznych w handlu spożywczym na świecie w 2012

No.	Company - Group	Country	Number of retail units	Total turnover in Bill. US\$
1.	Walmart	USA	10.257	288,3
2.	Carrefour	France	10.316	99,2
3.	Tesco	United Kingdom	6.981	87,2
4.	Kroger	USA	3.226	80,9
5.	Scwarz-Gruppe	Germany	11.270	80,3
6.	Aldi (Aldi Nord + Aldi Süd)	Germany	10.030	72,3
7.	Walgreens	USA	7.930	68,1
8.	Aeon	Japan	8.392	66,9
9.	Seven & I.	Japan	27.662	64,3
10.	Costco	USA	608	60,1

Source: Planet Retail - February 2013, according to: Lebensmittel Zeitung

Table 2. Top 10 retail brands in the world in 2013
 Tabela 2. Top 10 sieci detalicznych w 2013

Rank	Retail brand	Value of the retail brand in Bill. US\$
1.	Amazon	45,7
2.	Walmart	36,2
3.	The Home Depot	18,5
4.	Ebay	17,7
5.	Tesco	16,3
6.	Ikea	12,0
7.	Target	11,9
8.	Woolworts	11,0
9.	Aldi	8,9
10.	Lowe's	7,6

Source: Millward Brown "BrandZ", according to: Lebensmittel Zeitung

Table 3. Top 10 discounters in the world in 2012
 Tabela 3. Top 10 discountów na świecie w 2012

No	Discount retail brand	Company - Group	Country	Turnover in 2011 in Mill. €	Number of discount sale units in 2011	Selling surface in 000 m ²
1.	Aldi	Aldi Gruppe	Germany	52.771	9.483	7.622
2.	Lidl	Schwarz Gruppe	Germany	50.377	9.967	8.571
3.	Neto Marken - Discount	Edeka Gruppe	Germany	13.490	4.735	3.361
4.	Penny	Rewe Group	Germany	11.789	3.701	2.569
5.	Dollar General	Dollar General Corp.	USA	11.129	10.014	6.759
6.	Dia	Dia S.A.*	Spain	11.032	6.727	2.743
7.	Rema 1000	Reitan Gruppen	Norway	6.648	712	690
8.	Family Dollar	Family Dollar Stores, Inc.	USA	6.463	7.023	4.568
9.	Biedronka	JMR Jerónimo Martins Retails	Portugal	6.241	1.873	1.113
10.	Netto	Dansk Supermarked A/S	Denmark	5.426	1.160	691

* After separation from Carrefour in July 2011 as an independent company

Source: Planet Retail/LZnet - April 2012, according to: Lebensmittel Zeitung

LOGISTICS OF RETAIL CHAINS AND DEVELOPMENT OF SUPPLY CHAINS

It has already been ascertained that the retail operating unit must be observed as a point in the logistic system that is connected with previous points (wholesale trade units and manufacturers), as well as with consumers and other points that support the performing of distribution tasks (Segetlija, 1995). It has also been ascertained that the development of technical and technological possibilities is accompanied by changes in the importance of particular components of the working process, i.e. of marketing instruments, and that greater demands are especially put on logistic effects.

In fact, there is almost no function in a company that is not influenced by logistics as a cross-sectional function [Pentzinna, 2007].

The analysis of retail chains leads to conclusions about their different market effects, that is about marketing programs that condition different business models. The fact is, namely, that individual characteristics of the format of a retail operating unit also differ depending on the personality of the company. These characteristics then represent the characteristics of "the type of retail operating unit" and they amalgamate in the concept of the "business model". This individual expression then diversely determines the flows of goods and information from buyers to external partners, which are then finalized in their points of contact. These flows determine the flexibility of business models as well as the development of the structure of turnover and the structure of costs [Merkel and Heymanns, 2003].

In observing logistic solutions in supply chains managed by large retail chains, there are some interesting business models that have been examined by Th. Rudolph; these models are: global discounter (e.g. Aldi), retailer of pleasure, of contents (e.g. Tesco) and channel retailer (e.g. Walmart) [Rudolph, 2009].

Hofer [2009] has investigated the management of retail chains in the grocery sector on the examples of: (a) "slender" discounter (with an insignificant integration of

logistic processes); (b) channel retailer (consumer markets, German: Verbraucher-märkte) with high integration of logistic processes; (c) the retailer of pleasure, contents (supermarkets) with high integration of logistic processes.

According to this author [Hofer, 2009], "slender" discounters follow the strategy of exploitation of leadership in costs and therefore they show strongly simplified and standardized structures with shallow and narrow assortment and only an insignificant level of services. They aim at achieving advantages in efficiency and costs through a high level of standardization and simplification of logistic processes. An important partial aspect of standardization is the offer of fast-selling articles with minimal logistic costs. The responsibility for supplies has been decentralized (on shops). Based on the high turnover frequency, on more favourable costs and on the realization of turnover with the assortment of their own brands, and also thanks to the integration backwards (through contractual partnership with manufacturers) these "slender" discounters are trying to achieve their competitive advantage.

Retailers of pleasure contents especially focus on the component of services and they follow the benefits strategies of product leaders. They enter into intensive strategic partnerships with manufacturers in such a way that they keep the control over disposal and delivery processes. Presentation of goods is buyers-oriented; it emphasizes the offered assortment of goods and services. As opposed to "slender" discounters, delivery is flexible and requires automated disposal procedures and integrated supplies management systems, where the importance lies in the exchange of information between the shop, central warehouses (logistic-distributive centres) and management.

Channel retailers have a comprehensive assortment of goods; they use the strategy of price variations in the form of price reductions, special offers and rebate actions. Since the large number of offered articles results, averagely, in a low coefficient of stock turnover, large surface shops are introduced as the most frequent format. For disposals of

comprehensive assortment which is oriented towards the demand, and which is determined according to the fluctuation of sale, various models of cooperation with manufacturers have developed. Areas of cooperation include: common disposition and management of supplies, action sales, joint decisions about the positioning of particular products within the shops and on the shelves, etc. Standardized data formats and order initiation processes are used for the management of information exchange between the participants.

DEVELOPMENT OF RETAIL TRADE EFFICIENCY

Retail trade is traditionally "local" business, so that all until recently it has been possible to say that hardly any of the two compared countries have the same retail structure [Einzelhandel in Deutschland, 2000]. However, retail chains expand on international and on the global plan through concentration and internationalization processes, resulting in dramatic changes [Wortmann, 2003]. In this way, retail structures of particular countries are becoming more similar.

In analyzing the efficiency of retail trade in a particular national economy, it must be taken into account that retail trade can be an integral part of the value creation chains in which the participants are both domestic and foreign manufacturers and retailers of products - of goods and also of various services [Segetlija, 2010a].

For the created international or global supply chains, an important role is played by trade-marks and other forms of cooperation with production companies. Especially important are the processes of development of the globalization of procurement in retail trade. In the grocery sector, global food concerns and retail chains have become the integrators of international value chains [Stamm, 2004].

Through the development of their supply chains international retail companies are changing the relations with their suppliers in the sense of a redefinition of logistic tasks. The relations with suppliers are developing in the range from confronting interaction to close

and comprehensive cooperation [Magnus, 2007].

Everything that has been said so far leads to the conclusion that the retail trade expansion processes and the processes of foreign retail chains entering particular countries have resulted in the formation of new, more efficient distribution systems, i.e. new retail supply chains.

This has prevailed over diffusion and inefficiency - characteristics of distribution systems that have, all until recently, dominated in all developing countries (and even in China and India) [Kotler et al., 2003; Kotler and Keller, 2006].

However, in some countries, especially in the so-called countries in transition, there are problems in the development of their economies, because international retail supply chains, as we have already emphasized, present new competition. Therefore, the efficiency of retail trade in the sense of utilization of capacities and of labour force may be satisfactory in particular countries, but there still remains the question of efficiency of retail trade for the entire economy of the given country.

This problem has already been identified based on the understanding of the retail trade as a "mature" sector which - in the developed world - cannot increase the total number of employed either absolutely or relatively [Segetlija, 2010b], but which is becoming the integrator of supply chains.

In this connection, we have already emphasized that new conceptions have become necessary for the explanation of changes and of the development of formats of retail operating units, concerning the value creation chain, i.e. value networks [Segetlija, 2012c]. In that sense it would be worth mentioning that there is a need for analysis that would focus especially on the tendencies of growth in the services provided by others in the value chain of the retail company, on the increase in the number of channels and on the connection with manufacturers and with consumers.

SELECTED INDICATORS OF RETAIL TRADE EFFICIENCY

Graph 1 shows the work productivity in the retail trade of the observed European countries in 2008. Regarding different

structures of turnover and of retail operating units, retail turnover per 1 employee is different in different countries. However, the Czech Republic and Slovakia, as countries in transition, do not lag behind the market-developed European countries.



Source:

- Share of motor, wholesale and retail trades in total distributive trades in terms of turnover, Retail trade, except for motor vehicles and motorcycles; repair of objects for personal use and household, Eurostat - Statistics Database
- Share of motor, wholesale and retail trades in total distributive trades in terms of employment, Retail trade, except for motor vehicles and motorcycles; repair of objects for personal use and household, Eurostat - Statistics Database
- Gross domestic product as market prices, Purchasing Power Standard per Inhabitant Eurostat - Statistics Database
- GDP per capita - Annual Data, Eurostat, Statistics Database
- SLJH 2010, p. 396

Note: * Retail turnover for the group 47 - Retail trade, except for motor vehicles and motorcycles; repair of objects for personal use and household (under consideration of the PPS - standard (same as for the GDP). Calculation for the Republic of Croatia has been based on the exchange rate of 1 EUR = 7.30 HRK.

Fig. 1. Retail turnover per 1 employee in selected European countries in 2008

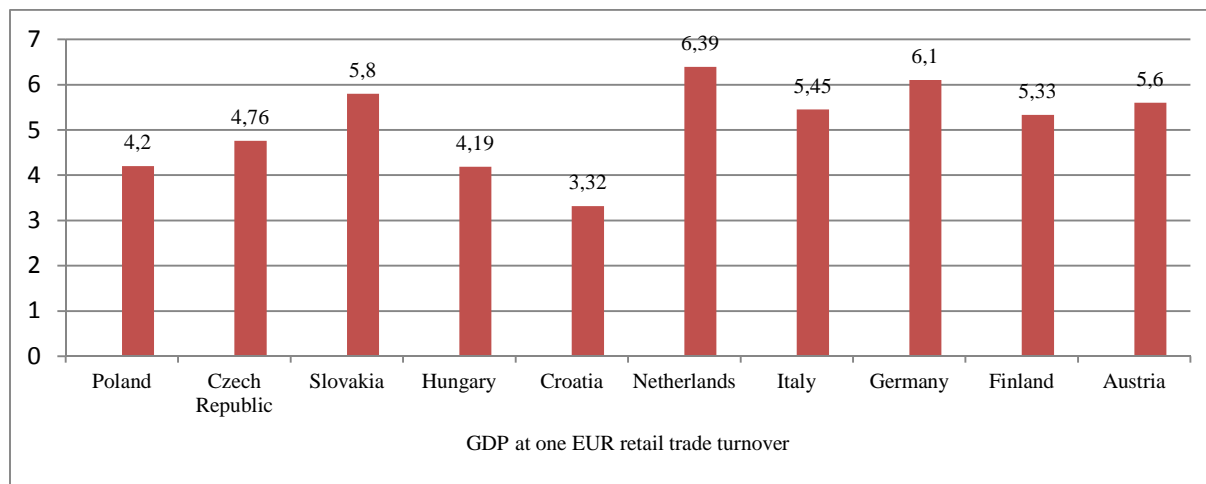
Rys. 1. Wielkość obrotu na 1 pracownika w wybranych krajach europejskich w 2008



Source: a) Key European Retail Data 2010 Review and 2011 Forecast, Directions Magazine, Articles, June, 30th 2011
 b) Gross domestic product as market prices, Purchasing Power Standard per Inhabitant Eurostat - Statistics Database
 c) GDP per capita - Annual Data, Eurostat, Statistics Database
 d) Population at 1 January, Most popular database tables, Eurostat

Fig. 2. Retail turnover per 1 m² of selling surfaces in selected European countries in 2010

Rys. 2. Wielkość obrotu na 1 m² powierzchni sprzedażnej w wybranych krajach europejskich w 2010



Source:

- Eurostat Yearbook 2010, Europe in figures, pp. 98, 99
- Share of motor, wholesale and retail trades in total distributive trades in terms of turnover, Retail trade, except for motor vehicles and motorcycles; repair of objects for personal use and household, Eurostat - Statistics Database

Fig. 3. GDP per unit of realized retail turnover in selected European countries in 2008

Rys. 3. PNB na jednostkę zrealizowanego obrotu detalicznego w wybranych krajach europejskich w 2008

Graph 2 presents the productivity of the selling surface, i.e. the turnover realized in the retail trade per 1 m² of selling surface in selected European countries.

Graph 2 shows that the productivity of selling surface in the retail trade is the highest in Finland, Poland, Croatia and the Czech Republic, whereas in more market-developed countries the selling surface productivity is lower. The presented indicators are the result of different retail structures and models. However, all countries show the tendency of decline in the productivity of selling surfaces and of reduction of their utilization, because the retail surfaces are growing faster than the retail turnover.

Graph 3 presents the realized gross domestic product (GDP) per unit of retail turnover in 2008 in observed European countries.

Graph 3 shows that the observed transition countries realize a considerably smaller GDP per unit of retail turnover than the market-developed countries, which means that in these countries the total efficiency of retail trade is considerably smaller. Namely, retail companies from these countries expand considerably less on the international plan, and

their production companies are insufficiently included in international retail chains.

CONCLUSIONS

The development of internationalization and of the globalization of business operations calls for new analyses of economic activities in particular countries. This is especially obvious in the analysis of the efficiency of retail trade in an individual country because the retail supply chains are developing internationally. The analysis of retail trade efficiency should therefore also take into the consideration its connection with the level of total economic development in a particular country.

On the basis of accessible data about the efficiency of retail trade in observed European countries, we can conclude that the retail trade in transition countries is less efficient because it realizes a smaller GDP per unit of retail turnover.

REFERENCES

- Andrijanić I., 2005. Poslovanje u vanjskoj trgovini [Business Operations in the Foreign Trade], Mikrorad, Zagreb.

- Berning, R., 2002, Prozessmanagement und Logistik [Process Management and Logistics], Cornelsen Verlag, Berlin.
- Dujak, D., 2012, Uloga maloprodaje u upravljanju opskrbnim lancem, Doktorska disertacija, [The Role of Retail Trade in the Supply Chain Management, Doctor's dissertation], Josip Juraj Strossmayer University in Osijek, Faculty of Economics and Business in Osijek, Osijek.
- Xxx 2000, Einzelhandel in Deutschland 2000, Immobilienmarkt R&D-Marktbericht 6 [Retail Trade in Germany 2000, Real Estate Market R&D Market Report], 1-19. Available in the Internet at: <http://www.bnkgesellschaft.de/70immo/10_marktinfo/Marktbericht6.pdf>, (accessed on 8 January 2003).
- Eurostat Yearbook 2010, Europe in figures. Available in the Internet at: <http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-10-220/EN/KS-CD-10-220-EN.PDF>, (accessed on 28 June 2012).
- GDP per capita - Annual Data, Eurostat, Statistics Database. Available in the Internet at: <http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama_aux_gph&lang=en>, (accessed on 23 March 2012).
- Gross domestic product as market prices, Purchasing Power Standard per Inhabitant Eurostat - Statistics Database . Available in the Internet at: <<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tec00001&plugin=1>>, (accessed on 19 March, 2012).
- Hofer, F.G., 2009, Management der Filiallogistik im Lebensmitteleinzelhandel, Dissertation, [Management of Branch Office Logistics in Groceries, Dissertation], Universität ST. Gallen, Hochschule für Wirtschafts-, Rechts- und Sozialwissenschaften (HSG), Gabler Verlag, Wiesbaden. Available in the Internet at: <[http://verdi.unisg.ch/www/edis.nsf/SysLkpByIdentifier/3547/\\$FILE/dis3547.pdfA](http://verdi.unisg.ch/www/edis.nsf/SysLkpByIdentifier/3547/$FILE/dis3547.pdfA)>, (accessed on 21 June 2013).
- Xxx , 2011, Key European Retail Data 2010 Review and 2011 Forecast, Directions Magazine, Articles, June, 30th 2011. Available from Internet: <<http://www.directionsmag.com/articles/key-european-retail-data-2010-review-and-2011-forecast/186736>>, (accessed 30 July 2011).
- Kotler, Ph., Wong, Veronica, Saunders, J. and Armstrong, G., 2005, Principles of Marketing. Adapted as Fourth European Edition, Pearson Education Limited, 2005, Translation, Mate, Zagreb, 2006.
- Kotler, Ph., and K.L. Keller, 2006, Marketing Management, Pearson Education Inc., Translation, Mate, Zagreb, 2008.
- Lerchenmüller, M., 1992, Handelsbetriebslehre (Trading Company Management), Friedrich Kiehl Verlag GmbH, Ludwigshafen, Rhein.
- Lerchenmüller, Metre., 2003, Handelsbetriebslehre (Trading Company Management), Friedrich Kiehl Verlag GmbH, Ludwigshafen, Rhein.
- Lebensmittel Zeitung (Groceries Magazine). Available in the Internet at: <http://www.lebensmittelzeitung.net/business/daten-fakten/rankings/Top-20-Lebensmittelhandel-Welt-2013_363.html#rankingTable> (accessed on 28 June 2013)
- Lebensmittel Zeitung (Groceries Magazine). Available in the Internet at: <http://www.lebensmittelzeitung.net/business/daten-fakten/rankings/Top-20-Haendlermarken-Welt-2013_396.html#rankingTable>, (accessed on 28 June 2013)
- Lebensmittel Zeitung (Groceries Magazine), Available in the Internet at: <http://www.lebensmittelzeitung.net/business/daten-fakten/rankings/Top-10-Discounter-Welt-2012_279.html#rankingTable>, (accessed on 8 June 2013)
- Levy, M. and B. Weitz, 2007, Retailing Management, McGraw-Hill, Cos Inch.
- Magnus, K. H., 2007, Erfolgreiche Supply Chain Kooperation zwischen Einzelhandel und Konsumgüterherstellern (Successful Supply Chain Cooperation between Retailers and Producers of Consumable Goods), Deutscher Universitäts-Verlag, GWV Fachverlage GmbH, Wiesbaden
- Mandel, J., 2011, Modell zur Gestaltung von Build-to-Order-Produktionsnetzwerken, Dissertation (A Model for the Creation of Build-to-Order Production Networks,

- Dissertation), Fakultät für Konstruktion-, Produktions- und Fahrzeugtechnik der Universität Stuttgart, Institut für Industrielle Fertigung und Fabrikbetrieb der Universität Stuttgart. Available in the Internet at: http://elib.uni-stuttgart.de/opus/volltexte/2012/7647/pdf/Mandel_Diss.pdf, (accessed on 8 June 2013).
- Merkel, H. and J. Heymans, 2003, Geschäftsmodelle im stationären Einzelhandel. (Business Model sin Stationary Retailing) Available in the Internet at: http://www.imC~ag.com/_artikel/Festschrift-03-02.pdf, (accessed on 10 April 2005).
- Morschett, D.: Cross-Channel-Retailing Die Zukunft des Handels, (The Future of Trade) T-Systems Multimedia Solutions, GmbH. Available in the Internet at: <http://www.t-systems-mms.com>, (accessed on 3 June, 2013).
- Petzinna, T., 2007, Chancen und Grenzen der Supply Chain Collaboration in der Konsumgüterdistribution, Dissertation, (Chances and Limitations of Supply Chain Collaboration in Consumable Goods Distribution, Dissertation), Wirtschafts- und Sozialwissenschaftlichen Fakultät der Universität zu Köln. Available in the Internet at: <http://kups.uni-koeln.de/2218/>, (accessed on 21 June 2013).
- Population at 1 January, Most popular database tables, Eurostat. Available in the Internet at: <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tps00001&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>, (accessed 20 March, 2012).
- Xxx 1997, Retailing in the European Economic Area 1996, Eurostat, European Communities.
- Rudolph, Th., 2009, Modernes Handelsmanagement, (Modern Trade Management), Schäffer Poeschel Verlag, Stuttgart.
- Segetlija, Z.: Logistički aspekti oblikovanja maloprodajnih poduzeća (Logistic Aspects of the Formatting of Retail Companies), Report at the Conference MAGROS´ 95, Zagreb, 3rd and 4th October 1995.
- Segetlija, Z., 2010a, Nove tehnologije i razvoj maloprodajnih oblika (New Technologies and the Development of Retail Formats), in Proceedings: Segetlija, Z., Karić, M., (ed.), Poslovna logistika u suvremenom menadžmentu, 10. međunarodni znanstveni skup 2010 (Business Logistics in the Contemporary Management, 10th International Scientific Conference 2010), Faculty of Economics and Business in Osijek, Osijek, 125-145.
- Segetlija, Z., 2010b, Maloprodaja u Republici Hrvatskoj i u nekim europskim zemljama, (Retail Trade in the Republic Of Croatia and in Some European Countries) in: Renko Sanda; Blaženka, Knežević, Vouk, R.: (ed.): Izazovi trgovine u recesiji, (Challenges of Trade in Recession), University in Zagreb, Faculty of Economics and Business, Zagreb, 35-50.
- Segetlija, Z., 2010c, e-Maloprodaja kao sastavnica vrijednosnoga lanca (E-Retail Trade as Integral Part of the Value Chain), *Suvremena trgovina*, 35, 3/2010, 20-24.
- Xxx, 2012, Share of motor, wholesale and retail trades in total distributive trades in terms of turnover, Retail trade, except of motor vehicles and motorcycles; repair of objects for personal and household use, Eurostat - Statistics Database. Available in the Internet at: <http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tin00009&language=en> (accessed on 20 March, 2012)
- Stamm, A., 2004, 'Wertschöpfungsketten entwicklungspolitisch gestalten, (The Forming of Value Creation Chains according to Development Policy) Eschborn: Deutsche Gesellschaft für technische Zusammenarbeit (GTZ) GmbH. Available in the Internet at: <http://www.gtz.de/themen> (accessed on 10 July 2005).
- Xxx 2010, Statistički ljetopis Republike Hrvatske 2010, (SLJH 2010), (Statistical Annual of the Republic of Croatia) Državni zavod za statistiku Republike Hrvatske, Zagreb. Available in the Internet at: <http://www.dzs.hr>, (accessed on 20 March, 2012).
- Xxx 2012, Statistički ljetopis Republike Hrvatske 2012, (SLJH 2012), (Statistical

Annual of the Republic of Croatia) Državni zavod za statistiku Republike Hrvatske, Zagreb. Available in the Internet at: <<http://www.dzs.hr>>, (accessed on 8 June 2013).

Xxx 2011, 2010 The 250 Global Retailers, Stores Magazine, January 2011. Available in the Internet at: <<http://www.stores.org/2010/Top-250-List>> (accessed 17 July 2011).

Wortmann, M., 2003, Strukturwandel und Globalisierung des deutschen Einzelhandels, (Structural Changes and Globalization of German Retail Trade) WZB - Discussionpapier. Available in the Internet at: <<http://www.skylla.wz-berlin.de/pdf/2003/iii03-202a.pdg>> (accessed on 1 April 2004).

DETALICZNE ŁAŃCUCHY DOSTAW ORAZ EFEKTYWNOŚĆ HADLU DETALICZNEGO

STRESZCZENIE. Wstęp: W obecnych czasach najistotniejszą częścią łańcuchów dostaw (szczególnie w niektórych branżach, np. spożywczej) jest jego część detaliczna. Dlatego w prezentowanej pracy, uwaga skupiona została na analizie łańcuchów dostaw detalicznych. Celem pracy jest zaproponowanie nowego wskaźnika efektywności handlu detalicznego w odniesieniu do krajowej ekonomii. Wskaźnik ten mógłby być wykorzystywany uzupełniająco do stosowanych analiz. Duże systemy marketingowe oraz łańcuchy dostaw detalicznych stanowią wyzwania dla producentów, posiadając istotną przewagę rynkową w dowolności wyboru dostawców produktów.

Metody: Poddano analizie koncepcje dotyczące detalicznych łańcuchów dostaw na podstawie dostępnej literatury. Dostępne dane źródłowe dotyczące 10 największych sieci detalicznych w sektorze spożywczym zostały zaprezentowane w formie tabelarycznej wraz z podaniem komentarzy dotyczących ich logistyki i rozwoju łańcucha dostaw. Przeanalizowano efektywność handlu detalicznego w wybranych krajach przy zastosowaniu następujących wskaźników: obrót na jednostkę powierzchni sprzedażnej oraz obrót na jednego pracownika w handlu detalicznym. Wskaźniki te zostały zaprezentowane w formie tabelarycznej oraz graficznej dla wybranych krajów europejskich.

Wyniki: Przeprowadzona analiza pozwoliła na wnioski, że efektywność handlu detalicznego, mierzona jako zrealizowany obrót na 1 zatrudnionego oraz na jednostkę powierzchni sprzedażnej, jest różna w poszczególnych analizowanych krajach. Nie jednak zauważono różnic pomiędzy krajami rozwijającymi się a krajami wysokorozwiniętymi. Niemniej, analiza efektywności handlu detalicznego w całości gospodarki analizowanych krajów wykazała różnice pomiędzy krajami rozwijającymi się a krajami wysokorozwiniętymi.

Wnioski: W celu oceny efektywności handlu detalicznego całej gospodarki w poszczególnym kraju, byłoby niezbędnym uwzględnienie również stosunku osiągniętego produktu krajowego brutto (GDP) oraz obrotu detalicznego w danym kraju. Propozycja taka jest istotna, ponieważ umożliwia wzbogacenie informacji wykorzystywanych do analizy efektywności handlu detalicznego. Dalsze badania należałoby kontynuować w kierunku analizy takiego szerszego rozumienia efektywności handlu detalicznego, co jest szczególnie istotne dla krajów słabiej rozwiniętych (krajów w okresie transformacji).

Słowa kluczowe: handel detaliczny, łańcuch detaliczny, łańcuch dostaw, efektywność handlu detalicznego.

EINZELHANDEL-LIEFERKETTEN UND DIE EFFEKTIVITÄT DES EINZELHANDELS

ZUSAMMENFASSUNG. Einleitung: Heutzutage macht den meist wesentlichen Teil innerhalb von Lieferketten (insbesondere in manchen Branchen, z.B. in der Lebensmittel-Branche) deren Einzelhandel-Teil aus. Daher wurde in der Arbeit die Aufmerksamkeit auf die Analyse von Lieferketten im Einzelhandel fokussiert. Das Ziel der vorliegenden Ausarbeitung ist es, eine neue Kennziffer für die Effektivität des Einzelhandels für den Bedarf der Landeswirtschaft zu ermitteln und vorzuschlagen. Die Kennziffer könnte ergänzungsweise zu den angewendeten Analysen in Anspruch genommen werden. Große Marketing-Systeme und die Lieferketten im Einzelhandel stellen für die Produzenten riesenhafte Herausforderungen dar, indem sie eine wesentlich größere Wettbewerbsfähigkeit bei der freien Auswahl von Produkt-Lieferanten besitzen.

Methoden: Auf Grund der bestehenden Gegenstandliteratur hat man die die Lieferketten im Einzelhandel anbetreffenden Konzepte einer Analyse unterzogen. Die bestehenden, die 10 größten Einzelhandelsnetze vom Lebensmittel-Sektor anbetreffenden Bezugsquellen wurden tabellarisch mit Angabe von Kommentaren in Bezug auf ihre Logistik und die Entwicklung von Lieferketten projiziert. Es wurde dabei die Effektivität des Einzelhandels in ausgewählten Ländern unter Anwendung der folgenden Kennziffern analysiert: der Kennziffer des Umsatzes gemessen auf die Einheit der Verkaufsfläche und der Kennziffer des Umsatzes gemessen auf einen Mitarbeiter im Einzelhandel. Die Kennziffern wurden tabellarisch in Form von Graphiken für ausgewählte europäische Länder präsentiert.

Ergebnisse: Die durchgeführte Analyse ließ schlussfolgern, dass die Effektivität des Einzelhandels, gemessen als der erzielte Umsatz auf einen Mitarbeiter und auf die Einheit der Verkaufsfläche, in den einzelnen betrachteten Ländern unterschiedlich bemessen ist. Man stellte jedoch keine Unterschiede zwischen den Entwicklungs- und den hochentwickelten Ländern fest.

Fazit: Zwecks der Beurteilung der Effektivität des Einzelhandels in der ganzen Wirtschaft innerhalb der einzelnen Länder wäre es unentbehrlich, das Verhältnis des erzielten Bruttolandesproduktes (BLP) und des Einzelhandel-Umsatzes im jeweiligen Lande zu berücksichtigen. Solch ein Vorschlag ist sehr brauchbar, denn er ermöglicht die Ergänzung der für die Analyse der Effektivität des Einzelhandels in Anspruch genommenen Informationen. Die betreffenden Forschungen sollten fortgesetzt werden in Richtung einer solchen breiteren Betrachtung der Effektivität des Einzelhandels, was für die schwächer entwickelten Länder (die in einer Transformation begriffenen Länder) als besonders wesentlich zu sein scheint..

Codewörter: Einzelhandel, Einzelhandel-Kette, Einzelhandel-Lieferkette, Effektivität des Einzelhandels.

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