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OD REDAKCJI

Wydawnictwa ekonomiczne w olsztyńskim środowisku naukowym mają ponadtrzydziestoletnią historię. Pierwszy zeszyt naukowy „*Ekonomika*” ukazał się w ówczesnej Akademii Rolniczo-Technicznej w 1974 r. Redaktorem działowym wydawnictwa do 1979 r. był prof. dr hab. Bogusław Imbs, a następnie, aż do 2003 r., funkcję tę pełnił prof. dr hab. Tadeusz Stachowski. Właśnie tych dwóch profesorów było autorami artykułu pt. *Wyznaczanie regresji kosztów w warunkach zmieniającej się produkcji przedsiębiorstw mleczarskich* otwierającego pierwszy numer „*Ekonomiki*”. Czasopismo to ukazywało się z różną częstotliwością (1–2 zeszyty rocznie) do 1986 r. Łącznie ukazało się 17 numerów „*Ekonomiki*”. Tematyka artykułów była związana z ekonomiką rolnictwa i przemysłu spożywczego. Liczne były także artykuły o charakterze metodologicznym, podejmujące problematykę optymalizacji ekonomicznej, głównie autorstwa doc. dr hab. Romana Krefta i jego współpracowników. Od 1980 r. tematykę wzbogacono o zagadnienia oświaty rolniczej oraz socjologii wsi.

Od 1986 r., zaczęły się ukazywać zeszyty pod nazwą „*Acta Academiae Agriculturae ac Technicae Olstenensis Oeconomica*”. W suplementach publikowano prace habilitacyjne. Pierwszy suplement (praca habilitacyjna Tadeusza Sokołowskiego) ukazał się w 1987 r., a ostatni w 1995 r. (praca habilitacyjna Romana Kisiela). Do 1998 r., kiedy ukazał się ostatni numer „*Oeconomica*”, wydano łącznie 17 numerów tego zeszytu oraz 7 suplementów. Zapewne było to dziełem przypadku, ale „*Ekonomika*” i „*Oeconomica*” istniały po 12 lat, z tą samą liczbą numerów – 17.

Od 1999 r. prace o tematyce ekonomicznej zaczęto wydawać w języku angielskim w „*Economic Sciences*”, obejmującym trzy obszary problemowe: *Economics, Management and Marketing, Science of Commodities*. Członkami Komitetu Redakcyjnego czasopisma zostali uznani specjaliści spoza olsztyńskiego środowiska ekonomistów, m.in.: prof. dr hab. Stanisław Urban (AE Wrocław), prof. dr hab. Jerzy Wilkin (Uniwersytet Warszawski) i prof. Zbigniew Bochniarz (Uniwersytet Minnesota). Autorami artykułów publikowanych w „*Economic Sciences*” coraz częściej byli przedstawiciele krajowych i zagranicznych ośrodków naukowych.

W 2004 r. utworzono wydziałowy periodyk „*Zagadnienia Ekonomiczne*”, w którym publikowano artykuły w języku polskim. Jego redaktorem naczelnym

był prof. dr hab. Janusz Heller, a w skład Rady Programowej wchodził: prof. dr hab. Andrzej Czyżewski (AE Poznań), prof. dr hab. Katarzyna Duczowska-Małysz (SGH Warszawa), prof. dr hab. Anna Głębocka-Zielińska (Uniwersytet Gdański), prof. dr hab. Andrzej Kowalski (SGH, IERiGŻ Warszawa), prof. dr hab. Roman Kisiel (UWM Olsztyn), prof. dr hab. Eugeniusz Niedzielski (UWM Olsztyn), prof. dr hab. Marek J. Stankiewicz (UMK Toruń). Tematyka artykułów zamieszczanych w „Zagadnieniach Ekonomicznych” dotyczyła teoretycznych i praktycznych problemów z zakresu ekonomii i zarządzania, a ich autorami byli także wybitni specjaliści z całego kraju. W 2006 r. Rada Wydziału podjęła decyzję o połączeniu czasopism „Economic Sciences” i „Zagadnienia Ekonomiczne”.

„Olsztyn Economic Journal”, wydawany w języku angielskim, jest kontynuacją poprzednich czasopism. Prezentowane w nim artykuły to nie tylko dorobek naukowy pracowników Wydziału Nauk Ekonomicznych UWM w Olsztynie, lecz także przedstawicieli innych, krajowych i zagranicznych ośrodków naukowych. Dążeniem Rady Programowej i Komitetu Redakcyjnego, któremu przewodniczy prof. dr hab. Dymitr Kaliszewicz, jest zapewnienie wysokiego merytorycznego poziomu publikowanych prac oraz regularności wydawania kolejnych numerów. Chcemy trwale uczestniczyć w krajowym i międzynarodowym życiu naukowym.

Filozoficznie można rzec, że nic nie zaczyna się dzisiaj i nic nie kończy się dzisiaj. Ciągłe jesteśmy w drodze. Oddając w ręce czytelników pierwszy numer „Olsztyn Economic Journal”, wyrażam głęboką wdzięczność i uznanie wszystkim, którzy w przeszłości angażowali się w rozwój naukowych, uczelnianych wydawnictw ekonomicznych, a kontynuatorom ich dzieła życzę pomnożenia tego dorobku.

*prof. dr hab. Eugeniusz Niedzielski prof. zw.
dziekan Wydziału Nauk Ekonomicznych*

EFFECTIVENESS'S DETERMINANTS OF QUALITY MANAGEMENT SYSTEM: AN EMPIRICAL STUDY IN SME'S ENTERPRISES EXAMPLE FROM WIELKOPOLSKA PROVINCE

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Key words: quality management system (QMS), effectiveness of QMS, factors of effectiveness, QMS in Small and Medium Enterprises, problems of QMS, suitability of QMS in business activity.

Abstract

Many firms have started to realize the benefits of quality management system (QMS) according to ISO 9001:2000. Also in Poland there are many certified QMS and impact on their increasing account have means from European Union supporting system's implementation in SME's enterprises. Then is a question arising, what are results of quality management system's implementing by using financial support from State. In the context of increasing account of certified QMS and above-mentioned question there were done poll research. In the following article an analysis of poll research' results (done in two stages) is carried out. The first research was done in the first quarter of 2004 year, during the project (of QMS implementing) in the analyzed group and concerned general questions according to system's implementing and running, together with way of evaluation of effectiveness and QMS efficiency. One year later, in the first quarter of 2005 year the research exploring the question of running QMS was made and factors affecting quality management system's effectiveness were analyzed.

DETERMINANTY SKUTECZNOŚCI SYSTEMU ZARZĄDZANIA JAKOŚCIĄ I WYNIKI BADAŃ W MAŁYCH I ŚREDNICH PRZEDSIĘBIORSTWACH NA PRZYKŁADZIE WIELKOPOLSKI

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Słowa kluczowe: system zarządzania jakością (SZJ), skuteczność systemu zarządzania jakością, czynniki wpływające na skuteczność systemu, SZJ w małych i średnich przedsiębiorstwach, problemy związane z wdrożeniem SZJ, przydatność SZJ w działalności gospodarczej.

Abstrakt

Wiele organizacji systemowo zarządza jakością, widząc korzyści związane z wdrożeniem i funkcjonowaniem systemu wg wymagań zawartych w normie ISO 9001:2000. W Polsce, jak na całym świecie, liczba wdrażanych systemów zarządzania jakością się powiększa, dodatkowo przez programy pomocowe ze środków Unii Europejskiej. Powstaje jednakże pytanie, jaka jest „przydatność” systemów zarządzania jakością i ich funkcjonowanie w sytuacji skorzystania z dofinansowania ze strony państwa. W odniesieniu do zagadnienia przeprowadzono badania ankietowe wśród przedsiębiorstw sektora MSP, które skorzystały z dofinansowania na wdrożenie i certyfikowanie systemu zarządzania jakością. Pierwsze badanie zrealizowano w 2004 r. i dotyczyło ogólnych zagadnień związanych z wdrożeniem i efektami systemu zarządzania jakością. Badanie drugie, zrealizowane w 2005 r., dotyczyło funkcjonowania systemu zarządzania jakością i przeanalizowano również czynniki wpływające na skuteczność systemu zarządzania jakością.

Introduction

Generally quality management system according to ISO 9001 is perceived as "world class organization" what was proved, for example in research in the north east England (PRABHU et al. 2000). Often the ISO 9001 norm is shown as the basis of TQM (WIELE VAN DER et al. 2000). It is correlated with numbers of certified quality management system in the World – over 500.000 (updated 31.12.2005). There are above 3.200 certified quality management system consistent with requirements shown in ISO 9001:2000 in Poland (*The ISO Survey...* 2003). However the national base presents even bigger amount of certified quality management systems ISO 9001:2000 – about 5000 companies (*Orgmasz...* 2005, *Hoppenstedt...* 2005). These numbers show huge interest in quality management systems, what relates to benefits of running system in a business. Therefore a multitude of publications concerning the meaning of quality management system in a business is not unjustified, especially as many of them is based on research results (TARI 2002, SANTOS 2002). There are also many articles concerning question of quality management system effectiveness (SHARMA, GADENNE 2001, CORREIA et al. 2001) and efficiency (LIN et al. 2004, MANN, KEHOE 1994), and what is connected with it also materials concerning certification impact on organization running (WIHERS, EBRAHIMPOUR 2001, GOTZAMANI, TSIOTRAS 2002). In Poland there are also many publications in above mentioned scopes, but the area of factors affecting obligatory question of quality management system – its effectiveness, is however not popularized (GRIFFIN 2004). Therefore having mentioned this gap together with author's scientific interest brought profit in the following article. Man should also point at defining general questions in the scope of the following article – effectiveness and efficiency of quality management system. Theoretically there is no problem to separate these to issues, especially with reference to quality management system, because ISO 9000:2000 norm specifies it unambiguously. Effectiveness is determined as extent to which planned activities are

realized and planned results achieved (ISO 9000:2000) and it is an obligatory component in quality management system. However efficiency, defined as relationship between the results achieved and the resources used to, is an optional issue towards quality management system's certification (ISO 9004:2000).

From above mentioned areas and analysis of quality management system's practical aspects came into being research hypotheses concerning relationships between internal factors (residing in given organization) and external factors (occurring in organization's environment) affecting system's effectiveness. Research' base was to define, that probably factors characteristic for given organization (internal) more than factors situated in organization's environment affect effectiveness of quality management system according to ISO 9001:2000.

In order to verify above mentioned, scientific presumption (hypothesis) poll research in chosen group of companies was done. In analyzed group of respondents are 79 legal entities from Wielkopolska province outstanding for the reason of achieved economic results towards other provinces.

9.3% of all businesses operating in Poland are to be found in the Wielkopolska Province. The basis of the Province's economy is the variety of industries, efficient agriculture and well-developed services, particularly in the commercial and financial sectors (Agency for Enterprise Development). This diversified economy undoubtedly contributed towards lessening the effects of the transformation process, and created favorable conditions for a market economy. After 1989, unrestrained societal activity resulted in a fast increase in the number of businesses, which currently amounts to approximately 333 thousand units, thus placing the Province third in the country. In the 500 largest companies in Poland, approximately 40 (8%) are from Wielkopolska.

In further part, after having presented research conception and used research method, follows a description of quality management system in analyzed group of companies together with next details and aspects of system approach. The most of the following points are built according to two parts. The first one is related to research from 2004 year, and the second one presents results achieved during the poll in 2005 year. However man should pay attention to different points of gravity in poll questionnaires from individual years, what will be detailed described in content.

Research methodology

In the first half of year 2004 public opinion poll concerning quality management system among small and medium enterprises (SME's according to 364/2004/WE) functioning in Wielkopolska province were made. As research sample was chosen a group of organizations (only legal entities owing to database made available by Polish Agency for Enterprise Develop-

ment), that used financial support for quality management system implementing and certification. Organizations, that questionnaire were sent to, contracted subsidy for quality management system implementing and achieving a certificate, that confirms conformity between system and requirements included in ISO 9001:2000 norm. Confirmation of use of the method Data Envelopment Analysis (DEA) was literature review in the field of scientific subject matter connected with the following article (CHANG, LO 2005, CASADESUS, KARAPETROVIC 2005).

In Poland in 2003 year 807 agreements were contracted (legal entities). In Wielkopolska province 79 contracts were made and this group of legal entities made research sample in research described in the following study. Legal entities from Wielkopolska province makes 9,79% of all legal entities in Poland, that contracted subsidy for quality management system implementing and certification. Such a group of companies was selected to the research owing to research premise, that companies, that are using the financial support are very committed in the issue of quality improvement. That was a little opposing premise with relation to occurring in the polish literature opinions, that the financial support makes up the main factor of taking actions connected with quality management system's implementation and certification. In the research conception was however assumed, that analyzed organizations are committed in products quality improvement (technical quality) and customer service (work organization quality) and the financial support has to increase the economic result connected with a system's certification.

46 % of all questionnaires in research were returned (36 organizations), but the project was ended (quality management system was implemented and certified) in 16 enterprises and further analysis concerns just these organizations.

Purpose of the first research (2004) was to get information concerning:

- premises of quality management system implementing,
- requirements exclusives within the confines of quality management system,
- difficulties occurring during quality management system implementing,
- benefits from quality management system's running,
- taking action towards evaluation of quality management system's effectiveness and efficiency.

Purpose of the second research (2005) was to get information concerning:

- usefulness of quality management system in a running business,
- components affecting QMS running,
- factors of quality management system's effectiveness and efficiency.

In the second research, in 2005 year, number of returns came to 30 %, as answered 24 respondents from 79 sent poll questionnaires. Size of tested organizations was divided fifty-fifty – to small and medium companies.

Reasons of implementation of quality management system

In the matter concerning quality management system in general man can point in first respect at circumstances of system's implementing. In the first research choice categories were shown to respondents on the base of analysis of the most frequent occurred in the literature (SILA, EBRAHIMPOUR 2002).

Tested enterprises pointed most often at the following premises of quality management system implementing:

- creating efficient and clear organization and management system (16,16%),
- company image improvement (12,12%),
- products and services quality raising (10,61%),
- action effectiveness increase (10,61%),
- obtaining a certificate (10,61%).

Enterprises marked in questionnaire a few premises. Research results show, that mainly putting management system in order caused quality management system implementing according to ISO 9001:2000. As second circumstance was pointed a marketing element – company image improvement.

In the research in 2005 year a question was treated as open with possibility of writing down to most important circumstances of quality management system. As most important circumstance in the second stage of research from 2005 year were pointed increase of companies competitiveness and ordering of internal organization in the company. The first circumstance concerning raising competitiveness through prestige thanks to certificate of the system common known in the world is convergent with project aim, that was financial support from State. The second circumstance is also connected with raising of companies value on the market, as internal organization affects customer service and as result also organization running on the market. Respondents choices agree with circumstances shown in the literature, however very interesting and additional is here issue of using the financial support. In the first research respondents were asked about making the project of quality management system's implementation dependant from getting financial support. Here is indicated the result for 36 answers that is all answers got from respondents (2004 research), independent from project's end that is quality management system's certification. In this group 15 organizations from 36 made implementing dependant from getting the financial support, what shows, that getting financial resources was very important circumstance of quality management system's implementing.

Man should pay attention here, that there are many reasons of quality management system's implementing presented in the literature and shown by respondents' answers, both by category choice and independent writing down, that confirm these described in the literature of the subject (CHOW-CHUA, KOMARAN 2002).

Obstacles of quality management

Respondents, as the most important problem by quality management system implementing were pointing (in the research from 2004 year) at shortage of time to implementing action and a lot of work connected with it what is shown at figure below.

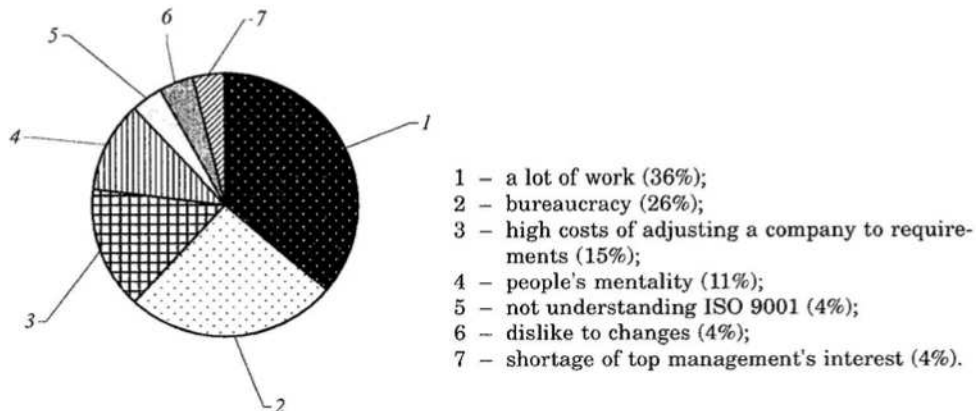


Fig. 1. Problems by implementation of quality management system

Source: Own elaboration.

As the second negative element connected with quality management system implementing respondents pointed at bureaucracy, and next at high costs of conforming the company to requirements. It can be noticed, that between these first two biggest obstacles exists a close connection. Bureaucracy perceived as excess of "papers" means a lot of work that is even not value-added work what concerns an obstacle most often chosen by respondents.

In the second research a question concerning problems connected with quality management system's implementing was an open question and respondents didn't choose an answer from the list. During grouping the answers it turned out, that the most important obstacle occurring during quality management system's implementing was lack of understanding of "norm's language". Interpretation and understanding of the content included in ISO 9001:2000 norm caused the company problems, what at the same time caused difficulties connected with actions' reorganization and creating system documentation. As the second essential difficulty connected with duration of quality management system's implementing concerned resistance of shift workers. An aversion to changes is an element, that was manifested in both research and it is also an essential issue met in the literature.

Effects of quality management

Effects of quality management can be both positive (benefits) and negative. In the following part analyzed will be only benefits seen by respondents.

As most important external benefit from quality management system implementing is showed improvement of competitive position on the market (in the first research from 2004 year). Respondents gave this advantage worth of "definitely yes". As other external benefits tested organizations pointed:

- increase of customer satisfaction degree (rather yes),
- decrease of complaints quantity (rather yes),
- improvement of supplies quality from suppliers (rather yes),
- marketing benefits (rather yes),
- sales increase (it is difficult to say).

The most important internal advantage of quality management system's running is in respondents opinion improvement of documentation supervision (definitely yes) and "rather yes" in matter of work quality improvement, employees self-control increase, internal communication improvement.

In the research from 2005 year respondents didn't point at benefits, but at "usefulness" of individual requirements included in ISO 9001:2000 norm in a business. Respondents assessed usefulness of individual components in scale from 1 to 5, where individual values mean: 1 – not useful, 2 – rather not useful, 3 – neutral, 4 – rather useful, 5 – useful. At the same time respondents giving answers used only three categories.

As useful requirements of ISO 9001:2000 there were indicated by respondents the following components:

- control of documents,
- internal audit,
- management review.

As "rather useful" there were indicated by respondents the following requirements:

- customer satisfaction research,
- corrective and preventive action.

A neutral impact on quality management system's usefulness have in respondents opinion the following requirements:

- quality policy,
- planning of quality objectives,
- design and development.

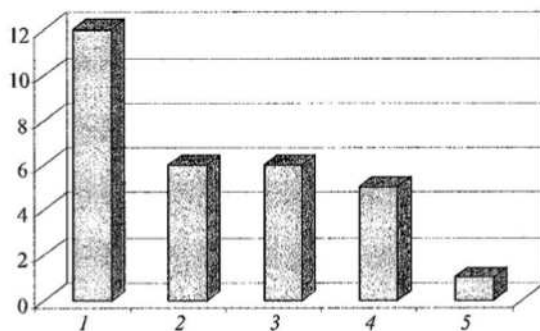
Control of documents was pointed as the most useful requirement. Control of documents is an essential issue in every activity and a question of indicating the proper requirement by respondents shows unambiguously usefulness of this requirement. Obviously control of documents should function in every organization, independent from running of quality management

system and requirements of ISO 9001:2000 norm, but as research results show this requirement affects mobilizing the employees.

Effectiveness of quality management system

In the first research respondents were asked questions concerning evaluation method of quality management system's effectiveness. On the question if there are made analyses concerning system's effectiveness in the group of respondents, that have finished the project – 81,25% of them pointed at making such analyses. Norm ISO 9001:2000 in point 5.6 Management review shows, that top management should in planned period of time make quality management system's review in order to assess among other things its effectiveness. Within the confines of this review there are analyzed such components as: quality policy, quality objectives, results of audit, customer feedback information and status of prevention and corrective actions. Results, with reference to levels of effectiveness' evaluation, are puzzling. Only 10 of them indicated, that they make evaluation of quality management system's effectiveness. Respondents pointed also, that effectiveness evaluation relates to: work position (6 answers), organizational unit (6 answers), organizational departments (1), quality management system (12), organization (5). Three respondents didn't give an answer.

During analysis of these data man should pay attention, that data refer to all given answers, that is to 36 organizations, in this 15 that have finished the project.



- 1 – quality management system (12 organizations);
- 2 – organizational unit (6);
- 3 – work position (6);
- 4 – organization (5);
- 5 – organizational department (1).

Fig. 2. Evaluation levels of quality management system's effectiveness

Source: Own elaboration

A zero-one method is the most often indicated evaluation method of quality management system's effectiveness (6 answers). Share of individual answers is illustrated by the following picture.

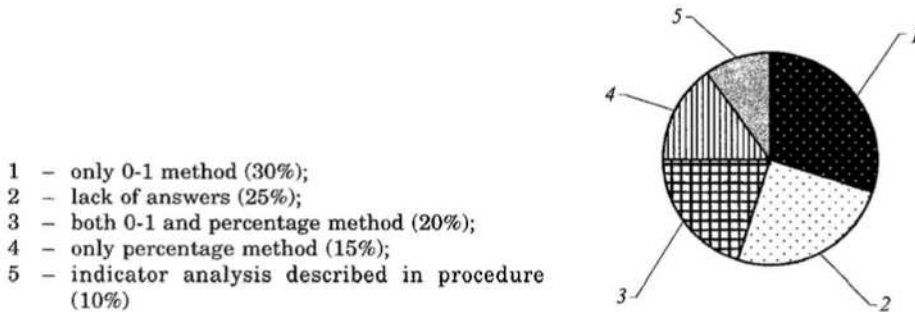


Fig. 3. Ways of making evaluation of quality management system's effectiveness.

Source: Own elaboration.

Making evaluation of quality management system's effectiveness and its improvement is an obligatory element of the system, therefore research's results presented below suggest many questions. First explanation of the situation is connected with "tiredness" with poll by individual organizations and answers written down in questionnaire "on principle".

In next research, in 2005 year, issue of quality management system's effectiveness and its evaluation were not more analyzed, but an analysis was guided by factors determining both evaluation mechanism of quality management system's functioning and realization degree of planned quality objectives. Results concerning components affecting quality management system's effectiveness will be presented in further part of the article.

Factors affecting quality management system's effectiveness

In the matter of factors man should pay attention, that analysis in this part refers only to results got from the second poll research. By building poll questionnaire and choosing analyzed factors the starting point was organization's environment and standard division of the factors occurring outside the organization. The basic division was presented on the following picture.

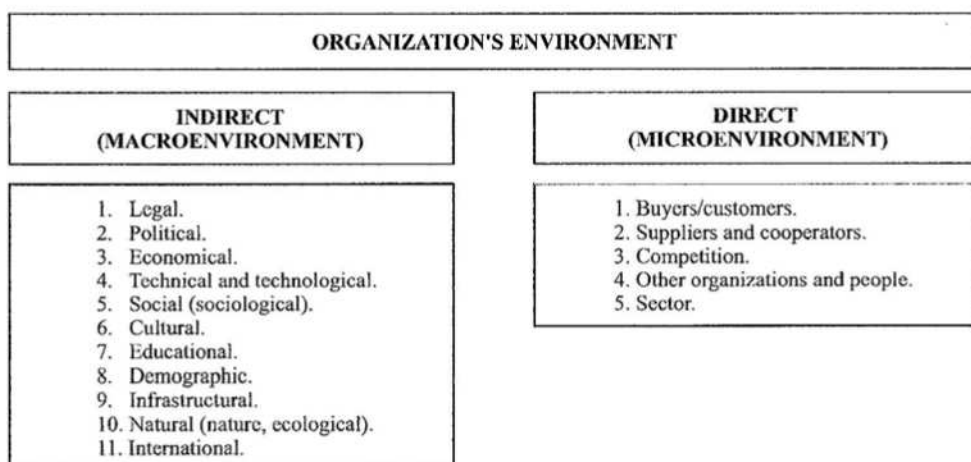


Fig. 4. Organization's environment
Source: Own elaboration (Certo, Peter 1988).

In the research respondents grouped factors and their impact in scale from 1 to 5, where: 1 – definitely no, 2 – rather no, 3 – hard to say, 4 – rather yes, 5 – definitely yes). At the same time respondents characterized factors impact in to analyzed areas. Firstly, within the confines of general impact interesting were factors determining quality management system's effectiveness, that concerned both the stage before the implementation and already running quality management system. Detailed were shown concrete determinants of planned quality aims' realization. They were analyzed according to shown on the picture 5 division of factors.

Within the confines of general approach to the problem, as components to most extent determining effectiveness of quality management system were pointed: consulting company also shown in literature (CASADESUS, KARAPETROVIC 2005) approach and employees engagement.

Next as factors affecting effectiveness of quality management system were indicated:

- certification unit's approach,
- functioning of other management systems,
- quality management system's substantiating.

In the matter of detailed impact on quality aims' realization respondents used two categories: impact "rather positive" and "neutral". It is worth to pay attention here to answers mostly pointed. As rather positive impact there were indicated:

- customer requirements,
- competitiveness in branch,
- companies financial situation.

As neutral impact on quality aims' realization respondents showed: kind of branch (if it is production, trade or service), quality management system's substantiating, legal requirements and condition of economy. Therefore it is seen that respondents point definitely at factors connected to microenvironment, that is at elements concerning branch, where they run their business.

Conclusion

Research done by article's author were carried out in to stages, at interval of one year. Results analysis of both research points at interesting problems concerning effectiveness and efficiency of quality management system.

Firstly, in spite of showing by respondents different kind of quality management system's implementing circumstances, it seems, that the important reason to take a decision about system's implementing was a possibility to use a financial support. Using public support allowed to implement a system by lower costs than in case of independent financing of the project.

Secondly, in the light of above mentioned circumstance of system's implementing, interesting seems analysis of respondents individual answers. For example, with reference to evaluation of quality management system's effectiveness, an obligatory component, it turns out, that not all analyzed organizations make such an evaluation. It seems strange, because analysis concerns certified systems, that is after assessment of fulfilling requirements included in ISO 9001:2000 norm. Comment to such situation can arise on the base of analysis of individual polls and connecting replies to different questions in one whole. Well, in connection with circumstances using consulting unit it turns out, that its representatives help by system's implementing "in the whole". At the same time certification audit focuses on content-related issues concerning fundamental sphere of the given organization's activity, omitting sphere of detailed fulfillment of typical system requirements.

Thirdly, above mentioned conclusions confirms results with reference to a question about components affecting quality management system's effectiveness. In depiction of components occurring at the stage of implementing and later running of quality management system, respondents pointed, at approach of both consulting and certification unit in connection with employees engagement during system's implementing affects its effectiveness.

Fourthly, analysis of quality management system's running was focused on factors impact according to standard division into macro and microenvironment. From respondents answers results, that definitely more impact on quality management system's implementing have micro factors than macro factors, by taking obviously internal conditions into account. It is by all

means understandable, because internal defining of aims in every organization is dependant from situation on the market, especially in direct environment as customers, suppliers and rivals.

Researches results point at these elements, that requires special attention, in order to ensure quality management system's effectiveness, that is to fulfill basic requirement connected with system's running in organization. The area to such research was specific, because connected with companies, that has already used financial support and in this way results are probably more clear than in case of analyzing of organizations, that made implementing without getting financial support. Putting together the research premises with shown above conclusions some contradiction can be thought over. It was as assumed, that analyzed companies are committed in quality problems, but results show rather, that the financial support was an important circumstance of implementing. The author thinks, that there is no discrepancy between these two elements. A matter of finances is a fundamental component in running every kind of business and doesn't contradict quality approach. However in order to be able to state this with firmness with reference to analyzed organizations it is necessary to treat the presented research as pre-study for qualitative research in the future.

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PRICE DEVELOPMENT OF DAIRY PRODUCTS IN RETAIL OUTLETS IN OLSZTYN PART 1: PRICE DIFFERENTIATION ON THE DAIRY PRODUCTS MARKET

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Key words: dairy products, price diversification, traditional and modern forms of retail channels.

Abstract

The paper presents the results of research on price diversification of dairy products in retail trade network in Olsztyn. Prices of chosen products and theirs substitutes were recorded in November 2005 in 194 trading outlets such as hypermarkets, supermarkets, discount stores, grocery stores, freestanding kiosks, kiosks located on the markets and convince stores at petrol stations. The analyses conducted indicate significant price diversification depending on type of the product offered and category of retailers used as outlets.

KSZTAŁTOWANIE SIĘ CEN PRODUKTÓW MLECZARSKICH W OLSZTYŃSKIEJ SIECI HANDLU DETALICZNEGO CZĘŚĆ 1: ZRÓŻNICOWANIE CEN NA RYNKU PRODUKTÓW MLECZARSKICH

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Słowa kluczowe: produkty mleczarskie, zróżnicowanie cen, nowoczesne i tradycyjne formy handlu detalicznego.

Abstrakt

W opracowaniu przedstawiono rezultaty badań nad zróżnicowaniem cen wybranych produktów mleczarskich w olsztyńskiej sieci handlu detalicznego. Rejestrację cen tych towarów i ich substytutów przeprowadzono w listopadzie 2004 r. w reprezentatywnej grupie 194 podmiotów

handlowych, którą tworzyły: hipermarkety, supermarkety, sklepy dyskontowe, sklepy powszechne, kioski wolno stojące, kioski na targowiskach oraz sklepy na stacjach benzynowych. Przeprowadzone analizy wskazują na znaczne zróżnicowanie cen rozpatrywanych towarów ze względu na rodzaj oferowanego produktu oraz wykorzystywane w ich dystrybucji kategorie detalistów.

Introduction

Since mid 1990s important changes have occurred in the marketing chain of consumer goods in Poland that have been to a large extent a consequence of quantitative and qualitative changes in retail trade. The process of trade transformation manifests in the changes in ownership, organization and technical operation of entities and their number, size and specialization. They have been linked mainly to the processes of transformation and globalization occurring in the economy, increased importance of information technology, development of increasingly complex relations between the suppliers and the retailers, development of network brands and changing attitudes of consumers towards convenient and comprehensive shopping. In the foods market the supply chain participants integration processes are also observed coupled with the increasing role as well as bargaining and negotiating power of large area trade entities (GRZYBOWSKA 2005, *Coraz mniej sklepów*. 2005, KŁOSIEWICZ-GÓRECKA 2002, MALESZYK 2001, KŁOSIEWICZ 1997).

The assumption that there are many market segments for a given product that differ in price sensitivity, which causes that prices are adjusted to the characteristics and size of individual segments, forms the basis for differentiation of prices. The price can be differentiated according to time and conditions of purchase, place of purchase, volume of single purchase, intended use of the product and used distribution channels. The manufacturers give the primary shape to prices while the secondary price level depends on the applied products sale channels thanks to which they reach the final buyers. Assessment of price differentiation in trade can be done by appropriate comparison of trade margin rates or through comparison of actual prices applied at different retail outlets.

The traditional approach to pricing policy in trade is linked to the vertical development of prices in the marketing chain where the role of trade margin as the parameter determining the final product price is highlighted. That margin is determined by the standard of service provided by retailers, their product range specialization and location. However, as highlighted by Szumilak, in the environment of gradual resignation from vertical pricing, the influence of manufacturer on the final price and price creating role of margins in sales of products are decreasing. As a consequence, analysis of differentiation of prices in distribution channels through comparison of final prices of products sold is more reasonable than analyses based on trade margin levels (SZUMILAK 2003). Studies conducted in Olsztyn by the authors of this paper represent an attempt at approaching the issue

of price development initiated by Szumilak from the perspective of a different product and geographic market. They are also justified because so far few studies on the Polish market have been presented that would allow clear identification of the influence of structural changes occurring in retail trade on the level and differentiation of prices for products offered¹.

Methodological assumptions for the study

This paper aims at presenting the results of own studies on assessment of the differentiation of retail prices throughout the analyzed market of dairy products considering the variety of categories of retailers forming the retail trade network in Olsztyn. To achieve that goal the thesis that differentiation of prices on dairy products is not identical and depends on the products offered as well as the distribution channel was verified. Studies on development of prices² covered selected "standard" dairy products³ representing the market of liquid milk for consumption, yogurt, dairy drinks, cream, dairy deserts, cottage cheese and spreads, ripening cheeses, processed and blue cheeses and butter (tab. 1).

Recording of prices for 11 products selected for studies as well as the lowest and highest prices for their close substitutes⁴ was done by inventory taking during several days in November 2004 at 194 outlets⁵ representing large area trade as well as small retail outlets. The population of outlets covered by the study consisted of: 3 hypermarkets (H), 15 supermarkets (S), 5 discount stores (D), 10 shops at petrol stations (SB), 14 kiosks at markets (KT) as well as 78 grocery shops (SP) and 69 freestanding kiosks (KS). For estimating the representative number of grocery shops and freestanding kiosks the double stage method by Stein was applied (SOBCZAK 2000), while in case of the other outlets the selection on purpose was made and the

¹ Studies on differentiation of prices as a consequence of products distribution channels used for sales and the influence of modern distribution systems on the level of market prices are widely conducted in highly developed countries, particularly the USA. It is enough to mention studies by Volp and Lavoie who showed the influence of Wal-Mart on development of food prices in New England (VOLP, LAVOIE 2005).

² The methodology of studies and empirical price analysis is based on the methodology proposed by Szumilak of Kraków School of Economics (SZUMILAK 2004). The studies considered only the price differentiation resulting from pricing strategies applied by different categories of retail outlets without considering the influence of other factors on levels of prices of products offered (e.g. social-economic structure of Olsztyn population).

³ The term standard products is understood as goods that are clearly identified at the level of manufacturer's brand, intended use and weight.

⁴ Close substitutes are products that differ from the studied ones by brand only and not the units of measure or weight. For example Lowickie UHT milk in 1-liter cardboard pack is the substitute for "Łaciate" UHT milk also in 1-liter cardboard pack.

⁵ Further in the paper terms trade entities, trade facilities, categories of retailers, forms of retail trade and retail outlets are used as equivalent.

exhaustive studies covering their entire populations were carried out. The empirical analysis of the recorded prices used the measures of central trend (arithmetic and modal averages) and measures of differentiation (standard deviation, relation between the highest and the lowest price, variance coefficient, variance according to 3 sigma).

Table 1

Dairy products selected for the study

No.	Product Category	Product Brand	Product Attributes
1	Milk	ŁACIATE	2% fat, cardboard pack 1 liter
2	Yogurt	JOGOBELLA	fruity, cup, 150 ml
3	Kefir	SOKÓLSKI	natural, cup, 450 ml
4	Cream	PIĄTNICA	18% fat, cup, 200 g
5	Homogenized cheese	BAKUŚ	fruity, cup, 100 g
6	Cream cheese	RAMA CREME BONJOUR	box, 200 g
7	Cottage cheese	ŁUKTA	full fat, cube, foil, 1 kg
8	Ripening cheese	GOUDA	full fat, loose, 1 kg
9	Processed cheese	HOCHLAND	slices, hermetic foil, 150 g
10	Blue cheese Camembert	TUREK	natural, foil, 120 g
11	Butter	MASMAK	cube, 200 g

Source: Own studies.

Results of studies

Differentiation of prices on studied products

The space for pricing the considered dairy products is large although its size is not identical and depends on the type of product offered. In November 2004 the relation between the highest and the lowest price in the analyzed city market of Olsztyn ranged between 1,32 (yogurt "Jogobella") and 1,78 (homogenized cheese "Bakuś") and in case of 9 out of 11 products it did not exceed the lowest recorded prices by 1,5 times (tab. 2). It was also interesting that the differentiation of dairy products' prices in Olsztyn market was lower than the differentiation of FMCG products prices observed in Kraków market. In the retail network of Kraków the recorded maximum prices of products investigated there were in most cases higher by more than 50% than their minimum prices while in case of some products they were more than double (SZUMILAK 2003). As can be assumed, the smaller space for dairy products pricing results from the importance of that products category in the nutrition model of consumers and price sensitivity of demand as well as the economies of Olsztyn market reflected in the size and density of outlets network and lower income of Olsztyn compared to Kraków residents.

Table 2

Price parameters and differentiation for dairy products in Olsztyn city market

Products studies	Price Parameters				Price Differentiation			
	Cmin (PLN)	Average price (PLN)	Cmax (PLN)	M (PLN)	S	R	Cmax Cmin	Variance according to 3 sigma min. Variance according to 3 sigma max.
LACIATE milk	1.95	2.51	2.85	2.60	0.14	0.90	1.46	2.92
JOGOBELLA yogurt	0.95	1.09	1.25	1.09	0.05	0.30	1.32	1.23
SOKÓLSKI kefir	1.30	1.50	1.75	1.50	0.08	0.45	1.35	1.73
PIATNICA cream	1.19	1.44	1.60	1.50	0.07	0.41	1.34	1.66
BAKUŚ homogenized cheese	0.90	1.15	1.60	1.20	0.09	0.70	1.78	1.43
Rama CREME BONJOUR	2.99	3.53	4.20	3.39	0.23	1.21	1.40	4.24
ŁUKTA cottage cheese	8.60	10.13	12.90	9.80	1.07	4.30	1.50	13.34
GOUDA ripening cheese	13.99	17.01	19.90	17.50	1.52	5.91	1.42	21.57
HOCHLAND processed cheese	2.49	3.18	4.10	3.20	0.22	1.61	1.65	3.83
TUREK blue cheese	2.78	3.60	3.96	3.65	0.21	1.18	1.42	4.24
MASMAK butter	2.69	3.09	3.55	3.20	0.15	0.86	1.32	3.54

* Cmin – minimum price, Cmax – maximum price, M – modal price, S – standard deviation, R – empirical variance area
Source: Own studies.

The high differentiation of dairy products' prices is also indicated by values of variance coefficient that allows defining the area of price for a given product as a consequence of price sensitivity of buyers and level of price control by manufacturer. In the retail network of Olsztyn the marginal values for price variance range were 4,2 and 10,6% and in case of products representing a widely understood market of cheese the differentiation of prices is the largest exceeding 6% (fig. 1). The highest dispersion was characteristic for prices of cottage cheese "Łukta" and ripening cheese "Gouda", which can be explained by low level of price control by manufacturers and the fact that they are among the major products in the basket of frequent food products purchases. As the price of yogurt "Jogobella" is under particular control by the manufacturer (suggested price), as a consequence of high price flexibility of demand and fierce price competition existing in the market of yogurt, the price variance in case of that product is low.

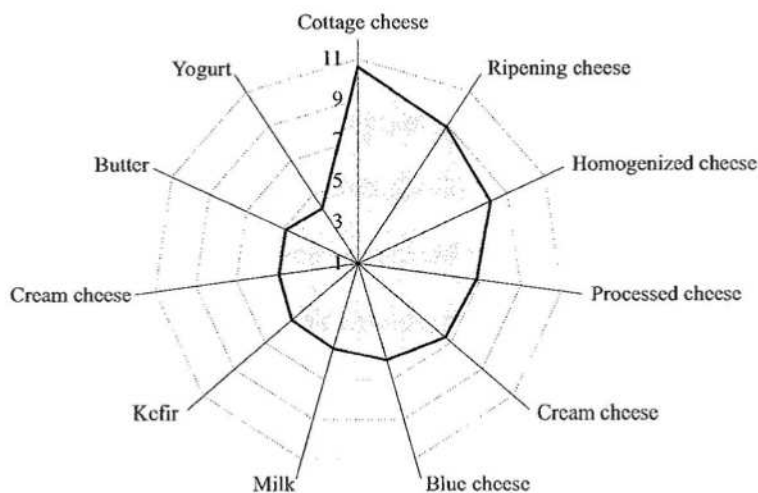


Fig. 1. Price variance coefficients for studied dairy products in Olsztyn city market (%)

Source: Own studies.

Comparison of prices differentiation measures according to the category of trade entities shows that the space determined by the level of prices in the market depends not only by the type of product offered but also by the place of sale, which, as can be assumed, results from location and number of trade outlets in a given category. In relation to the average 1,18 spread of prices for Olsztyn market, it is higher for grocery shops and freestanding kiosks. That can be explained by the influence of convenient location of those outlets, which frequently is the source of competitive advantage. In case of grocery shops the average ratio between the highest and the lowest

Table 3

Differentiation parameters of prices for studied products in distribution channels*

Products studies	$\frac{C_{max}}{C_{min}}$ relation							Variance coefficient (%)						
	H	S	D	SB	SP	KS	KT	H	S	D	SB	SP	KS	KT
LACIATE milk	1.13	1.09	–	1.13	1.24	1.24	1.14	6.7	2.5	–	5.5	4.4	4.2	3.5
JGOBELLA yogurt	1.07	1.22	–	1.00	1.21	1.19	1.09	3.8	7.4	–	0.0	2.9	3.6	2.5
SOKÓLSKI kefir	1.03	1.20	–	1.00	1.30	1.30	1.12	1.5	5.4	–	0.0	4.9	5.1	3.4
PIATNICA cream	1.18	1.22	–	–	1.34	1.23	1.15	8.9	4.4	–	–	4.3	3.9	3.9
BAKUŚ homogenized cheese	1.21	1.16	1.00	1.00	1.36	1.25	1.14	9.6	4.7	0.0	0.0	6.9	4.9	5.4
Rama CREME BONJOUR	1.09	1.07	1.00	–	1.28	1.24	1.11	4.9	1.4	0.0	–	6.0	6.0	3.5
ŁUKTA cottage cheese	1.31	1.20	–	–	1.44	1.42	1.05	13.4	5.3	–	–	10.8	11.9	2.0
GOUDA ripening cheese	1.21	1.21	1.00	–	1.42	1.40	1.20	10.1	7.4	0.0	–	8.5	7.3	7.0
HOCHLAND processed cheese	1.14	1.15	1.00	1.10	1.33	1.44	1.09	6.5	4.4	0.0	5.2	4.9	6.9	3.2
TUREK blue cheese	1.22	1.15	–	–	1.28	1.18	1.09	10.0	3.7	–	–	5.2	4.2	3.0
MASMAK butter	1.10	1.12	–	–	1.32	1.21	1.07	4.8	2.6	–	–	4.7	4.4	2.8

* Cmax – highest recorded product price, Cmin – lowest recorded product price; H – hypermarkets, S – supermarkets, D – discount shops, SB – convenience shops at patrol stations, SP – grocery shops, KS – freestanding kiosks, KT – kiosks at markets.
Source: Own studies.

price was 1.32 and for freestanding kiosks 1,28; at the same time prices of all products in those types of retail outlets are characterized by the largest differentiation within the entire retail network. Assessed variance coefficients' values additionally indicate that in case of 8 out of 11 products investigated the largest variance can be found in hypermarkets. The variance of yogurt and kefir prices is at the highest in supermarkets while that of cream cheese in grocery shops and freestanding kiosks (tab. 3).

Major differentiation in prices of products offered at hypermarkets can indicate that the prices offered influence not only the price image of those outlets but that they are also used as an active instrument of competition among hypermarkets. That is particularly well visible in Olsztyn market where only three concise space hypermarkets are present. In difference from that type of outlets, the level of prices differentiation at grocery shops and freestanding kiosks indicates that in those cases prices are rather adjusted to the market and not used in competitive struggle among outlets of these categories. Relatively low diversification of prices is, in turn, characteristic for products sold at markets, which can be explained mainly by close vicinity of outlets of that type.

Price differentiation of substitutes for the investigated products

Spread of prices of close substitutes is one of the premises for appropriate price positioning of brands of the investigated products. The numbers characterizing substitutes price differentiation in Olsztyn retail network are presented in table 4. The smallest area for development of prices of substitutes in the city market is characteristic in the segments of liquid milk for consumption, cottage cheese, blue cheeses and ripening cheeses while the largest exists in the segment of cream cheeses. In case of cream cheese "Rama Creme Bonjour", a product representing one of the most dynamically developing segments in the market of white cheeses, the price of the most expensive substitute was almost twice higher than the cheapest substitute. It should be highlighted in particular that in the entire city market, in case of seven investigated products, the pricing area for their close substitutes was smaller than that for the main products.

Analysis of differentiation of substitutes price depending on the type of retail outlets used for their sales also showed that purchasing of goods in hypermarkets and supermarkets was the most attractive for buyers, which, as can be assumed, is linked to their product and price positioning strategy in the market. In those outlets both the number of substitutes available to buyers and the price relations are not only significantly higher than the average values for the entire city market but also clearly higher as compared to the other categories of retail outlets. In difference from other forms of retail trade, large area retail outlets offer the buyers a wide range of products in each group that at the same time is distinctly differentiated in price.

Table 4
 Relation of maximum to minimum prices for substitutes
 of studied dairy products and saturation with substitutes in Olsztyn retail network

Product markets	$\frac{C_{max}}{C_{min}}$ relation							Average Number of Substitutes							
	RM	H	S	D	SP	KS	KT	RM	H	S	D	SB	SP	KWS	KT
Milk	1.16	1.63	1.31	1.24	1.14	1.11	1.16	1.5	3.3	2.1	1.4	1.5	1.2	1.2	1.8
Yogurt	1.57	2.71	1.89	1.93	1.54	1.38	1.75	2.8	9.3	5.8	3.2	1.0	1.1	2.2	1.9
Kefir	1.54	2.05	1.52	2.02	1.49	1.58	1.01	1.1	1.0	1.0	1.6	–	1.2	1.0	1.0
Cream	1.26	2.40	1.47	1.85	1.18	1.06	1.21	1.5	2.3	1.8	2.0	–	1.4	1.6	1.3
Homogenized cheese	1.27	1.75	1.63	1.35	1.24	1.21	1.26	2.3	5.0	5.7	2.2	–	2.1	1.7	1.6
Cream cheese	1.92	2.37	2.19	2.03	2.00	1.86	2.01	3.4	11.7	7.7	1.4	1.0	1.2	1.0	3.4
Cottage cheese	1.16	1.48	1.25	1.11	1.12	1.10	1.22	1.7	3.7	2.1	2.8	–	1.7	1.4	1.3
Ripening cheese	1.24	3.85	1.62	1.17	1.15	1.09	1.16	3.6	16.0	12.1	5.4	–	2.2	1.7	4.2
Processed cheese	1.28	1.28	1.40	1.01	1.29	1.14	–	1.3	3.7	1.9	1.4	–	1.2	1.0	1.0
Blue cheese	1.21	2.60	1.36	1.04	1.10	1.07	1.26	2.3	13.3	3.7	2.0	–	1.5	1.0	1.0
Butter	1.40	2.88	2.17	1.97	1.34	1.20	1.31	1.8	4.3	1.9	3.6	–	1.9	1.5	1.5

* Cmax – highest recorded product price, Cmin – lowest recorded product price, RM – total Olsztyn Market

Source: Own studies.

Analysis of price positioning of investigated dairy products in relation to minimum prices of their substitutes in the entire Olsztyn market also shows that 5 products covered offered by the retailers should be classified as more expensive because their price levels clearly exceed the center of the range formed by the lowest and highest values of prices for their substitutes while two products were the most expensive. The average prices of "Łaciate" UHT milk and "Hochland" processed cheese were at the level of their most expensive substitutes while in case of homogenized cheese "Bakuś" and "Piątnica" cream their prices were significantly higher than their substitutes. The substitutes of "Gouda" ripening cheese, "Rama Creme Bonjour" cream cheese and "Turek" blue cheese were the least attractive for buyers as concerns their price. The price positioning of the covered products in individual forms of retail outlets also confirms that hyper and supermarkets offer substitutes much more expensive than entities forming the traditional retail trade network (tab. 5).

Table 5

Positioning of the average studied product price in relation to minimum price for its substitute in Olsztyn retail network

Studied products	City market	Categories of retail outlets					
		H	S	D	SP	KS	KT
ŁACIATE milk	0.97	0.61	0.99	–	0.91	0.97	0.76
JOGOBELLA yogurt	0.70	0.41	0.56	–	0.69	0.83	0.56
SOKÓLSKI kefir	0.55	0.55	0.54	–	0.55	0.50	2.19
PIĄTNICA cream	1.06	0.54	0.69	–	0.97	2.42	1.60
BAKUŚ homogenized cheese	1.15	0.36	0.81	1.45	1.18	1.38	1.24
Rama CREME BONJOUR	0.33	0.27	0.34	0.70	0.32	0.31	0.42
ŁUKTA cottage cheese	0.89	0.52	0.40	–	1.07	1.24	0.76
GOUDA ripening cheese	0.15	0.08	0.02	0.79	0.06	0.44	0.39
HOCHLAND processed cheese	0.97	0.85	0.72	10.50	0.93	1.21	–
TUREK blue cheese	0.37	0.06	0.31	–	0.57	0.32	0.24
MASMAK butter	0.47	0.61	0.67	–	0.38	0.23	0.23

Source: Own studies.

Conclusion

Results of studies presented in the paper confirm the relation existing in the dairy market between product and outlet categories and differentiation of prices for products offered. Despite geographic limitation of studies to the local market, it can be assumed that the regularities observed in that

market are also characteristic for other spatial markets in Poland. Verification of that assumption requires nevertheless extended studies in markets of other urban agglomerations. Additionally, verification of results obtained so far would require empirical studies of prices in Olsztyn retail market of dairy products.

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ASSESSMENT OF THE LEVEL OF ABSORPTION OF STRUCTURAL FUNDS IN WARMIA AND MAZURY PROVINCE WITHIN THE INTEGRATED REGIONAL OPERATIONAL PROGRAM (IROP)

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Key words: regional policy, regional and local development, structural funds, operational programs.

Abstract

The paper presents the level of absorption of the Integrated Regional Operational Program (IROP) in Warmia and Mazury province. The data covers the period from Poland's accession to the European Union until the end of 2005.

During the covered period the value of contracts signed did not exceed 50% of available funds. The disbursements ratio was at a much lower level. Until the end of 2005 only 7% of the contracted funds were disbursed. Measures in the area of road infrastructure and measures targeted at microenterprises enjoyed the highest levels of interest. The lowest absorption of contracted funds was recorded in case of measures covered by Priority 2 financed from the European Social Fund funds.

OCENA STOPNIA WYKORZYSTANIA FUNDUSZY STRUKTURALNYCH W WOJEWÓDZTWIE WARMIŃSKO-MAZURSKIM W RAMACH ZPORR

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Słowa kluczowe: polityka regionalna, regionalny i lokalny rozwój, fundusze strukturalne, programy operacyjne.

Abstrakt

W artykule przedstawiono stopień wykorzystania Zintegrowanego Programu Operacyjnego Rozwoju Regionalnego (ZPORR) w woj. warmińsko-mazurskim. Dane dotyczą okresu od przystąpienia Polski do Unii Europejskiej do końca 2005 r.

W badanym okresie wartość podpisanych umów przekroczyła 50% dostępnych środków. Na znacznie niższym poziomie kształtował się wskaźnik płatności. Do końca 2005 r. wypłacono jedynie 7% zakontraktowanych środków. Największym zainteresowaniem cieszyły się działania z zakresu infrastruktury drogowej oraz działania skierowane do mikroprzedsiębiorstw. Najniższym poziomem wykorzystania zakontraktowanych środków cechowały się działania objęte Priorytetem 2, finansowane ze środków Europejskiego Funduszu Społecznego.

Introduction

On accession to the European Union entire Poland was covered by Objective 1 of the regional policy. As a consequence, it was given the possibility of benefiting from all four structural funds (the European Regional Development Fund, European Social Fund, European Agricultural Guidance and Guarantee Fund and Financial Instrument for Fisheries Guidance). Additionally, the GDP of Poland is below 90% of the EU average and as a consequence Poland has also become a beneficiary of the Cohesion Fund. During the years 2004 – 2006, Poland received over • 12 billion within the frameworks of regional policy. To be able to absorb those funds we were required to complete numerous adjustment works. Some of those works covered development of operational programs. They represent strategies of EU funds allocation considering the areas needing support the most. Among seven operational programs there is one of regional nature, i.e. the Integrated Regional Operational Program. The strategic goal of IROP is to create conditions for increase in competitiveness of regions and preventing marginalization of certain areas in a way supportive for long-term economic development of the country, its economic, social and territorial cohesion as well as integration with the European Union (PATRZALEK 2005, p. 151).

That Program is funded simultaneously from two structural funds: the European Regional Development Fund that aims at closing the development level gaps between regions belonging to the European Union UE (GROSSE 2003, p. 104) and the European Social Fund responsible for supporting activities focused on preventing and combating unemployment (GŁABICKA, GREWIŃSKI 2003, p. 107).

According to the allocation in the IROP¹ Warmia and Mazury province can use • 181,9 million representing ca. 6,6% of the total Community funds

¹ Poland in its entire area satisfies the criteria qualifying it as the area covered by Objective 1 of European Union structural funds. That justifies the dominating role of population criterion in regional allocation of support funds. 80% of those funds were allocated proportionally to the number of residents in the individual provinces. As a consequence of per capita GDP differences between provinces, 10% of the funds will be divided proportionally to the number of residents in provinces where the average per capita GDP during the years 1997–1999 was lower than 80% of the national average. That applies to Lubelskie, Podkarpackie, Podlaskie, Świętokrzyskie and Warmia and Mazury provinces. As a consequence of the high unemployment rate and threat of permanent marginalization of significant

contracted within the frameworks of that program during the years 2004–2006 (ZPORR 2004, p. 130). The applied allocation criterion caused that the value of offered aid funds per capita in the region positioned Warmia and Mazury province in the first position in the ranking of provinces.

It should also be noticed that the total amount of capital expenditures from the budgets of municipalities in Warmia and Mazury province was ca PLN 221,8 million in 2000, the majority of which represented investments necessary for performance of basic functions of territorial governments. It is clearly visible then how big an amount is represented by funds contracted in IROP and, which is linked to that, how big a problem can it be to find additional funds allowing absorption of that aid (CZESZEJKO-SOCHACKA, WOJARSKA 2005, p. 143).

The paper aims at presenting the assessment of the level of absorption of structural funds in Warmia and Mazury province from the Integrated Regional Operational Program during the period from May 2004 until the end of 2005. The information originates from materials obtained from the Structural Funds Implementation Department of Warmia and Mazury province Marshal's Office. The studies were carried out within the research subject *Use of economic, social and institutional potential of the region* implemented at the Chair of Economic and Regional Policy of the Faculty of Economic Sciences at the University of Warmia and Mazury.

IROP implementation in Warmia and Mazury province

At the end of 2005 the IROP funds commitment resulting from projects selected by Warmia and Mazury Province Management Board and Implementing Institutions amounted PLN 513,749,938.66 representing 74% of the total Program funds (excluding Priority 4). The total amount of liabilities resulting from contracts made (ERDF and ESF funds) amounted PLN 401,465,404.11 representing 57.51% of total funds. Since the beginning of Program, implementation refunds have been made from the EU funds amounting in total PLN 51,802,182.79, the equivalent of • 13,502,458.70.

Since the beginning of the Program 42 projects have been selected by the Province Management Board within Priority 1 (fig. 1) representing the total subsidy amount of PLN 293,925,401.30 representing 78% of the allocation for the years 2004–2006. The Governor has made 34 contracts representing the total subsidy amount of PLN 218,431,137.14 and 58.10% of the allocation awarded for the years 2004–2006.

community groups in some counties, 10% of support funds will be allocated to those counties where the unemployment rate during the years 1999–2001 exceeded 150% of the national average. There are 72 such counties populated by 5,327,400 people.

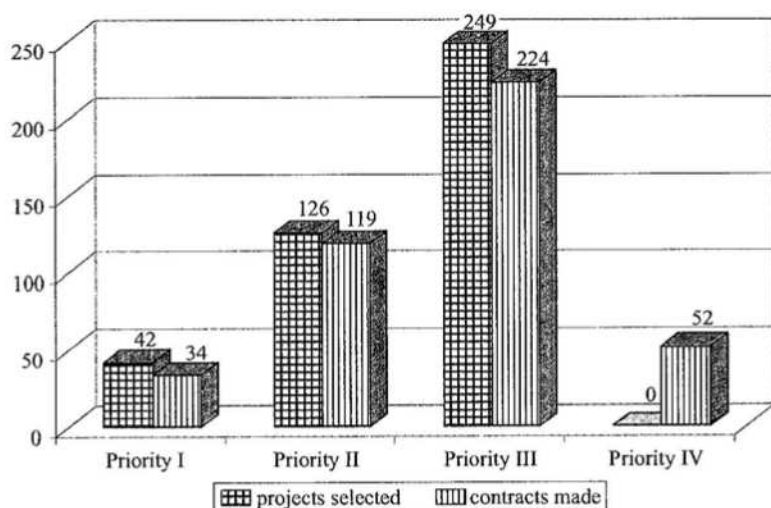


Fig. 1. Number of applications selected by the Province Management Board and Implementing Institution and contracts made within IROP in Warmia and Mazury province – status as at the end of 2005

Source: Own work based on studies.

The division within individual measures is as follows:

- measure 1.1 *Modernization and development of the regional transport system* – 11 contracts representing the value of PLN 141,234,779.37 corresponding to 73.08% of funds allocation for the years 2004–2006;
- measure 1.2 *Environment protection infrastructure* – 8 contracts representing the subsidy value of PLN 31,218,649.37 corresponding to 44.16% of funds allocation for the years 2004–2006;
- measure 1.3 *Regional social infrastructure* – 11 contracts representing the value of PLN 23,745,979.20 corresponding to 65.40% of funds allocation for the years 2004–2006;
- measure 1.4 *Development of tourism and culture* – 4 contracts representing the subsidy value of PLN 22,231,729.20 corresponding to 44.27% of funds allocation for the years 2004–2006 (fig. 2).

The disbursements made from the Program account since the beginning of Program implementation have been as follows:

- measure 1.1 – PLN 827,094.72 representing 0.43% of funds allocation for the years 2004–2006;
- measure 1.2 – PLN 4,360,237.72 representing 6.17% of funds allocation for the years 2004–2006;
- measure 1.3 – PLN 999,824.09 representing 2.75% of funds allocation for the years 2004–2006;
- measure 1.4 – PLN 62,625 representing 0.12% of funds allocation for the years 2004–2006 (fig. 2).

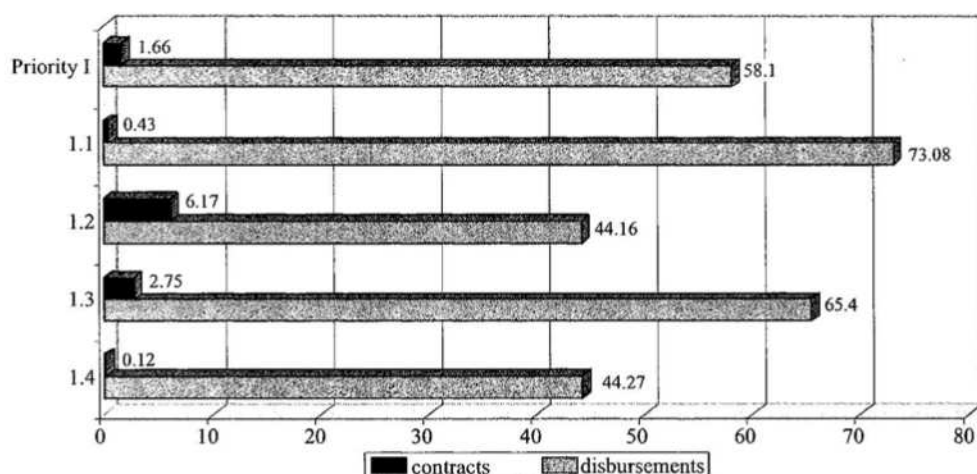


Fig. 2. Level of IROP absorption in Warmia and Mazury province based on the contracts and disbursements made (Priority I) – % of funds allocation for the years 2004–2006 – status as at the end of 2005

Source: Own work based on studies.

Since the beginning of Program implementation, within this Priority, implementation of 9 projects has been completed, i.e. the final reports and applications for final disbursement have been filed.

Territorial government bodies represented the majority of beneficiaries of so far made contracts (19 projects). The other beneficiaries were health care institutions (7 projects), tertiary schools (4 projects), institutions of culture (1 project by Stefan Jaracz Theater in Olsztyn) and other entities (3 projects).

The characteristics of contracts as concerns the value of subsidy from the European Funds were as follows: 2 projects valued at below PLN 0.5 million, 4 projects valued at PLN 0.5–1 million, 20 projects ranging from PLN 1 to 5 million, 6 projects between PLN 5 and 10 million, 1 project within the range from PLN 20 to 50 million and 1 project exceeding PLN 50 million. The average project value (structural funds subsidy value) amounted PLN 6,424,445 representing 44.27% of funds from the allocation for the years 2004–2006.

Within the frameworks of Priority 2, until the end of December 2005, 126 applications were selected for implementation; 119 contracts were made (fig 1) representing the total subsidy value of PLN 69,786,142.59, which corresponds to 64.03% of funds of the allocation for the years 2004–2006, including:

- measure 2.1 *Development of skills related to the needs of the regional labor market and possibilities of continuous education in the region*
- 29 contracts representing the total subsidy value of PLN 19,544,500.27,

- which corresponds to 90.03% commitment of funds of the allocation for the years 2004-2006;
- measure 2.2 *Equalizing the educational opportunities through scholarship programs* – 51 contracts representing the total subsidy value of PLN 25,077,831.42, which corresponds to 58.47% commitment of funds of the allocation for the years 2004-2006;
 - measure 2.3. *Vocational reorientation of people leaving agriculture* – 7 contracts representing the total subsidy value of PLN 3,840,331.15, which corresponds to 30.55% commitment of funds of the allocation for the years 2004-2006;
 - measure 2.4 *Vocational reorientation of people threatened by restructuring processes* – 3 contracts representing the total subsidy value of PLN 5,511,805.65, which corresponds to 68.5% commitment of funds of the allocation for the years 2004 – 2006;
 - measure 2.5 *Promotion of enterprise* – 18 contracts representing the total subsidy value of PLN 8,327,753.84, which corresponds to 66.81% commitment of funds of the allocation for the years 2004 – 2006;
 - measure 2.6 *Regional Innovation Strategies and knowledge transfer* – 11 contracts representing the total subsidy value of PLN 7,483,920.26, which corresponds to 66.16% commitment of funds of the allocation for the years 2004-2006 (fig. 3).

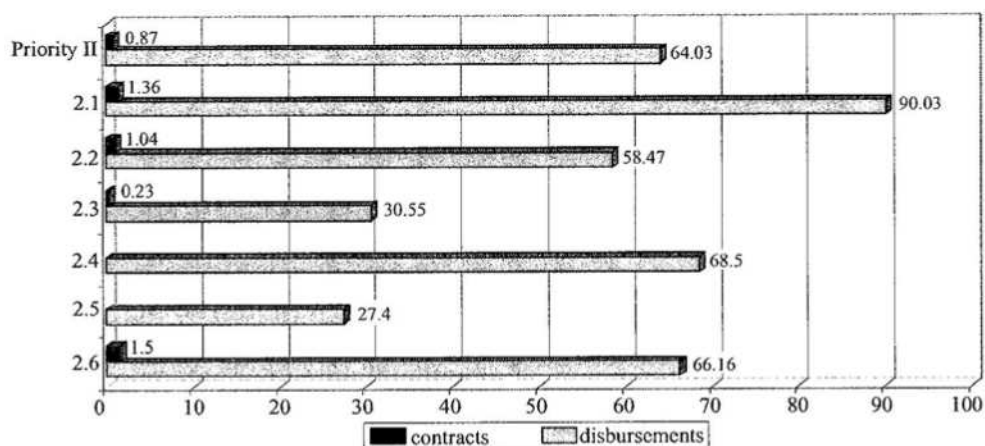


Fig. 3. Level of IROP absorption in Warmia and Mazury province based on the contracts and disbursements made (Priority II) – % of funds allocation for the years 2004-2006 – status as at the end of 2005

Source: Own work based on studies.

The average value of projects implemented within Priority 2 amounts PLN 586,438.17 (from ESF funds).

Within the frameworks of Priority 2, since the beginning of Program implementations disbursements have been made from the Program account for measures 2.1, 2.2, 2.3, 2.6 amounting PLN 945,548.58, which corresponds to 0.87% of funds of the allocation for the years 2004-2006 (fig. 3), including:

- measure 2.1 *Development of skills related to the needs of the regional labor market and possibilities of continuous education in the region* – PLN 294,691.87, which corresponds to 1.36% of the allocation for the years 2004-2006;
- measure 2.2 *Equalizing the educational opportunities through scholarship programs* – PLN 447,424.05, which corresponds to 1.04% of the allocation for the years 2004-2006;
- measure 2.3 *Vocational reorientation of people leaving agriculture* – PLN 34,265.95, which corresponds to 0.23% of the allocation for the years 2004-2006;
- measure 2.6 *Regional Innovation Strategies and knowledge transfer* – PLN 169,166.71, which corresponds to 1.50% of the allocation for the years 2004-2006.

According to the decision by the IROP Monitoring Committee of December 15, 2005 (resolution No 16/2005) funds amounting PLN 10,240,120.31 (according to the effective exchange rate) were reallocated from measure 2.4 *Vocational reorientation of people threatened by restructuring processes* to measure 2.2 *Equalizing the educational opportunities through scholarship programs* (Type II).

Within the frameworks of Priority 3 249 projects were selected for implementation by the Management Board of the province representing the total subsidy value of PLN 146,797,017.89, which corresponds to 69% of funds of the allocation for the years 2004-2006 of which 224 contracts were made (including 157 within measure 3.4) representing the total subsidy value of PLN 113,248,124.38, which corresponds to 53.15% of funds of the allocation for the years 2004-2006.

The situation presented by individual measures (fig. 4) is as follows:

- measure 3.1 *Rural areas* – 52 contracts representing the total subsidy value of PLN 68,120,722.41, which corresponds to 64.50% of funds of the allocation for the years 2004-2006,
- measure 3.2 *Areas that are subject to restructuring* – 5 contracts representing the total subsidy value of PLN 7,155,475.00, which corresponds to 4.92% of funds of the allocation for the years 2004-2006,
- measure 3.3 *Degraded urban, industrial and post-military areas* – 3 contracts representing the total subsidy value of PLN 12,346,482.08, which corresponds to 24.27% of funds of the allocation for the years 2004-2006,
- measure 3.5 *Local social infrastructure* – 7 contracts representing the total subsidy value of PLN 13,627,452.85, which corresponds to 50.78% of funds of the allocation for the years 2004-2006.

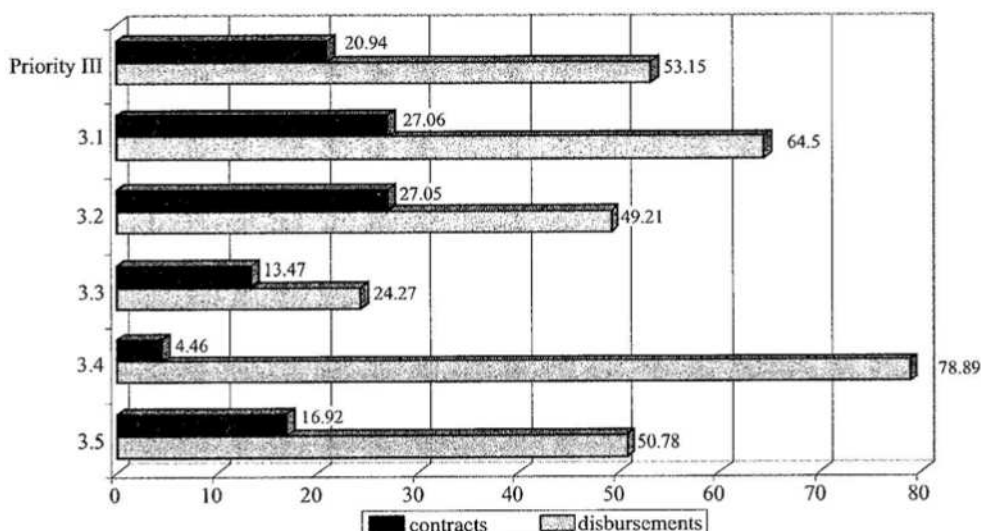


Fig. 4. Level of IROP absorption in Warmia and Mazury province based on the contracts and disbursements made (Priority III) – % of funds allocation for the years 2004–2006 – status as at the end of 2005

Source: Own work based on studies.

Within that Priority (excluding measure 3.4) implementation of 43 projects has been completed, i.e. the final reports and applications for final disbursement have been filed.

17 annexes to contracts were made. Additionally, out of 67 completed projects (excluding measure 3.4), 15 projects were finally accounted for after conducted audit in the place of implementation. The beneficiaries received the total subsidy from the structural funds amounting PLN 9,462,702.63, including: measure 3.1 – 11 projects representing the amount of PLN 7,946,753.54, measure 3.2 – 2 projects representing the amount of PLN 925,790.48 and measure 3.5 – 2 projects representing the amount of PLN 499,476.33.

Payments made from the Program account since the beginning of the Program were as follows (fig. 4):

- measure 3.1 – PLN 28 572 195,14, which corresponds to 27.06% of funds of the allocation for the years 2004-2006,
- measure 3.2 – PLN 3,933,236.64, which corresponds to 27.05% of funds of the allocation for the years 2004-2006,
- measure 3.3 – PLN 6,851,051.99, which corresponds to 13.47% of funds of the allocation for the years 2004-2006,
- measure 3.5 – PLN 4,541,644.11, which corresponds to 16.92% of funds of the allocation for the years 2004-2006.

The characteristics of contracts as concerns the value of subsidy from the European Funds were as follows: 11 projects valued at below

PLN 0.5 million, 17 projects valued at PLN 0.5-1 million, 34 projects ranging from PLN 1 to 5 million and 5 projects between PLN 5 and 10 million. The average project value (structural funds subsidy value) amounted PLN 1,511,196.01.

Summary and conclusions

During the period covered the implementation of Priority 3 *Local development* was the most advanced as despite the lower level of contracts made than the allocation for the years 2004–2006 and at the same time higher number of contracts than in priorities 1 and 2, almost 21% of expenditures incurred by the beneficiaries were reimbursed. That means that in case of that priority the value of expenditures refunded to the beneficiaries will probably exceed the allocation for 2004. In priority 1 the level of funds committed according to contracts is high – over 58% of the available allocation for the entire programming period. It should be remembered, nevertheless, that within that priority large infrastructural projects the value of which, after conducting the tenders can sometimes decrease even by 25–30% are implemented. The value of disbursements lower than in priority 3 indicates delays related to conducting tenders and signing contracts with contractors. Implementation of priority 2 measures where only PLN 945,548.58 representing 0.87% of commitments for the years 2004–2006 have been reimbursed from the program accounts progresses much worse. That low level of disbursements resulted from, among others, delays in SIMIK system implementation and continuous errors and amendments in Applications Generator, changing procedures, guidelines for Beneficiaries and lack of the detailed checklist.

Recapitulating, until the end of 2005 the Marshal's Office of Warmia and Mazury province received over 1000 applications representing the amount almost twice larger than the available funds. During the period discussed the value of contracts made exceeded 50% of funds available. The disbursements rate was at a much lower level. Until the end of 2005 only 7% of the contracted funds have been disbursed.

Almost two years of IROP implementation in Warmia and Mazury province were characterized by unexpectedly high number of projects presented, which, against concerns concerning preparation of the major program beneficiaries – units of territorial government – should be considered a success. The interest in the program exceeded expectations. During the covered period the activities of institutions involved in program implementation focused on creating the pipeline of applications and their formal assessment. That process resulted in developing a comprehensive system of administration in Warmia and Mazury province encompassing program bases, skilled staff and specialized task units.

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THE INSTITUTIONAL SYSTEM AS A FOUNDATION OF THE "NEW ECONOMY". THE COMPARISON OF THE UNITED STATES AND SOME CHOSEN COUNTRIES OF THE EURO ZONE¹

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Key words: "New Economy", institutional system, entrepreneurship culture, venture capital, international openness, competitive intensity, labor market flexibility, transaction costs.

Abstract

After pricking the Internet bubble on the American financial market, some skeptics of the idea of the "New Economy" announced the end of this phenomenon and a fortunate return to the "Old Economy". However, companies dealing with the "New Economy" have already overcome their losses; they seem to be strong again and they have become an even more important development advantage of highly industrialized countries.

The experiences of the first wave of Internet shock suggest that not all industrialized economies were able to harness all potential generated by the positive technological change of the 90's. The United States has become the first beneficiary of the new reality. In Europe only the economies of Ireland, Sweden and Finland have properly harnessed the new conditions, whereas the most important economies of the euro zone: Germany, France and Italy were not able to improve their economic growth.

It seems that some cultural and institutional differences, though underestimated, are very important factors distinguishing the American economy from big European economies that have not been able to harness the potential of the "New Economy" yet. The paper presents a hypothesis that an institutional system is the factor that determines the utilization of the potential of the "New Economy".

¹ The main thesis of the paper was presented at IX International Conference of PhD Students from Czech Republic, Germany and Poland *"Plenty of Domains, One Aim, One Economy"*, The Faculty of Economic Sciences and Management, Nicolaus Copernicus University, Toruń, 4-6 July 2005 and the First Conference starting the series: Economics and Law *"Institutional order in economy"*, The Faculty of Economic Sciences and Management, Nicolaus Copernicus University, Toruń, 14-15 September 2005.

**SYSTEM INSTYTUCJONALNY JAKO FUNDAMENT „NOWEJ GOSPODARKI”.
ANALIZA PORÓWNAWCZA STANÓW ZJEDNOCZONYCH
I WYBRANYCH KRAJÓW STREFY EURO**

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Słowa kluczowe: „nowa gospodarka”, system instytucjonalny, kultura przedsiębiorczości, venture capital, otwartość na handel międzynarodowy, intensywność konkurencyjności, elastyczność rynku pracy, koszty transakcyjne.

A b s t r a k t

W czasie pęknięcia tzw. bańki internetowej na amerykańskim rynku finansowym sceptycy idei „nowej gospodarki” zdążyli już ogłosić upadek owej koncepcji i „szczęśliwy powrót” do tzw. starej gospodarki. Jednak przedsiębiorstwa związane z „nową gospodarką” szybko pokryły straty i ponownie nabierają wiatru w żagle, stając się coraz ważniejszym czynnikiem rozwojowym gospodarki wysoko rozwiniętej.

Doświadczenia z pierwszej fali szoku internetowego wskazują, że nie wszystkie kraje wysoko rozwinięte potrafiły właściwie wykorzystać potencjał generowany przez rozwój technologiczny lat 90. Pierwszym beneficjentem nowych realiów okazały się Stany Zjednoczone. W Europie właściwie nowe warunki skapitalizowała tylko gospodarka Irlandii, Szwecji i Finlandii, podczas gdy najważniejsza gospodarka strefy euro: Niemcy, Francja czy Włochy, nie odnotowały przyspieszenia wzrostu gospodarczego.

Wydaje się, że istotnym czynnikiem odróżniającym gospodarkę amerykańską od gospodarki europejskiej, która dotychczas nie potrafiła wykorzystać potencjału tkwiącego w „nowej gospodarce”, są różnice kulturowe i instytucjonalne. W opracowaniu postawiono hipotezę, że jednym z istotnych determinantów efektywnego wykorzystania potencjału generowanego przez „nową gospodarkę” jest system instytucjonalny.

Introduction

Within the confines of research on the "New Economy" many papers were written that prove the divergence between industrialized countries and developing ones. That is the result of the acceleration of growth processes in the technologically advanced countries. Nearly all commentators notice that some developing economies, which suffer from serious deficiency of infrastructure and are often in the underdevelopment trap, are not able to harness the potential of the "New Economy". However, little space is devoted to the fact that there are serious differences in exploiting the opportunities offered by the "New Economy" even in the case of industrialized countries that are at the same level of infrastructural and technological advance. That can be especially noticed when one compares the results obtained by the United States (the leader of the "New Economy"), and the most important economies of the euro zone: Germany, France and Italy.

Some economists, especially the ones who belong to so called mainstream economics, often ignore the facts which prove that the institutional

infrastructure is an important determinant of the economic development of a society². When one analyses literature concerning the "New Economy", one can find many papers concentrating on some technical aspects of that phenomenon, mainly the usage of the Internet. Similarly, one can find some papers concerning the significance of fiscal and monetary policy for creating the "New Economy". On the other hand, there are only a few papers that analyse the role of the institutional infrastructure in creating the "New Economy". As a result, the aim of this paper is to assess the role of the institutional system in harnessing the potential of the "New Economy". Some selected characteristics of the institutional infrastructure that dominate in the United States and in the mentioned European countries will be analysed.

The conception of the "New Economy"

Many papers concerning the "New Economy" were written in recent years. However, the definition of this phenomenon is still a subject of controversy. Martin Baily says that there are many pitfalls in the term "New Economy", "New Economy" is probably too broad a term and implies both more change and more permanent change than actually took place. But 'information technology' seems too narrow a term to describe the set of interrelated forces bringing about change in the economy, that include increased globalization, a more intense pressure of competition, the rapid development, adaptation and use of information and communications technology and a favorable economic policy environment." (BAILY 2001)

In the case of the majority of papers on the "New Economy" research is concentrated on the influence of the Internet on the production growth. However, Robert Atkinson and Rick Coduri suggest that, "(...) the New Economy was never just about the Internet, (...) Rather, the New Economy is about the transformation of all industries and the overall economy. As such, the New Economy represents a complex array of forces. These include the reorganization of firms, more efficient and dynamic capital markets, more economic "churning" and entrepreneurial dynamism, relentless globalization, continuing economic competition, and increasingly volatile labor markets" (ATKINSON, CODURI 2002). This approach seems to be quite appropriate to present the role of the institutional system in creating the "New Economy".

² Recently, one can see a tendency for better understanding of the role of institutions in economics. This is mostly possible due to the contribution of "New Institutional Economy" theoreticians, who try to integrate their works with mainstream neoclassical economics.

The United States as the first beneficiary of the "New Economy"

Chronologically, most of the commentators combine the "New Economy" with the period of vigorous economic growth of the American economy in the last decade of the 20th century. In the 90s the American economy was growing continuously for eight years, which was the longest period of incessant, sustainable growth in the previous century. Moreover, the decrease of the unemployment rate was unprecedented in that period. The economy created 17 million jobs, driving unemployment down to a 30 year low of 4.1%. Though it all, inflation was kept very low. Consumer prices rose 5% per year at the beginning of the 90s but less than 2% a year from 1996 on (Cox, ALM 1999). Consequently, some economists seem to perceive the serious change in the inflation processes, the traditional wisdom of trade-offs between unemployment and inflation is defied again. The enthusiasts of the "New Economy" believe that the "New Economy" is able to sustain stronger growth for a long time with little danger of inflation.

Nonetheless, these changes seem to avoid continental Europe, where besides the economies of Ireland, Sweden and Finland, the biggest economies of the euro zone, Germany, France and Italy, are not able to accelerate their economic growth. In the years 1991-2003 these economies obtained the average GDP growth of 1.51%, whereas in the same time the American economy was growing at the average annual rate of 2.97%³.

A vigorous discussion about the potential sources of this favorable growth of the American economy is under way. Among the most popular hypotheses one can find the assertion attributing this growth to the very good monetary policy of the FED (TAYLOR 1998); some economists underscore the technological change that results from the proliferation of the Internet (JORGENSEN, STIROH 2000); others concentrate on the benefits of America from globalization (ROGOFF 2003). However, there are also serious arguments for a notion that an appropriate institutional infrastructure is a factor that joins all these positive tendencies. Vito Tanzi said, "It is no accident that the New Economy revolution started in the United States and not in Japan. Japan was very advanced in terms of technology, but the revolution started in the United States. The reason is that the United States had far less regulations, far less obstacles to the introduction of these new ideas. The fact that the United States was better placed in terms of regulations, in terms of organization for this, meant that the United States was much quicker, much more ready to take advantage of this new trend" (TANZI 2001).

In the next section some characteristics of the American institutional system, which seems to enable this country to harness the potential of the "New Economy", will be discussed.

³ Calculations of the author based on: *Economic Survey of Europe*, United Nations, New York and Geneva 2004.

The institutional infrastructure of the "New Economy"

Douglas North, an eminent economist rated among the New Institutional Economy school, defines an institutional system as a set of formal (juridical regulations, laws and constitutions) and informal (norms of behavior, social conventions and self imposed codes of conduct) constraints and their enforcement characteristics. These "rules of the game", which are deeply rooted in the social, cultural and political life of society, form the economic incentives that are the underlying determinants of long term economic growth (NORTH 1994).

Among the factors that form the institutional system of society, one can usually find: the quality of the juridical system which enforces contracts and protects property rights; development of the economic infrastructure, international openness, development of financial markets, quality of human capital and flexibility of labor markets, entrepreneurial culture, political stability and others.

In the case of economies of the US and Europe the biggest institutional differences concern entrepreneurship competitiveness, elasticity of labor markets and characteristics of financial markets. William Sahlman as Vito Tanzi finds the roots of the successful and effective exploiting of the "New Economy" by the American economy in the following institutional characteristics of that country:

1. Very high social status of private entrepreneurs and big tolerance towards their failure, which is often the result of the endeavor that is aimed at finding new solutions;
2. Attracting the best human capital to the "New Economy" companies, whereas in the past the best people were absorbed by traditional financial sectors;
3. Easy access to capital for private entrepreneurs (SAHLMAN 1999).

Unlike Europe, American society loves its entrepreneurs, one can say that the most successful ones enjoy the popularity of celebrities and show business stars. This very high social prestige of private entrepreneurs is a factor that encourages the best educated people to set up new companies, which often grow in the way described by the Shumpeterian paradigm of "creative destruction" (SCHUMPTER 1995). According to William Sahlman in the year 1999 35% of Harvard Business School graduates decided to start their careers in companies that are associated with the "New Economy", or work in venture capital companies that seriously support the "New Economy" (SAHLMAN 1999). In the case of Europe most graduates want to follow careers in the traditional financial sector or in state and government bureaucracy. As a result, according to Paul Reynolds, Micheal Hay and Michael Camp's report the US (next to Israel and Canada) was placed in the highest group on the basis of entrepreneurial activity with an average level

of entrepreneurial activity of 6.9%, whereas the economies of France and Germany were placed to the lowest group with an average level of entrepreneurial activity of 1.8% (REYNOLDS et al. 1999).

International empirical comparisons tend to prove that financial markets have a key role in effective allocation of savings, hence, they are an important determinant of GDP growth⁴ (KING, LEVINE 1993, LEVINE 1997). A highly developed financial market, especially its venture capital sector, is considered as a foundation of the "New Economy". Venture capital is the most important source of finance for start-ups that are often a source of innovations and new solutions. When one compares the financial markets of continental Europe with the US financial markets, one can see the serious deficiency of European financial markets. According to Global Entrepreneurship Monitor 2000 in 1999 the ratio of venture capital invested domestically to GDP for the US equaled 5.3%, whereas in Germany it equaled 1%, in France 0.9% and in Italy only 0.5% (ZACHARAKIS et al. 2000).

Some other institutional characteristics that support the "New Economy" were listed by Martin Baily. He underscores the role of international openness, competition and proliferation of best practices, and especially the elasticity of labor markets which seems to be a basic condition of building the "New Economy" (BAILY 2001).

International openness of a market is the factor that enables the fast spreading of innovation and knowledge. It makes the market highly competitive which forces companies to improve their product and develop new ones. Despite building the common market in the EU, according to research quoted by Martin Baily prices in the US, on average, were 15% above the lowest international prices, whereas for Germany and other European countries the figure was above 60%. These price data seem to support the view that openness and competitive intensity are substantially lower in continental Europe than in the United States (BAILY 2001).

Creating and implementing the new organizational and technological solutions is a foundation of the "New Economy". It basically depends on smooth and fast reallocation of the best human capital from sectors that tend to be in stagnation to sectors that are the most productive. High elasticity of a labor market is the factor that makes this reallocation smooth and enables the economy to adjust to changing conditions. On the other hand, the inelastic labor markets create many constraints for fast and effective reallocation of human capital, which impedes building the "New Economy".

The American labor market is considered the most flexible labor market in highly developed countries. On the other hand, the European labor market, which struggles with a chronically high rate of unemployment, despite the need for reform, is still characterized by generous unemployment, disability or early retirement programs and high minimum wages. That kind of institutional

⁴ Robert King and Ross Levin comment that there is a group of eminent economists who seem to underestimate the importance of financial markets for long term growth; however, the majority of recent empirical studies prove a serious correlation between the development of financial markets and economic growth.

infrastructure of a labor market makes it highly inflexible. According to Donald Johnson, who quoted Alan Greenspan, the main reason why France and Germany were not able to take full advantage of the "New Economy", notwithstanding the high skill level and the availability of technology, is the inflexible labor market. He stressed, "The labor market rigidities make it difficult for some countries to re-allocate employment and thus they are put in a position where they are not as capable of taking advantage of the new technologies through employing new skills." (JOHNSTON 2001).

Already in the early 1960s, Ronald Coase proved that some habits, social norms and tradition can create serious constraints influencing the behavior of market actors. These factors can help to reduce uncertainty and influence the level of transaction costs that is a significant constraint to economic development (Coase 1960). In the context of Ronald Coase's research, one can say that the institutional factors stressed by Vito Tanzi, William Sahlman and Martin Baily, in the case of the US, reduce transaction costs significantly and make favorable conditions for harnessing the potential of the "New Economy". *The Economist* argues that setting up a company in Europe can take ten times more time and can be four times more expensive than in the United States (*The Economist* 2000).

Conclusions

William Sahlman says, "The economic, social, and cultural factors undergirding the new economy are rock solid" (SAHLMAN 1999). These words harmonize with the notions of Leonard Nakamura who summarizes the American institutional advantages over other economies, "The U.S. has a well-educated, diverse, and disciplined workforce; access to the most recent research; a deregulated economy relatively unencumbered by bureaucratic restrictions; moderate taxes; a smoothly functioning financial market to finance investment; a long history of rule by law and democracy." (NAKAMURA 2000). All these institutions make perfect foundations for the "New Economy".

On the other hand, the European institutional infrastructure of the "New Economy" needs serious reform. The change of cultural context and entrepreneurship attitude is unfortunately a very long process. However, Europeans have to start this institutional reform with making labor markets more flexible, increasing the openness and competition intensity of the European market. The bureaucratic constraints have to be also reduced and, last but definitely not least, the financial market must be improved.

It is very difficult, or maybe even not possible, to provide a sophisticated model that gives some hard scientific proofs of the influence of the institutional system on the creation of the "New Economy". Nevertheless, the research into the influence of the institutional system on the growth process can indeed help to recognize some sources of tendencies that lead to

serious divergence of development between economies. This paper supports the notion that the institutional infrastructure and organization of a society determines its growth possibilities.

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MANAGERIAL COMPETENCE MODEL OF SELF – GOVERNMENTAL ORGANIZATIONS

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Key words: competence, competence model, competence management, manager, managerial effectiveness, self – governmental organization.

Abstract

Effective management of organizations is determined by many factors. One of the most important factors are managerial competence since the optimal usage of organizations' resources, picking up occasions and possibilities existing in the environment depends on managers.

The objective of the following research is the empirical verification of the competences theoretical model along with defining managerial competence model of self – governmental organization of the future. The realization of the above objective was based on theoretical considerations, self – valuation of commune officers from the north – east part of Poland and investigations based on empirical data gathered during the research process.

MODEL KOMPETENCJI MENEDŻERÓW ORGANIZACJI SAMORZĄDOWYCH

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Słowa kluczowe: kompetencje, model kompetencji, zarządzanie kompetencjami, menedżer, efektywność menedżerska, organizacja samorządowa.

Abstrakt

Efektywne zarządzanie organizacjami jest zdeterminowane wieloma czynnikami. Kompetencje menedżerów zalicza się do jednych z ważniejszych czynników, albowiem to od kadry zarządzającej zależy optymalne wykorzystywanie zasobów organizacyjnych oraz wychwytywanie okazji i możliwości tkwiących w otoczeniu.

Celem pracy jest empiryczna weryfikacja teoretycznego modelu kompetencji oraz zdefiniowanie modelu kompetencji menedżera samorządowej organizacji przyszłości. Realizację celu oparto na teoretycznych rozważaniach, samoocenie osób pełniących funkcje wójtów gmin wiejskich zlokalizowanych w północno-wschodnim rejonie Polski oraz dociekaniach na podstawie materiału empirycznego zgromadzonego w postępowaniu badawczym.

Introduction

Effective management of organizations depends on many factors which are connected with their interior and the constantly changing surrounding. The internal factors are connected with material, financial, informational and human resources of the organization. Although the condition and quality of all those resources are very important the literature on the subject emphasizes the role of human resources in the modern world. The first reason for this is the optimal utilization of the rest of resources and the second – the effective adaptation to the environment (i.e. its objectives, tasks, structures,...) in which the organization exists and acts in a benefit of. The most favourable activities for the internal resources utilization and the ability of opportunity and chances notification in the environment are mostly determined by quantitative and qualitative conditions of all employees, especially management staff.

Nowadays the issue of managers competence is a contemporary theme and a lot of researchers are interested in it. There was a lot of books written about the qualification of engineers even before the term 'competence' was introduced because it was them who mostly took managerial posts.

The literature on the subject introduces the model sets of competence of managers working in organizations turned towards profits. But there is definitely no scientific discernment of management staff profiles directing public organizations.

The subject of the investigation was a competence model of the self – governmental managers at the level of local administration of commune council. In this research the competence model has been adapted as a standard competence set contributing to the efficient activity of a manager. With reference to operation activities the model includes competence currently demanded in a given post but the strategic expression gives a hypothetical competence set in perspective. In this investigation the current competence model is presented as a profile and the expected competence model as a register. In this work a manager of a public organization is a person managing a local government unit. The subject of the research were chief officers of the rural communes.

The limitation of the extent of research to one type of public organization has been intentional and resulted from the following circumstances:

- managing a self – governmental organizations belongs to comparatively new trends in the Polish science of management
- political, economical, legal, social and cultural transformation that took place in Poland after the year 1989 have mostly affected the self-governmental organizations that are expected to manage public resources in an efficient way and to solve many problems of a local commune in an efficacious way

- the accession of Poland to the European structures has forced the abidance of the standards valid in countries of the European Union (EU). Activities according to these standards can be secured only by managers with different competences than so far.

The new challenges mentioned above and the insufficiencies in the activities of the self – governmental organizations have been concentrated on the competence of persons managing these organizations. The complexity of those problems and the small scientific recognition until now has based the treatment of these matters as the object of investigation. The additional base of the necessity of the scientific treatment of the accepted object of research resulted also from after – mentioned factors :

- the literature of the objective of research is mostly related to theoretical models of managerial competence especially with the competence of managers managing business organizations,
- the models of competence elaborated in other countries are very cognitively valuable on one hand but on the other should not be transferred directly to the Polish reality. This prudence results from the different political, economical, social and cultural conditions and ‘the young age’ of Polish self – governmental organization,
- in an editorial market the insufficiency of scientific descriptions related to the competences of managers managing self – governmental organizations can be noticed. It means mainly editions based on the empiric material. Researches presented are a partial supplement of this gap.

The circumstances mentioned above as well as the conviction about the occurrence of the social and economic demand for the applicable results are a main inspiration for these studies.

Assumptions of the research

The empirical verification of the theoretical model of competence and the elaboration of the model of competence of a person managing a self – governmental organization of the future were the main objectives of this researches. According to this main objective the subject of the verification was mainly the concordance of the theoretical model with opinions about the self – governmental managers competences expressed by themselves. The realization of this objective was based on theoretic considerations, the self – valuation of people acting as chief officers of the rural communes located in the north – east part of Poland and investigations based on the empirical materials collected during the investigation process.

The problem contained in the following question: which of the competence useful in a operational and strategic measure creates a key – model of self – governmental manager competence and what does it mean for the efficiency of the organization? The investigation guiding to the answer to this question was related with the solution of following detailed problems:

1. what components make up the competence of a manager?
2. what is the hierarchy of importance of each competence in a self – valuation of the self – governmental managers?
3. in what degree the key – competence of the self – governmental managers are in line with the competence of business managers?
4. in which area of chief officers' competence can the biggest malfunctions at present be identified?
5. which management styles and which attitude towards inspection dominate among self – governmental managers?
6. what is the degree of the deprivation of needs related with work?
7. what type of company culture do self – governmental managers prefer?
8. which competences should build up the key – model of competence of a person managing a self – governmental organization in the future?
9. in what way ought the management education be changed?

The following research hypothesis was formulated in context of the accepted objectives and research problems: the competence potential of self – governmental managers of organizations is lowered mainly by the insufficient knowledge and skills in the discipline of management. In consequence the organization is less efficient because these people manifested the tendency to fall into rut and bureaucratic activities. In this hypothesis the importance of knowledge comparing with other components of competence was mainly accentuated, assuming that the bigger knowledge resources the easier formation of practical skills, attitudes and behaviour of the employees desirable in a work process. The determinants of rut and bureaucratic activities were: the hypothesis of needs related with work and their deprivation degree, the style of management, the inclination to internal audit and cultural standards.

The research was realized during 2000–2003. In the first phase the method of literature studies was used. This approach permitted to establish fundamentals for considerations that led to the project of theoretic model of self – governmental manager competence. Finding a point of reference, a point that would be the start to forming a new model was an investigative difficulty. As it was mentioned before, the literature of the subject is unusually poor especially with reference to managers of self – governmental organizations. That is why the models of managers managing business organisations presented in the Polish and foreign literature were adopted as a starting point.

Two methods were used in pilot and fundamental studies: diagnostic pool and self -valuation. The researches were carried out by means of questionnaire method and conversation with respondents. The processing of competences making up the model was carried out according to the assumption of the ABC method based on the Pareto's law (20/80). The results obtained made the elaboration of a hierarchical model differentiating each

competences, for holding a post of a chief officer, according to the criterion of their importance (in the self – valuation of respondents) possible. The description of the competence profile for self – governmental managers was enriched by the results of additional diagnoses related with a style of management, the inclination to internal audit, the needs' deprivation and the company culture. These diagnoses were executed using standard instruments applied by L. ZBIEGEŃ-MACIĄG (1999, p. 162-169) and S. TOKARSKI (1997, p. 64-71) and home grown questionnaires.

The questionnaires were distributed between 149 chief officers of rural communes located in the Podlaskie and Warmińsko-Mazurskie provinces. The current professional status was the criterion used during the selection of respondents process. All of the 122 returned questionnaires were taken into consideration.

Findings

The list of competences – theoretical model

The theoretic model – a list of 51 competences (tab. 1) was based on:

- responsibilities of commune councils,
- duties and competences of managers of commune councils,
- contents included in the project related with The British Know – How Foundation Programme of Supporting Local Autonomies (BARTKOWSKA-NOWAK, NOWAK 2000);
- key – model of competences of efficient business managers (on the basis of literature)
- a profile of a Polish manager of the 90 – ties (on the basis of literature);
- key – competences of American self – governmental managers (on the basis of literature)
- key – competences of self – governmental managers in chosen European countries (on the basis of literature)
- experiences of self – governmental administration in the USA and in European countries related with methods improving the efficiency (on the basis of literature)
- rules and decisions of The European Code of Good Administration and the European Card of The Territorial Autonomy.

The register of competences verified in piloting studies (tab. 2) are divided into three sub – sets i.e.: professional (managerial knowledge and skills assuring an efficient and successful organization management), social (knowledge about attitudes and behaviours of individuals and groups and influent qualities for actions according to the objectives of the organization and its members) and business (enterprising skills guiding into profitable activities) competence.

Table 1

The theoretical model of competence of self – administrative managers

The name of competence		
– comprehensive thinking – management knowledge – acts and regulations knowledge, also concerning the EU – absorbing and understanding ability – commune problems knowledge – strategic thinking – high education – ability to create flexible company structures – analytical thinking – attitude towards self and co – workers development – fluent English – good mental and physical condition – planning and work organizing skills – decision making ability – tasks delegation skills	– attitude towards risk – business units budgeting abilities – flexible approach to changes – care of work quality – seniority in administration – ability to demand from subordinates – initiative – creativity – managerial experience – attitude towards results – leader skills – ability to diagnose organizational problems – ability to estimate the efficiency of the company – need for achievements – negotiation skills – sense of responsibility – ability to use information technology	– creative attitude towards work – supporting to act – integrity and honesty – self – assurance – personal culture – showing confidence towards subordinates – team working ability – ability to solve conflicts – work and personal life integrity – ability to mould company culture – stress resistance – social maturity (sensitivity and responsibility) – ability to convince – self – esteem – understanding human behavior – keeping one's emotion under control – communicativeness – ambition – tactful behavior

Source: Proper study.

The division of competence into different subsets is always conventional. It was introduced in this scientific description with an objective to study the internal structure of competence. The following circumstances are the reasons of this division:

- commune councils through their own organization units realize services and economic activities. A commune officer has to supervise and control if those units are functioning correctly. Therefore he should have professional knowledge and skills in a field of economic organization management,
- communes organizations realize mostly social functions. Therefore the portfolio of competence should include competence manifesting sensibility in the area of local community needs and public responsibility for the taken decisions,
- self – governmental units are organizations not profit – oriented. None the less managers of these entities should know how to attract investors and additional financial means (out of budget). Business attitudes (initiative) should increase their competence potential.

Table 2

The competence model according to commune officers

Professional competences (P)	Social competences (S)	Business competences (B)
– management knowledge – acts and regulations knowledge, also concerning the EU – commune problems knowledge – comprehensive thinking – analytical thinking – attitude towards self and co workers development – flexible approach to changes – care of work quality – planning and work organizing skills – decision making skills – tasks delegation skills – attitude towards risk – seniority in administration – managerial experience – ability to demand from subordinates	– integrity and honesty – personal culture – self – assurance – showing confidence towards subordinates – team working ability – ability to solve conflicts – stress resistance – social maturity (sensitivity and responsibility) – ability to convince – self- esteem – understanding human behavior – keeping one's emotion under control – communicativeness – ambition – tactful behavior – supporting to act	– initiative – creativity – attitude towards results – leader skills – need for achievements – sense of responsibility

Source: Proper study.

The empirical verification of the theoretical model

The register of competence verified by commune officers was transmitted into the new construction of the questionnaire. The results were subject to statistical analysis (tab. 3).

The data in the table show the quantitative and qualitative structure of competence in each subset. The subset A (key competence) constitutes 21,6% of all competence. Professional competence constitute the highest percentage in the empirical structure of key competence (62,5%). Social competence constitute 25% and business 12,5%. The second most important set were competence of the B subset in which social competence dominated (54,5%). Business competences constitute 27,3% and professional 18,2%. The subset C, in which professional and social competence constitute 44,4% and business only 11,2%, was the supplement of the competence portfolio of commune officers.

The result received differs from the theoretical model in which dependence is 20/80. In the investigation the relation was from 21,6% (cumulative percentage of competence number) to 24,1% (cumulative percentage of points

number). The obtained differential of 55,9% shows a competence gap in the key competence subset. This unfavourable, from the paraxeological point of view, situation was also diagnosed in the competence structure of other subsets. For example in the subset B, the second – rate, such important competence were localized like attitude towards changes, towards results and care of work quality. However, management knowledge, acts and regulations knowledge, also concerning the EU were localized among other in the C subset, the third – rate. Surprisingly, communicativeness was also localized in the C subset. It is hard to imagine how one could absorb other social competence mentioned in the A and B subsets without communication abilities.

Table 3

Competence hierarchy according to commune officers

Competences	Cumulative percentage of number of competences	Number of points*	Cumulative number of points	Cumulative percentage of number of points	Subset of competences
1	2	3	4	5	6
creativity (B)	2.70	4.86	4.86	3.13	A
comprehensive thinking (P)	5.40	4.79	9.64	6.22	
work organizing skills (P)	8.1	4.71	14.36	9.26	
commune problems knowledge (P)	10.80	4.71	19.07	12.30	
attitude towards development (P)	13.50	4.57	23.64	15.25	
decision making ability (P)	16.20	4.57	28.21	18.20	
supporting to act (S)	18.90	4.57	32.79	21.15	
showing confidence towards subordinates (S)	21.60	4.57	37.36	24.10	B
responsibility for one's obligations (B)	24.30	4.50	41.86	27.00	
flexible approach to changes (P)	27.00	4.43	46.29	29.86	
self – assurance (S)	29.70	4.43	50.71	32.72	
social maturity (sensitivity and responsibility) (S)	32.40	4.43	55.14	35.58	
integrity and honesty (S)	35.10	4.43	59.57	38.43	
personal culture (S)	37.80	4.43	64.00	41.29	
Initiative (B)	40.50	4.36	68.36	44.10	
attitude towards results (B)	43.20	4.29	72.64	46.87	
care of work quality (P)	45.90	4.29	76.93	49.63	
team working ability (S)	48.60	4.29	81.21	52.40	
ability to solve conflicts (S)	51.30	4.29	85.50	55.16	

cont. Table 3

1	2	3	4	5	6
stress resistance (S)	54.00	4.21	89.71	57.88	C
leader skills (B)	56.70	4.21	93.93	60.60	
ability to convince (S)	59.40	4.14	98.07	63.27	
self - esteem (S)	62.10	4.14	102.21	65.94	
acts and regulations knowledge, also concerning the EU (P)	64.80	4.14	106.36	68.62	
tasks delegation skills (P)	67.50	4.14	110.50	71.29	
analytical skills (P)	70.20	4.14	114.64	73.96	
managerial experience (P)	72.90	4.07	118.71	76.59	
management knowledge (P)	75.60	4.00	122.71	79.17	
understanding human behavior (S)	78.30	3.93	126.64	81.71	
keeping one's emotion under control (S)	81.00	3.86	130.50	84.19	
ability to demand from subordinates (P)	83.70	3.71	134.21	86.59	
Communicativeness (S)	86.40	3.71	137.93	88.99	
need for achievements (B)	89.10	3.64	141.57	91.34	
Ambition (S)	91.80	3.57	145.14	93.64	
attitude towards risk (P)	94.50	3.43	148.57	95.85	
Seniority in administration (P)	97.20	3.29	151.86	97.97	
tactful behavior (S)	100.00	3.14	155.00	100.00	

* the number of points was given as a weighted average of the desirable level of absorbing competence

Source: Own studies.

The results of the proper research were compared with empirical results of other researchers in order to find the answer to the question concerning the degree of consistency of key competence of Polish self – governmental managers with key competence of business managers and self – governmental managers from the USA and Western Europe.

In the light of presented results it can be stated that only three competence i.e. comprehensive thinking, creativity and ability to motivate that are key competence in the proper research can be also found in the results of R. Boyatzis (adequately conceptional thinking – creativity, attitude towards effectiveness through motivating achievements) and D. A. Cameron (adequately conceptional thinking, motivating others).

Table 4

Managerial key competence – the balance of empirical research results

Authors		
R. Boyatzis (1992)	D. A. Whetten i K. S. Cameron (1984)	Proper results
- attitude towards effectiveness - attitude towards acting - proactivity - self – confidence - verbal communication ability - conceptional thinking ability - methodical thinking ability - ability to take advantage of social authority - ability to manage team work	- self – consciousness (knowledge about oneself) - coping with stress - creative solving problems ability - communication ability - ability to exert influence - ability to motivate others - ability to delegate managerial entitlements - ability to manage conflicts	- creativity - comprehensive thinking - commune problems knowledge - work planning and organizing ability - supporting to act - showing confidence towards subordinates - attitude towards development - making decisions skills

Source: CHEPA 2001 and proper research.

The diagnosed situation shows a clear discrepancy between the set of key competence of people managing Polish, American and Western European self – governmental organizations as well as business managers competence. Those discrepancies are the reason of Polish self – governmental administration malfunctioning.

Key competence profile – present and desirable situation

The efficiency of each manager as well as a self – governmental one depends mainly on the level of absorbing key competence. The competence profile of this subset was based on desirable and present measurement of their absorbtion. A five – rank scale was used, self – valuation was the method of measurement. The results are presented in the table nr 5.

Levels of absorbtion received in an empiric way show a highly unfavourable competence potential of Polish self – governmental managers. All of the eight key competence need improving. The low level of self – valuation concerning comprehensive thinking and motivating to act is a result of management knowledge scarcity. Self – governmental managers lack of high managerial education and according to them during their studies contents concerning managing an organization were not presented or in a very small degree.

People managing commune councils should have the ability to pay less attention to operational operations and know how to look ahead. Comprehensive thinking and the ability to define strategic objectives should be essential competence. They explained the difference in the level of absorbing the comprehensive thinking competence (-1,19 pts.) by the fact that their work is mainly concentrated on present matters. This explanation is

not consistent with the unfavourable discrepancy (-0,71 pts.) recorded for the commune problems knowledge competence. The lack of in – depth knowledge of problems to solve and mean the lack of commitment or falling behind fast changes.

Table 5

Key competence profile of a commune officer

Competence	Level of competence		Competence gap /pts/ (3-2)
	Desirable condition	Present condition	
creativity	4.86	4.26	-0.60
comprehensive thinking	4.79	3.60	-1.19
commune problems knowledge	4.71	4.00	-0.71
work planning and organizing ability	4.71	3.66	-1.05
supporting to act	4.57	3.80	-0.77
showing confidence towards subordinates	4.57	4.50	-0.07
attitude towards self and co – workers development	4.57	3.90	-0.67
fast and right decision making	4.57	3.60	-0.97

Source: Proper research.

The creativity competence also needs correction because it is not conducive to building new perspectives and acting strategies. Without those abilities characterizing people managing self – governmental units, those organizations will withdraw into o. s. and will not be able to take advantage of their strong points, chances and opportunities. This will mean stagnation and lack of developmental perspective.

The competence portfolio of each manager and his subordinates has to be constantly improved and developed. Commune officers are aware of that necessity and have a positive approach towards it. However commune budgets do not allow to satisfy it on a level expected by them. They explain the negative discrepancy (-0,67 pts.) between the desired and present level by the state of commune finances.

Conclusions

The methodology used in the research enabled the quantitative and qualitative diagnosis of the competence condition of self – governmental managers and enabled the creation of a model of anticipated competence of those managers. The main and partial objectives were accomplished through theoretical considerations and considerations based on empirical

research. The data gathered during the research process enabled the hypothesis verification and the formulation of the following general and cognitive conclusions:

General conclusions

1. Competence are a multidimensional and interdisciplinary structure. Knowledge, skills, experience, personal features, attitudes and behaviour are their basic components. Since each component is also multidimensional, there are extremely many relations that can not be entirely predicted. Hence, all definitive classifications and orders of competence are very difficult and always debatable.
2. The uncritical application of competence model worked out for other organizations (domestic and foreign ones) is groundless because each model is a simplification and does not take into consideration all real variables (political, economical and cultural conditions) and changes in time.
3. Although all the anticipated competence models are probable, they have to be worked out. The hypothetical conditions of organizations behaviour are the base to those models. This fundamental benefit that results from having them is manifested by the ability to shape and develop competence of managers and candidates for managerial posts in a right way.
4. A universal model of competence can not be created because all professional situations, organization's and its environment's behaviour, all humane relations (to which those competence are related) are impossible to predict.

Cognitive conclusions

1. In the self – valuation of self – governmental commune officers the most important competence are comprehensive thinking, work organization skills, commune problems knowledge, attitude towards self and co – workers development, making decisions ability, supporting to act and showing confidence towards subordinates. All of them make up a key competence portfolio.
2. The quantitative comparison of self – governmental manager's key competence with theoretical models of successful business manager's key competence, managers of American and Western European self – governmental administration went moderately favourably. From among eight competence characterizing commune officers five were mentioned in the successful business manager's model. But the quantitative comparative analysis of empirical models works out unsatisfactory because only three competence of self – governmental's i.e. creativity, comprehensive thinking and supporting to act meet with competence of other researcher's models.
3. Significant discrepancies between the desired and present level of competence were recorded in as much as seven from among eight key compe-

tence of self – governmental managers. Five of them concern knowledge and abilities in the field of management. In the self – valuation of commune officers the biggest lack of competence exist in comprehensive thinking and making decisions ability.

4. The bureaucratic style was the management style that dominated. The most desired leader style characterized only six of all respondents. Superiority in the scope of location of control was not identified among self – governmental managers. Similar decomposition was noticed between external and internal location of control.
5. Independence at work turned out to be the most significant and most deprived need. Next, according to the level of deprivation, was the need for self – improving. Although this need was the sixth (between seven) in the hierarchy of needs related with work it is very important because a high level of its dissatisfaction lowers the support to act.
6. Self – governmental managers prefer company culture based on fixed rules. Team work, interpersonal relations and care for personal development require an urgent correction of cultural norms.
7. The key competence theoretical model of people managing self – governmental organizations of the future is made up by: attitude towards constant education, comprehensive thinking, positive attitude towards changes, cultural sensitivity, entrepreneurship, communicativeness, attitude towards cooperation, pro – market and pro – quality attitudes.
8. The system of managerial education requires changes towards internationalization of education programs according to European standards, introducing organization and management units to all majors, educating ‘generalizational’ managers whose competence would be based on wide economic, psycho – sociological and law knowledge, integrating academic education with professional training and development in organizations.

Most of the cognitive conclusions mentioned above are also appliqué. The key competence profile based on empirical knowledge and the theoretic register of anticipated competence are a base to improving the process of managing people. In the context of the subject of research, the worked out models can be also applied during the recruitment for managerial posts and the selection of those already acting as managers. The competence models can be also useful while working out criteria of periodical notes and assessment process. The knowledge of differences between the model level of competence applied in an organization according to its standards and its present condition can be used in planning the development of managerial staff and working out the payment system for managers.

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INVESTMENT STRATEGIES OF ENTERPRISES, REASONS, FINANCING – AN EMPIRICAL APPROACH

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Key words: investment strategies, investing, reasons, enterprise, financing.

A b s t r a c t

The paper presents the results obtained during the research on investment areas in the enterprises of north-eastern Poland, considering various reasons for investing and sources of financing.

The discussion concerned investment strategies that, on one hand, are directly subordinated to the development of the examined enterprises and, on the other hand, are to ensure the survival of companies or preserve their level of economic stagnation. Investment strategies of enterprises, both in the aspect of development and survival, are presented in the context of reasons underlying investments and of the feasibility of financing. Currently, it is becoming a *"business compulsion"* in the Polish sector of enterprises and a microscale strategic task.

STRATEGIE INWESTYCYJNE PRZEDSIĘBIORSTW, PRZESŁANKI, FINANSOWANIE – UJĘCIE EMPIRYCZNE

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Słowa kluczowe: strategie inwestycyjne, inwestowanie, przesłanki, przedsiębiorstwo, finansowanie.

A b s t r a k t

W artykule zaprezentowano wyniki uzyskane w trakcie badań nad obszarami inwestowania w przedsiębiorstwach północno-wschodniej Polski przy różnorodnych przesłankach i źródłach finansowania.

Rozważania dotyczyły inwestycyjnych strategii z jednej strony podporządkowanych jednoznacznie rozwojowi badanych przedsiębiorstw, z drugiej strony natomiast zapewnieniu im

przetwarzania czy utrzymania na poziomie stagnacji gospodarczej. Inwestycyjne strategie przedsiębiorstw zarówno w aspekcie rozwoju, jak i przetrwania zostały wyrażone w kontekście przesłanek inwestowania oraz realności finansowania. Staje się ona obecnie w polskim sektorze przedsiębiorstw „przymusem ekonomicznym” i zadaniem strategicznym w mikroskali.

Introduction

This paper analyses investment strategies required for companies to develop independently, survive, adapt to changeable environmental conditions and the reality of a market economy and integrate with European structures. The types of reviewed investment strategies all stem from the business practices of enterprises from north-eastern Poland.

The empirical research was based on the following assumptions:

- It was assumed that the analysed investment strategies of enterprises constituted groups of strategies related both to the development of the enterprise and to its survival, and that investment on the micro scale is subordinated to those factors.

Investment undertakings resulted from the domination of particular reasons for investing in the practice of enterprise development. Investment strategies could be in such situations realized by means of (PŁOCICA 1984):

- investments consisting in the construction of new objects, buildings and structures,
- replacement and modernization investments,
- investment consisting in the development of plants and buildings.

Creation of new enterprises and increasing the existing production facilities consisting of the construction of new plants and buildings and in the restructuring of existing ones.

However, functions related to replacement and restructuring of the technical base in the existing enterprises were fulfilled by means of modernization investments.

- Research focused on the independence and the freedom of decisions of investors (entrepreneurs), who invested within the framework of a specific investment activity resulting from running needs or development necessities of enterprises.

This activity was burdened with the so-called feasibility of financing – from modernization, through development to new investments (OLKOWSKA 2003).

- The main subject of the discussion were manufacturing and service investments related to the developmental aims of enterprises or to those that are to ensure their survival.

Methods and description of the analysed group

The analysis aimed at identification of types of investment strategies of enterprises with particular reasons for investing, as well as of the feasibility of their financing. Empirical research was addressed to local companies, operating in the north-eastern region of Poland. They helped to find the answer to questions regarding types of investment strategies directly related to the aims of the enterprise, connected rather to the reasons for investments than to particular types of investments (TOWARNICKA 1986).

Empirical research was conducted by way of a pilot survey in two stages at the turn of 2002 and 2003, and 2005 and 2006. The first stage included a group of 70 business units, and the second one – 40. In the description of the examined group, it was assumed that the size classes of enterprises, affiliation to ownership sectors and sections would make it possible to objectively and exhaustively present the examined objects. The examined group consisted of 110 enterprises. Classification of enterprises according to the employment level showed that small units, employing up to 50 people, constituted 58% (64 companies) of the total examined group. Medium enterprises (up to 250 employees) constituted 30% (33 business units), and large enterprises (more than 250 employees) constituted 12% (13 business units) of all examined business entities (*The Business...* 1999).

The analysis of the examined enterprises, as regards their classification into ownership sectors, showed that 85.7% of the examined units belonged to the private sector. Only 4.3% of enterprises belonged to the public sector, while the remaining 10% were units with mixed capital. The structure of the examined business units according to size classes and classification into ownership sectors is presented in Figure 1.

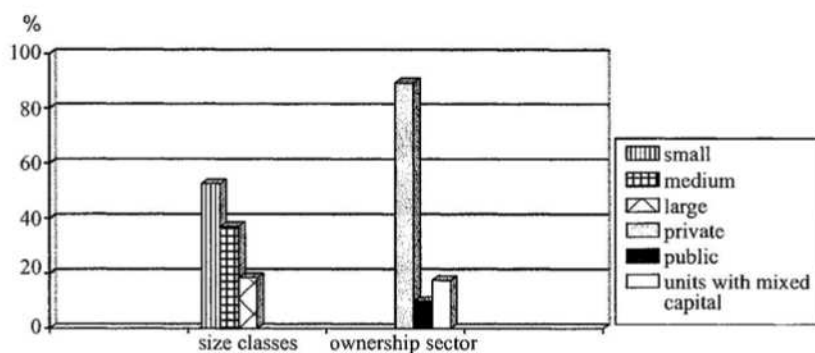


Fig. 1. Structure of the examined business entities according to size classes and ownership sectors

Source: Compilation on the basis of own research.

Taking into consideration the selection criteria, the largest percentage rate of investing enterprises was identified in the trade section (26% responses). The following activities were also found: industrial (20% responses), transport (16% responses), and construction engineering (13% responses). On the other hand, 4.5 % respondents, on average, pointed to hotel activity with restaurants and cafes. Among trade, transport and construction companies, the majority were small units, however, in industrial activities the majority were large enterprises.

The criteria of unit selection, as well as the structure of surveys to conduct the research, were identical. In the second stage of research, a deliberate selection of business units was used, by eliminating enterprises that had been already surveyed. As part of the description of the examined groups, the respondents were asked to choose the types of investment strategies in the aspect of development and survival in the light of the reasons for investing and sources of financing investments for the periods 2000–2002 and 2003–2005.

Results

The first step in the empirical research was the presentation of the need for realization of various types of investments, taking into consideration their proper selection, depending on the various aims of the enterprises, under various conditions of financing (Table 1).

Table 1

Realization of investment strategies in the aspect of development or survival of enterprises from north-eastern Poland in the period of 2000–2005 (% responses)

Types of investments in development strategies of enterprises	Percentage of investing enterprises in individual size classes		
	small: up to 49 employees	medium: between 50 and 249 employees	large: 250 or more employees
New investments, consisting of the construction of plants, buildings, structures	49	58	84
Replacement and modernization investments	27	40	45
Investments consisting of the development of plants and buildings	16	24	28

Source: Compiled on the basis of own research.

The above mentioned types of investment aimed both at the attainment of specified manufacturing and service results for enterprises as the so-called main aim of investments, as well as their survival, i.e. maintaining the enterprise at the level of economic stagnation.

While indicating types of investment strategies, the respondents most frequently mentioned new investments, in all size classes of enterprises, (between 49% and 84% indications) (Table 1). They involved the purchase of land, construction of modern manufacturing and service facilities or technical infrastructure equipment.

At this point, one can suppose that the examined enterprises, most of all from private sectors, in the years of 2000-2005 directed their investment expenditures toward activities that were to strengthen their market position. However, as a general rule, those were capital consuming investments, characterized by a long payback period (OLKOWSKA 2004). In second place were modernization investment strategies of enterprises, fulfilling the process of reproduction of fixed assets, functions of replacement and modernization of the existing technical base (between 27% and 45% responses). On average, every fourth investing entrepreneur in the small-enterprises size class, and every second in medium- and large-size classes replaced and modernized fixed assets. This indicated a direct process of aging of the existing fixed assets, particularly in small enterprises. On the other hand, investments consisting of the modernization of plants and buildings represented the smallest percentage (between 16% and 28% responses).

The examined enterprises were bound by investment strategies, especially as regards investing. The companies under analysis indicated various reasons for investing, both in the aspect of development as well as of survival. The variety and assessment of the significance of reasons underlying investments was assumed to be decisive, important or insignificant (Table 2.). Many among the examined companies indicated several reasons at the same time, indicating the most important one.

On the basis of the data presented in Table 2, one can claim that dominant reasons assessed as decisive and important in all size classes of enterprises were the reasons regarding the nature and requirement of the markets, including the foreign market (between 42% or 61% to 85% indications). Investment strategies of the examined enterprises were realized first of all as new investments and in the form of development of existing production and service facilities. At another stage of this development strategy, an increase in goodwill was also mentioned (between 30% and 69% responses). However, dominant reasons for investments in the form of reducing unit costs and the improvement of production quality, indicated concurrently as decisive and important in the examined size classes of enterprises (between 42% and 71% responses) resulted from the need to modernize fixed assets in existing investment and service enterprises. These were mainly replacement and modernization investments.

Table 2

Assessment of the significance of the reasons for investing in the realization of investment strategy of the examined enterprises (% responses provided by respondents)

Reasons for investing	Significance	Percentage of investing enterprises, according to size classes		
		small: up to 49 employees	medium: between 50 and 249 employees	large: 250 or more employees
Growth of sales and change of the production profile.	decisive	23	12	23
	important	41	24	15
	insignificant	38	12	54
Reduction of unit costs	decisive	19	18	15
	important	50	24	54
	insignificant	41	15	8
Improvement of production quality	decisive	23	24	54
	important	48	21	15
	insignificant	27	18	31
Nature and requirements of domestic and foreign market	decisive	25	27	31
	important	36	15	54
	insignificant	25	33	15
Development of the competitiveness in domestic and foreign market	decisive	36	15	0
	important	41	21	23
	insignificant	34	18	38
Increase in goodwill	decisive	22	12	15
	important	47	18	46
	insignificant	36	42	15
High level of asset obsolescence and its high failure frequency	decisive	9	21	23
	important	20	18	38
	insignificant	34	58	38
The pace of technological progress	decisive	19	12	31
	important	47	39	15
	insignificant	31	12	38
Other reasons, e.g. company reputation	decisive	9	0	8
	important	23	0	0
	insignificant	5	0	0

Source: Compiled on the basis of own research.

The implementation of technical progress was strongly related both to the strategy of development as well as to that of the survival of enterprises. Between 46% and 66% of respondents indicated its significance as decisive and important. The character of investments in these strategies could be characterized as expanded, simple or narrowed reproduction. The investment strategies of enterprises, both in the aspect of development and of that of survival, should be undertaken upon careful examination of the rationality of financial economics of enterprises. This is currently becoming in the Polish sector of enterprises "business compulsion" and a strategic task on a microscale.

Table 3

Internal and external financing of investments in the examined enterprises
for the period 2000–2002 and 2003–2005 (% responses in size classes)

Sources and forms of in-vestment financing.	Percentage of the examined enterprises in individual size classes					
	small: up to 49 employ-ees		medium: between 50 and 249 employees		large: 250 or more em-ployees	
	2000-2002	2003-2005	2000-2002	2003-2005	2000-2002	2003-2005
1. Internal financing						
a) Retained profit	51	49	46	50	40	51
b) Depreciation write-offs	36	36	77	67	67	75
2. Own external financing						
a) Owners' contributions	0	0	5	9	0	25
b) Material contributions – land for construction – transport means	0 7	9 9	16 5	4 0	0 0	0 0
c) Targeted governmental subsidies	7	8	5	8	11	25
3. External debt financing						
a) Investment credits and credits on mortgage	31	33	39	44	22	25
b) Leasing	15	18	26	36	22	25
c) Others (long-term loans)	10	14	9	14	44	50

Source: Compiled on the basis of own research.

As it follows from Table 3, retained profit was a particularly important source of internal financing for two research stages of 2000–2002 and 2003–2005, both for the SME sector, as well as for large enterprises of north-eastern Poland (between 45% to 49% responses). However, depreciation write-offs played a leading role in the examined periods as regards internal financing of medium and large entities (about 70% responses on average). Significantly smaller was their role in financing the development of small enterprises (36% responses). One can suppose that small depreciation write-offs or their lack in this size class resulted from a high level of asset obsolescence or their full depreciation.

Summing up, in the examined group, on average, every other respondent indicated internal sources of financing. For about 50% of the respondents, the lack of own means did not make it possible to carry out development investments, as well as those aiming at the survival of the enterprise.

However, own external financing, including contributions of owners and material contributions, constituted in all classes of the examined enterprises a marginal phenomenon, which did not play in the years 2000–2005 any

larger role in investment financing. Targeted governmental subsidies were not as popular as a domestic instrument of supporting new investments or those that created new jobs. These were trace quantities, involving 1–3 investors – entrepreneurs in the SME sector. These were entrepreneurs from transport, construction and trade sections. As regards the class of large enterprises, two entrepreneurs in the industrial section benefited from subsidies during the analysed period. Those subsidies were allocated for technological innovations related to the implementation of quality and introduction of ISO.

As regards external financing of investments in the examined enterprises from north-eastern Poland in the period of 2000–2005, every third entrepreneur in the SME sector and every fourth in a class of large enterprises, on average, received investment credit or credit on mortgage (Table 3). Most respondents expressed their opinion that investment credit was too expensive and it required complicated procedures, securities or additional documentation of investment activity. However, credit on mortgage was quite popular and investor-entrepreneurs directed their investment expenditures for buildings and constructions aiming at increasing their market value.

Although leasing companies offered a wide range of goods, it was not a popular source used in financing of investments in the SME sector, as regards the entrepreneurs under analysis. Leasing offers were used, on average, by every fifth of the respondents. However, in the class of large enterprises, in the period of 2000–2002, 22% entrepreneurs chose leasing (2000–2002) and in the years of 2003–2005 – 25%.

On the other hand, other forms of financing, such as long-term loans, were more significant than leasing. They were used, on average, by every third entrepreneur-investor from all size classes. The respondents reported them to be a convenient form of involving debt capitals in investments, as they do not involve costs of issuing which would occur while running up a debt by taking out a bond loan on the capital market.

It should be emphasized that the examined group, including 110 enterprises from north-eastern Poland, was not a big sample. It covered 25% of return from over 400 surveys that had been sent. This, however, does not belittle the importance of the examined issue.

Summary

This paper presents selected issues regarding the investment strategies of enterprises from north-eastern Poland. Discussion focuses on investment decisions, in the aspect of development or the survival of enterprises. Their common feature is the realization of business aims, both running and related to the development of enterprises, as expressed by various reasons and financial conditions for investing.

The obtained results of empirical research show that the development of investment strategies of enterprises is affected by reasons underlying the investments, related to the development aims of enterprises, and the feasibility of financing investment decisions that have been made.

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ECONOMIC INSURANCE IN THE SMALL AND MEDIUM-SIZED ENTERPRISES IN THE WARMIŃSKO-MAZURSKIE PROVINCE

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Key words: small and medium-sized enterprises sector, insurance products.

A b s t r a c t

The aim of studies was to get the information about the range of insurance services which were obtained by small and medium-sized enterprises (SME). The research has been carried out in 40 SMEs chosen on a random basis from the Warmińsko-Mazurskie Province.

The most popular insurance was property and transport insurance. From among the property insurance products the most popular was "the property insurance policy against fire and other random events" – 95% and "the property insurance policy against burglary and robbery" – 82.5%. Financial insurance policy was used least the by entrepreneurs because of their exorbitant costs.

UBEZPIECZENIA GOSPODARCZE W MAŁYCH I ŚREDNICH PRZEDSIĘBIORSTWACH NA TERENIE WOJEWÓDZTWA WARMIŃSKO-MAZURSKIEGO

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Słowa kluczowe: sektor małych i średnich przedsiębiorstw, produkty ubezpieczeniowe.

A b s t r a k t

Celem badań było uzyskanie informacji dotyczących zakresu usług ubezpieczeniowych, z których korzystały małe i średnie przedsiębiorstwa. Badania przeprowadzono w 40 wybranych losowo MSB z terenu województwa warmińsko-mazurskiego.

Najpopularniejszym ubezpieczeniem było ubezpieczenie majątku i komunikacyjne. Wśród produktów ubezpieczenia majątku największą popularnością cieszyły się „ubezpieczenia mienia od ognia i innych zdarzeń losowych” – 95% oraz „ubezpieczenia mienia od kradzieży z włamaniem i rabunku” – 82,5%. Najrzadziej przedsiębiorcy korzystali z ubezpieczeń finansowych, wskazując na zbyt wygórowane koszty ich zastosowania.

Introduction and the aim of research

All economic processes and all surrounding us reality works in uncertain conditions, which is closely connected with the occurrence of various random events. The random events are the result of objectively existing threats, i.e. risks. These risks are connected not only with business activities but also threat each person's health and life. In the contemporary social-economic conditions there are two ways of protection against the negative financial results of risks – these are: individual gathering of financial assets or transferring that burden to another economic entity. Apparently, in practise the second way is more economic and a rational method which is realised by special institutions – insurance companies. These companies provide services that consist of assurance of insurance protection, that is keeping conditions and readiness to withdraw the money consideration.

In the case of occurrence of an insurance accident the small and medium businesses are open not only to threats connected with their specific characteristics, but also to negative effects of the events that may happen to every economic entity (that is: fire, robbery, breakdown of devices and equipment or accidents at the work spot). Moreover, the most common risks for businesses are: a death of the owner or the person that is crucial for the company's functioning, bankruptcy of a main cooperand, appearing of a strong rival, lack of access to the external financial sources and civil liability.

Insurance policies, through delivery of financial means, allow to restore the economic position of an economic unit which that unit had before the damage occurred. The insurance provides the continuity of company activities. From among the numerous groups of insurance the company chooses the most suitable and favourable for itself. The entrepreneur has to make decision about choosing the kind of insurance, the height of insured sum and the price that they are ready to pay for that insurance.

The aim of research was to get the information about the range of using insurance services that are bought by small and medium-sized enterprises (SME) from the Warmińsko-Mazurskie Province and about the progress prospects of these services. The detailed research aims were aimed at:

- determining the popularity of individual insurance products
- the position of insurance company in servicing businesses
- mechanics that decide about choosing the insurance company
- progress prospects and factors that limit insurance progress in SMEs.

Sample profile and research methodology

The research has been carried out in the Warmińsko-Mazurskie Province. It has covered 30 small enterprises employing from 10 to 49 employees and 10 medium-sized enterprises employing from 50 to 249 employees. The examined companies have been functioning in various lines: 35% in the

production line, 30% in the trade line, 20% in services and 15% in the construction industry. The sample selection was random and the drawing operator was a list of small and medium-sized enterprises prepared by the Provincial Office of Statistics in Olsztyn.

The examined SMEs have worked in various organisational-legal forms (table 1).

Table 1

Profile of the sample according to the legal form

		Structure	
		Companies	%
1	Limited liability company	16	40.0
2	One-man business	10	25.0
3	General partnership	4	10.0
4	Civil partnership	3	7.5
5	Joint stock company	2	5.0
6	Other	5	12.5
Total		40	100.0

Source: Self study on the basis of PSH Olsztyn.

National capital occurred in 95% of the examined companies. Only one company had the foreign capital dominant and one was foreign.

Full accounting was kept by 32 companies, that is 80%, the other kept the income and expenditure book.

20% out of the examined companies have obtained the income under 1.5 million zł; 30% between 1.5-5 million zł; 22.5% in the 5-12 million zł range and 27.5% above 12 million zł.

A direct interview method was used to gather information from entrepreneurs representing the SME sector. The research was carried out in the year of 2005.

The collected source material was put forward to the comparative analysis and its results have been presented in a descriptive form, in tables and charts.

The results of research

All examined companies obtained the property insurance policies but in a different range depending on the company line. The highest number of insurance products was bought by the production companies, the smallest – by the service companies.

The examined companies obtained the services of one insurance company in most cases (45% of sample, i.e. 18 companies). 16 companies (40%)

maintained the services of two insurance companies and 6 companies (15%) maintained the services of three and more insurance companies.

For 23 companies, i.e. 57.5%, buying insurance services the main insurance company was PZU S.A. The second largest insurance company "Warta S.A" has been pointed as a main insurance company by seven companies (17.5% of sample). Three companies (7.5%) have chosen the "Ergo Hestia S.A.", and two (5%) have chosen the "Allianz Polska S.A.".

For insurance companies the knowledge about persons deciding about choosing the insurer is crucial information. The research says that in 77.5% of small enterprises and in 60% of medium-sized ones the decision was made by the proprietor (a chairman of the board). The company's board had an important influence on the insurer's choice in the companies employing over 50 persons (20%) while in small enterprises it was only 10%. Additionally, the financial manager decided about the insurer's choice (7.5%) and the main accountant (5% of indications).

In the selection of a main insurer the most important were three factors: reputation, good company's image; safety, company's solvency and the premium amount (table 2).

Table 2

Criteria of the main insurer selection ordered by importance

Criterion	% of respondents pointing the factor as most important
Reputation, good image	32.5
Safety, solvency	20.0
Insurance premium amount	17.5
Wide range of insurance products	12.5
Attachment to the company and tradition	10.0
Agent's activity	5.0
Speed of damage liquidation	2.5
Total	100

Source: Self study.

As the main criterion in the insurer's choosing some of the examined companies pointed the wide range of insurance offer; attachment and tradition; activity of the insurer's agent as well as the effectiveness and speed of liquidation of damages.

Out of the small and medium companies maintaining the insurance plans 5% have been obtaining the services of their main insurer for not longer than a year, 15% of companies have had the services of their main insurer from 2 to 3 years. 57.5% of companies declared the cooperation with insurance companies longer than 5 years.

The research shows large differences in popularity of individual insurance products. Among the examined companies the most popular were property and transport insurance policies. These were obtained by more than 90% of the examined small and medium enterprises (Fig. 1).

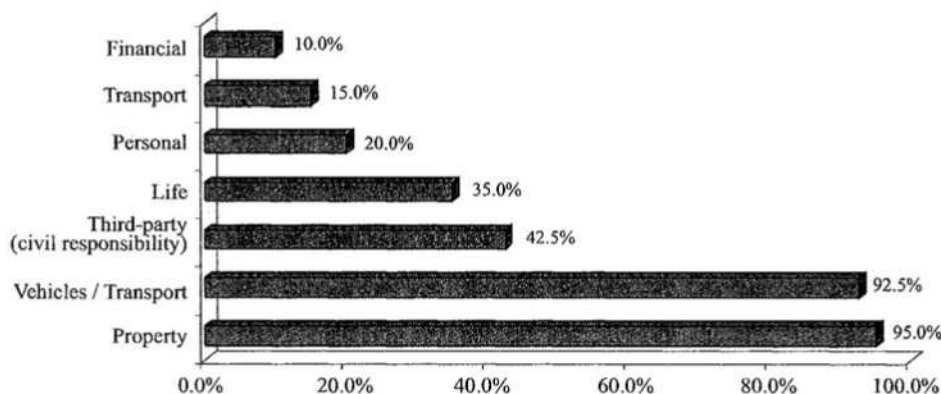


Fig. 1. Popularity of different kinds of economic insurance policies in the small and medium-sized enterprises
Source: Self study.

More than 1/3 of the companies have bought the life and third-party (civil responsibility) insurance policy. The least popular insurance products were financial insurance policies (10%) and transport ones (15%).

The property insurance policy consists of numerous different insurance products. Almost all out of the examined companies (95%) insured their property against fire and random events (Fig. 2).

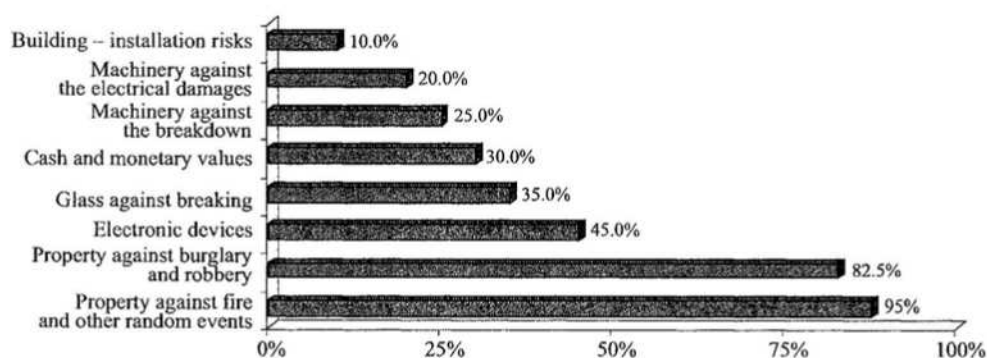


Fig. 2. Popularity of various property insurance products in the examined SMEs
Source: Self study.

More than 4/5 of companies have insured "their property against burglary and robbery". Almost half bought "electronic devices insurance policy", and a third obtained "glass against breaking insurance policy". The "machinery against breakdown insurance policy" and "electrical damages insurance policy" were obtained mostly by production companies (about 70%). The "building – installation risks insurance policy" was obtained far less frequently.

The most important among vehicles /transport insurance policies were the third-party (civil responsibility) insurance of owners of motor vehicles; car accident and theft insurance (autocasco) as well as accident insurance policies. The obligatory insurance for owners of motor vehicles, which is the third-party (civil responsibility) insurance policy, was obtained by 37 companies, i.e. 92.5%. The optional vehicle/ transport insurance products were obtained by more than 70% of the examined companies. The leader of the vehicle/transport insurance was PZU S.A. – 65% of the analysed sample, the second place took the Warta S.A. – 17.5% and the third was the Ergo-Hestia S.A. – 7.5%.

The third-party (civil responsibility) insurance policies make the specific category of economic insurance because of their essence, fulfilled functions and legal nature. The third-party insurance policy means that the insurer lays under the obligation of paying the compensation to the third party that gets damage from the insured party or the third party for whom the insurance contract was signed. Two out of the most popular kinds of the third-party insurance policies are delict insurance (against prohibited offences) and contract insurance (against not discharging or not proper discharging of a contract). From among the examined companies 35% obtained the third-party delict insurance and 22.5% got third-party contract insurance. The delict insurance was obtained in the largest extent by the companies from the construction and production lines while the contract insurance was obtained by the trade companies.

The range of obtaining the financial insurance was slight. Out of the offer of financial insurance policies the SMEs got only the contract guarantees – 3 companies, and the guarantee of paying the customs charges and the commercial credit (1 company for each kind). The research has confirmed the small popularity of financial insurance policies among the Polish entrepreneurs, pointed by the country-wide statistic data, which is in contrast to the entrepreneurs from the EU that in most cases maintain that kind of insurance (KNUIFE 2005).

The research shows that only 1/3 of companies have bought the employees' group life insurance, mainly from the PZU Życie S.A. (67.5%). Most frequently these were the protective insurance policies aimed to cover the death risk, expanded to cover the accident and illness risks and risks referring to the family of an insured party.

More than 1/3 out of the examined SMEs used block insurance policies. The block of insurance is a product that combines a few separate policies in

one set. Its aim is to cover the client with that kind of protection which protects them against the after-effects of different random events for price that is lower than a total price of insurance policies against every separate random event. The examined SMEs obtained blocks offered mostly by the PZU S.A., the Warta S.A and the Ergo Hestia S.A. Among the entrepreneurs the most popular were the following blocks of insurance:

- PZU S.A. "Bezpieczna Firma" ("Safe company") – 50% of indications
- Warta S.A "Miś" ("The little bear") – 12.5% of indications
- Ergo Hestia "Moja Firma" ("My company") – 7.5% of indications
- Allianz Polska S.A. "Allianz Biznes Plus" ("Allianz Business Plus") – 5% of indications

According to the respondents' declarations, the 65% out of the companies obtained the blocks of property insurance, 15% obtained the blocks of personal insurance, 5% concerned the blocks of vehicle/ transport insurance and 15% the other blocks. The sales of the blocks generally took place through the intermediary agents (in 70% insurance agents, in 20% insurance and reinsurance brokers). Through buying the blocks of insurance the companies received the premium discount, usually about 25%.

In the examined sample 92.5% out of the companies expect to not change the range of insurance in the nearest future, one company even wants to decrease its own insurance protection and two companies want to increase it. The poll shows that the main factors affecting these decisions are the following: too high insurance premiums, the limited range of insurance protection, too high demands referring to the security, complicated insurance conditions, little awareness about advantages out of insurance plans, lack of sufficient information, others (Fig. 3).

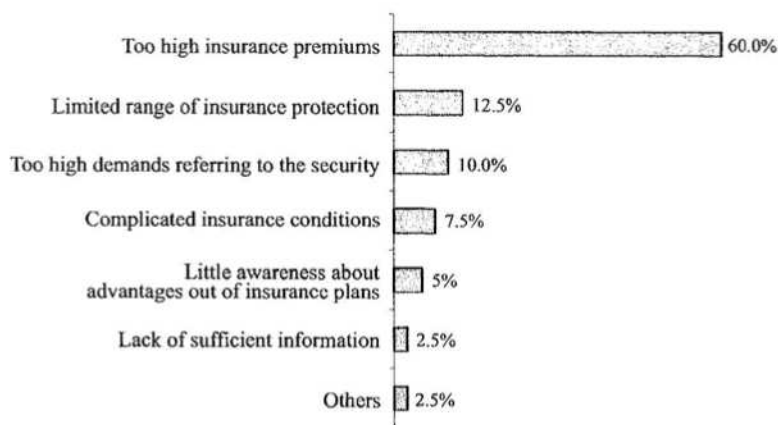


Fig. 3. The barriers pointed by the SMEs that make obtaining insurance policies difficult.
Source: Self study.

The entrepreneurs from the Warmińsko-Mazurskie Province have pointed too high costs of insurance plans as the most important element that limits development of insurance in the SMEs.

Summary and conclusions

The carried out research shows that the range of using the insurance services was different, depending on the company line. The biggest number of insurance products were bought by the production companies, the smallest by the service companies.

More than 90% out of the examined companies were insuring their vehicles and other property. Among the property insurance products the most popular were "property insurance policy against fire and random events" – 95% and "property insurance against burglary and robbery" – 82.5%.

The financial insurance policies were obtained least by the entrepreneurs, only 4 out of the examined companies maintained ones. Although they refer to the protection of processes connected with the finance management they are not really known and obtained in Poland. The entrepreneurs point too high costs of their application.

The research shows a certain stagnation in the insurance products obtained by the sector of the SMEs on the area of Warmia and Mazury. 92.5% of companies of the examined sample do not plan to widen their insurance level. The process of insurance development is limited by too high insurance premium, the limited range of protection and too excessive security demands.

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EFFECTS OF OPERATION OF WARMIA AND MAZURY SPECIAL ECONOMIC ZONE

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Key words: special economic zones, regional development, enterprise.

Abstract

The paper is an attempt at determining the development of investment projects and creation of new jobs as an effect of operation of Warmia and Mazury Special Economic Zone. The analysis also covered the motivations that influenced the entrepreneurs in choosing the zone and their influence on the local environment. The Investment projects and jobs created in the zone show an increasing trend. Considering investments planned for 2005 it should be pointed out that they rank the zone in the first place among investments of the other zones in Poland. All entrepreneurs took their decisions concerning positioning their investment projects in the zone mainly as a consequence of tax deductions offered. As a result of establishing enterprises within the zone small local service companies established cooperation with them; beside that new companies are also established in the municipalities where the zone is situated or in the neighboring municipalities aimed at establishing cooperation with companies positioned within the zone.

EFEKTY FUNKCJONOWANIA WARMIŃSKO-MAZURSKIEJ SPECJALNEJ STREFY EKONOMICZNEJ

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Słowa kluczowe: specjalne strefy ekonomiczne, rozwój regionalny, przedsiębiorczość.

Abstrakt

W pracy podjęto próbę określenia rozwoju inwestycji i powstawania nowych miejsc pracy jako efektów funkcjonowania Warmińsko-Mazurskiej Specjalnej Strefy Ekonomicznej. Analizie poddano również motywy, jakimi kierowali się przedsiębiorcy, wybierając tę strefę, oraz ich wpływ na lokalne otoczenie. Podejmowane inwestycje i powstające miejsca pracy w strefie mają trend wzrostowy. Biorąc pod uwagę inwestycje zaplanowane na 2005 r., należy wskazać, że plasują one strefę na pierwszym miejscu wśród inwestycji pozostałych stref w Polsce. Wszyscy przedsiębiorcy decydują o ulokowaniu inwestycji w strefie podjęli głównie ze względu

na oferowane ulgi podatkowe. Małe lokalne firmy usługowe nawiązały z przedsiębiorstwami powstałymi na terenie strefy kooperację, ponadto powstają również nowe firmy w gminach, w których jest zlokalizowana strefa, lub w gminach ościennych w celu podjęcia współpracy z przedsiębiorstwami ze strefy.

Introduction

Special economic zones (SEZ) are areas with strictly defined borders within which special legal regulations are in force aiming at creating attractive conditions for conducting business activities. The zones are to contribute mainly to development of small enterprises and a variety of services and, as a consequence, to limiting unemployment. Besides creating new jobs, the additional benefit is the inflow of new technologies together with the investments as well as the offer of investors for cooperation, which creates possibilities of improving own technologies. The task of the zones is to bring in the capital and investments offering stimuli for development of business activities in local and regional scale (KISIEL, IWANKIEWICZ 2002, p. 58, LIZIŃSKA, KISIEL 2005, p. 127, MRÓZ 2000, p. 160).

Operation of the zones was to be a factor supportive for acceleration of economic development in regions where the processes of industry restructuring required additional support. The conditions for operating business activity within a SEZ form a motivation for positioning investment projects in a given area. The SEZ played a particularly important role in the regions previously dominated by sectors of economy maladjusted to the market and requiring global restructuring (GROSSE 2004, p. 7, BRĘCZEWSKA 1997, p. 160-161).

On the other hand a question can be asked - is economic activation a consequence of the zone influence only? Three practically possible consequences could be analyzed here. The first, of neutral nature, was called the neutral run. It occurs when the required changes, i.e. the growth, would appear independent of existence of the zone. It can be concluded that in that case establishment of the zone was a redundant element of regional policy. On the other hand, the consequences of establishment of a zone could be negative for the economy of the region. That happens in case when the effects of dislodging and substitution appear. The effect of substitution occurs when as a result of commencement of operation of an entity in the zone its liquidation or limitation of its operations in another location takes place. The problem appears when the operational costs outside the zone are higher than those incurred by the entity in the zone maintaining the same level of business activity. The effect of dislodging takes place when lower operational costs in the zone allow achieving the competitive advantage, which leads to dislodging from the market companies representing a similar character of activity but operating outside the zone (BAZYDŁO, SMĘTKOWSKI 2000, p. 52).

Objective and methodology of studies

An attempt at determining the changes in the level of investments and their industry structure in Warmia and Mazury Special Economic Zone was the main objective of the study based on secondary data. The direct studies attempted at determining: the factors that determined the decisions of entrepreneurs concerning positioning of investment projects in that zone, the level of use of licenses granted for conducting business in the zone, changes that take place in enterprises resulting from business operated and influence on the local environment of enterprises. The questionnaire and managed interview were the primary source of data. The questionnaire was targeted at companies operating within the Warmia and Mazury Special Economic Zone and completed by applying the method of direct interview (11 companies participated in the study). The managed interview was conducted in 45 companies selected at random conducting their operations within municipalities where the Special Economic Zone was established and municipalities in their immediate vicinity.

The questions of the managed interview were formulated in a way allowing obtaining of opinions of entrepreneurs concerning problems such as the influence of the SEZ operation on the operations of a given enterprise, barriers to development of enterprise in the zone and mutual relations between companies situated in the zone and outside it.

Results of studies

Similar to the majority of special economic zones in Poland, also in the Warmia and Mazury Special Economic Zone (W-M SEZ) the outlays increased from year to year. The Warmia and Mazury Special Economic Zone is characterized by a relatively balanced increase of investment outlays. It should be highlighted, nevertheless, that the largest increment occurred at the turn of 2002 and 2003; that was an increase by PLN 36 million. The lowest increase of investments amounted ca. PLN 17 million during the years 2003–2004. The investment outlays in the W-M SEZ are presented in figure 1.

The structure of investments by industry in the W-M SEZ is entirely different from the structure of outlays by industry in Polish special economic zones as a whole. The data in figure 2 show the investment outlays in PLN million by industry in the W-M SEZ.

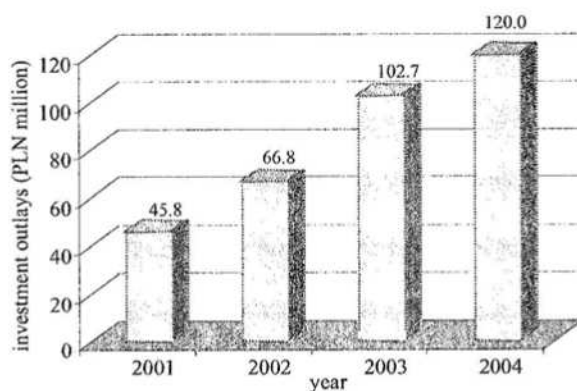


Fig. 1. Accrued investment outlays in the W-M SEZ in PLN million during the years 2001–2004

Source: Own work based on the ME&L (2005).

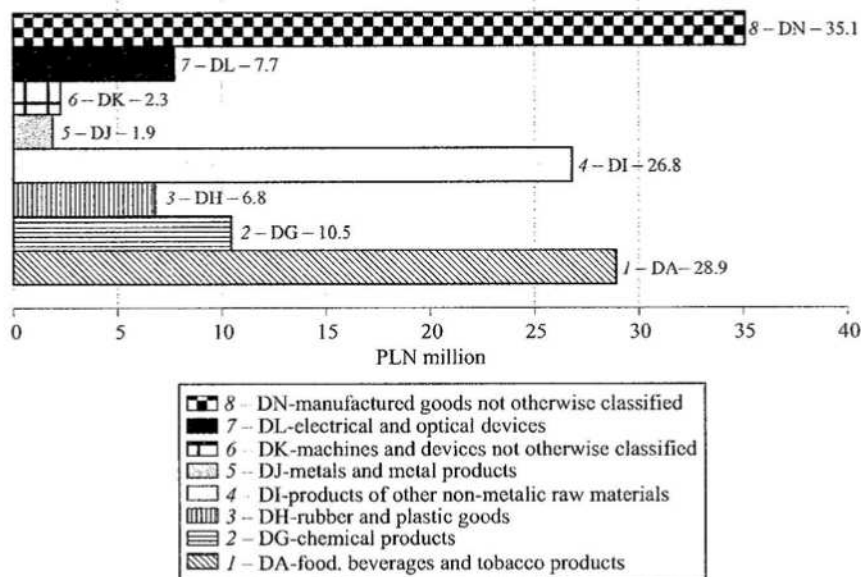


Fig. 2. Investment outlays in PLN million in W-M SEZ by industry in 2004

Source: Own work based on <http://www.mgip.gov.pl/>

The largest outlays, exceeding PLN 35 million, were made in the segment of manufactured goods not otherwise classified. Almost PLN 29 million was invested in the food, beverages and tobacco products industry. The automotive industry had the largest share in investment outlays in special economic zones in Poland treated as a whole. Around PLN 27 million

was invested in manufacturing of goods of metals and PLN 10.5 million on manufacturing of chemical products. The metal goods sector enjoyed low interest from investors in the province.

According to investments planned for 2005, the W-M SEZ won the top position in Poland. The data presented in figure 3 present the structure of investments in individual zones planned for 2005. The planned value of investments in W-M SEZ amounted PLN 1434.7 million while in one of the largest Polish zones – Katowice zone – that amount was PLN 880 million (fig. 3). The success of W-M SEZ was determined by two large projects – extension of the factory belonging to the French Michelin Group for which a sub-zone in Olsztyn was established and the project by Korean LG in Mława estimated a Euro 90 million. The zone also issued 7 licenses for commencement of operations for smaller companies. The investments will allow creating almost 3,000 jobs in the region.

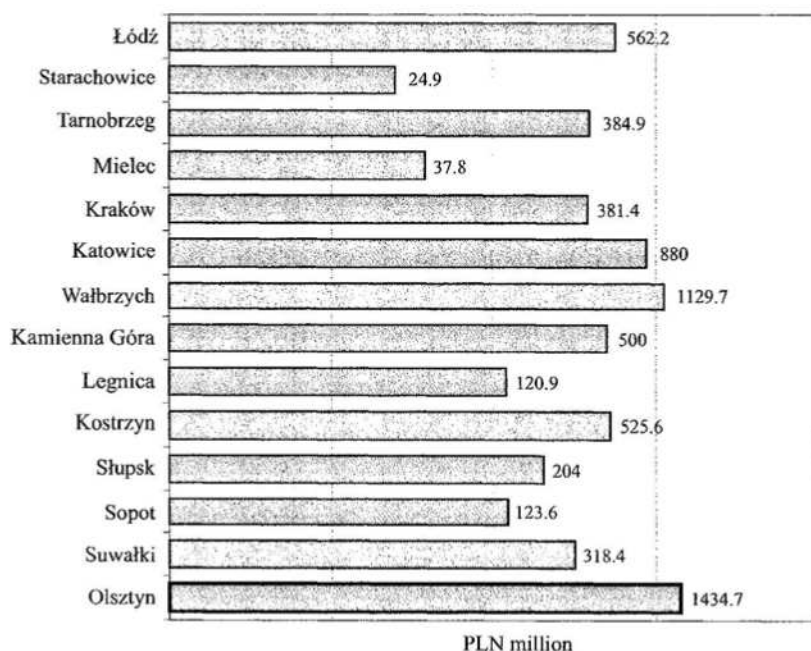


Fig. 3. Ranking of the SEZ according to investment projects planned for 2005 (PLN million)
Source: Own work based on the data of the WMSEZ (www.wmsez.com.pl).

The results of own studies, however, show that establishment of the Special Economic Zones had moderate influence on development of enterprise in a given region. Despite issuance of licenses for operation in the zone not all the licensed entities have started their operations. The licenses of over 75% of companies that had obtained them had been withdrawn. That proves low attractiveness of the zones resulting from the statutory

requirement of making high levels of investment outlays that pose a real barrier for small and medium enterprises. Public aid in the form of exemption from income tax is insufficient as an instrument stimulating enterprise and motivation to commence operations in a zone. Additionally, withdrawal of municipalities from exemptions from and deductions in the real property tax limits the activity of enterprises. Since the beginning of operation of the zone only 23 entities have operated in the Warmia and Mazury Special Economic Zone although the number of licenses issued is three times higher.

Entrepreneurs have taken the decisions to position the enterprise in the Special Economic Zone mainly because of the tax deductions offered (fig. 4). Specific geographic location at the eastern border was the additional stimulus to operate in the Warmia and Mazury Special Economic zone.

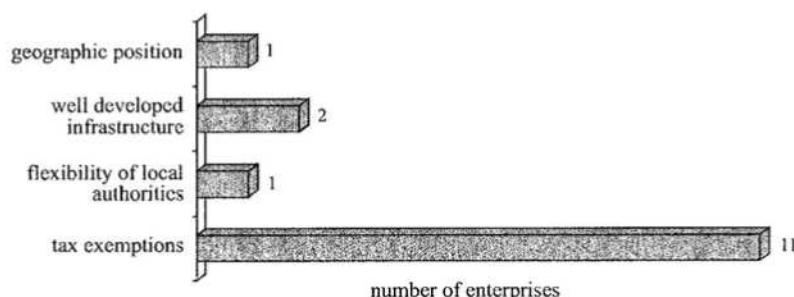


Fig. 4. Criteria of choosing the Warmia and Mazury Special Economic Zone by investigated enterprises

Source: Own studies.

The zone has no significant influence on decreasing the numbers of unemployed in the region. 2950 people employed in enterprises operating within the Warmia and Mazury Special Economic Zone represent is a small number compared to the scale of needs of the region and does not solve the problem of high unemployment in Warmia and Mazury. On the other hand, Warmia and Mazury Special Economic Zone has a significant influence on limiting unemployment in small municipalities within which it is located. Employment in the W-M SEZ increases year after year, which is related to the increasing level of investment outlays in Warmia and Mazury province as the plans of investments in the SEZ are linked to the level of employment.

The Warmia and Mazury Special Economic Zone, despite a relatively low proportion of enterprises using the licenses granted to them for commencement of operations supports inflow of investments as a consequence of the level of outlays required to start operations. The positive effect of existence of the zone also is that 7 respondent companies expanded their activities. Expanding the operations in the zone did not involve a change of the profile of operations of any respondent company. It resulted from increase in investments leading to an increase in production and employment.

In four respondent companies relocation of production to the zone resulted in development of those companies.

Existence of the Special Economic Zone influences development of municipalities within which the zone functions, indifferent of the size of the municipality, however, in the sub-zones concentrating a larger number of companies (Szczytno, Dobrze Miasto) those effects are more visible. Companies positioning their investments in the zone mainly increase the dynamics of their social and economic development, although not always; as a consequence of the policy of the SEZ managing body that is mainly achieved through tax revenues.

Some companies from outside the zone and the local community also benefit from existence of the Special Economic Zone. As a consequence of establishment of companies in the zone small local service companies acquire new cooperation partners and that type of cooperation relations is the main relation type between companies operating within and outside the zone. Some new companies are also established in the municipalities where the zone is located and in the neighboring municipalities to embark on cooperation with companies operating within the zone.

Sixteen respondent companies operating outside the zone expressed negative opinions concerning establishment of the zone in the municipality, 17 companies did not experience any effect of the zone and only 12 expressed positive opinions. The respondents based their negative and neutral opinions on the fact that their companies did not achieve any benefits from establishment of the zone in their municipality. In some cases the companies from the zone entered the sales markets of companies from outside the zone. The investigated entities were small companies and they were unable to compete with companies from the zones. The positive opinions on the other hand were based on the existing cooperation between companies from the zone and outside it. That cooperation involved providing services for business entities positioned in the zone (fig. 5).

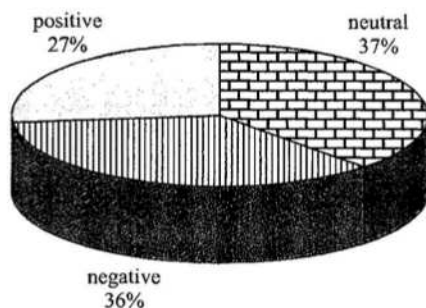


Fig. 5. Influence of the Warmia and Mazury Special Economic Zone on operation of companies from outside the zone

Source: Own studies

According to the respondents, establishment of the Warmia and Mazury Special Economic Zone gave more benefits to the residents of the municipalities than the companies. Those benefits had direct and indirect influence on the residents. Direct as some of the unemployed found employment in newly established companies. Indirect, as towns and municipalities where the zone operates changes their looks. Many streets have been repaired, new sidewalks were made for use by the local population; public utility buildings and premises are refurbished.

Summary and conclusions

The process of social and economic system transformation in Poland and introduction of the market economy revealed many problems inherited from the former system, including the scale of hidden unemployment. The necessity to close the key employer enterprises accelerated the steps taken by the government aiming at stimulation of economies and establishment of new jobs. Special Economic Zones play an important role in that process. Their goal was to stimulate economic activities in some regions through restructuring with participation of public institutions and funds. Involvement of external strategic investors, their capital and technologies also played an important role in the process. The main idea for establishment of Special Economic Zones was to mitigate the structural unemployment in selected regions of the country by placing new investment projects there using the package of financial incentives as motivation.

On the basis of analyses of secondary and primary data the following conclusions have been formulated:

1. In Warmia and Mazury Special Economic Zone a low level of use of the licenses for operation in the zone has been recorded (23 companies while the number of licenses issued was almost three times larger). Despite that the trend of increasing the level of investments (from PLN 45.8 million in 2001 to PLN 1434.7 million in 2005) and number of jobs should be noticed. Considering the investment projects planned for 2005 the W-M SEZ reached the top position in the ranking of SEZ in Poland according to the level of investments acquired.
2. Although public aid in the form of exemption from income tax is not the only and sufficient instrument stimulating enterprise in the zone it should be noticed that the decisions on positioning enterprises in the Warmia and Mazury Special Economic Zone were taken by all respondent entrepreneurs (11) mainly for the tax deductions offered.
3. W-M SEZ influences development of all municipalities within which it operates, although according to the respondents the effects of zone operations are best experienced in sub-zones Szczytno and Dobrze Miasto, where the largest numbers of companies are positioned.

4. Some companies from outside the zone and the local community also benefit from existence of the Special Economic Zone. As a consequence of establishment of companies in the zone small local service companies acquire new cooperation partners and that type of cooperation relations is the main relation type between companies operating within and outside the zone. Some new companies are also established in the municipalities where the zone is located and in the neighboring municipalities to embark on cooperation with companies operating within the zone.

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HOSPITAL COSTS BUDGETING CONCEPT BASED ON THE ACTIVITY BASED COSTING (ABC) PRINCIPLES

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Key words: budgeting methodology, hospital, activity based costing.

Abstract

Standard budgeting procedures created for manufacturing enterprises cannot be applied directly to the operation of health care entities as specific service units. Effective implementation and efficient functioning of a budgeting system requires using procedures that fully satisfy the needs of the management. This paper presents methods and principles for budgeting of costs in a hospital based on Activity Based Costing (ABC) principles that could offer a wide range of information useful in a hospital management process.

KONCEPCJA BUDŻETOWANIA KOSZTÓW SZPITALA NA PODSTAWIE RACHUNKU ABC

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Słowa kluczowe: metodyka budżetowania, szpital, rachunek kosztów działań.

Abstrakt

Typowe procedury budżetowania, tworzone dla przedsiębiorstw produkcyjnych, nie mogą być wprost przeniesione na obszar funkcjonowania zakładów opieki zdrowotnej jako specyficznych jednostek usługowych. Skuteczne wdrożenie i sprawne funkcjonowanie systemu budżetowania wymaga wykorzystania takich procedur, które w pełni zaspokoją potrzeby kierownicze kadry zarządzającej. W opracowaniu przedstawiono metody i zasady budżetowania kosztów w szpitalu oparte na rachunku ABC (Activity Based Costing), które mogą być podstawą wielu przydatnych informacji w procesie zarządzania szpitalem.

Introduction

Relatively abundant literature on management provides a relatively wide description of the issues related to implementation of activity based costing in hospitals. However, there are no detailed proposals for Activity Based Budgeting application in such entities (CHAN 1993, RAMSEY 1994, CANBY 1995). In an attempt at filling that gap an attempt was made to improve the methods and principles of costs budgeting at a hospital aimed at improving the level of satisfying the information needs of the management. The proposed costs budgeting methodology is based on Activity Based Costing and it assumes planning the patients' treatment costs according to individual disease units.

The main goal of the paper was to present a new concept of costs budgeting system for a hospital based on the ABC principles. The described budgeting procedure represents the synthesis of the author's experience acquired from studies of subject literature and analysis and assessment of costs budgeting systems applied in selected entities in the province of Warmia and Mazury.

Main assumptions of the hospital costs budgeting concept

The goals and procedure of activities' costs budgeting are similar to the tasks and procedure of the traditional system. The basic difference is the difference in costs planning setups. In case of the ABB the costs are grouped for individual activities and the projected volume of each activity represents the additional and integral part of the budgets (KABALSKI 1997).

According to this concept it is proposed to plan the activities of the department measured by the number of admitted patients with a specific disease and according to activities involved in the patient treatment process. That is determined by the fact that the type of disease and the method of treatment are the major factors determining the level of treatment costs incurred (DURBAJLO-MROWIEC 1998).

The activities involved in implementation of the budgeting system based on activities in a hospital should be represented by:

- identification of processes and activities covered by budgeting,
- linking the activities to costs incurred by the hospital,
- identification of diseases treated at individual departments,
- development of costs planning principles for separated activities,
- training of employees in the new budgeting methodology,
- adjustment of motivation systems to new budgeting principles,
- drafting budget documentation templates.

Development of the budgeting procedure should start with identification of processes and activities occurring in the hospital. As a consequence of the wide range of work involved in system implementation we propose to limit the activities covered by the project to the activities involved in the basic process occurring in the hospital, i.e. patient treatment.

The classification of activities involved in the patient treatment process was done from the logical perspective (Fig. 1) (see GLAD et al. 1995, KARMAŃSKA 2003). That process involves activities related to:

- admission of the sick person to the hospital and department (L_1),
- initial examination (L_2),
- diagnostics (L_3),
- treatment itself (L_4), within which the following activities were identified:
 - medical consultations (L_{41}),
 - diagnostic tests and examinations (L_{42}),
 - procedures (L_{43}),
 - rehabilitation and physiotherapy (L_{44}),
- maintaining the medical documentation (L_5),
- discharge or transfer of the patient to another department (L_6).

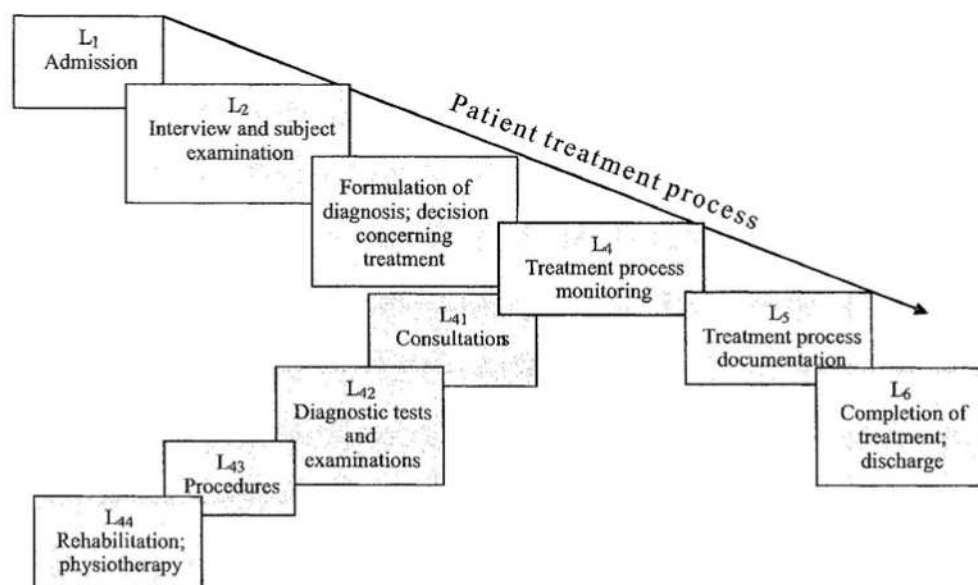


Fig. 1. Classification of activities in the patient treatment process (L) – logical perspective
Source: Own work.

From the costs perspective that format of the treatment process for budgeting needs is unjustified as it requires excessive effort involved in registration of costs incurred for some of the identified activities as compared to the use of information obtained. That applies, e.g. to activities L_2 , L_5 , L_6 .

For the needs of this concept, combining of certain activities is proposed, which results in separating the areas of cost analysis of particular importance from the financial perspective (Fig. 2):

- admission of the patient to the department, including admission of the patient by the admission department – L_1
- performance of image diagnostics – L_{21} ,
- performance of laboratory diagnostics – L_{22} ,
- performance of a procedure – L_{23} ,
- administration of drugs – L_{24} ,
- medical care in the department – L_3 ,
- hotel services to the patient at the department (hotel costs) – L_4 .

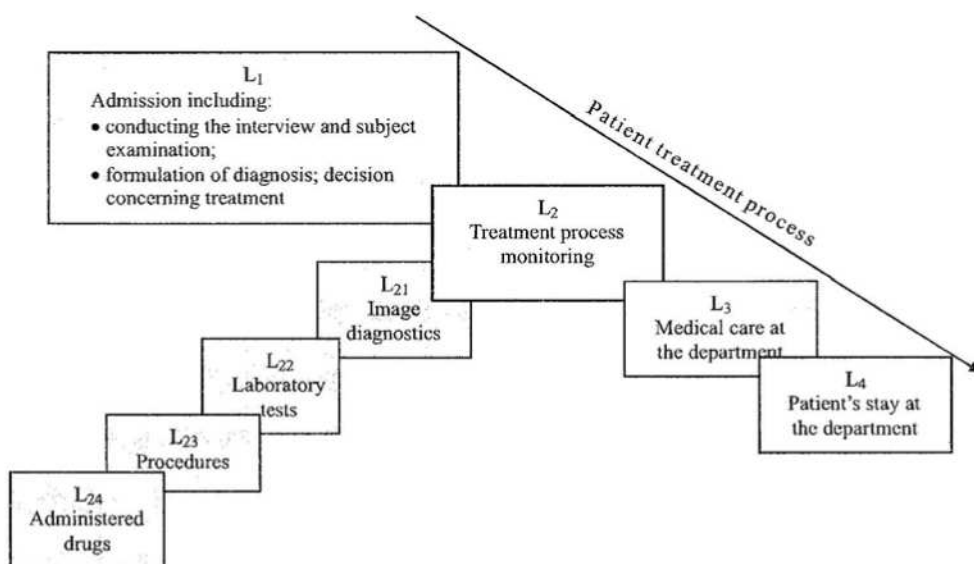


Fig. 2. Classification of activities in the patient treatment process (L) – cost perspective
Source: Own work.

The above proposal focuses on medical activities while generalizing the administrative activities. Acceptance of that solution is a consequence of:

- low level of costs involved in discharge of the patient,
- effective principles of payment for the treatment process by the NHF,
- technical-organizational possibilities of costs recording,
- demand for information by both the medical staff and the hospital management.

In the presented concept the cost centers in the department were identified in the form of the number of patients admitted with the specific diseases. It is proposed to assume the identification of diseases based on the International Classification of Diseases ICD-9 for procedural departments and the International Classification of Diseases ICD-10 for the conservative treatment departments. Depending on the therapeutic profile of the department and the information needs the diseases or procedures within individual classifications can be aggregated or presented in more detail in whichever way is considered necessary.

Aiming at tighter linking of information generated by the system with the principles of health services financing the classification of patients can be also based on the list of medical services required by the NHF¹. That recording of treatment costs would allow precise and current analysis of financial results of the departments by linking the cost centers to the revenues tightly.

It is also possible to record treatment costs for individual diseases according to the uniform patient groups (UPG). That however, requires development of categories of diseases at individual departments, the treatment costs of which are similar and defining the principles for allocating patients to earlier defined UPGs. That is a complicated process that requires time and as a consequence it is not yet applied in practice in Polish hospitals.

The data characterizing the features on one hand and the costs of individual patient groups on the other form the base for defining the UPGs. The set of necessary information on the patients should be processed in a way requiring the minimum work input. It is recommended that it should contain information on patient age, gender, admission mode, discharge mode, primary disease, secondary diseases, and medical procedure according to the applicable classification.

Planning and effective control of patient treatment costs in case of a specific disease can be done only in case of appropriate linkage between consumption of resources and individual activities. Table 1 presents the

¹ The list of health services is provided in the catalogue of hospital services that forms appendix 1 to the "Detailed information materials on the subject of proceedings in the case for award of contracts for providing health services of the type: hospital treatment" approved in the regulation number 15/2005 by the President of the National Health Fund of February 10, 2005 on approval of the "Detailed information materials on the subject of proceedings in the case for award of contracts for providing health services of the type: hospital treatment".

proposed linkages between the patient treatment process and the costs incurred at the department, at medical service units and non-medical service units and administration. The proposed solutions consider the technical-organizational capacity of hospitals and are based on already partially implemented solutions in the field of costs recording and accounting.

For budgeting purposes, both the department costs and the costs of auxiliary activities should be accounted for per patient with a specific disease according to the identified activities (table 1).

The costs of individual centers should be divided into variable and fixed costs. The variable costs dependent on the volume of services provided determined by the number of patients and person-days of treatment include mainly the value of medical materials used and the value of medical drugs administered. The fixed costs are those the amount of which does not depend on the volume of medical services provided. They include, e.g. the costs of maintaining individual organizational units².

This concept assumes that the costs of individual activities in the treatment process of a patient with a specific disease will be determined at the level of costs of a given department and variable costs of standard service centers. The department fixed costs (excluding medical personnel remuneration costs), service centers fixed costs and administration costs treated as costs of operation and servicing a given department will not be allocated to individual disease units. That is a consequence of lack of a parameter reflecting the logical cause and effect relation between those costs and the identified diseases.

The principles of allocating the costs of permanent medical service centers to individual departments are determined by the assumed costs calculation methods and can be based partly on currently applied solutions.

Department costs budgeting should start with planning the number of patients representing a specific disease according to the accepted classification taking into account the average treatment time expressed by person-days³. That represents the starting point for planning the costs incurred in performance of activities forming the treatment process in case of specific disease units.

During the first year of system implementation, it is recommended to plan the costs of performance of individual activities based on the historical or standard data by applying the "from zero" method. During the transition the incremental method can also be applied to allow gradual establishment of standards and technical standards for performance of specific activities.

² Classification of costs into variable and fixed should be done individually at individual hospitals by department and service center. That is the consequence of the fact that variability of costs in individual units within responsibility centers is not identical. See Kujawska 2004.

³ In subject literature advanced methods for estimating the health needs are identified in the form of: epidemiological, comparative and corporate methodologies. See Topór-Mądry et al. 2003.

Table 1

Matrix of links between costs and identified activities within the patient treatment process

Disease according to the effective classification		Department			Medical service units							Non-medical service units				Administration
		Drugs	Payroll	Other costs	Admission department	Operations theater	Anesthesiology	Image diagnostics lab.	Laboratory	Pharmacy	Sterilization	Kitchen	Laundry	Boilers	Technical division	
Admission	L ₁				KZ											
	Image diagnostics							KZ								
Treatment process	Laboratory tests								KZ							
	Procedures					KZ	KP									
	Administered drugs	KRZ														
Medical care	L ₃		KP													
Patient's stay at the department	L ₄			KZ								KZ	KZ			
Department operation and servicing costs	L ₅			KS	KS	KS		KS	KS	KS	KP	KS	KS	KP	KP	KP

(KRZ – actual costs, KZ – variable costs, KS – fixed costs, KP – full cost)

Source: Own work.

Admission of a patient to the hospital consists of numerous activities performed by the physician on duty. The most important of them include registration and establishment of medical documentation, assessment of the patient's health status, performance of initial diagnostic tests and examinations, taking the decision concerning treatment and nursing activities, preparation of the patient for transfer to a department or discharge for home. It is recommended to allocate the variable costs incurred at the admissions department to the patient with a specific disease on the basis of the chart of medical-nursing procedures carried out at the admissions department and the Patients' Medical Chart⁴. That allows determining the treatment costs by applying accrual calculation at the level of real material and personal outlays.

Methodology for calculating the costs of activities forming the patients' treatment costs

Budgeting the costs of admitting patients with identified diseases can be carried out according to the formula presented below⁵.

Costs of patients' admission to the hospital:

$$BL10_{li} = kz_{pi} \cdot n_i; \quad i = 1, 2, 3, \dots, m, \quad (1.1)$$

where:

- m – number of diseases identified within the frameworks of ICD-10 classification;
- $BL10_{li}$ – budgeted activity cost: admission of patient with i -disease according to ICD-10 classification to the hospital;
- kz_{pi} – unit variable (standard) cost of admission of a patient with a specific disease determined by the "from zero" method according to medical procedure standard or on the basis of historical data;
- n_i – planned number of patients with a specific disease established on the basis of epidemiological or historic data.

It is proposed that the costs of image diagnostics, laboratory tests and procedures should be allocated to treatment processes for individual diseases using the division calculation with weights after earlier allocation of points to the services rendered reflecting the differences in material and labor intensity.

⁴ Patients' Medical Chart contains all the information on the process of treatment of a patient with a specific disease. See Grubecki 2003.

⁵ Aiming at differentiation between the treatment process of patients in procedural department and conservative department it is proposed to assign index 9 or 10 to individual activities according to ICD 9 or ICD 10. In this concept the basic cost planning formulas for individual activities were assigned index 10 values as they take into consideration the specifics of treatment in a conservative department.

The presented solutions assume then that the number, and as a consequence the costs of image diagnostics activities, laboratory tests and procedures depend on the number of patients with a specific disease unit.

Budgeting the costs of the above activities can be done on the basis of the following formulas.

Cost of image diagnostics

$$BL102_{1i} = po_i \cdot kp_o \cdot n_i; \quad (1.2)$$

where:

$BL102_{1i}$ – budgeted activity cost: image diagnostics of patients with i -disease unit according to the ICD – 10 classification;

po_i – planned (standard) number of points, reflecting the cost intensity of image diagnostics necessary for the patient with i -disease according to the ICD – 10 classification;

kp_o – planned cost of performance per one point of image diagnostics.

Other symbols as in formula 1.1.

Cost of laboratory tests:

$$BL102_{2i} = pl_i \cdot kp_l \cdot n_i; \quad (1.3)$$

where:

$BL102_{2i}$ – budgeted activity cost: laboratory tests of patients with i -disease unit according to the ICD – 10 classification;

pl_i – planned (standard) number of points, reflecting the cost intensity of laboratory tests necessary for the patient with i -disease according to the ICD – 10 classification;

kp_l – planned cost of performance per one point of laboratory tests.

Other symbols as in formula 1.1.

Cost of procedures:

$$BL102_{3i} = pp_i \cdot kp_p \cdot n_i; \quad (1.4)$$

where:

$BL102_{3i}$ – budgeted activity cost: procedures applied to patients with i -disease unit according to the ICD – 10 classification;

pp_i – planned (standard) number of points, reflecting the cost intensity of procedures applied to patients with i -disease unit according to the ICD – 10 classification;

kp_p – planned cost of performance per one point of procedures;

Other symbols as in formula 1.1.

The costs that accompany every procedure are the costs of anesthesiology services including drugs and equipment. The method of budgeting for anesthesiology costs depends on the accepted solutions concerning the methods of financing them. In case that financing is subject to a separate contract in the hospital it is possible to allocate the full cost of that service to the patient on the basis of the invoice received⁶. In other circumstances those costs are treated in the same way as the costs of the operations theater.

Drugs and payroll that represent 10% and 55% of all department costs have been separated from the direct department costs⁷. As a consequence, it is important to monitor them on current bases during budget implementation. It is proposed to add drug costs to the costs of treatment on the basis of the Patient's Medical Chart. That operation is greatly facilitated if the IT module "Hospital pharmacy" that allows almost automatic assessment of the value of drugs issued to specific patients functions in the hospital.

The formula used to determine the value of drugs necessary to treat a patient with a specific disease is presented below.

Cost of drugs issued:

$$BL10_{24i} = kz_{li} \cdot o_i; \quad (1.5)$$

where:

- $BL10_{24i}$ – budgeted value of drugs administered to patients with i -disease unit according to the ICD – 10 classification;
- kz_{li} – value of drugs administered daily to a patient with i -disease unit determined by the "from zero" method according to the standards of medical procedure or on the basis of historical data;
- o_i – planned number of person-days for of patients with i -disease unit at the department.

The medical personnel payroll costs that reflect the medical service provided at the department can be added to individual disease units depending on the nature of the doctors' work on the basis of the:

- person-days number the patient stays at the department;
- real time devoted to a specific patient⁸.

⁶ That option was assumed for the purpose of the described budgeting concept.

⁷ Internal materials of C hospital, unpublished.

⁸ In the investigated hospitals it is possible only in case of procedural departments where it is possible to determine the time devoted to a specific patient during performance of the procedure.

Cost of medical care:

$$BL10_{3i} = kz_{oi} \cdot o_i; \quad (1.6)$$

where:

$BL10_{3i}$ – budgeted cost of medical care for the patients with i -disease unit according to the ICD – 10 classification;

kz_{oi} – cost of medical care for one patient with i -disease unit during one day determined on the basis of the payroll levels of doctors and nurses working at the department⁹;

Other symbols as in formula 1.5.

The presented budgeting procedure assumes that the costs of hotel stay of the patient with a specific disease unit depend on the number of person-days of stay. That cost includes the variable costs of the department (excluding the cost of administered drugs) as well as variable costs of the laundry and kitchen.

The formula for planning those costs is presented below.

Cost of hotel stay:

$$BL10_{4i} = kz_{hi} \cdot o_i; \quad (1.7)$$

where:

$BL10_{4i}$ – budgeted hotel costs for patients with i -disease unit according to the ICD-10 classification;

kz_{hi} – cost of hotel stay of the patient at the department for one day.

Other symbols as in formula 1.5.

As mentioned earlier, the treatment costs for individual diseases will not be increased by the costs of maintaining and servicing the department. Their level can be set globally for the entire organizational unit considering:

- fixed costs of the department (excluding medical personnel payroll), admissions department, operations theater, laboratories, pharmacy, kitchen and laundry,
- costs of full sterilizations, boiler rooms, technical department and administration.

⁹ In case the doctors (this applies in particular to procedural specializations), are paid on the basis of contracts made according to which the remuneration depends on the number of procedures performed or their work time, the costs of medical care will be determined at the level of nurses' payroll as the payroll of doctors should be included in the cost of the procedure.

Conclusions

1. The presented budgeting principles allow determining the relation between the costs and the number of provided medical services and time of hospitalization. Additionally, they provide information on the type and volume of resources consumed in the form of administered drugs, performed diagnostic procedures per disease unit and indicate where reductions of costs could be searched for – e.g. in a change of the profile of the department activities (shifting from worse paid procedures to better paid procedures), shortening the hospitalization time or decreasing the number of diagnostic procedures performed.

The other advantages of the described system include:

- the possibility of adjusting the department activity profile to the number and value of services contracted with the National Health Fund;
 - obtaining information necessary for assessment and analysis of costs linked to provision of specific medical services;
 - separating treatment process monitoring costs and costs of patient's stay at the hospital (so-called hotel costs) from patient treatment costs, which can be considered the initial stage in preparation of the hospital for cooperation with private insurance companies;
 - identification of particularly cost-intensive areas in the patient treatment process;
 - possibility of direct comparison between the price set by the National Health Fund for treatment of a specific disease unit and the costs incurred by the hospital;
 - current control of performance of budget assumptions including identification of areas where the deviations are the largest;
 - identification of persons responsible for individual stages of the treatment process, which allows development of a motivation system encouraging the employees to search for new solutions streamlining the work and limiting the costs – of course where possible only.
2. The difficulties with application of the presented budgeting concept can appear at the stage of specifying the disease units for individual departments. Inconsistency of the system of medical services developed by the National Health Fund for the purpose of financial settlements with the existing and generally effective classifications such as the international ICD-9 or ICD-10 classifications represents an additional limitation.
 3. The described budgeting concept requires defining the diagnostic-therapeutic procedure standards for all disease units treated in a given hospital. Considering individual, frequently differentiated practices of doctors, this task can prove difficult to complete.

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THE PROCESS OF TRANSFORMATION IN SLOVENIA, CHANCES AND RISK

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Key words: transformation, reforms, effects, changes, increase, risk, integration.

Abstract

The aim of this study is to present the way of transformation which was conducted in Slovenia. The close attention was paid to following items: privatization, changes at financial sector, foreign trade and the level of foreign direct investment. The transformation process in Slovenia was different from this one in other European countries, which were based on central planned economy before. Slovenian way proved to be a success, since the gap between Slovenia and EU countries is the narrowest comparing with other European countries applying to EU.

PRZEBIEG PROCESU TRANSFORMACJI W SŁOWENII, SZANSE I ZAGROŻENIA

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Słowa kluczowe: transformacja, reformy, efekty, zmiany, wzrost, zagrożenia, integracja.

Abstrakt

Celem artykułu jest przedstawienie przebiegu procesu transformacji w Słowenii. Uwzględniono typowe zakresy reform gospodarczych. Zwrócono uwagę na prywatyzację, zmiany sektora finansowego, handel zagraniczny oraz dynamikę i poziom inwestycji zagranicznych. Powyższe reformy znacznie odbiegają od sposobu ich prowadzenia w innych państwach Europy Środkowej. Z tego względu można przyjąć, iż Słowenia wprowadziła swoją oryginalną drogę transformacji rynkowej. Droga okazała się skuteczna, gdyż dystans do krajów UE jest najmniejszy spośród wszystkich państw Europy Środkowej.

Introduction

In comparison with countries of ex-Yugoslavia, the process of transformation in Slovenia proceeded strongly differently. This smallest republic in sense of area (20 251 km²) and population (1,92 mln in 1990) (*Statistical... 1992*) has taken a very beneficial status not only in the economic apprehension, but also in social one. In the national structure dominant share posses Slovenian (92 % of the whole society), only a small part represent Croatians (3 %), and Serbs (2%). Thanks to this uniform structure drawn-out territorial conflicts have been avoided, which sometimes turned into rapid and crippling armed conflict (MRAK 1991). Until year 1990 Slovenia has produced 18–20% yearly PKB the whole Yugoslavia, it has ensured nearly 15% of its income from export (*Statistical... 1992*). The rate of unemployment was the smallest in the federation and amounted nor 3,2% (the average in the other republic 9,9%), in turn the efficiency of work has been twice higher than in the other republics of federation (KARNAIL 1998).

In Middle Europe countries, the transformation mainly proceeded according to the scheme below. Basic reforms concerned:

- privatization
- liquidation of monopolies
- restricting the role of the country
- acquittal of the prizes
- creating a new tax system
- arising a new capital and financial market.

Above mentioned methods were aimed to improve the efficiency and adaptation of the solutions typical for the market economy (BALCEROWICZ 1995). The definition of this aim was important, because of the fact that countries coming through transformation openly declared the willing of entrance to the European Union (AltJe, Shepslek 1991). Although introduction of similar scheme of reforms, vital difference occur. Mostly they reduce to:

- time and scope of the reforms
- chronology
- fast and consequence. In fear of appearance social resistance, partial deterioration macro economical indicator, decision makers restricting suggested changes, what's more they came back to rules being in force in central-planned economy.

In early nineties Middle Europe countries considerably changed in sense of social-economy development. The basic changes included:

- tempo of the increase and overall GDP level
- share in international division of work
- access to the outlets and natural resources

- scope of the lunched market mechanism (for ex. Share of the private property, central allocation of investments, rules of appraisal enterprises etc.)

For this reason different effects of transformation occur in a particular Middle Europe country.

The aim of work, avowed hypothesis and assumptions

The aim of this work is to depict the process of transformation in Slovenia, and (on this base) to estimate chances and dangers resulting from access of this country to European Union. The work was based on the hypothesis listed below:

- economical reforms must be consequently introduced in a definite chronology. Any perturbation lead to uprising negative effects.
- Reforms should take into account the situation of the country, current macro economical conditions, head for the established aim. Economical strategy is verified and in case of any perturbations from the accepted plan, specially modified
- Successes arising from defined reforms can (after suitable modification) be repeated in other countries under transformation as well

All Middle Europe countries, including ex-Yugoslavia ones (although minor differences) has based their model of economy on dominant role of the country. The central plan in direct way determined the assignments for the attendee of the market.

Analyzed were years 1990–2002. Longer period allows a better estimation of the situation, thereby pointing out validity of introduced reforms. The study embraced the following scopes:

- privatization
- foreign investments
- foreign trading

The scopes mentioned above indicate the level of openness of the economy and its part in international division of work.

In the work a method of deduction was used, including reference books especially World Bank elaboration: Slovenia Economic Transformation, R.Baldwin, E.Segezzy, A.Wagner, L.Barbone studies, and European Commission reports.

Preparation – phase of preliminary reforms

While gaining independence (June 1991), many essential reforms had been introduced in order to maintain stabilization in Slovenia. Afterwards to enable a fast way of economical growth (WAGNER 1996).

Typical method (it was observed in most of the transformed countries) aiming to provide stabilization was restriction of the inflation. In year 1990 the inflation in Slovenia accounted for 250% (*Statistical... 1991*). Accordingly to its high level reasonable planning, controlling economic account was particularly impossible (BARRO, SALA 1995). It is worth to underline the lack of the problem of inflation in years before gaining the independence. The average level of inflation in years 1970–1990 amounted 17,5%, whereas the smallest value was observed in the mid seventies – 8,1% (*Statistical... 1991*).

Table 1

Tolar rate in proportion to USD and DEM in years 1991–2002

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
SIT/USD	55.6	81.2	113.2	128.1	118.1	119.6	135.3	159.1	166.7	187.1	167.2	199.6
SIT/DEM	34.8	52.0	68.1	79.1	81.1	89.1	92.1	94.1	99.6	111.8	*	*

* Mark was replaced by Euro

Source: Nova Lubljanska Banka. Lublana Raport 2003

The 8th October a new money unit has been introduced – tolar, which established rate in proportion to dollar on the level of 55.60 SIT (Slovene Tolar) / 1 USD, whilst in proportion to west German mark 34.81 SIT/ 1 DEM (*Bank of Slovenia... 1992*). In the following years the rate proved distinct growth tendency.

During years 1991–2002 USD rate in proportion to Slovene Tolar skyrocketed four times. In 2002 SIT rate to USD amounted less than 200 units. Similar trend has been noticed in relation between SIT and DEM. At the end of the analyzed period the rate increased to the level 118,8.

Basic scopes of activity concerning the dropping of inflation boiled down to restricting money supply, budget discipline, full clearance of price (BALDWIN, SEGHEZZA 1996). It is vital to take into account resolute activity of corporation especially with respect to two first areas. Although the increase of value rendering credits, their share drops in relation with GDP. In years 1991–2002 this drop amounts nearly 30%. In comparison with other Middle Europe countries this trend is inconvenient.

Table 2

The value of the credits rendered in Slovenia in years 1991–2002 (changeable prices)

	1991	1994	1996	1998	2000	2001	2002
Credit value mln SIT	133.3	672.7	993.9	1.134.7	1.624.7	2.100.4	2.522,1
% PKB	68.0	36.3	38.9	37.7	33.4	31.4	32.1
Government credit (%)	8.5	37.6	30.6	31.3	25.2	21.4	20.7
other credit	91.5	62.4	69.4	68.7	74.8	78.6	79.3
Share of firms (%)	83.7	48.4	48.3	52.1	55.8	57.2	61.3
Share of households (%)	7.8	13.6	17.6	20.8	23.6	27.9	31.5
Share (%) credit in proportion to GDP in selected Middle Europe countries							
Czech	73.6	78.8	74.6	72.8	62.3	65.6	66.9
Hungary	105.6	96.9	76.9	64.5	77.9	82.5	62.1

Source: Bank of Slovenia. Bulletin 7, 9, 11 from 2001 4, 12 from 2002 2 from 2003

Although systematical growth of the value rendered credits, their share in relation to GDP also systematically drops. In 1991 share of the credits in proportion to GDP amounted 68%, however in 2002 merely 32,1%. In Czech and in Hungary the sign of rendering credits had merely twice smaller value. In these countries it presented dropping trend too, but it was strongly less dynamic then in Slovenia. It also points out the fact of involvement of private banks in rendering enterprises. Throughout the whole analyzed period nearly 70% of the overall credits falls for private banks, the share of the state units was distinctly smaller, only in year 1994 they has amounted 37,6%, and in the latter years they did not overcome 32% of the total income.

In years 1991–2002 the real rate of interest of the credit has been dropped from 25% to 5,6%. The fact of the long period (till 1998) alleging high level of rate of interest above 15% can not be overlooked. This situation impinged on dynamic and level of deposits. In the analyzed period they have risen in an average year tempo 8%, amounting a value of 1,6 mld SIT (*National...* 2003).

After 1991 the government of Slovenia leaded politics that restricted the financing deficit. Deficit was hesitating in compartment [-1,8; -1,1], according to this study it was strongly on a lower level than pose the guidelines of the EU countries. The low level of spending on social aims and help catches our attention. They do not overcome 0,5% GDP (*Statistical...* 2003).

The ways of privatization and its effects

In Slovenia process of privatization was mainly determined by the current model of economy. The countries property was restricted and the main role played the private property and the cooperative one. According to this the decided part of GDP produced private economic entity. For example, in 1990 only 7,5% of the GDP return fall on the private firms (ROJEC 1996). Similar proportions took place in the other republics as well.

The property changes started after gaining independence. A legislative regulating the transformations was accepted in 1992. It was based on three basic pillars:

- 1) – privatization of the country property
- 2) – restructure
- 3) – nationalize (JONES 1998)

Similar as in different Middle Europe countries (also in Poland) in Slovenia a program of massive privatization was carried out. According to age (*Slovenia...* 1998) of the citizens certificates were assigned to the main part of the society. Their value measured from 2 up to 4000 DEM. Those certificates didn't subject to the circulation of the market, but they were intended for the buy of shares that belonged to the privatized companies. The general sum of delivered certificates corresponds with 40% of the countries accountant value (*World Bank's...* 1996).

The rest state companies were privatized basing on direct methods, which main aim was to:

- transference of shares to the workers (up to 20% of the total value of the firm)
- selling the shares to the workers (up to 40%)
- selling on the way of public offer
- transference of the shares to the Slovenian Development Fund

The second important feature characterizing the property process in Slovenia was restructure, mainly the financial sector. Thanks to that the two-step bank system was preserved and the state property was reinforced (in the biggest banks as for Liublijanska Banka and Kreditna Banka Maribor). Liublijanska Banka and Kreditna Banka Maribor developed strong capital groups that had nearly 45% shares in the market.

State banks have the decided part of share in the market. In the analyzed period it fluctuates from 61,7-74,8%. It is nearly twice higher than the shares of the private shares. What is more, in private banks very noticeable is the contribution of the country. In the 4 biggest private banks it amounts about 16% (*Bank of Slovenia...* 2003).

Table 3

The share in the market (%) in selected state
and private banks in Slovenia in years 1994–2002

	1994	1996	1998	1999	2000	2001	2002
Grupa Liubljanska Banka	28.7	26.7	29.4	30.1	27.7	25.4	26.8
Banka Koper	5.4	5.1	6.1	5.2	5.3	4.8	4.3
Albanka	3.3	3.7	4.2	4.3	3.8	4.1	5.3
Kreditna Banka Maribor	14.1	16.2	15.5	15.2	12.2	14.3	14.7
Banka Celje	4.3	3.3	4.6	4.2	5.5	5.2	5.8
7 the biggest state banks	61.1	72.3	74.8	72.1	73.4	70.8	72.2
Private banks	38.9	27.7	25.2	27.9	26.6	29.2	27.8

Source: Bank of Slovenia Annual Report, 2001 and 2003. Ljubljana.

The dependence mentioned above are not strictly the same as in the other Middle Europe countries. The share of the country in the building sector is falling down. In Poland, Hungary and Czech the main advantage has the private capital. It controls the bank sector 75–80% (*Raport o przekształceniach...* 2002). Proportions between Slovenia and other countries under transformation are very different. The marginal role of the foreign capital amounts a small share in the privatization, it restricts only to the more active role of German and Austrian banks, which have 7% shares in the Slovenian market (*Bank of Slovenia...* 2003). In order to privatize the foreign investors did only make only 1% of the whole transactions about the property changes (*Slovenia Economic...* 1998).

In opposite to the other countries under transformation the government of Slovenia performed the nationalization of economy sectors. Basic on the art73 Privatization Legislative the dominant state property was guaranteed in the following sectors of economy:

- energy transport and industrial net
- transport
- telecommunication (post services as well)
- water network and communal service
- Ecology protection

The nationalization encompassed forest and agricultural terrains, which until 1992 year has been cooperative property. The Slovenian government prepared a program that helped the industries in bad financial situation and than hired many workers (300) (*Law on Public Services...* 1993). This program provided help:

- 12 concerned heavy industry
- 7 financial sector(banks)
- 25 concerned processing industry

The means for this aim came from Slovenian Development fund and other share that belonged to the country. On this program 164 mln USD (*IMAD Report...* 2002) has been provided.

The effect of the process of privatization was a rapid growth of state property. The measure according to which the survey was taken was the share of the state industries in GDP. From 1995 year this share systematically grows, and in 2002 it amounts for 45%. The following trend is one more time a reverse to the changes in the other Middle Europe countries.

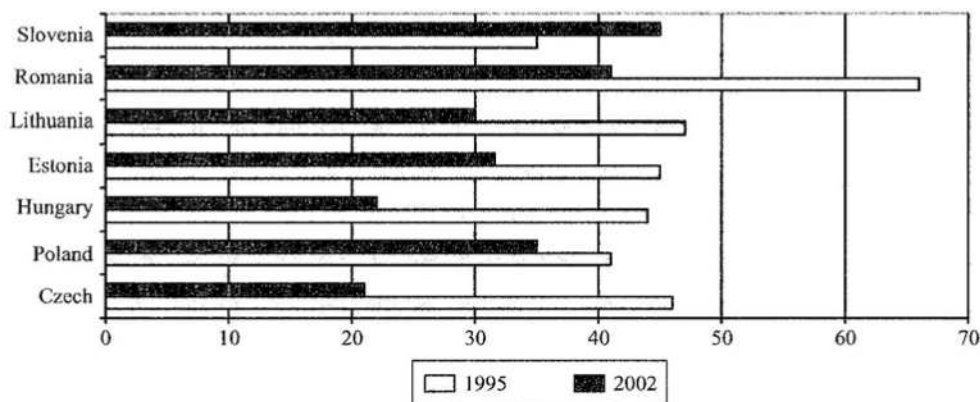


Fig. 1. The share (%) of state industries in GDP in selected countries of Middle Europe in years 1995 and 2002.

Source: The studies based on *Rocznik Statystyczny GUS 2002*. Wydawnictwo Urzędu Statystycznego Warszawa. 2003.

In most countries under transformation the share of state industries falls in GDP. The smallest share was noticed in Czech and in Hungary, it amounted less than 22%. A rapid fall took place in Rumania. In 1995 the share of state firms in GDP amounted 66% and in 2002 less than 40%. Similar changes happened in Latvia and Estonia. In 1995 in Slovenia the analyzed factor measured 35% and in 2002 it raised to 45%.

Differently than in other countries of Middle Europe the results of the Slovenian economic industries change. The better changes happen in all analyzed groups. This process is noticeable especially in state industries and privatized in the direct way (selling shares to the hired workers). In the table 4 the results of industries of different countries were shown.

Financial results of state firms are much more worse than the results of private or foreign companies. However, there are a few differences between Slovenia and Hungary, Czech. The layout of the results of those two countries is similar, Rate of capital return by private firms fluctuates from 0,9–4,1%. Positive results take private and foreign units. Results of state companies are worse, the dynamic is slower and the rate of capital return. Only in the initial period the Slovenian industries differed in financial

Table 4

Rate of capital return (A) and the dynamic of sale (B) of Slovenian industries and selected Middle-East European countries in years 1994–2002 (%)

	1994		1996		1998		1999		2000		2001		2002	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
<i>Slovenia</i>														
Domestic private firms	1.5	2.1	1.0	2.8	1.1	1.8	0.7	3.1	1.4	1.9	1.3	1.4	2.6	4.2
Foreign firms	2.2	3.1	1.7	4.3	1.5	3.3	2.2	3.9	1.8	2.0	1.1	5.8	2.8	6.7
Government firms	-1	-2	-1	0.5	1.4	2.7	1.1	3.9	1.7	2.2	1.9	3.3	2.1	5.1
<i>Hungary</i>														
Domestic private firms	2.2	5.9	1.9	7.1	2.6	6.1	3.1	7.2	1.9	5.1	0.9	4.2	1.3	3.9
Foreign firms	2.9	8.9	3.1	9.1	3.0	10	2.2	6.1	3.5	7.1	3.1	8.1	3.8	7.2
Government firms	0.4	1.4	-1	1.1	-2	0.5	0.2	2.5	-1	0.2	0.4	2.1	0.2	1.5
<i>Czech</i>														
Domestic private firms	1.2	3.5	1.8	4.1	1.3	6.3	3.2	5.5	2.4	5.9	2.2	5.3	1.9	4.3
Foreign firms	3.3	9.1	3.6	8.3	4.1	8.9	3.5	7.1	4.0	4.9	4.2	7.2	3.8	5.2
Government firms	0.2	3.1	-1	0.1	0.3	0.2	-1	0.9	-1	-2	0.1	2	0.5	3.1

Source: Study based on Slovenian Economic Mirror, Marzec 2003 and Slovenia Economic Transformation, Volume 11, Main Report, World Bank, Washington, 1998, Hungary, Structural Reforms for Sustainable Growth, World Bank Operation Deument, Report 13766 HU Washington, 2003.

results. The rate of the capital return and the dynamic of sell was several times smaller than in private or foreign companies. In final years both results are similar. In 2002 year rate of capital return in state companies amounted 2,1%, and in private firms 2,6% and foreign 2,8%. Dynamic of sell in state companies is much higher than in private industries and it amounted 5,1% (in private 4,2%).

Foreign investments in Slovenia

Another very crucial difference between Slovenia and other Middle Europe countries was the level and the dynamic of foreign investments. From year 1992 the investments started to flood into Slovenia. In first four years they posed a stable growing trend. In the beginning of the period the investments amounted 111 mln USD and in 1996 186 mln USD. The highest level of foreign investments was noticed in 1997 – 321 USD, in comparison with the past year it was a growth about 73%. In the next few years the value of investments fluctuated from 140-211 mln USD. Summarizing in years 1992-2002 foreign investors have directed an amount of 2,1 mld USD (*Bank of Slovenia...* 2003).

In comparison with other Middle Europe countries, this sum of money is relatively low. For example, it is just 4% of the measures directed to Poland.

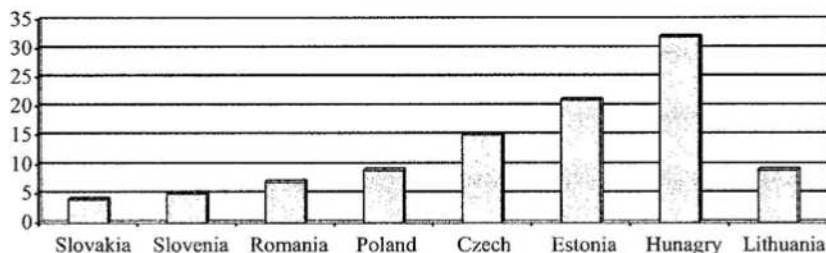


Fig. 2. Share of average annual foreign investments in relevance to GDP in selected European countries during years 1992-2002 (%)

Source: Studies based on Project Finance in Developing Countries World Bank. Washington 2003. World Investment Report. UNCTAD. New York 2003.

Among countries under transformation share of foreign investments in relation with GDP, the one in Slovenia is the smallest. The share amounts less than 5%, only Slovakia has a lower level – 4,2%. Very noticeable is the situation of Hungary. In this case the foreign investments are much higher than 30 % GDP. Also in Czech or in Estonia the level is very high (15 and 21%). Similar low level concerns the height of investments per capita. During years 1992-2002 in Slovenia it amounted 366 USD, in Hungary 1822 USD, in Czech 1211 USD, in Estonia 788 USD.

Above signs prove a low inflow foreign capitals to Slovenia. One of the reason of such layout of current law regulations. Each investment higher than 10 mln Euro, or the 25% of sold shares of a firm needs a government agreement (*Foreign Investment Act Artykul 20...* 1997). The second vital obstacle is fact of very clear favoritism of state producers. They can count on big help from the central power.

Table 5

Typical forms of help and its level (% budget outcomes) for state industries in Slovenia in years 1994–2002

Help programs/Years	1994	1996	1998	1999	2000	2001	2002
Subsidies	0.72	0.74	1.1	0.9	1.0	1.2	1.1
Restricturization program	1.49	1.37	2.1	0.56	0.36	0.43	0.55
Programs for work activity	0.78	0.77	0.71	0.45	0.33	0.28	1.1
Government support	0.22	0.27	0.18	0.11	0.28	0.15	0.23
Support for elaborated programs	0.27	0.22	0.21	0.23	0.13	0.17	0.36
Tax holiday	0.28	0.34	0.37	0.31	0.25	0.19	0.14

Source: Study based on Slovenian Economic Mirror. March 2003 oraz Slovenia Economic Transformation. Volume 11. Main Report. World Bank. Washington. 1998.

In years 1994–2002 Slovenian authorities have appropriated significant measures to help state firms. The programs cost average 3.5% of the whole budget outcomes. The fact of such big help causes formation of a privileged position if the state companies.

Characteristic feature of foreign investments was the lack of the engagement the measures in projects considerable amount of value, higher than 25 mln USD. In years 1992–2002 only two projects that were higher than 25 mln USD have been realized. The first one concerned on the investments of Renault (montage services) – 65 mln USD, the second one Good year (OPONY factories) – 77 mln USD (*Bank of Slovenia...* 1999). The biggest (nearly 80%) investment concerned expenditure up to 0.5 mln USD. There is a lack of a significant preference of foreign investments. It results from restricting the access to the local market (the domination of the state property in the key sectors), According to this foreign capital is distracted. In none of the sectors of the economy its share is higher than 15% (*Hallard-Dreiemeier* 2003).

The feature that may become an obstacle is the level of the real payment, In Slovenia it is nearly three times higher than in Baltic sea countries (Latvia, Estonia, Latvia) nearly four times higher in comparison with Bulgaria or Rumania. The smallest difference concerns on Czech and Hungary, it amounts 1,5 times (*BALDONE* 2002).

The causes of such low level of foreign investments in Slovenian, have they base in:

- the process of privatization. The dominance of country in many economy sectors. Preference of local industries
- law regulations, Administrative restrictions on a level one time investments higher than 10 mln USD
- government help („help programs”) only for local industrializes
- high cost of work
- restrictions of the size of interior market

The causes mentioned above significantly prevail than attractive location , political stability, macro economical balance and relatively well qualified workers (ROLDOS 2003).

Changes in foreign trade

Till 1992 year Slovenia has been concentrated on circulations with ex-Yugoslavia countries. Deliveries to those countries amounted 42% of the whole export. Similar share was in import, The most important partner was Croatia, which fall for nearly 17% of the general trade exchange (*Slovenian Statistical...* 2003). It is worth to notice that in export dominant role played goods highly processed, technologically advanced (mainly products of the pharmaceutical industry, electro machine, electronics). Their share in delivery on outside markets amounted more than 53%. Dominant share came for ready made light industry and food industry, less than 25%. As for import the significant role played raw materials, half products and machines or technological appliances, they amounted 63% of whole import (*Slovenian Statistical...* 2003).

While gaining the independence diversification on a foreign market become. Beginning on 1992 year the most important partners became EU countries. From 1992 year they amount more than 63% of total trade exchange. Circulations with ex-Yugoslavia countries fall.

In years 1992–2002 Slovenian trade turnover amount significant raising trend. The export raised from nearly 6,7 mld USD up to 10 mld USD and import 6,1 mld USD to 10,2 mld USD. Generally this turnover is below zero. Twice in year 1992 and 2002 it was above zero. The highest level was marked at the beginning of the period of transformation, in year 1992 – 540 mln USD, 2000 year 170 mld USD. The fact of the value of export is also very important. Only thanks to this position it is possible to gain positive balance in current turnovers in the whole period. Import shows stable grow from 117 mln USD in 1992 year up to 433 mln USD in 2002. The value of reserves raised from 720 mln USD to nearly 5 mld USD. Characteristic feature is maintaining the structure of export. The industrial products still dominate in the deliveries on the outside markets. They amount nearly

60% of the total supplies on the EU markets, The structure of import comes under diversification. The participation of machines, industrial products, electro machine, grocery is more visible. The level of it raised by o 25%. The share of raw materials and resources dropped by 7,4%.

Table 6

The value of export and import in Slovenia in years 1992–2002 in mln USD (current prices)

	1992	1994	1996	1998	1999	2000	2001	2002
Export (FOB)	6.681	6.828	8.310	8.369	9.122	9.436	9.877	9.941
Share of EU(%)	61	65	67	63	64	65	63	66
Import (CIF)	6.141	7.304	9.421	9.366	9.777	9.266	9.988	10.211
Share of EU(%)	60	64	69	65	71	66	68	64
Trade turnover	540	-476	-1.111	-997	-655	170	-111	-270
Export of services	773	826	1.266	1.655	1.474	1.211	992	822
Import of services	117	211	196	228	311	349	331	433
Services turnover	656	615	1070	1.427	1.163	862	661	389
Current turnover	1.429	139	41	430	508	1.032	550	119
The value of reserves	720	1.499	2.297	3.315	3.800	4.166	4.784	4.941

Source: Bank of Slovenia Annual Report. 2003. Ljubljana. 2003. Slovenia Economic Transformation. Volume 11. Main Report. World Bank. Washington. 1998.

While taking into account the value per capita of foreign trade in Slovenia (about 7500–9000 USD), it gives her one of the best places in Europe (*Slovenian Statistical...* 2003). It shows that Slovenia was active in the international work share. Traditional offer of export after year 1992 was also accepted on the other very strict markets, especially EU. Industries, that start or continuity its operating, but also want to expand their companies must gain the access to the foreign receivers. The outside market is restricted and it is a very effective demand-pull barrier (MRAK 1998). Above statement find its reflection in analysis of the biggest firm deliveries. In significant majority the production is designated for export. Table 7 shows the data.

In the analyzed group of industries the share of export in the total value of deliveries fluctuates from 51–95%. The highest share possess companies that distribute medicaments (KRKA<LEKA) and the smallest in the building the company SKB.

Until year 1990 Slovenia didn't have any special restrictions in foreign turnovers. One vital barrier was the access to devise means, designated for supply import. However there wasn't a significant monopoly of foreign

trade. The companies accessed the possibility to gain to the outside markets (GRUCINI 1997). According to this fact, full liberation of foreign trade came without any special problems and in very short time. From 1992 year the government of Slovenia encourages to active exporting. Nearly 60% "help means" that government dedicated in years 1992–2002 for local companies, were designated for firms participating in international exchange (*Global Economic...* 2003).

Table 7

The share of export (%) in total value of market deliveries
of selected Slovenian companies in years 1992–2002

Firm/Sector	1992	1994	1996	1998	1999	2000	2001	2002
Krka (medicine)	85	82	89	92	95	90	91	90
LEKA(medicine)	76	75	88	81	83	85	86	86
Mercator(food)	71	77	81	80	76	77	74	71
Instrabenz(chemistry)	67	66	69	70	66	63	61	65
Groga Portoroz (machinery)	73	75	64	68	72	77	76	55
Radenska (machinery)	75	78	81	88	87	67	71	82
SKB (construction)	69	66	63	57	69	51	48	57

Source: Source: Based on Lublana Stock Exchange Annual Report.z 1997 and 2003.

Slovenia has also a very effective politic of security its market. In this aim the tariff aims and parataxis are used. The security of market designates the agronomic products, and the high processed. In this product groups rule the highest rates about 23%, average payments amount 10% counted ad valorem. The access to the agricultural products is similar to this in the European Union. Importers (except the high duty) need to deliver certificates of its quality, origins, certificates of its access to the market, and the deliveries must accommodate in the limits. This model helps an exchange based on two sides trade agreement. Based on the agreements then come preferences. Thanks to this nearly 4/5 trade turnovers is realized based on toside agreement. The most, nearly 70% dedicates trade with EU countries., 8% with CEFTA, an least with EFTA (*Strategy of the Republic...* 1998). The expansion (especially after year 1998) are agreements about free trade(Free Trade Agreement-FTA). Based on this agreement every restrictions about exchange are not obligatory. The first Fta Slovenia had with Croatia. In 2002 the agreement s about free trading was 11. It is worth to underline, that export to the countries of free trading zone during years 1998–2002 raised 23,5%, and import similarly gains the same levell (*International Trade Statistics...* 2003). Slovenian companies are the beneficiens.

Macro economical stability and the perspectives of development after access to the European union

Before accession the Slovenia position (comparing it to the others countries) was very good. Thanks to the economic reforms the standard of living was noted. The annual GDP growth (during the years 1992–2002) was on 4,9 % the level. It was the highest among all countries under transformation. The annual GDP growth in Czech was on the level of 3,6%, Hungary 2,5%, Estonia 2,8%. The level of investment was also very high. In Slovenia the level was 24,5%, Czech 21%, Hungary 19,6%. Thanks to investments the rate of unemployment was reduced. During the years 1992–2002 the rate of unemployment in Slovenia was 6,8%, Czech was exceeded the level of 7,2%, Hungary 6,6%, Estonia 6,9%. The above mentioned indicators were supported by balanced budget and low inflation.

The GDP per capita can be used as the synthetic indicator of economic situation. Its dynamic is presented at Figure 3.

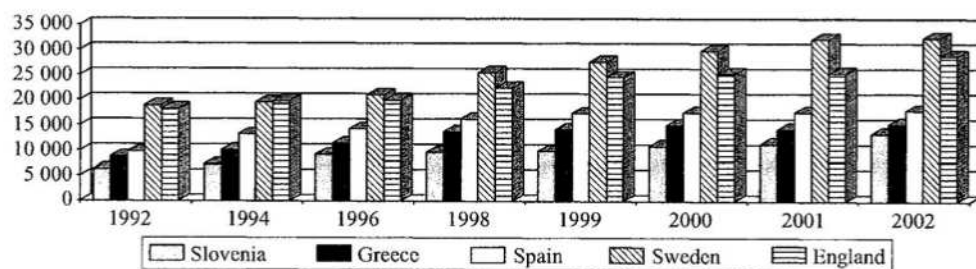


Fig. 3. The level of GDP per capita in Slovenia and other UE countries during 1992–2002 (USD)

Source: Elaborated on Statistical Office of the European Communities. Report 2 from 2003

The Slovenian GDP per capita consists nearly 90% of Greece and 78% of Spanish level. In this way is quite close to the level of some less developed UE countries. The bigger distance is noted when one can compare GDP per capita to the leading European countries. In this respect the Slovenian GDP pre capita fluctuated on 45% of their income. From the other hand Slovenian results ore the best ones among other countries acceded EU. For example Polish GDP per capita consists 39% of UE level, Hungarian 47% Czech 63% and Slovenian 69%. The key question is related to the time when Slovenia can reach the level of UE countries. Based on the studies headed by World Bank. Slovenia within 21 years can reach 75% of standard EU GDP per capita level. Such estimation was assumed when annual GDP growth in Slovenia would rise by 4% and in other UE countries by 2%.

Such scenario can be even shorter when Slovenia can increase the investment which influences the GDP growth. When the market can

be more open for foreign investors the flow of international capital can be expected.

Based on R.Barro formula, referring to the GDP correlation and the economic politics (granting Slovenia 4% annual growth) one must do in the first :

- liberalize domestic market,
- cancel dominant government position in the key sectors,
- lower the tariff and paratariff levels,
- keep the low rate of inflation,
- make all firms equal,
- reduce the government support for domestic companies 43.

Conclusions

The headed analyze confirmed the taken hypothesis. The Slovenian case pointed out that all reforms must be managed consequently and in the proper row. The first step after gaining the freedom, the plan was based on providing stable and steady fundamental framework for further growth.

The reforms took into the account the economic situation and background. That why Slovenia chose another manner of economic reforms. The basics differences between Slovenia and other middle European countries were referred to protection of its domestic market and to:

- create barriers for foreign capital flow,
- providing dominant government position in key sectors (like finance, communication, transport, energy),
- support for domestic companies based on local capital (especially government owned ones).

Thanks to the reforms the position of Slovenia is very optimistic (comparing it to the other countries under transformation) after joining the EU. GDP per capita is quite close to the EU level. Such situation can help Slovenia in further development. From the other hand, especially after 2004 Slovenia faces other problems. The country supposed to change its economic policy. The changes are referred to the liberalization of domestic market for foreign investors. This change will verify the running strategy. The liberalization can change the position of local companies. This is because the foreign entities have the financial advantage on domestic firms. But from the other hand the market oriented reforms must equalize all its members.

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